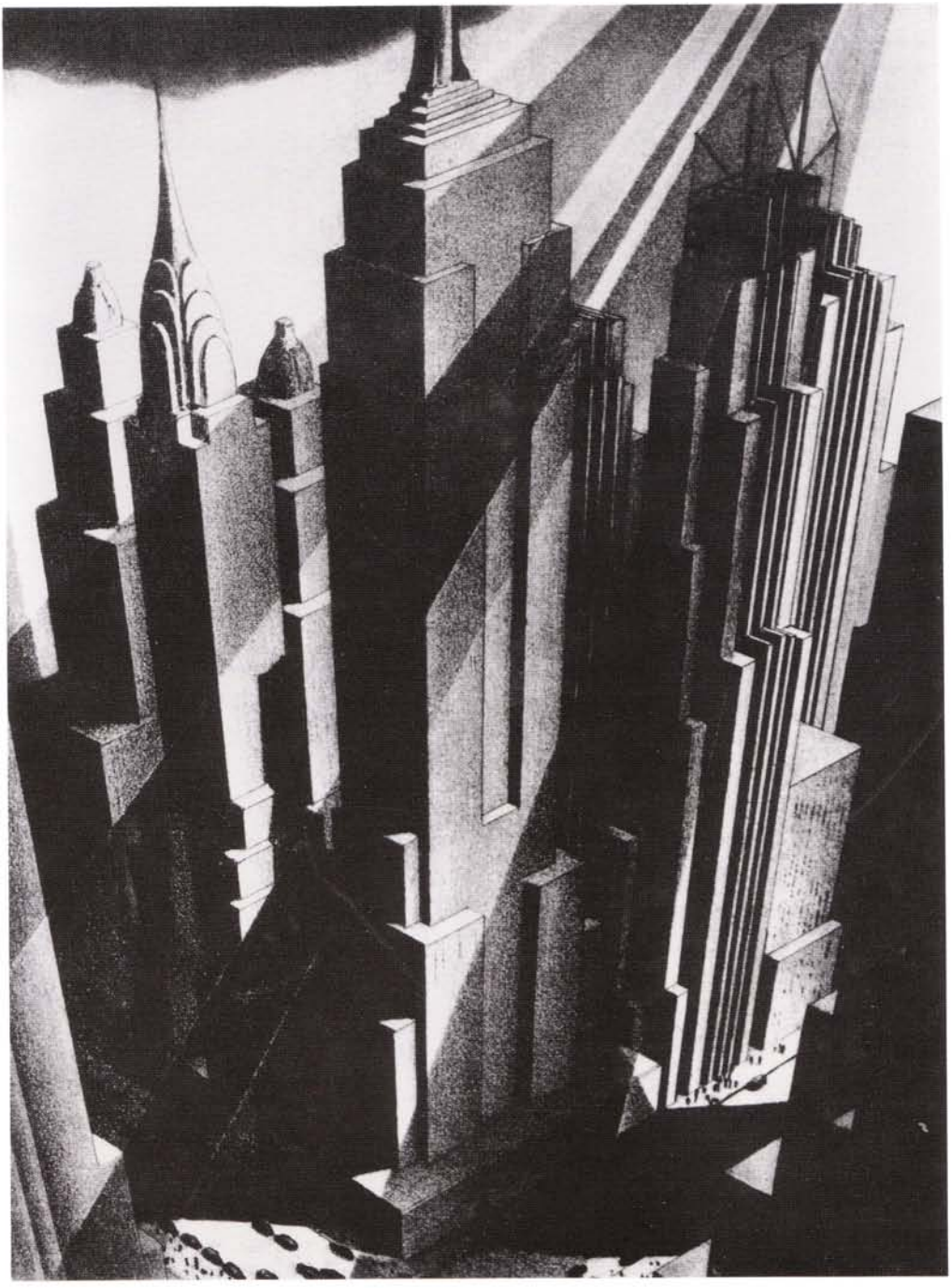
THE LANDSCAPE OF MODERNITY

David Ward and Olivier Zunz, editors



THE LANDSCAPE OF MODERNITY

Essays on New York City, 1900–1940

Edited by David Ward and Olivier Zunz

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Density and Intervention: New York's Planning Traditions

Marc A. Weiss

"Make no little plans." Daniel Burnham's famous dictum was written for and about Chicago at the turn of the twentieth century. Yet his large and ambitious vision could equally well have been applied to New York City. Indeed, two of the leading promoters of the 1909 Plan of Chicago, Charles Norton and Frederic Delano, later helped initiate the much grander Regional Plan of New York and its Environs, which played a major role in guiding the infrastructure development of the modern metropolis. New York's regional efforts in the 1920s stood as a direct descendant in a long line of farsighted, massive and highly acclaimed planning efforts, including the 1811 street plan, the creation of the Croton Aqueduct and the water system, the development of Central Park and the park system, the building of the subways, bridges, tunnels, highways, and public housing projects, and many other significant accomplishments. These achievements, while by no means unique in American urban development, were highly influential due to their scale, timing, and level of imagination.[1]

One of the best known of these milestones is the passage in 1916 of the New York City Zoning Resolution, frequently hailed as the nation's first zoning law. New York's actions in publicly regulating private development and land use through zoning were widely imitated around the country, as were its earlier efforts in regulating multifamily dwellings through the 1901 Tenement House Law. The assumption that underlay New York's zoning resolution—that restrictions on the use, height, and bulk of all privately owned buildings differentially applied by "districts" or "zones" was legally permissible under the municipal police powers—helped launch a rapidly spreading wave of zoning laws during the 1920s.[2]

Looked at in the larger context of the evolution of land use regulations in the United States, however, New York's 1916 zoning law was definitely an American pacesetter but not quite for the reasons commonly attributed to it. This is because the primary motivation for zoning on a national basis was the segregation of residential uses from commerce and industry, and especially the creation of exclusive districts for single family houses. Almost all of the many suburban communities that adopted zoning in the 1910s and 1920s had this intention, and most central cities also established zoning fundamentally to help protect certain middle- and upper-income residential neighborhoods. In this sense the first American citywide land use zoning law was passed by the City of Los Angeles in 1908. Los Angeles established, both in legislative and administrative practice and judicially through several key court decisions, the legal validity of regulating and separating land uses for the public purpose of sheltering and nurturing a home environment. New York City essentially adopted and indirectly popularized the Los Angeles model, and applied this approach to winning political support from property owners in zoning certain areas of its outer boroughs.[3]

New York's pioneering zoning law stands as an anomaly in United States urban history because its basic economic, political, and regulatory thrust had its roots in a very different issue than the mainstream of the early twentieth century zoning movement: (1) New York's law was chiefly designed to resolve conflicts among commercial and industrial property owners in the central business districts of Manhattan. Residential regulation, though an important part of the law, was not the principal focus. (2) The main innovation in the New York law was the height and bulk regulations, not the use restrictions. Although New York was not the first city to control building height or even to create height districts (many cities already had statutory limits, and Boston's height regulations by separate zones had been legally upheld by the U.S. Supreme Court in 1909), it was the first city to use public regulation to rationalize and stimulate the growth and development of a central area for modern corporate office buildings, advanced services, and retail trade.[4] The story of zoning in New York is primarily the saga of the growth of Manhattan skyscrapers, which is also the main emphasis of this article.

Thomas Adams, who directed the 1920s New York Regional Plan, wrote in 1931 that "the 1916 zoning law was really a temporary measure based on compromise."[5] Yet the key compromise over height and bulk regulations, which the real estate industry finally recognized in 1916 as necessary to protect the long-term economic viability of commercial property in Manhattan, established a permanent pattern of

active public intervention and private involvement to facilitate large-scale development while attempting to create more open space between buildings, and especially to preserve "open space in the sky." The building setback requirements of the original zoning restrictions were later superseded by the more elaborate "tower-in-the-plaza" approach of the 1961 zoning resolution, which encouraged street level open space around high-rise buildings, and then by a rapid succession of density bonuses and special districts in the past three decades, all far more complex than in any other American city.[6]

Since 1916, New York has consistently led the nation by experimenting with more aspects of zoning regulation, a wider variety of administrative processes, and a greater level of interaction between public regulators and private developers in negotiating building form, public amenities, and urban design standards. Only recently have San Francisco, Boston, and a few other places embarked on interventionist methods of central business district development control that rival New York's. But then, no American city has ever approached the level of density or the number of tall buildings that have long existed in downtown and midtown Manhattan.

