

# EFFICIENT LAND USE FOR METROPOLITAN HOUSING

Theo Mackey Pollack, Esq., M.C.R.P.

Legal Towns Consulting

One of the most significant consequences of the 1926 *Euclid* decision has been the tendency of local governments to quash organic approaches to efficient land use development. In many cases, this impulse has served a valuable function, allowing communities to protect themselves from nuisances, incompatible uses, and the damage wrought by bad development. But along with their clear benefits, it is important to note the potential costs of zoning policies that discourage efficient land use. In their 2000 book, *Suburban Nation: the Rise of Sprawl and the Decline of the American Dream*, Andrés Duany, Elizabeth Plater-Zyberk, and Jeff Speck note that between 1970 and 1990, the proportion of American families that could afford to purchase a median-priced home fell from 50 percent to just 25. During the same years, planners and others widely observed a troubling decline in the aesthetic design quality of new buildings and land uses, while lamenting the growing number of communities in which people cannot take part in basic, daily activities without a car. Significantly, a number of the contributing factors that have been cited for these trends have a common thread: a declining efficiency of land use.

Land use efficiency has a long and practical history in town planning, beginning organically at the dawn of urban civilization, and refined in its method at least since the fifth century B.C., when Hippodamus planned the reconstruction of his native Miletus, after the Persian Wars. The goal of efficient land use was traditionally driven by the practical necessities of urban life in pre-industrial societies, where walking and animal use were the primary modes of mobility on land. Even with the advent of railroads in the nineteenth century, and the fast, long-distance travel that they facilitated, new towns were still built on a walkable scale—that is, their streets were laid out within walking distance of one another, and also of the train station. Out of this practical necessity, a refined

tradition developed which included resourceful devices for saving the valuable land near existing settlements, and for making the best use of the land that was already contained within them.

The industrial pollution and massive crowding of the late nineteenth century, followed by the individual freedom supplied by the automobile in the early twentieth, undermined the established, pragmatic rationales for maintaining the traditions of town planning: As cities became increasingly unpleasant, many individuals soon became free to leave them behind. In the United States, the Supreme Court's 1926 decision in *Euclid* eliminated yet another support for traditional urban growth patterns: their legal inevitability. By empowering local governments to widely regulate the lawful uses of private property, the ability of individual land owners to maximize their use of every urban parcel was greatly abrogated. In *Suburban Nation*, Duany *et al.* point out two common, practical devices that fell out of favor due to their increasing illegality under Euclidian zoning regimes. The first is the age-old tradition of building inexpensive apartments over the retail space of business districts. Duany *et al.* write:

Upstairs apartments provide customers for the shops, activity for the streets, and nighttime surveillance for the neighborhood. They also represent one of the most economical ways to provide housing, since the land and infrastructure costs are covered by the shops; the housing can be supplied for the cost of construction alone. . . . Additionally, [housing over shopping] contributes much-needed height to retail buildings, which with only one story fail to adequately define street space.<sup>1</sup>

In addition to separating what might be perfectly compatible uses, such as stores and apartments,

Euclidean zoning laws have also frequently dictated that no more than one unit shall be permitted on a single lot. According to Duany, this policy has resulted in the elimination of so-called outbuilding apartments, such as those located above the garages of a detached carriage house, or those contained in a separate, smaller building, in the yard behind a primary house.<sup>2</sup> Significantly, the elimination of such market-rate, affordable housing alternatives may have a doubly negative effect on the affordability of housing. By reducing the availability of new, affordable units, it has created greater competition for existing housing options.

In addition to quashing the potential for over-the-store apartments and outbuilding flats, typical Euclidian zoning codes, in keeping with the language of Justice Sutherland's opinion in the decision, often greatly constrain the development of multifamily buildings in areas beyond their immediate vicinity at the time of drafting. In the post-*Euclid* world, any significant changes to established land use policies generally require the highly-political, time consuming, and necessarily infrequent process of revising the official map.<sup>3</sup> And in a typical zoning ordinance, each of the basic use-zones is further correlated with a schedule of so-called zone requirements. These rules typically mandate minimum lot widths, depths, and street frontages, as well as maximum lot coverages, numbers of units, and heights. These kinds of requirements are often written in language that is so restrictive that they effectively preclude the potential creativity of builders and architects.<sup>4</sup> In short, the hands of developers are quite well tied by the common restrictions of Euclidian zoning.

The impact of Euclidian zoning on economic development is powerful: First, it ensures that the productive potential of a community's land is controlled by legislative restrictions on both its use and its intensity of development. Up to a point, the prudent exercise of this power can be beneficial to local economies, especially where it protects local properties by averting the predictable externalities of nuisances, eyesores, crowding, and incompatible

uses. But where the impact of zoning laws exceeds these practical goals, and results in the arbitrary exclusion of compatible uses, walkable neighborhoods, and decent, land-efficient housing, such laws can severely limit a community's capacity for healthy economic development. And when zoning policies result in artificial shortages of necessary floor space, the resulting increase in costs can impose a high entry barrier on a local marketplace, and ensure that a larger portion of a community's wealth must be spent on obtaining access to real estate, rather than be invested in more productive, dynamic sectors of the local economy.