The Corporate-Commercial City

In many large and rapidly growing American cities in the early twentieth century there were "City Beautiful" plans written by architects, civil engineers, and landscape architects, and sponsored primarily by downtown corporate and commercial interests. These plans were explicitly designed to establish a central business district of commercial office buildings, department stores, hotels, and other related uses while pushing out factories, warehouses, and wholesale markets. The focus of this urban redevelopment planning was on public investment in civic centers, parks, parkways, rail terminals, and waterfront facilities. Its main purpose was reshaping the physical landscape through public works to generate new patterns of accessibility and movement in the city, showcasing the clean and attractive commercial and cultural districts, and attempting to banish the dirty and unsightly city of industry to working-class neighborhoods removed from the central area. The Chicago Commercial Club's 1909 plan by Daniel Burnham and Edward Bennett is a classic of this genre, and many other cities followed a similar path. In each case, from Cleveland to San Francisco, land use conflicts emerged between the commercial and industrial sectors, and this type of central area planning was more successful in some cities than in others.[7]

What makes New York interesting and different is that at the point that most cities were still struggling to assemble a critical mass of tall office buildings, department stores, and hotels that would symbolize the modern downtown, Manhattan was already firmly established as one of the world's leading corporate and commercial centers. This fact explains why New York's zoning law was geared so heavily toward regulating Manhattan commercial real estate when zoning in most communities was more concerned with protecting residential property. It also helps to explain why in New York the height and bulk regulations on commercial buildings adopted in 1916 after nearly two decades of controversial debate were generally supported by key business and real estate interests, whereas in other big cities at that time many comparable business groups strongly opposed height and bulk regulations in proposed zoning laws. New York was already built up with such a great density and volume of large buildings that the corporate-commercial sector turned to public regulation as a necessary measure to facilitate and protect new investment and development without stagnation or chaos, in order to continue growing bigger and taller.

A few statistics give a sense of the contrast between New York and the rest of the country during the period in which zoning laws were first established in most American cities. At the end of 1912, Manhattan had 1,510 buildings from nine to seventeen stories high, and ninety-one buildings between eighteen and fifty-five stories (seventy-one of which were office buildings, with the rest divided between hotels and loft manufacturing buildings). A decade later, during which time new commercial buildings had grown both taller and more numerous, Chicago, the nation's second-largest city with a rapidly expanding downtown, had forty buildings eighteen stories or higher, less than half of Manhattan's total from ten years before. In Chicago's downtown "Loop," where most of the city's high buildings were concentrated, 151 buildings were between nine and seventeen stories, a mere one-tenth of the decade-earlier Manhattan figure. New York not only led the nation in very tall buildings (which in 1912 included a thirty-eight-, a forty-one-, a fifty-one-, and a fifty-five-story office building), but the sheer volume of skyscrapers totally overshadowed any other city. Table 3.1 displays national data for United States cities in 1929, demonstrating that New York had half of all the buildings in America that were ten stories or higher. New York also had most of the tallest commercial structures, from the Woolworth Building, completed in 1913, to the Chrysler Building, which was under construction during 1929.[8]

Table 3.1 Tall Buildings in American Cities, 1929

City	Buildings 10–20 Stories	Buildings 21 Stories or More
Albany, NY	9	2
Atlanta, GA	17	1
Atlantic City, NJ	21	0
Baltimore, MD	36	4
Beaumont, TX	5	1
Birmingham, AL	13	1
Boston, MA	102	2
Chicago, IL	384	65
Cincinnati, OH	24	2
Cleveland, OH	40	4
Columbus, OH	16	1
Dallas, TX	31	1
Dayton, OH	15	0
Denver, CO	9	0
Des Moines, IA	14	0
Detroit, MI	102	19
Duluth, MN	5	0
Forth Worth, TX	11	3
Galveston, TX	5	0
Houston, TX	24	5
Indianapolis, IN	23	0
Jacksonville, FL	14	0
Jersey City, NJ	16	0
Johnstown, PA	5	0
Kalamazoo, MI	5	0
Kansas City, MO	60	2
Knoxville, TN	6	0
Little Rock, AR	6	0
Long Beach, CA	14	0
Los Angeles, CA	134	1
Louisville, KY	17	0
Memphis, TN	23	1
Miami, FL	25	1
Milwaukee, WI	15	1
Minneapolis, MN	32	3
Montgomery, AL	5	0
Nashville, TN	17	0
Newark, NJ	18	3
New Haven, CT	5	0
New Orleans, LA	21	1
New York, NY	2,291	188
Oakland, CA	14	1
Oklahoma City, OK	20	2
Omaha, NE	9	0
Peoria, IL	12	0

Table 3.1 (continued)

City	Buildings 10–20 Stories	Buildings 21 Stories or More
Philadelphia, PA	98	22
Phoenix, AZ	5	0
Pittsburgh, PA	52	15
Portland, OR	25	0
Providence, RI	5	1
Richmond, VA	20	1
Rochester, NY	12	0
Sacramento, CA	7	0
St. Louis, MO	83	3
St. Paul, MN	7	0
Salt Lake City, UT	10	0
San Antonio, TX	21	3
San Diego, CA	8	0
San Francisco, CA	45	8
Seattle, WA	41	2
Springfield, IL	5	0
Stockton, CA	6	0
Syracuse, NY	4	1
Tacoma, WA	6	0
Tampa, FL	11	0
Toledo, OH	6	1
Tulsa, OK	37	2
Washington, DC	20	0
Wheeling, WV	6	0
Wichita, KS	14	0
Wilkes-Barre, PA	5	0
Youngstown, OH	5	0

Source: The American City 41 (September 1929): 130.

One of the driving forces behind New York's 1916 zoning resolution was the Fifth Avenue Association, a group of leading retail merchants, hotel operators, property owners, investors, lenders, and real estate brokers trying to stabilize and reinforce the image of Fifth Avenue between Thirty-second and Fifty-ninth streets as a high-class shopping district. The retail merchants' nemesis was the garment industry, which was steadily moving northward along Fifth Avenue, occupying newly constructed tall loft manufacturing buildings. Arguing that "these hordes of factory employees . . . are doing more than any other thing to destroy the exclusiveness of Fifth Avenue," the merchants turned to the city for the legal authority to control private property

through zoning laws, limiting building heights within the district to cut down on the number and size of loft buildings.[9] Zoning under municipal police power regulations, if properly executed, had the advantages of being compulsory on all property owners without the government having to financially compensate these owners.

If the Fifth Avenue Association could have blocked the rapidly spreading lofts by prohibiting light manufacturing in a commercial zone, it would surely have proposed such intervention. By 1913, however, no city, not even Los Angeles, had yet attempted to segregate such uses, and it did not appear to be legally possible. Height restrictions by district, on the other hand, had been declared constitutional by the U.S. Supreme Court in 1909, so the Fifth Avenue Association seized on and vigorously promoted this idea as the means of its salvation.[10]

Fifth Avenue, however, was not really the principal long-term issue. Whereas the Fifth Avenue Association had chosen building height regulation as a method of blocking and redirecting the garment industry's geographic expansion, the main demand in 1916 for regulating the height and bulk of commercial buildings through zoning came from private businesses that leased office space, land and building owners, investors, lenders, insurers, developers, contractors, brokers, lawyers, and others involved in the lower Manhattan real estate market. These real estate and business groups reluctantly agreed that some form of public regulation was necessary, after having opposed commercial height restrictions since they were first suggested in the 1890s.

The 1901 Tenement House Law had imposed height and lot coverage restrictions on multifamily dwellings, but commercial and industrial buildings were still unregulated except by building codes, and the new skyscraper technology had brought much anxiety and uncertainty to the downtown area, where many new tall and bulky buildings blocked the sunlight from older and smaller buildings, causing the latter's property values to drop and in some cases even driving away their tenants. This situation is well illustrated in the accompanying photograph from the 1916 report of the Commission on Building Districts and Restrictions (see Figure 3.1). Though the tenants in the dark buildings could presumably move, and the owners could possibly build a new, taller building, there seemed to be no way to privately ensure that the district would not become strangled by overbuilding and congestion, with each building cutting off the others' sunlight and views, turning the narrow side streets into perpetually dark and impassable canyons. Public regulation was finally perceived by 1916 to be the only viable solution.

Figure 3.1 The *Final Report* of the 1916 Commission on Building Districts and Restrictions used this photo to demonstrate the necessity for zoning regulations in New York City to reduce the density of skyscrapers and allow more light, air, and open space between tall buildings. *Source*: Avery Architectural and Fine Arts Library, Columbia University.