In contrast to the patterns that develop under the legal and political restrictions of Euclidian land policies, the pre-zoning development patterns of late-Victorian New York City illustrate the trends that emerged in a metropolitan land economy that was driven mainly by the organic demands of the market, and large-scale adaptations of traditional town planning devices. In the period between 1890 and 1930, when the available land in Manhattan was being increasingly built out with single-family brownstones, a continued demand for housing led to the gradual redevelopment of many townhouse neighborhoods with larger apartment buildings.<sup>5</sup> The architects of these new buildings, who were often limited to a canvas of just a few attached lots, were required to find resourceful ways to create housing on limited parcels of land.

Accordingly, the housing stock of New York City that was built between 1890 and 1930 contains a wealth of examples of traditional land use efficiency. The buildings of that era occupied the entire spectrum of both practical and aesthetic possibilities, representing, as they did, the products of a largely unregulated urban land market awash in the tumult of industrial capitalism. In the years since the turn of the century, a number of reporters have thoroughly documented the deplorable conditions of the downtown tenements in Victorian New York, but comparatively little attention has been paid to the remarkable qualities of the city's

vast upper-middle-class apartment stock, which was beginning to take shape around the same time. The design and land use efficiency of these buildings, and the value that they concentrate on small parcels of private land, often compares quite favorably with the endless payout of strip malls, garden apartments, mundane architecture, and distorted housing costs that has accrued to much of the post-*Euclid* metropolitan landscape of the United States. While zoning remains a useful tool in the hands of local authorities, the argument for re-examining its standard applications, often made by New Urbanists like Duany, has grown increasingly strong.

### **Market-Based Efficient Land Use: Late Victorian New York City**

The upper-middle-class apartment stock of New York City, dating from the late Victorian era, represents a unique historical intersection of traditional, pre-zoning, land efficient approaches to town planning, and the large-scale, extensive infrastructure of a modern urban economy. In light of the present situation, it is interesting to look more closely to the not-so-distant past, and to examine some of the better approaches to efficient metropolitan land development that were employed in that context. In 1892, a guidebook author, Moses King, published an extensive survey of the contemporary city of New York that continues to offer some of the clearest depictions and descriptions of American urbanism in the late years of the Victorian period. In a chapter discussing the city's growing supply of middle-class apartment buildings, King offers a thoughtful analysis of the social and economic factors that had influenced the increasing respectability of apartment living. He writes:

Apartment houses, it has been said, hold more than half of the middle-class population of Manhattan Island. Real estate is so valuable, and consequently rents so high, that to occupy a house is quite beyond the reach of a family of ordinary means, and the suburbs on account of their inaccessibility are out of the question.

Consequently, apartments and flats have become a necessity, and a system of living, originally adopted for that reason, has now become very much of a virtue. Apartment-life is popular and to a certain extent fashionable. Even society countenances it, and a brownstone front is no longer indispensable to at least moderate social standing. And as for wealthy folk who are not in society, they are taking more and more to apartments.<sup>6</sup>

It was during this period that a sharp distinction began to emerge in the city's apartment stock, with the traditional slum-tenement buildings on one side, and the new supply of well-appointed buildings on the other.<sup>7</sup> Both made efficient use of land, but the former group took into account few other considerations, while the latter tried to balance efficient land use with an effort to meet the aesthetic expectations of more affluent tenants.

The differences between these two channels of buildings highlight the inherent tension between the goals of achieving maximum land use efficiency and creating decent living spaces. In the pre-zoning days of the 1890s, developers of the two types of buildings became embroiled in battles over the character of individual blocks and neighborhoods. King describes the frontiers of class geography in 1892 Manhattan:

The tenements display the lowly side and often the dark side of New-York life. It is not possible to locate the tenement-house population within any closely defined limits. In general, it may be said to hold parts of nearly all the streets below 14th, except a part of the old Ninth Ward, which is distinctively the Native [-born] American section of the city, and in and about Washington Square and lower Fifth Avenue, clinging to the river-front on either side, monopolizing almost entirely the East Side nearly over to Broadway. Above 14<sup>th</sup> Street on the East Side it is supreme east of Third Avenue as far as the Harlem River, with the exception of a part of lower Second Avenue

and a few side-streets here and there. On the West Side it comes from the river-front as far east as Sixth Avenue, with oases of better homes here and there, and this as far north as about 59<sup>th</sup> Street. The territory above 59<sup>th</sup> Street to 125<sup>th</sup> Street has very little of this population. Tenement-houses are as a rule great towering buildings, many of them squalid and in bad repair, and devoid of any but the rudest arrangements for existence. They are packed with human beings. In a single block between Avenue B and Avenue C and 2d and 3d Streets there are over 3,500 residents, and a smaller block on Houston Street contains 3,000 people, which is at the rate of 1,000,000 to the square mile. That section is altogether populated at the rate of 500,000 to the square mile, which is as if the entire population of the city should be crowded into a space less than two miles square.<sup>8</sup>

Presumably, it was with this landscape in mind that developers of new, upscale apartments sought to acquire land parcels further uptown, especially in the clean-slate blocks near Central Park, in Harlem and Washington Heights, and along the Grand Concourse. Many of their buildings took the spatial efficiency measures that had long been used in downtown tenements, and tempered them with a consciousness of form to create compact, yet beautiful buildings.