Table 3.2 Financial Institutions and Insurance Companies Endorsing the 1916 New York Zoning Law

Astor Trust Company
Bank for Savings in the City of New York
Bankers Trust Company
Bowery Savings Bank
Citizens' Savings Bank
Columbia Trust Company
Commonwealth Insurance Company of New York
Commonwealth Savings Bank
Dime Savings Bank of Williamsburgh
Dry Dock Savings Institution
East Brooklyn Savings Bank
Emigrants' Industrial Savings Bank
Equitable Life Assurance Society of the United States
Excelsior Savings Bank
Fidelity Trust Company
Franklin Savings Bank
Franklin Trust Company
German Savings Bank of Brooklyn
Germania Fire Insurance Company
Germania Savings Bank
Globe & Rutgers Fire Insurance Company
Greater New York Savings Bank
Guaranty Trust Company of New York
Harlem Savings Bank
Home Insurance Company
Home Life Insurance Company
Hudson Trust Company
Imperial Assurance Company
Irving Savings Institution
Italian Savings Bank
Jamaica Savings Bank
Lawyers Mortgage Company
Lawyers Title & Trust Company
Liverpool and London and Globe Insurance Company
Long Island City Savings Bank
Manhattan Life Insurance Company
Metropolitan Life Insurance Company
Mutual Life Insurance Company of New York
New York Life Insurance Company
New York Savings Bank
New York Title Insurance Company
North British & Mercantile Insurance Company
North River Insurance Company
People's Trust Company
Postal Life Insurance Company
Royal Insurance Company
South Brooklyn Savings Institution
Sumner Savings Bank

Table 3.2 (continued)

Title Guarantee and Trust Company
Transatlantic Trust Company
Union Square Savings Bank
United States Mortgage & Trust Company
West Side Savings Bank
Williamsburgh Savings Bank

Source: Final Report of the Commission on Building Districts and Restrictions, pp. 75–76.

Construction of the new Equitable Building had demonstrated the difficulty with private methods of control. When the old nine-story building burned to the ground and plans were announced in 1913 for a massive new forty-story, 1.4 million square foot structure covering an entire city block that would "steal" light, views, and tenants from many surrounding buildings, neighboring property owners organized to stop its construction through private negotiations with the property's owner, but failed in their efforts. After the new building was completed, Lawson Purdy, president of the New York City Department of Taxes and Assessments, testified that "the owners of practically all the property surrounding it have asked for and obtained a reduction of the assessed value of their property on proof of loss of rents due to limitations of light and air and other advantages they enjoyed when the Equitable Building was only nine stories high."[11]

Many of the institutions that were concerned with long-term real estate market stability were eager to impose the new regulations by the middle of the decade. Large lenders such as the Metropolitan Life Insurance Company, the New York Life Insurance Company, and the Lawyers Mortgage Company—a pillar of the New York establishment whose president, Richard Hurd, had written the widely admired *Principles of City Land Values* (1903)—supported the building height and bulk regulations (see Table 3.2). Even the Equitable Life Assurance Society, despite or perhaps because of the dispute over its new headquarters, endorsed the proposed zoning resolution. Walter Stabler, the controller of the Metropolitan Life Insurance Company and a member of the Commission on Building Districts and Restrictions, actively encouraged the efforts of the Fifth Avenue Association. Stabler was such a strong advocate for height, bulk, and use restrictions that Edward Bassett, who chaired both the 1913 and 1916 New York zoning commissions and was considered by many to be the leading American zoning expert, dedicated his 1936 book on zoning to Walter Stabler (along with Lawson Purdy and Frederic Pratt). Property, casualty, and

fire insurance companies supported the zoning restrictions, arguing that they would bring greater certainty to realty markets and lower the risks of fire and property damage. Title insurance companies, such as the Title Guarantee and Trust Company, also backed the new zoning regulations.[12]

A vital aspect of development in Manhattan was the growth in corporate headquarters as property owners and space users. Many opponents of tall office buildings argued that higher construction and operating costs and a loss of rentable space due to elevators and reinforcing structures meant that these towers were not as economically profitable as was commonly assumed. However, a key factor behind their continued development and rapid growth in height, bulk, and numbers was the prestige value of the building's visual image, which served as a powerful form of advertising for the corporate owners and occupants. Publicity was becoming more important for many large firms, and constructing an elaborate corporate headquarters was one increasingly popular method of displaying to the general public the company's growing wealth and power.[13]

The Politics of Height and Bulk Restrictions

New York's zoning process was unusual not only for the central attention on the issue of building height and bulk in lower and midtown Manhattan, but also because the corporate-commercial sector and the real estate industry generally supported these restrictions. Indeed, the initiative to establish the new public regulations came partly from these business groups. This contrasts with height limitations in many other American cities, where the issue was either less important relative to use restrictions applied mainly to residential areas, or more controversial and unpopular with various segments of the downtown business and real estate communities.[14]

Many cities imposed building height limits beginning in the late nineteenth century when the private "skyscraper" first emerged as a new urban form. Most of the legal limits ranged from 100 to 200 feet. Boston and Washington, D.C., had differential limits for various parts of the city, with the highest buildings permitted in the central area. Other cities, such as Baltimore and Indianapolis, had special restrictions that applied to particular locations. In most cases the height limits were intended mainly to restrict building heights in the downtown area, the only place where land values, transportation accessibility, and corporate image made tall buildings economically feasible or culturally preferable. Much of the early impetus for imposing these restrictions emanated from fears about fire hazards and building safety,

concerns about the lack of sunlight and air, aesthetic considerations that preferred the older European city model of smaller buildings of uniform height, and popular desires to avoid excessive urban population density and congestion.

In some cities, such as Chicago or San Diego, downtown business and realty interests were initially against proposed height limits, asserting that restrictions would impede economic growth and civic progress. Such opposition led to compromises that raised the maximum permitted building heights. Once the limitations were in place, however, many of these same interests did acknowledge that the new regulations helped protect the owners of and tenants in smaller existing buildings, stabilizing investments and markets. Particularly during times of real estate recessions, owners of smaller buildings favored height restrictions.

The commercial and real estate sectors in some cities basically supported height regulations from their inception. Los Angeles imposed a 150-foot building height limit in 1906, following San Francisco's earthquake and fire that same year. Civic leaders of southern California's "Riviera" took this action to reinforce Los Angeles' image of safety and serenity in contrast to more intimidating conceptions of city life in their northern California archrival. Boston's Brahmin business elite was content with older traditions of modest building heights, and also wanted to spread private construction across newly filled land in the Back Bay and other areas near the city's center.

Local chapters of the National Association of Building Owners and Managers (NABOM) were very influential in many cities during this period. NABOM was as important in the development of downtown zoning as the National Association of Real Estate Boards (NAREB) was in the evolution of residential and suburban zoning. Throughout the 1920s, many Building Owners and Managers groups strongly opposed urban height limitations, sponsoring and publicizing research studies that argued for the commercial superiority of skyscrapers.[15]

New York City's successful negotiation of a common agreement on building height and bulk restrictions in 1916 stands in contrast to the controversy that surrounded height limitations in many large cities. In Chicago, Philadelphia, Detroit, Cleveland, Pittsburgh, and San Francisco, downtown corporate-commercial and major real estate development and investment interests fought against strict height regulations, often with the local NABOM chapter among the leading organizational members of the opposition coalition. In many cases, opposition to regulating building heights held up the passage of an entire zoning ordinance until some kind of accommodation was made. In Chicago and Pittsburgh, compromises were reached by 1923. In San Francisco,

the Downtown Association and the Building Owners and Managers were able to remove all height limitations from the 1921 law, which only regulated land uses. In Philadelphia, Detroit, and Cleveland, opposition from downtown corporations and property owners held up zoning throughout the 1920s, and in Cleveland an ordinance that finally passed in 1928 was quickly repealed two months later. Houston never passed a zoning law, though the downtown lobby eventually supported the idea. Zoning in St. Louis and Los Angeles ran into strong opposition from real estate brokers and developers wanting to build large commercial and residential buildings on wide boulevards that were to be restricted to single family homes. Other cities, including Boston and Washington, D.C., raised their height limits during the 1920s, and Atlanta virtually repealed effective height restrictions by increasing its limits in 1929 from 150 feet to 325 feet with no setback requirements.

What is most interesting about the pattern outside of New York is that the cities with the greatest disagreements about the public control of private building heights were essentially the cities with the tallest buildings. Chicago, Philadelphia, Detroit, Pittsburgh, San Francisco, Houston, and Cleveland, after New York, were the leading cities with buildings twenty-one stories or higher (see Table 3.1). Two factors account for the differences between zoning politics in New York and these other cities. One difference is that New York's law was passed during a period when the real estate market was in a cyclical downturn. Zoning was seen by the main economic actors as a means of stabilizing the city's economy, spreading out property values, and creating incentives for new investment. Major corporate and financial interests were strongly motivated to give this new form of government intervention a chance, and speculative operators who would normally oppose such regulations were in a weak financial and political position due to the real estate recession.[16] By the time New York's example spread and zoning was proposed in other big cities during the early 1920s, their real estate markets were beginning to boom, and property owners, developers, investors, lenders, builders, brokers, corporate tenants, and other major forces all wanted to profit from economic growth without public intervention standing in the way. They wanted to maximize the development potential of their individual parcels while demand was strong. Once the markets collapsed, height regulations once again appeared desirable as a stabilizing factor. This helps explain why Philadelphia, Detroit, and Cleveland waited until the Great Depression before they finally imposed zoning restrictions on their cities.

The second difference is that in New York a complex bargain was struck, establishing what is now a tradition of the city's zoning regula-

tions permitting and encouraging very large-scale private development while still attempting to accomplish certain important public goals. Under the 1916 zoning resolution, New York pioneered a new form of regulation that combined restrictions on height, bulk, and use in one law. Since the issue in lower and midtown Manhattan, other than the Fifth Avenue merchants' conflict with the garment industry, revolved around the problem that tall and bulky buildings blocked sunlight from neighboring buildings and from the streets, the solution was to redesign buildings so that they would allow more space between them and more room for sunlight and open air. This was accomplished through the setback requirements, regulating buildings by volume rather than height alone. Regulating building height and volume in relation to the width of the street and the size of the parcel allowed buildings in some zones to be very tall by requiring progressively stepped-back towers above a certain height determined as a multiple of the width of the fronting street. This approach permitted development while preserving public open-air space because, as buildings went higher, the upper stories drew further back from the streets and lot lines and from surrounding buildings (see Figure 3.2). What was prohibited was *not* tall buildings per se, just bulky, monolithic fortresses covering the entire lot, like the Equitable Building. Such a compromise in 1916 made possible the construction fifteen years later of the world's tallest structure, the Empire State Building, which was legally zoned to soar over Manhattan because it encompassed a very large lot, fronted on relatively wide streets, and utilized numerous setbacks in the building's design.

Why didn't other big cities adopt similar compromises? Eventually, many of them did. It took time for enough people to see the effects of New York's zoning regulations worked out in practice, and during the boom of the early and middle 1920s many private business interests preferred not to rock the boat, wanting only traditional commercial structures and existing government regulations, or no regulations at all. Eventually, most commercial architects, builders, investors, lenders, insurers, corporate tenants, and owners began to accept the new post-zoning New York model of setback skyscraper development and to want to import it to their city or export it to other cities. By the late 1920s, many big cities were changing their zoning laws to adopt "volumetric" controls and the setback system for tall buildings. New York's height and bulk zoning had actually created a popular new aesthetic standard that was beginning to dominate American skylines. Even conservative Boston, which had regulated building heights since 1890 with a flat and relatively low maximum in the downtown area, changed its zoning law in 1928 to permit pyramidal setback towers.

Figure 3.2 The New Yorker Hotel, completed in 1930, is a good example of "sculptured mountain" skyscraper architecture popular in the 1920s and 1930s, encouraged by the building setback requirements of New York City's zoning law. Urban planners, including the authors of the Regional Plan of New York and Its Environs, appreciated the setbacks and argued that high-rise structures should be situated farther away from surrounding buildings and streets than was mandated by the existing zoning. *Source*: Avery Architectural and Fine Arts Library, Columbia University.

Part of the motivation for Boston's change was pressure from both local and national corporations for the city to modernize its image, along with the desire by public officials to attract outside capital and to promote new investment in a central business district that was far from booming.[17]

Implementation of the 1916 New York Zoning Law

The imposition of restrictions on the height, bulk, and use of commercial buildings in New York, after more than two decades of sometimes acrimonious debate, was generally received by the real estate industry as an acceptable compromise. Some real estate developers were unhappy with the height limits, and several of them appealed to the city for reductions in property tax assessments on the grounds that zoning had caused a decline in values. The Real Estate Board of New York disagreed, strongly endorsing the ordinance in November 1916 and announcing that it would help the city defend its constitutionality in court.[18]

In February 1917, leaders of the Fifth Avenue Association and other key zoning advocates formed the New York Zoning Committee to mobilize ongoing private sector support for the new law. The Committee worked with the city's Corporation Counsel to protect the legality of zoning, provide technical assistance in its implementation, and publish pamphlets explaining the new regulations to the general public. Frederic B. Pratt, dean of the Pratt Institute and son of one of New York's leading industrialists, chaired the Zoning Committee; Walter Stabler of Metropolitan Life was the treasurer; and Edward Bassett served as general counsel. Within five months the committee had over 100 members and was actively working to maintain public acceptance during the critical early period of zoning implementation.[19] Robert E. Simon, a commercial real estate developer and leader of the New York Zoning Committee, stated in 1918:

> Never before in the history of this City has a restrictive measure of so radical a nature, affecting real estate, received so nearly unanimous approval of the real estate interests in the City as did this law. Now that it has been in effect sufficiently long to give it an opportunity to be thoroughly tested, it still has the approval of a vast majority.[20]

A vital factor in this broad support for zoning was the improved condition of the Manhattan real estate market after the law's passage in 1916, reversing several years of declining property values. According

to the Central Mercantile Association, investment in new buildings between Canal and Thirty-fourth streets increased dramatically after zoning was initiated. Demand for office space rose significantly in lower Manhattan, particularly after the war, and rents were rising substantially, leading to the boom in construction and real estate prices beginning in the early 1920s.[21]

The new zoning law succeeded in defining Fifth Avenue and the midtown area as an office and retail district, rather than an expanding location for garment manufacturing. The Save New York Committee reported in December 1916 that 205 out of 225 manufacturers between Thirty-second and Fifty-ninth streets and Third and Seventh avenues had agreed to relocate from their current buildings by the time their leases expired. Despite this accomplishment, the Fifth Avenue retailers were concerned that too much light manufacturing was still being permitted under the 1916 zoning use district category for "business." To accelerate the pace of change and protect against future encroachment, in 1923 the Save New York Committee proposed the creation of a "retail" use district category in the zoning law. A retail district would permit the same uses as a business district except that manufacturing would be prohibited within the retail zone. Walter Stabler, Edward Bassett, and Charles G. Edwards, president of the Real Estate Board of New York, were among those endorsing the retail zone amendment.[22]

The Fifth Avenue Association was joined by similar associations representing merchants, property owners, and tenants on Broadway, Thirty-fourth Street, Eighth Avenue, and Forty-second Street in lobbying the Board of Estimate for the retail amendment. These groups were opposed on one side by garment manufacturers and wholesalers fighting to retain the business use designation, and on the other side by elite residents of Murray Hill and portions of Fifth and Madison avenues who wanted to preserve their neighborhoods as residential use districts. Finally in 1929 the Board of Estimate created a retail use district category restricting manufacturing activity to a maximum of 5 percent of the total floor space in any building in that zone (25 percent manufacturing was permitted in "business" use districts under the 1916 zoning resolution). Like all the provisions of the law, it was not retroactive and only applied to new development. At the same time, the Board of Estimate designated much of the area between Twenty-third and Fiftieth streets from Park to Eighth avenues as a retail district.[23]

In the 1920s Fifth Avenue above Thirty-fourth Street solidified as the elite shopping district, surrounded by a steadily increasing amount of new office space for corporate tenants, some of them migrating

northward from Wall Street to midtown. As early as 1920 the Heckscher Building, a thirty-two-story office tower, was constructed at Fifth Avenue and Fifty-seventh Street, and S. W. Straus, the leading mortgage bond brokerage firm, built a tall headquarters at Fifth Avenue and Forty-sixth Street. By mid-decade the pace of office construction in the midtown area was rapidly accelerating.[24]

One of the most dramatic effects of zoning was on the architecture of New York's skyline (see Figure 3.2). Bulky rectangular buildings were replaced by (1) ziggurat-style "wedding cake" setback buildings, such as the ubiquitous tall loft structures of the new garment district; (2) buildings that looked like sculptured mountains with numerous imposing setbacks; (3) most prominently, very tall but relatively slender and graceful setback towers. All of these new building sizes and shapes conformed to the zoning restrictions on height and bulk. The Chrysler, Empire State, and other famous buildings of the 1920s and 1930s serve as monuments to zoning's impact on urban design in New York and around the world.[25]