### **The Classic Six**

The New York Public Library maintains an extensive digital image database under the title, "Classic Six: New York City Apartment Building Living, 1880-1910." The name refers to the six-room layout that was typical in many of the city's late Victorian<sup>9</sup> apartment buildings, and the images are mostly scanned from *The World's New York Apartment House Album*, an out-of-print volume that was published in 1910 by the New York World; and *Apartment Houses of the Metropolis*, a similar out-of-print album published

two years earlier by G. C. Hesselgren & Company. Among the many plates are hundreds of color lithographs, depicting the footprints, floor plans, details, and dimensions of actual buildings that comprise the early portion of the iconic, pre-war apartment stock of the city. These plans, which refer to bedrooms and living rooms as chambers and parlors, respectively, and which often provide for a maid's room and a library in an otherwise modest unit, depict the urban American lifestyle of a lost time. Yet, in spite of their indulgence of dated pretensions and their frequently ornate details, these buildings contain a practical wisdom in their simple geometry that deserves to be recovered and applied in the contemporary search for efficient housing solutions.<sup>10</sup> And, notably, like the over-the-store apartments and outbuilding flats described by Duany, et al., many of these buildings' most useful efficiency devices could never be reconciled with the typical zoning ordinances of contemporary suburbia.

### **Courtyards**

One of the basic architectural features that were employed for spatial efficiency in the apartment buildings of the late Victorian period was the interior courtyard. By opening up the inside of the structure to air and light, internal rooms could be arranged to overlook the courtyard, and a larger portion of the lot could be covered with living space. As an added benefit, interior courtyards facilitated the aesthetic effect of having continuous façades along the street's block face, creating a strong sense of intimately contained space on each block, and maintaining the enclosure that had previously been established by rows of attached brownstones. While the courtyard remains in use today, it is applied less frequently in the kinds of simple, basic buildings that it often enhanced a century ago. This has led to a loss of both aesthetic value and land use efficiency in urban housing.<sup>11</sup>

A good example of the ordinary application of the interior courtyard can be found in the layout of the Wadsworth Court, a six-story elevator building that was finished in 1909. (Images of each

of the described buildings, as well as their floor plans, can be found in the appendix titled “Images”.) Situated at the southwest corner of Wadsworth Avenue and West 180<sup>th</sup> Street, its modest, 100-by-75 foot lot is the land-use equivalent of just three standard row houses.<sup>12</sup> But the Wadsworth accommodates five generously proportioned apartments on each of its upper five floors, and four large apartments, as well as a lobby and vestibule, on its ground floor. If one could presume that the chambers, maids’ rooms, and libraries of 1909 would today be, simply, bedrooms, then the Wadsworth layout manages to accommodate a total of 66 separate sleeping areas.<sup>13</sup> And if a predictable portion of these are shared by couples, then the building provides enough space for about 100 people to live comfortably. Today, few people who passed on the street would be likely to notice the Wadsworth as anything more extraordinary than a typical New York apartment building. In fact, its cornice is gone—replaced by mismatched bricks—and its paint is visibly fading. Its aging fire escapes have marked it for conflation with the tenements it was designed to contrast. But, in a way, its unremarkable present-day appearance is exactly what makes it interesting: These ordinary old buildings often contained simple design elements that have been shelved by subsequent generations of architects. Yet some of these devices might well be recovered in the contemporary quest to create more housing in dense metropolitan areas.

Similar to interior courtyards, externally-oriented adaptations of the same principle were widely employed by architects of the period. Rather than being enclosed by four structural walls, exterior courtyards are generally open to the street, resulting in a building whose façade is visually separated into two or more arms. The deep setback created by this design might be furnished with landscaped gardens, paths, lamp posts, benches, and patio tables. Like the interior courtyard, the open courtyard allows a larger percentage of the building lot to be covered by extending the length of exterior walls, and providing the necessary geometry to gain greater access to light and air. Unlike the interior courtyard, it is generally less

private, and it may or may not be gated from the street. A good example of two buildings whose design employs this device to maximize ground coverage can be found in Washington Heights, in a pair called the Knowlton Court. Occupying the entire east side of Broadway between West 158<sup>th</sup> and West 159<sup>th</sup> Streets, these buildings were constructed between 1907 and 1908. Together, they have four exterior courtyards, with two facing Broadway and one facing each of the cross streets. At seven stories, the Knowlton Court buildings provide at least 244 bedrooms on a parcel that measures 200x125 feet, or enough space to house about 300 people.<sup>14</sup>

### **Yards, Alleys, and Airshafts**

While courtyards offer a balance of function and form, providing both practical and aesthetic benefits to buildings in urban settings, their function alone can frequently be achieved on a smaller scale with more utilitarian applications of the same basic concept. Simple paved or unpaved yards, bounding alleyways, and airshafts can be designed into large apartment buildings to maximize lot coverage and provide at least a modicum of air and light to a large number of off-street rooms. A good example of the judicious application of such devices can still be found at the Saxonía, in Harlem. Designed by the architects of Neville & Bagge, the building opened in 1907 at the northwest corner of Broadway and West 136<sup>th</sup> Street, in an enclave known as Hamilton Heights. A six-story, elevator building with extensive ground floor retail space, the Saxonía capitalized on its proximity to the new City College campus<sup>15</sup>, which also opened in 1907, and to the simultaneously-constructed I.R.T. subway station at the corner of Broadway and West 137<sup>th</sup> Street.<sup>16</sup> <sup>17</sup> With a façade that wraps around its block face on both streets, the retail spaces are arranged to open on Broadway, while the building’s residential lobby is entered through a vestibule on the cross street. Neville achieved internal space efficiency through a variety of devices, including both interior and exterior courtyards, an oversized airshaft (providing air and light to a number of the tenants’

bathrooms), and a narrow setback from each of the interior property lines to create bounding alleyways, which are faced with windows and fire escapes. In this way, despite being situated on a lot that measures only 100 by 100 feet, or the equivalent of just four row houses, the architects were able to provide for at least 100 bedrooms on the upper five floors, as well as seven retail stores and a superintendent's apartment on the ground level.<sup>18</sup>

Similarly, in west Midtown, the architects of the Summersby Apartments achieved an even greater efficiency with just a 50-foot lot.<sup>19</sup> Their seven-story building, located on West 56<sup>th</sup> Street between Eighth and Ninth Avenues, opened in 1910. Its façade is attached to those on either side, creating the aesthetic of a continuous streetscape, but the building edges are stepped in at a depth of 20 feet, to create a pair of narrow bounding alleys that run to the back of the structure. There, these spaces are connected by a small, paved yard that adjoins the similar yards of adjacent buildings. The crevasses of light and air thus provided are used as facings for the placement of windows and exterior fire escapes, and they allow for an astonishing eighty percent of the Summersby's lot width to be covered with livable floor space. As a result, space enough for at least 68 bedrooms is provided in just seven stories on the land that would be required for just two standard row houses. Admittedly, the actual light and air enjoyed by many rooms under such a design is minimal. But the building's description in the *Album* indicates that, even in 1910, there was a market for apartments that traded aesthetics for access to Midtown:

The Summersby is a splendidly built, fireproof apartment house, with elevator service and telephone in each apartment. The highest degree of efficiency is demanded of the superintendent and uniformed hallboys. Tenants are selected with great care, and each apartment has the advantages of a private house.

Surprisingly, in light of today's Manhattan land costs, the building was designed to have just two large apartments on each floor. Clearly, in the alternative, a number of smaller units could be carved out of the same space to provide more housing at lower price points to smaller households.<sup>20</sup>

### **The Legacy of Late Victorian Urban Design**

The approaches applied by the architects of the buildings described above are not especially unique. Instead, they are examples of routine design elements employed in the kinds of typical, middle-class and upscale apartment houses that were built in New York City around the turn of the twentieth century. For better and for worse, these devices were applied in thousands of buildings to achieve a higher density of residential space on limited parcels of land.<sup>21</sup> Late Victorian urban design employed a much greater intricacy in its building devices than the majority of today's apartment buildings. Many of these devices continue to haunt the collective consciousness that Americans have of old city buildings: long, echoing hallways, precarious fire escapes, dim alleys, and dark, paved yards. The hard times that fell on many urban neighborhoods in the late-twentieth century further colored the perception of these devices, as their inherent creation of mystery, density, and intricacy seemed terribly ill-suited for a world of crime, poverty, and neglect. Yet, some of the period's classic devices, like landscaped courtyards, grand lobbies, sunken living rooms, high ceilings, and transom windows are remembered much more fondly, and are still admired for the aesthetic grace that they add to the older buildings—almost to the point of obscuring their practical purposes. Yet, all of this complexity, both good and bad, was built with a small toolbox of simple, geometrical adaptations that allowed for the very efficient use of limited land.

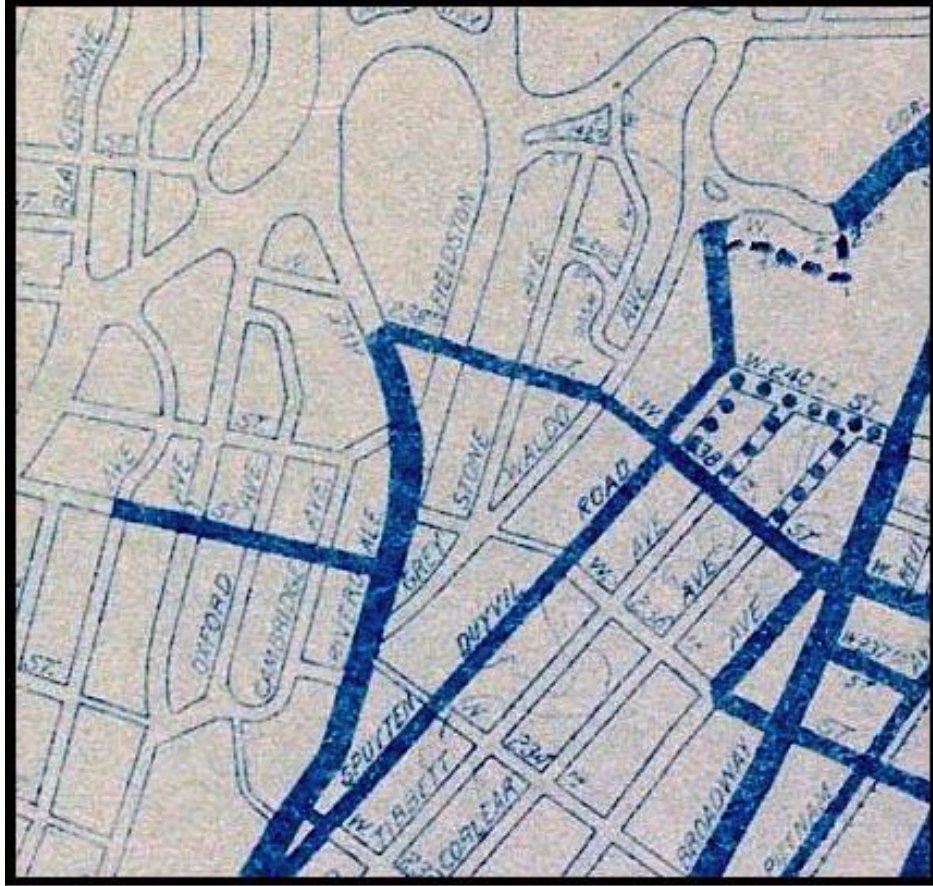
In the years after World War II, as the patchwork of postwar America developed from the application of traditional Euclidian zoning, much of the resourceful wisdom and intricate variety of urban America began to unravel under a legal