The spread of new midtown office towers was reflected in the height district zoning changes for Manhattan taken by the Board of Estimate between 1916 and 1931. Many of the rezoning actions were designed to permit the development of skyscrapers in areas originally zoned for lesser heights. All but one of the fourteen decisions of this type were in midtown. The biggest change occurred in 1928, when the Board of Estimate rezoned all of Eighth Avenue from Thirty-third to Fifty-sixth streets as a "two times" height district, allowing for very tall buildings.[26]

Occasionally, a zoning conflict was resolved against the wishes of real estate developers. One of the most publicized examples of a developer defeat involved the Equitable Life Assurance Society, principal occupant of the bulky skyscraper in lower Manhattan that had been such an important catalyst for the imposition of height and bulk restrictions in 1916. Equitable intended to relocate some of its clerical staff from downtown to midtown in a new building the firm planned to construct on Seventh Avenue between Thirty-first and Thirty-second streets. The proposed building, nineteen stories without any setbacks, did not conform to the height regulations for that district. Equitable asked for a zoning variance, but the Board of Standards and Appeals denied the insurance company's request in 1922.[27]

The rash of skyscraper development, at first reflecting the widespread acceptance of the zoning regulations as well as the new aesthetic of setback architecture, reached such an unprecedented volume by 1926 that the previous enthusiasm for the 1916 compromise turned into dissatisfaction and controversy. Critics began to voice serious

objections to the existing height and bulk regulations permitting too many new buildings that were still far too tall and massive, despite the setbacks and the restrictions. One of the most virulent skyscraper opponents was Major Henry Curran, counsel of the City Club of New York, who denounced the buildings as "monsters" and their spread as a "plague." Curran blamed them for subway crowding and automobile accidents, called for an absolute height limit of six stories on narrow streets and ten stories on wide streets, and recommended that tall building design be regulated by the Municipal Art Commission.[28]

William A. Boring, director of Columbia University's School of Architecture, endorsed Henry Curran's proposed ban on skyscrapers and advocated a special tax on tall buildings. The Committee on Community Planning of the American Institute of Architects (AIA), chaired by Henry Wright, also supported Curran's proposals. Wright suggested in 1927 that skyscrapers should provide public open spaces in amounts proportionate to their cubic capacity, an idea that was later partially incorporated into the 1961 zoning law through density bonuses awarded for plazas surrounding tall buildings. The concern of Henry Wright and his AIA committee for open space was also voiced by the Municipal Art Society. Its City Plan Committee denounced the overdevelopment of skyscrapers and the consequent urban congestion, arguing that "we cannot have a beautiful city without a proper adjustment of spaces to buildings."[29]

By the mid-1920s, even some of the 1916 zoning law's strongest supporters were beginning to call for changes, frustrated with the seeming lack of any real control over the advancing juggernaut of skyscraper construction in Manhattan. Edward Bassett, sharing a platform with Henry Curran at the Municipal Art Society in 1926, agreed that the zoning law should be modified to further reduce congestion in Manhattan by promoting decentralization of commercial development throughout the city and region. Earlier in the year, J. E. Harrington, chairman of the Traffic Committee for the Broadway Association, blamed the excessive number, size, and growth of skyscrapers for transit and traffic congestion and stated that "the Zoning Law in New York has outgrown itself and needs revision."[30]

Edward Bassett joined other critics of skyscrapers in opposing the Board of Estimate's upzoning of the midtown section of Eighth Avenue in 1928 to permit the construction of taller buildings. "The greatest present problem is congestion," Bassett asserted, and while politically "it may be impossible to decrease the cubage zoning limit," he nevertheless strongly argued that "successive Boards of Estimate ought to refrain from establishing new skyscraper districts."[31] Bassett also appeared before the Board of Estimate in 1931 to oppose the height dis-

trict upzoning of Forty-second Street between Eighth and Tenth avenues. The proposed change had the support of the Forty-second Street Property Owners and Merchants Association, hoping that the new thirty-two-story McGraw-Hill Building would spawn a skyscraper development boom in their district. In 1932, the Board of Estimate passed the zoning map amendment over Bassett's objections. By the late 1920s, Bassett was also frequently denouncing the wholesale granting of zoning variances by the Board of Standards and Appeals. Some of these variances were later overturned in court as being legally improper, and Bassett claimed that the appeals board's actions were corrupting the process of zoning.[32]

Zoning reformers banded together to lobby for changes through the City Committee on Plan and Survey appointed by Mayor Walker in 1926. The Sub-Committee on Housing, Zoning and Distribution of Population was headed by Frederick H. Ecker, chairman of Metropolitan Life. On this subcommittee, Lawson Purdy chaired a study of zoning height and area regulations, and Edward Bassett chaired a study of zoning administration. The Purdy report proposed that height limits generally be lowered and that there be three standard building heights for the entire city, replacing the formula for multiples of street widths. In particular, his report proposed a drastic reduction in building heights along the wide avenues and of the corner buildings on the cross streets. It also recommended other changes to increase open space by trading off increased building height for decreased lot coverage, foreshadowing the 1961 zoning law.[33]

The 1928 *Report of the City Committee on Plan and Survey* endorsed the zoning changes proposed by Purdy's study group, stating that "The time is ripe for amendment and strengthening of the Zoning Resolution which was passed into law eleven years ago." The full committee also supported the establishment of a separate retail use district category, which was endorsed by Bassett's study. In addition, the committee advocated that the Board of Estimate create "an official Planning Board functioning as a permanent city department." Among its many other functions, the proposed planning board would have the authority to review and recommend zoning changes:

> This would permit a more constructive approach being made to the zoning of the City than has been the case in the past in the absence of a comprehensive plan. In the final analysis the solution of the problems of congestion and of distribution of population will depend on the principles and methods which are applied to the regulation of building uses and densities, and the relation of these to the street and other open areas of the City.[34]

The new city charter adopted in 1938 finally established a City Planning Commission along the lines suggested by the Committee ten years earlier. The City Committee on Plan and Survey's endorsement of the retail district zoning amendment had a more immediate impact on the Board of Estimate, which passed a compromise version in 1929. However, the committee's proposed changes in height and area restrictions ran into too much opposition from real estate developers and property owners to succeed politically.

Manhattan Borough President Julius Miller and New York City Tax Commissioner George H. Payne were two prominent public officials who opposed new height restrictions. Miller believed that tall buildings were necessary for the city's economic vitality, and that the problems of congestion could be solved without curbing the development of skyscrapers in Manhattan. He proposed alleviating traffic congestion by constructing subways under major crosstown streets, express highways on the riverfront, and tunnels to the outer boroughs. The new City Planning commissioner, John F. Sullivan, appointed by Mayor Walker in 1930 to head a one-man agency with no power over zoning or any other land use matters, also was on the side of supporting skyscraper development. For example, he favored the upzoning of Forty-second Street between Eighth and Tenth avenues, which passed the Board of Estimate in 1932. The opponents of stricter height and bulk limitations mostly prevailed during the renewed zoning debates and controversies of the late 1920s, and the Board of Estimate rejected various amendments recommended by the City Committee on Plan and Survey and other civic groups such as the Municipal Art Society, the City Club, and the AIA Committee on Community Planning.[35]

Thomas Adams, who directed New York's metropolitan regional planning during the 1920s, addressed the Building Managers and Owners Association of New York in 1928 about the Purdy report proposing greater zoning restrictions on height and bulk, and acknowledged that "It may appear that certain details of the recommendations of the Sub-Committee go much further than the Association would approve. . . ."[36] Whereas chapters of NABOM in several other cities were bitterly opposed to any regulations limiting the height of buildings, the New York chapter was generally content with the zoning compromise of 1916 but did not support further reductions in the permitted size of commercial structures.

New Yorkers provided national leadership for building owners and managers in the 1920s: Clarence T. Coley, manager of the Equitable Building, served as NABOM president during 1921–1922; and Lee Thompson Smith, manager of the Sinclair Oil Building, was president of NABOM from 1924 to 1926. During Smith's presidency, NABOM's

Height Limitation Committee launched a sophisticated public relations campaign by sponsoring research that argued for the economic and social benefits of tall buildings and disputed charges that skyscrapers caused congestion or were unsafe. NABOM emphasized that advances in building design, construction, and materials, such as the use of setbacks and lightweight terra cotta that reflected sunlight, mitigated problems of light, air, views, and open space.[37]

Probably the most significant efforts at finding a new compromise formula for zoning to reduce densities and congestion while attempting to satisfy both the real estate industry and its critics came from the Regional Plan of New York and Its Environs, directed by Thomas Adams and involving many of the key architects, planners, lawyers, and community leaders behind New York's zoning law: Edward Bassett, Lawson Purdy, George Ford, Robert Whitten, George McAneny, Frederic Pratt, and numerous others. Thomas Adams was sympathetic to Henry Curran's ideas and the movement against skyscrapers, and, like Bassett, opposed the upzoning of Eighth Avenue in 1928. Adams believed that tall buildings per se were not a problem if land patterns around the skyscrapers were better planned and regulated: "The high building in itself cannot be condemned as unhealthful if there is sufficient space around it to give it light and air; nor as inefficient if there is sufficient space for the people and traffic to serve its needs."[38] He argued that in the debate over height limitations, people must "distinguish between, first, the high building that has ample space surrounding it to meet all its need for light, air and accessibility, and second, the crowded groups of high buildings where these essential elements in land values are destroyed as a result of too intensive concentration."[39]

In several key publications of 1931 (volume 6 of the Regional Survey of New York and Its Environs, volume 2 of the Regional Plan, and volume 2 of the Harvard City Planning Studies) Thomas Adams, George Ford, and their colleagues began to work out ideas for continuing to reduce the bulk of tall buildings through less lot coverage at the street level, greater setbacks of the building's lower stories, and slimmer towers.[40] Adams and Ford discussed limiting height and bulk by regulating the total volume of building space in relation to land mass, citing the architect Raymond Hood's ideas about controlling building volume through a maximum floor-area ratio. Three decades later, New York City adopted a variation of this approach as a new and more effective method of controlling building density while still permitting the construction of skyscrapers.

The Regional Plan Association pointed in particular to New York's and the world's tallest structure, the Empire State Building, completed

in 1931, as a model skyscraper with sufficient open space surrounding it on the street level and in the sky. In an important rebuttal to NABOM-type arguments over economic efficiency, Adams and his colleagues argued that the older practice of crowding urban land and commercial districts with tall buildings cheek-by-jowl had given way to new techniques of skyscraper planning and development that were the wave of the future: "The rectangular prism remains the most economical framework for a building. But economy of construction is not true economy if the building is not rentable at a profit. As the best lighted space brings the highest rents, this gives the economic justification for wide setbacks."[41]

Conclusion

By 1931, Edward Bassett was critical of the zoning compromise he had so carefully fashioned fifteen years earlier, and was looking ahead to the next generation of height and bulk restrictions that were widely discussed in New York beginning in 1926:

> The regulation of skyscrapers is undoubtedly the most difficult problem of zoning in every great city. After the zoning plan of New York City had been worked upon for years, it was nearly defeated at a certain stage by reason of a spirited and influential attack on limitation of skyscrapers. The same difficulty has been mainly responsible for the fact that Philadelphia and Detroit have no zoning ordinances today. New York City did not advance very far when it adopted the two and two and one-half times limit with setbacks and 25 percent towers, and there are many who say that with this limit the skyscraper problem was hardly touched, that skyscrapers are being erected as high as they probably would have been without zoning, that the total rentable floor space in the high building blocks has not been affected, and that street congestion is as great as if buildings had been left unregulated. These criticisms are partly true. On the whole, however, the results of zoning have been to give greater access of light and air to separate buildings and to the street. The opportunity of blanketing one building by another has been lessened. Architecturally New York has been greatly improved by zoning. What more can be done? Nearly all will admit that something ought to be done. But to say what ought to be done and to say what can be done are two quite different things.[42]

After a decade of experience with regulating the height and bulk of commercial buildings, New Yorkers were contemplating doing more by the late 1920s. Residential structures received a new set of

regulations with the Multiple Dwelling Law of 1929, and ideas for rezoning were being discussed, leading in 1961 to the floor-area ratio concept and new sky exposure planes. With the 1961 zoning law the "wedding cake" setback buildings were shunted aside to herald a new era of modernist architecture with tall "glass boxes" rising straight up from the street, leaving more open space around the buildings to allow sunlight and views on every floor. The concept of "open space in the sky" was brought down to street level as the new zoning permitted a 20 percent larger building in exchange for the construction of a plaza made available for public use. Between 1961 and 1973 virtually every major development project in New York took advantage of the zoning density bonus to build taller and bulkier buildings, constructing over one million square feet of plaza space, more than the total in all other U.S. cities combined. Incentive zoning proved controversial; one study of density bonuses in New York found that for every dollar developers had spent on constructing plazas, they earned an additional $48 from the increased value of the buildings due to the extra rentable space they were permitted to build. Despite much criticism, the city government later initiated many other density bonus trade-offs under incentive zoning, especially through the method of creating special districts. Bonuses were granted both as-of-right and by negotiation and special permit for providing a variety of amenities that included sidewalk arcades; indoor public spaces such as atria, retail stores, museums, live theaters, and dance studios; pedestrian passageways; subway station improvements; and affordable housing. As two expert zoning observers commented in 1979, "It is as pointless to talk about special districts without a focus on New York as it would be to discuss the steel industry and ignore Pittsburgh and Chicago. The New York City Planning Commission, these last ten years, has been cranking out special districts as though they could be used to redeem anemic municipal bonds."[43]

In 1975, New York City instituted an elaborate Uniform Land Use Review Procedure (ULURP), officially incorporating the demand for greater citizen participation through the fifty-nine Community Boards. Despite this and other more recent reforms, including a new charter and land use planning system beginning in 1990, zoning in New York continues to be extremely contentious. Yet each new compromise from 1916 forward has had the essential backing of key corporate and development interests. Zoning has also become increasingly interventionist, adding more layers of complexity to address urban physical problems and conflicts that threaten quality of life, economic stability, and property values. Most contradictory, New York has evolved as an innovative leader in urban planning and zoning, yet with a set of prob-

lems substantially different from most other cities. The extremely high levels of population and building density, especially in Manhattan, have required a greater degree of real estate market intervention in order to maintain an adequately functioning metropolis.

Since the 1960s, the "Manhattanization" of central business districts has been an explicit urban planning and economic development policy goal, in many cases the main purpose of large-scale urban redevelopment and renewal projects. Density, intervention, and political controversies about the impacts of downtown commercial development that were pioneered in New York City are being repeated across urban America, and new experiments with sophisticated and complex downtown zoning regulations have spread to numerous cities coast to coast, from Boston and Hartford to San Francisco and Seattle.[44] As these planning debates unfold, interest in the origins of zoning for the modern corporate-commercial city leads one back to the New York law of 1916 and its implementation during the real estate boom and bust of the 1920s and 1930s.

Notes

1. Three useful essays on New York planning are Kenneth T. Jackson, "The Capital of Capitalism: The New York Metropolitan Region, 1890–1940," in Anthony Sutcliffe, ed., *Metropolis, 1890–1940* (Chicago: University of Chicago Press, 1984); John Mollenkopf, "City Planning," in Charles Brecher and Raymond D. Horton, eds., *Setting Municipal Priorities, 1990* (New York: New York University Press, 1989); and Paul Goldberger, "Shaping the Face of New York," in Peter D. Salins, ed., *New York Unbound* (New York: Basil Blackwell, 1988). On Chicago planning, see Marc A. Weiss and John T. Metzger, "Chicago: The Changing Politics of Metropolitan Growth and Neighborhood Development," in Robert A. Beauregard, ed., *Atop the Urban Hierarchy* (Totowa, NJ: Rowman & Littlefield, 1989).
2. On New York's 1916 zoning resolution, see S. J. Makielski, Jr., *The Politics of Zoning: The New York Experience* (New York: Columbia University Press, 1966); Seymour I. Toll, *Zoned American* (New York: Grossman, 1969); Harvey A. Kantor, "Modern Urban Planning in New York City: Origins and Evolution, 1890–1933." Ph.D. diss. (New York University, 1971); Marc A. Weiss, "Skyscraper Zoning: New York's Pioneering Role," *Journal of the American Planning Association* 58 (Spring 1992). The reports of the two zoning commissions are vital documents. See *Report of the Heights of Buildings Commission* (December 23, 1913); and Commission on Building Districts and Restrictions, *Final Report* (New York: Board of Estimate and Apportionment, Committee on the City Plan, 1916; hereafter CBDR, *Final Report*). On height and bulk restrictions for residential buildings before 1916 zoning, see Roy Lubove,

The Progressives and the Slums: Tenement House Reform in New York, 1890–1917 (Pittsburgh, PA: University of Pittsburgh Press, 1963); Richard Plunz, *A History of Housing in New York City: Dwelling Type and Social Change in the American Metropolis* (New York: Columbia University Press, 1990).