regime whose mandatory, broad brushstrokes pushed builders, architects, and even small-scale private landowners in entirely new directions. As New Urbanist writers like Duany have frequently observed, post-war land development was largely removed from the historical, practical, and aesthetic contexts of traditional approaches to town planning, and the consequences of this fundamental shift can be perceived in the strip malls, garden apartments, stunted design quality, wasted land, car dependence, and distorted housing that now characterize much of the American landscape. But, in spite of this, the conventional wisdom at the heart of land use zoning retains a broad and powerful appeal: most people recognize that the authority that has been delegated to local governments, pursuant to *Euclid*, has allowed many communities to protect themselves and the economic value of their properties from the predictable externalities of nuisances, eyesores, crowding, and incompatible uses, each of which has the potential to blight the landscape in a nearly permanent way.

Therefore, while the potential value of land use zoning is evident, it is interesting to consider whether some of the architectural devices that were employed in New York City before its advent might be recovered and applied to address today's planning challenges across the United States. A recovery of certain design elements from that time would hold the promise of influencing a wider recovery of land use efficiency in metropolitan housing. This would be broadly consistent with the sustainable goals of economic development, ecological stewardship, and social equity, for many of the reasons discussed above. Therefore, as we revise the calcifying approaches to Euclidian zoning, and seek to increase housing stocks without destroying the complex fabric of existing neighborhoods, we should look to the intricacy of New York City's late-Victorian approach to apartment-building. We might find it contains a number of valuable secrets, hidden in plain view.



## Images



**Image 1:** Close-up look at part of the original New York City zoning map of 1916, showing different uses by block in the Riverdale and Kingsbridge sections of the Bronx. The dark blue streets, including all of Broadway and the part of Riverdale Avenue south of West 238<sup>th</sup> Street, represented the areas where commercial activity would be permitted. Incidentally, the limits of commercial use remain roughly the same today, more than 93 years later, illustrating the power of zoning policies to permanently enshrine the sorts of urban land use decisions that were once in flux. Source: NYPL Digital Archive.



**Township of Wall  
Schedule of Zone Requirements  
January 2004  
[Amended 5-12-2004 by Ord. No. 11-2004]**

Zone	Maximum Gross		Minimum Lot Dimensions			Maximum Lot Coverage		Minimum Yard Depths				
	Density for Major Subdivisions (dwelling units/acre)	Minimum Lot Area (square feet)	Minimum Lot Width (feet)	Minimum Lot Frontage (feet)	Minimum Lot Depth (feet)	All Buildings (percentage)	All Impervious Surfaces (percentage)	Front Yard (feet)	Side Yard (feet)	Rear Yard (feet)	Stories	Feet
<b>Residential</b>												
RR-6	0.16	6 Ac	400	275	400	5	6	75	50	75	2.5	35
RR-5	0.2	5 Ac	400	275	400	6	7	75	50	75	2.5	35
R-R	0.5	2 Ac	300	165	200	9	15	50	30	50	2.5	35
R-60	0.6	60,000	200	145	200	10	20	50	20	50	2.5	35
R-40	0.9	40,000	150	125	150	12	20	40	20	30	2.5	35
R-30	1.2	30,000	125	100	150	14	25	40	20	25	2.5	35
R-25	1.5	25,000	125	80	150	15	30	35	20	25	2.5	35
R-20	1.7	20,000	100	80	150	17	30	30	15	15	2.5	35
R-15	2.9	15,000	75	75	150	19	35	30	10	15	2.5	35
R-15 corner lot		18,000	75	75	150	19	35	30	10	15	2.5	35
R-10	4.4	10,000	75	75	100	22	40	30	10	15	2.5	35
R-10 corner lot	4.4	12,000	75	75	100	22	40	30	10	15	2.5	35
R-7.5	5.8	7,500	65	65	100	25	40	25	7.5	15	2.5	35
R-7.5 corner lot	5.8	9,000	65	65	100	25	40	25	7.5	15	2.5	35
<b>Residential Multifamily</b>												
MH/MHP	7	10 Ac	400	300	500	30	50	50	40	40	1	15
HD-8	8 <sup>3</sup>	10 Ac	400	300	500	30	50	100	50	50	2	30
HD-12	12 <sup>3</sup>	10 Ac	400	300	500	30	60	75	50	50	2	30
<b>Highway Business</b>												
HB-200		200,000	350	350	350	20	60	125	50	75	2	40
HB-120		120,000	250	250	250	20	65	75	30	50	2	35
HB-80		80,000	200	150	200	20	65	50	20	25	2	35
HB-40		40,000	150	150	150	30	65	50	20	25	2	30
HB-20		20,000	100	100	100	20	65	50	20	25	2	30

NOTICE:

**Image 2:** The Schedule of Zoning Requirements in Wall, New Jersey. Source: Official Website of Wall, N.J. Note the setback and lot coverage requirements, which would prevent all but the most determined builders from exercising much creativity toward the end of land use efficiency.



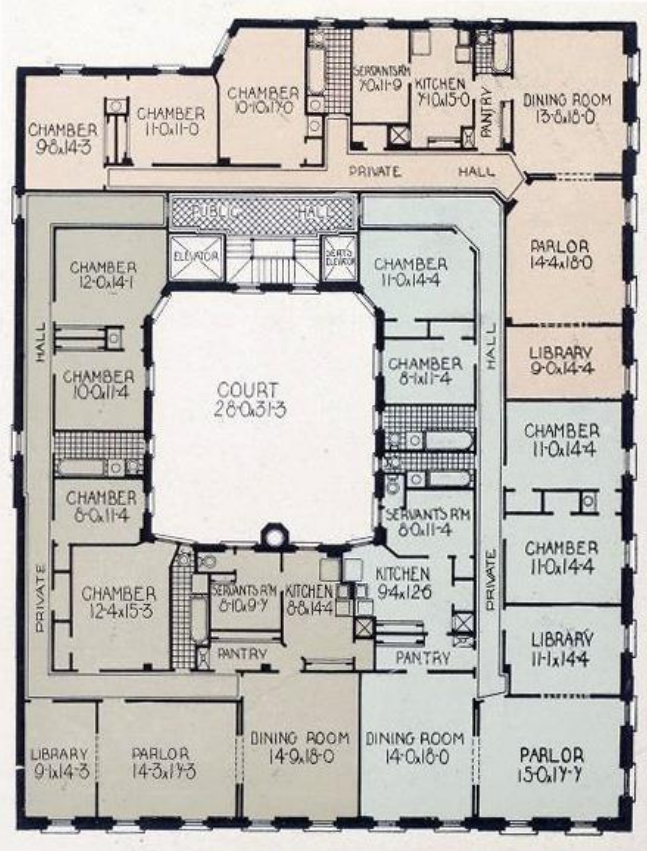
**Image 3:** The Wadsworth Court, Wadsworth Avenue and West 180<sup>th</sup> Street in Manhattan, pictured in 1909.  
Source: NYPL Digital Archive.



**Image 4:** Plans showing the original layout the Wadsworth Court. Source: NYPL Digital Archive.



**Image 5:** The Wadsworth Court today: A fairly typical Washington Heights building. Source: Google.



**Images 5 & 6:** The Hanover, which once stood on Park Avenue at the corner of East 63<sup>rd</sup> Street, depicted new (left) and the original plan of its eight upper floors (right). Source: NYPL Digital Archive.



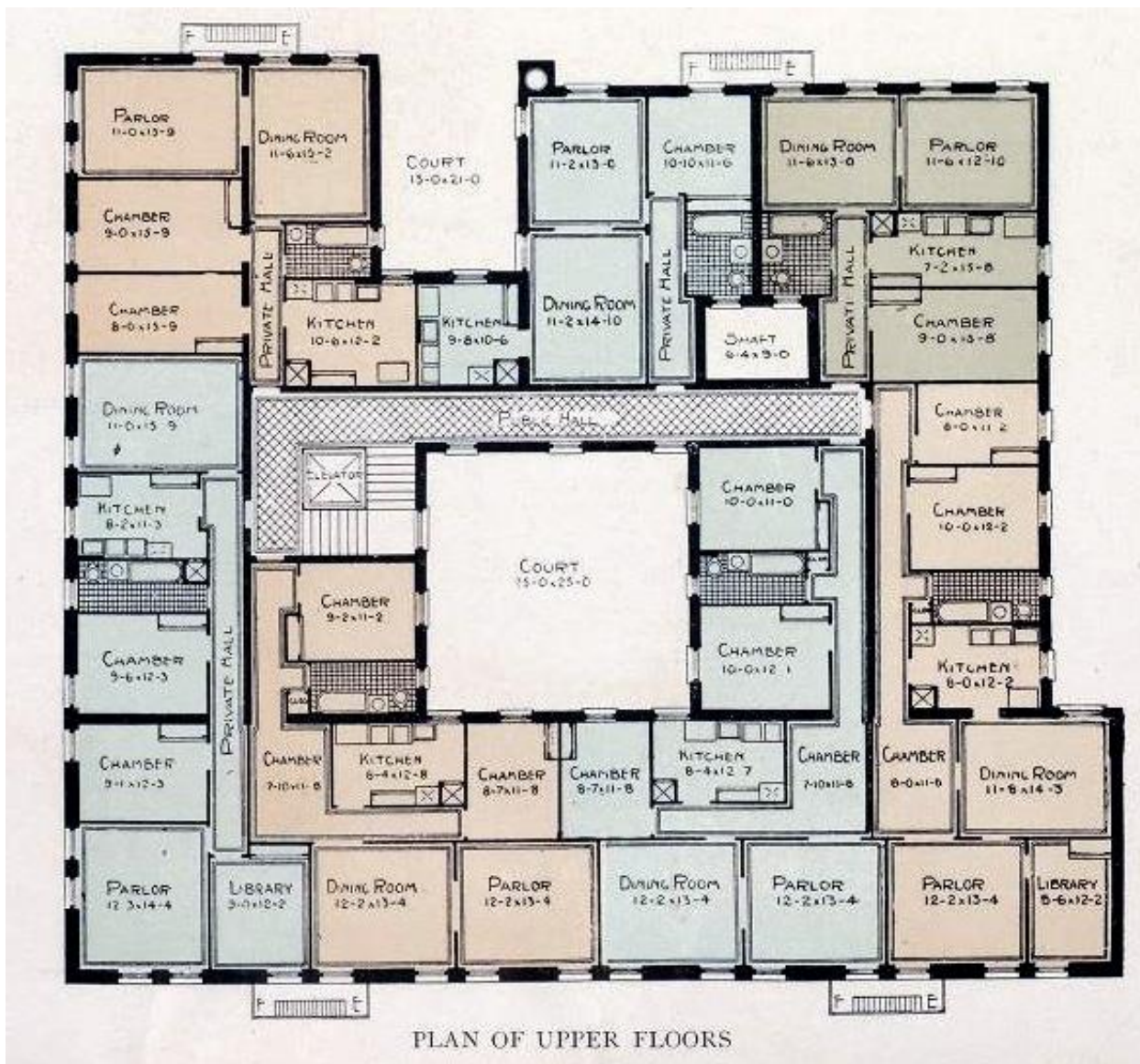
**Images 7 & 8:** Knowlton Court, in Washington Heights: Broadway between 159<sup>th</sup> Street and West 158<sup>th</sup> Street, shown when new, in 1907 (left), and today (right). Source: NYPL Digital Archive (modified), and Google.