3. For analysis of Los Angeles' 1908 zoning law and its effects on the national origins and spread of residential zoning, see Marc A. Weiss, *The Rise of the Community Builders: The American Real Estate Industry and Urban Land Planning* (New York: Columbia University Press, 1987). The U.S. Supreme Court affirmed the legality of Los Angeles zoning in a 1915 decision, *Hadcheck v. Sebastian*, which served as an important precedent for New York's 1916 zoning resolution.
4. The 1909 U.S. Supreme Court decision upholding Boston's height limitation districts is *Welch v. Swasey*. On height regulations in Boston from 1891 to 1928, see Michael Holleran and Robert M. Fogelson, "'The Sacred Skyline': Boston's Opposition to the Skyscraper, 1891–1928," Working Paper No. 9 (Cambridge: MIT Center for Real Estate Development, August 1987).
5. Thomas Adams, "The Character, Bulk, and Surroundings of Buildings," in Regional Survey of New York and Its Environs, *Buildings: Their Uses and the Spaces About Them* (New York: RSNYE, 1931), p. 119.
6. On the post-1916 evolution, see S. J. Makielski, *Politics of Zoning;* RSNYE, *Buildings;* Norman Marcus and Marilyn W. Groves, eds., *The New Zoning: Legal, Administrative, and Economic Concepts and Techniques* (New York: Praeger, 1970); Jonathan Barnett, *An Introduction to Urban Design* (New York: Harper & Row, 1982); William H. Whyte, *City: Rediscovering the Center* (New York: Doubleday, 1988); Michael Kwartler, "Legislating Aesthetics," in Charles M. Haar and Jerold S. Kayden, eds., *Zoning and the American Dream* (Chicago: Planners Press, 1989); Katherine Kennedy and Mitchell S. Bernard, *New York City Zoning: The Need for Reform* (New York: Natural Resources Defense Council, 1989); Richard F. Babcock and Wendy U. Larsen, *Special Districts: The Ultimate in Neighborhood Zoning* (Cambridge: Lincoln Institute of Land Policy, 1990); special issue: "Real Estate Development and City Regulations," *New York Affairs* 8 (1985); Weiss, "Skyscraper Zoning."
7. George B. Ford, *City Planning Progress in the United States* (Washington, DC: American Institute of Architects, 1917); William H. Wilson, *The City Beautiful Movement* (Baltimore: Johns Hopkins University Press, 1989); Judd Kahn, *Imperial San Francisco: Politics and Planning in an American City, 1897–1906* (Lincoln, NE: University of Nebraska Press, 1979); Weiss and Metzger, "Chicago."
8. Data comes from *Report of the Heights of Buildings Commission*, pp. 15–17; Chicago Real Estate Board, *Studies on Building Height Limitations in Large Cities* (1923), pp. 24 and 26 (map); "A Census of Skyscrapers," *American City* 41 (September 1929): 130. For additional information on New York buildings in the 1920s and 1930s, see Adams, "Character," pp. 54–64; Robert H. Armstrong and Homer Hoyt, *Decentralization in New York City* (New York: Urban Land Institute, 1941), 122–147. Carl W. Condit, *The Chicago School of Architecture* (Chicago: University of Chicago Press, 1964), gives a detailed picture of downtown Chicago buildings from 1875 to 1925.

9. "Statement by Mr. Frank D. Veiller, Representing the Fifth Avenue Association, June 19, 1913," *Report of the Heights of Buildings Commission*, p. 269. The Fifth Avenue Association also published a separate book that included all of its arguments for height restrictions in its neighborhood. See *Statement of the Fifth Avenue Association on the Limitation of Building Heights to the New York City Commission and the Testimony of the Association's Representatives at a Conference, June 19, 1913.* Emanuel Tobier, "Manhattan's Business District in the Industrial Age," in John H. Mollenkopf, ed., *Power, Culture, and Place* (New York: Russell Sage Foundation, 1988), analyzes the growth of loft manufacturing in New York and the land use conflict with commercial properties such as office buildings, department stores, and hotels.
10. "Statement by Frank Veiller," p. 270: "In case the occupancy of the building cannot be regulated either through the factory commission or otherwise, the next best step would be in the limitation of the height of buildings in this zone, thereby diminishing the volume of operatives and making a uniform sky line." New York City's Board of Estimate and Apportionment established a Heights of Buildings Commission in 1913 at least in part at the urging of the Fifth Avenue Association, with the explicit purpose of recommending height regulations on Fifth Avenue above Thirty-second Street.
11. "Statement by Lawson Purdy, President, Department of Taxes and Assessments, May 8, 1916," in CBDR, *Final Report*, p. 168. Purdy in his 1916 testimony, Seymour Toll in *Zoned American*, and Edward Bassett in a speech (Chicago Real Estate Board, *Studies on Building Height Limitations*, pp. 236–237) discuss the efforts of the property owners to privately organize against the Equitable Building. Their accounts conflict on several points, but each of them argues that the failure of these private efforts helped convince the building owners that public regulation would be necessary. Also, one of the leaders of the attempt to stop the new Equitable Building was George T. Mortimer, vice-president of the United States Realty Company that owned two buildings across the street from 120 Broadway as well as several other tall buildings nearby. Mortimer served on both the 1913 and the 1916 zoning commissions, and was a strong advocate for height and bulk restrictions on commercial buildings.
12. "This book is dedicated by the author to Frederic B. Pratt, Lawson Purdy and Walter Stabler," Edward M. Bassett, *Zoning: The Laws, Administration, and Court Decisions During the First Twenty Years* (New York: Russell Sage Foundation, 1936). Richard M. Hurd, *Principles of City Land Values* (New York: Real Estate Record and Guide, 1903). The Lawyers Mortgage Company, which by 1916 had made $465 million in first-mortgage loans on "improved income-producing business or residence property in the most desirable sections of New York City," was so ardently in favor of zoning that it published a handbook explaining the New York zoning resolution through text and maps. See George B. Ford, *Building Zones* (New York: Lawyers Mortgage Company, 1916).
13. When Frank Woolworth paid $13 million in cash to build a nearly 800-foot office tower that became New York's tallest building in 1913, he was warned by his general contractor, Louis Horowitz, president of the Thompson-Starrett Company, that the building might be too costly and not yield an acceptable return. According to Horowitz, Frank Woolworth

replied that "the Woolworth Building was going to be like a giant signboard to advertise around the world his spreading chain of five-and-ten-cent stores. On that basis, of course, his splendid building was a sound investment." Louis J. Horowitz and Boyden Sparkes, *The Towers of New York: The Memoirs of a Master Builder* (New York: Simon & Schuster, 1937), p. 2. On early corporate office headquarters buildings, see Kenneth T. Gibbs, *Business Architectural Imagery in America, 1870–1930* (New York: Arno, 1984); Mona Domosh, "The Symbolism of the Skyscraper: Case Studies of New York's First Tall Buildings," *Journal of Urban History* 14 (May 1988): 320–345; Robert A. M. Stern, Gregory Gilmartin, and John Massengale, *New York 1900: Metropolitan Architecture and Urbanism, 1890–1915* (New York: Rizzoli, 1983). For more recent office development, see Tom Schactman, *Skyscraper Dreams: The Great Real Estate Dynasties of New York* (Boston, MA: Little, Brown, 1991); Karl Sabbagh, *Skyscraper: The Making of a Building* (New York: Viking, 1989).