Image 9: Original plans of the southern building at Knowlton Court.



Image 10: Ground floor plan of the Saxon, showing Broadway storefronts: Source: NYPL Digital Archive.



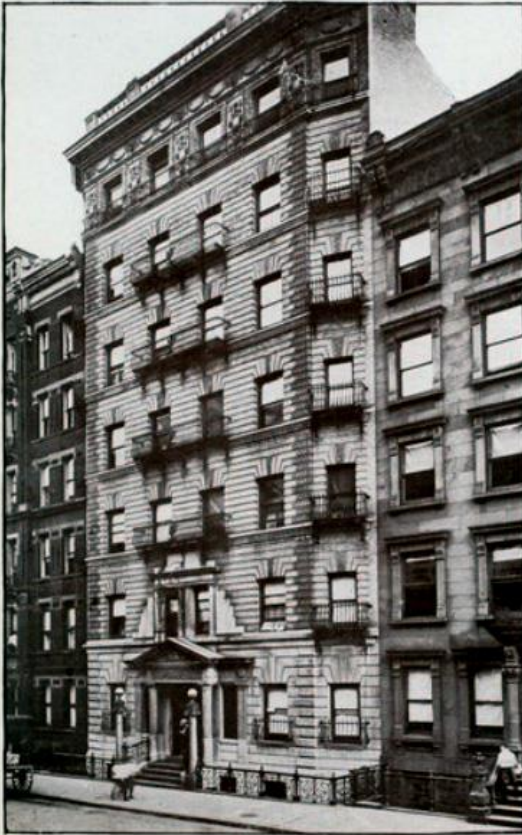
**Image 11:** The original plan of the upper floors of the Saxonia. Note the small airshaft in the upper right corner of the building, providing light to a number of bathrooms and hallways. Source: NYPL Digital Archive.

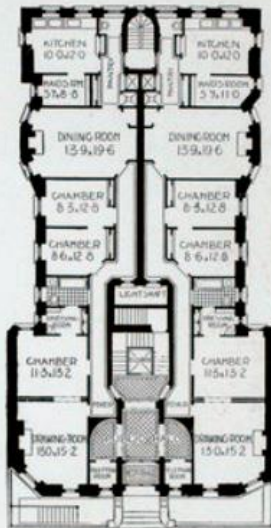


**Images 12 & 13:** The Saxon, at the corner of Broadway and West 136<sup>th</sup> Street in Hamilton Heights, Harlem, shown as a new building in 1907 (above) and today (below). Source: NYPL Digital Archive, and Google.

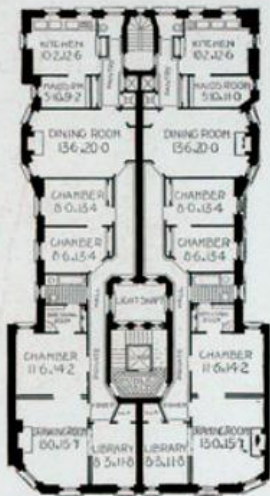


**The Summersby Apartments**





FIRST FLOOR PLAN.



UPPER FLOOR PLAN.

**THE SUMMERSBY**  
Nos. 342-344 West Fifty-sixth Street

The Summersby is a splendidly built, fireproof apartment house, with elevator service and telephone in each apartment. The highest degree of efficiency is demanded of the superintendent and uniformed hallboys. Tenants are selected with great care, and each apartment has the advantages of a private house. Besides the elevator there are both front and rear stairs, the latter being found very convenient for servants and tradespeople.

The Apartments—The building is 50 feet wide, with only two apartments on each floor, fourteen in all. Those above the first floor comprise eight large rooms, bath, dressing room with hot and cold water, a servants' toilet and a butler's pantry. The servants' room adjoins the kitchen and is not otherwise connected with the rest of the apartment.