14. The discussion in this section draws from a number of sources, including Weiss, *Community Builders;* Bassett, *Zoning; Report of the Heights of Buildings Commission;* Chicago Real Estate Board, *Studies in Building Height Limitations;* Theodora Kimball Hubbard and Henry Vincent Hubbard, *Our Cities To-Day and To-Morrow* (Cambridge: Harvard University Press, 1929); George B. Ford, *Building Height, Bulk, and Form* (Cambridge: Harvard University Press, 1931); Norman L. Knauss, *Zoned Municipalities in the United States* (Washington, DC: U.S. Department of Commerce, 1931); RSNYE, *Buildings;* Barbara J. Flint, "Zoning and Residential Segregation: A Social and Physical History, 1910–1940." Ph.D. diss. (University of Chicago, 1977); Garrett Power, "High Society: The Building Height Limitation on Baltimore's Mt. Vernon Place," *Maryland Historical Magazine* 79 (Fall 1984): 197–219; Marc A. Weiss, "The Real Estate Industry and the Politics of Zoning in San Francisco, 1914–1928," *Planning Perspectives* 3 (September 1988): 311–324; J. M. Neil, "Paris or New York: The Shaping of Downtown Seattle, 1903–1914," *Pacific Northwest Quarterly* 75 (January 1988): 22–33; Holleran and Fogelson, "'Sacred Skyline'"; Charles M. Nichols, *Zoning in Chicago* (Chicago: Chicago Real Estate Board, 1923); Toll, *Zoned American;* Wilson, *City Beautiful;* Houston Chamber of Commerce, *What Other Cities Say About Zoning* (Houston: Chamber of Commerce, 1946); Weiss, "Skyscraper Zoning." Though Cleveland did not have a zoning law during the 1920s, it did have a 250-foot height limit. The proposed zoning would have lowered this limit, which is one reason why downtown business and real estate interests opposed the zoning bill.

15. On NABOM, see Earle Shultz and Walter Simmons, *Offices in the Sky* (Indianapolis: Bobbs-Merrill, 1959); annual *Proceedings of the National Association of Building Owners and Managers* and their other publications, including *Buildings* and *Skyscraper Management.* On NAREB and zoning, see Weiss, *Community Builders.* NABOM is now the Building Owners and Managers Association International, and NAREB is now the National Association of Realtors. An influential, widely discussed, and NABOM-inspired book of the period was W. C. Clark and J. L. Kingston, *The Skyscraper: A Study in the Economic Height of Modern Office Buildings* (New York: American Institute of Steel Construction, 1930). Clark

was a vice-president of S. W. Straus, the mortgage bond firm that financed the development of many skyscrapers, including the Chrysler Building, and Kingston was a commercial architect with Sloan & Robertson. The authors chose a hypothetical example of a site near Grand Central Station to demonstrate that a seventy-five-story building yielded a greater return on investment than smaller structures, thus arguing for skyscrapers as the most economically efficient use of urban land in districts with high property values. The best efforts to critique Clark and Kingston's pro-skyscraper arguments were by George Ford, *Building Height*, and Thomas Adams, "Character, Bulk, and Surroundings of Buildings." For further debate, see Chamber of Commerce of the United States, *Economic Height of Buildings* (Washington, DC, 1927).

16. An excellent statement of the cyclical economic imperative behind New York's 1916 zoning is by Frank Lord, vice-president, Cross & Brown Company, Real Estate and Insurance, *Commission on Building Districts and Restrictions* (March 29, 1916), pp. 149–150. For a broad analysis of how economic timing affects planning and policy initiatives, see Marc A. Weiss, "The Politics of Real Estate Cycles," *Business and Economic History* 20 (1991): 127–135.
17. Carol Willis, "Zoning and Zeitgeist: The Skyscraper City in the 1920s," *Journal of the Society of Architectural Historians* 45 (March 1986): 47–59, gives a good picture of the changes in architectural style and conceptions of urban design that followed the 1916 New York building height and bulk regulations. See also Robert A. M. Stern, Gregory Gilmartin, and Thomas Mellins, *New York 1930: Architecture and Urbanism Between the Two World Wars* (New York: Rizzoli, 1987); Paul Goldberger, *The Skyscraper* (New York: Knopf, 1981); Jonathan Barnett, *Urban Design*; Carol Herselle Krinsky, "Architecture in New York City," in Leonard Wallock, ed., *New York: Culture Capital of the World, 1940–1965* (New York: Rizzoli, 1988). On Boston's late 1920s conversion, see Holleran and Fogelson, "'Sacred Skyline.'"
18. *New York Times* (November 22, 1916): 1:12; (November 5, 1916): 3:4; (May 6, 1917): 4:1.
19. *New York Times* (February 25, 1917): 8:4; (August 5, 1917): 4:4; (February 2, 1919): 1:6.
20. *Real Estate Record and Builders Guide* (June 1, 1918; hereafter *Record and Guide*): 697.
21. *Record and Guide* (September 15, 1917): 329; (October 27, 1917): 531–532; (February 8, 1919): 171; (June 28, 1919): 861; (November 15, 1919): 493–494. *New York Times* (January 25, 1917): 1:13; (September 23, 1917): 8:2; (June 29, 1919): 9:18.
22. *New York Times* (December 31, 1916): 3:5; (May 27, 1923): 9:2; (October 14, 1923): 10:1; (March 23, 1924): 11:2; *Record and Guide* (May 26, 1923): 655–656.
23. *New York Times* (November 7, 1924): 1:1; (December 7, 1924): 11:1; (January 3, 1926): 10:4; (May 4, 1926): 1:16; (November 11, 1928): 13:1; (January 21, 1929): 1:1; (April 19, 1929): 1:8; *Record and Guide* (April 27, 1926): 6.
24. *Record and Guide* (February 21, 1920): 241; (September 25, 1920): 427.
25. See Willis, "Zoning and Zeitgeist" and *Record and Guide* (June 1, 1918): 697.

26. City of New York, Board of Estimate and Apportionment, Building Zone Amendment, Amendments 44 (June 28, 1919): 70; (July 11, 1919): 264; (November 23, 1923): 309; (April 4, 1924): 378; (March 6, 1925): 421; (June 12, 1925): 611; (June 17, 1926): 718; (March 31, 1927): 787; (September 29, 1927): 803–805; (November 17, 1927): 853; (March 8, 1928): 903; (September 27, 1928); *New York Times* (September 29, 1928): 18.
27. *Record and Guide* (July 29, 1922): 134.
28. *New York Times* (June 17, 1926): 25; (November 10, 1926): 29; (December 5, 1926): 4:2; (May 22, 1927): 12:4; *Record and Guide* (May 14, 1927): 8.
29. *New York Times* (June 18, 1926): 15; (May 13, 1927): 29; (July 9, 1926): 33.
30. *New York Times* (December 12, 1926): 2:21; (January 10, 1926): 11:1.
31. *Record and Guide* (January 21, 1928): 6; *New York Times* (April 18, 1927): 39; (June 7, 1927): 12; (June 17, 1927): 41; (January 15, 1928): 11:2.
32. *New York Times* (June 13, 1931): 29; (November 8, 1931): 11:1; (October 26, 1927): 51; (January 15, 1928): 11:2; (February 21, 1928): 27; (September 30, 1928): 12:2; (May 5, 1929): 12:16; (May 22, 1930): 5; (March 24, 1930): 20; *Record and Guide* (October 27, 1928): 6.
33. *Report of the City Committee on Plan and Survey* (New York, 1928), pp. 51–52.
34. Ibid., pp. 3, 8–9; *New York Times* (April 11, 1928): 1; (June 6, 1928): 1; *Record and Guide* (October 20, 1928): 6, 8.
35. *New York Times* (November 16, 1926): 1; (May 16, 1928): 26; (June 13, 1931): 29; (November 8, 1931): 11:1.
36. *Record and Guide* (October 20, 1928): 6, 8.
37. *Record and Guide* (July 12, 1924): 8; (June 20, 1925): 10; *New York Times* (May 1, 1927): 11:2; (June 19, 1927): 10:1; (January 15, 1928): 14. On NABOM, see note 15.
38. *New York Times* (July 4, 1926): 8:3.
39. *New York Times* (May 2, 1928): 24.
40. RSNYE, *Buildings*; Ford, *Building Height*; Regional Plan of New York and Its Environs, vol. 2, *The Building of the City* (New York: RPNYE, 1931).
41. RPNYE, *Building of the City*, p. 192.
42. Edward M. Bassett, "Control of Building Heights, Densities and Uses by Zoning," in RSNYE, *Buildings*, p. 367.
43. Clifford L. Weaver and Richard F. Babcock, *City Zoning: The Once and Future Frontier* (Chicago: Planners Press, 1979), p. 125; Jerold S. Kayden, *Incentive Zoning in New York City: A Cost-Benefit Analysis* (Cambridge: Lincoln Institute of Land Policy, 1978). See note 6 for additional references on the evolution of New York zoning since the 1940s.
44. For example, see Babcock and Larsen, *Special Districts*; Terry Jill Lassar, *Carrots and Sticks: New Zoning Downtown* (Washington, DC: Urban Land Institute, 1990); Mike E. Miles, Emil E. Malizia, Marc A. Weiss, Gayle L. Berens, and Ginger Travis, *Real Estate Development Principles and Process* (Washington, DC: Urban Land Institute, 1991).