The dining rooms are unusually large, with bay window effect. The woodwork throughout the apartments is selected, well finished and heavy. There are handsome double sliding doors between the parlor and library and between the parlor and first bedroom. The bay window in the parlor affords an extensive view along the street.

Location—Near Columbus Circle and within walking distance of the principal theatres in Longacre Square and Forty-second street section; also convenient to the most popular restaurants. Subway and elevated stations nearby, and numerous trolley lines. Central Park is only three blocks away.

**Image 14:** The Summersby, West 56<sup>th</sup> Street, in Midtown.



**Image 15:** A bounding Alley at the Audubon Park, Washington Heights. Source: Google.

## Notes

---

<sup>1</sup> Duany, Andres, Plater-Zyberk, Elizabeth, et al. “*Suburban Nation: The Rise of Sprawl and the Decline of the American Dream.*” (New York: 2000).

<sup>2</sup> Ibid.

<sup>3</sup> Since, presumably, both the property values and tax burdens of voters are likely to improve with a scarcity of residential units, and since people who are priced out a community do not, by definition, vote in its local elections, the political resistance to permissive code revisions can become strongly entrenched. Therefore, the initial establishment of use districts can effectively abrogate the flexibility of local land use policies indefinitely. See, also, the note below [Image 1](#).

<sup>4</sup> An example of this approach can be found in the addendum to the zoning ordinance of Wall, New Jersey, which is a relatively ordinary suburban township between the Atlantic Ocean and the Garden State Parkway, about fifty miles south of New York City. The minimum residential lot size in Wall (for new construction) is 65' x 65', and on such a lot, only the construction of one single-family home is permitted. Meanwhile, the smallest multifamily lot in the township is required to have dimensions of at least 400' x 500', with no more than 30 percent of that land being covered by fixed structures. Therefore, one can see how this approach presumably leaves little flexibility in the hands of builders or architects, and would seem to prevent the local land market from being very responsive to marginal, discrete changes in demand. Source: Official Website of Wall, New Jersey.

<sup>5</sup> See, generally, King, Moses: 217-20.

<sup>6</sup> King, 217-18.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid at 220.

<sup>9</sup> While the late Victorian era actually ended with the death of Queen Victoria in 1901, many of its architectural styles continued to influence apartment building design at least through the 1920s.

<sup>10</sup> NYPL Digital Library. “Classic Six: New York City Apartment Building Living, 1880s-1910s.” <http://digitalgallery.nypl.org>

<sup>11</sup> A *Google Images* search will confirm this. The majority of apartment building floor plans now show units arranged in a linear pattern in the context of a suburban, landscaped setting; or double-sided corridor, high-rise buildings, whose footprints are generally rectangular, and within an open plaza. Even urban, mid-rise buildings now tend to have simple, rectangular layouts. Likewise, examination of satellite images for high-density areas like Manhattan and Hoboken will reveal a marked difference in the number of apertures within the rooftops of newer buildings versus older ones.

<sup>12</sup> The Commissioners Plan of 1811 established the standard block measurements for Manhattan and parts of the Bronx. Under the plan, the distance between the rights-of-way of numbered streets is 200 feet, while the distance between avenues is varied, but ranges from 200 to 600 feet, with most being in the 400 to 600 foot width range. Accordingly, an interior lot on such a block is 100 feet deep. In standard practice, these lots were subdivided at a width of 25 feet, making room for 16 to 24 row houses on a typical east-west block. In reality, the number of buildings per block has often been smaller, because those facing the avenues tend to dominate at intersections. See, generally, the following link for an 1811 summary of the plan from *Harper's* magazine, followed by the text of the actual bill, as enacted by the New York legislature. <http://www.library.cornell.edu/Reps/DOCS/nyc1811.htm>

<sup>13</sup> *Supplement to Apartment Houses of the Metropolis* (1909: New York, G.C. Hesselgren): 60.

---

<sup>14</sup> *Apartment Houses of the Metropolis* (1908: New York, G.C. Hesselgren): 67-69.

<sup>15</sup> *Ibid*: 132-33.

<sup>16</sup> The City College of New York. History. <http://www1.cuny.cuny.edu/ci/centennial/index.cfm>

<sup>17</sup> 601 West 136<sup>th</sup> Street HDFC. <http://www.neighborhoodlink.com/neighbor/thesaxonia>

<sup>18</sup> *Apartment Houses*: 132-33.

<sup>19</sup> Unfortunately, the architectural firm that designed this building is not cited by the source.

<sup>20</sup> *World's Album*: 190.

<sup>21</sup> It should be noted, however, the latter set of devices, including yards, alleyways, and airshafts, often provide only a very limited amount of fresh air and sunlight. In contrast to the judicious use of these elements in the uptown, middle-class and upscale buildings described above, downtown tenement builders of the late Victorian period were notorious for abusing these tactics to achieve the most legalistic, superficial compliance with air and light regulations (many of which had been written in response to the construction of earlier tenement apartments without any windows at all). Accordingly, it should be kept in mind that, as a general rule, there is an inverse relationship between the floor space gained through these devices, and the amount of air and light that can be obtained in the resulting rooms. It is important to recognize that such devices, while potentially useful, can also be abused to create units that lack a decent standard of habitability. Therefore, a limited and skeptical application of paved yards, bounding alleyways, and airshafts is called for, and in most cases it is better to rely on full-sized courtyards and greater building heights to provide for more density on a given parcel of land.