National Register of Historic Places
Multiple Property Documentation Form

This form is used for documenting multiple property groups relating to one or several historic contexts. See instructions in How to Complete the Multiple Property Documentation Form (National Register Bulletin 16B). Complete each item by entering the requested information. For additional space, use continuation sheets (Form 10-900-a). Use a typewriter, word processor, or computer to complete all items.

__X__ New Submission ____ Amended Submission

A. Name of Multiple Property Listing

Historic Residential Suburbs in the United States, 1830--1960

B. Associated Historic Contexts

(Suburbanization of Metropolitan Areas in the United States, 1830—1960)

C. Form Prepared by

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D. Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this documentation form meets the National Register documentation standards and sets forth requirements for the listing of related properties consistent with the National Register criteria. This submission meets the procedural and professional requirements set forth in 36 CFR Part 60 and the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation. (___ See continuation sheet for additional comments.)

______________________________________________       ____________________
Signature and title of certifying official Date

State, Federal or Tribal agency and bureau
I hereby certify that this multiple property documentation form has been approved by the National Register as a basis for evaluating related properties for listing in the National Register.

Signature of the Keeper ___________________
Date ___________________

Table of Contents for Written Narrative

Provide the following information on continuation sheets. Cite the letter and the title before each section of the narrative. Assign page numbers according to the instructions for continuation sheets in How to Complete the Multiple Property Documentation Form (National Register Bulletin 16B). Fill in page numbers for each section in the space below.

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Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 120 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.
E. STATEMENT OF HISTORIC CONTEXTS:
SUBURBANIZATION OF METROPOLITAN AREAS IN THE UNITED STATES, 1830—1960

The evolution of American suburbs from 1830 to 1960 can be divided into four stages, each corresponding to a particular chronological period and named for the mode of transportation which predominated at the time and fostered the outward growth of the city and the development of residential neighborhoods:

1. Railroad and Horsecar Suburbs, 1830 to 1890;
2. Streetcar Suburbs, 1888 to 1928;
3. Early Automobile Suburbs, 1908 to 1945;

The chronological periods listed above should be viewed as a general organizing framework, rather than a fixed set of dates, thereby allowing for overlapping trends, regional influences, and variations in local economic or social conditions. Within each period, a distinctive type of residential suburb emerged as a result of the transportation system that served it, advances in community planning and building practices, and popular trends in design.

The following overview examines the major national trends that shaped America’s suburbs, including the development of urban and metropolitan transportation systems, the evolution of building and planning practices, a national system of home financing, the design of the residential subdivision, and trends in the design of the American home.

TRANSPORTATION

TRENDS IN URBAN AND METROPOLITAN TRANSPORTATION

The laying out of new transportation routes, using new technologies, spurred the outward movement of suburban development. New circulation patterns formed the skeleton around which new land uses and suburbs became organized. Farmland near the city was acquired, planned, and developed into residential subdivisions of varying sizes. Separate from the city, new subdivisions were designed as residential landscapes, combining the open space, fresh air, and greenery of the country with an efficient arrangement of houses.

Railroad and Horsecar Suburbs, 1830 to 1890

With the introduction of the Tom Thumb locomotive in 1830, the Baltimore and Ohio Railroad became the first steam-powered railroad to operate in the United States. Soon after, railroad lines rapidly expanded westward from major northeastern cities, making possible the long-distance transportation of raw materials and manufactured goods. On the eve of the Civil War, an extensive network of railroads existed in the eastern half of the United States, connecting major cities as far west as Chicago.

Seeking new sources of revenue, railroad companies started to build passenger stations along their routes connecting cities with outlying rural villages. These stations became the focal points of villages that developed in nodes along the railroad lines radiating outward from cities. Land development companies formed with the purpose of laying out attractive, semi-rural residential communities.

Railroad suburbs offered the upper and upper-middle classes an escape from the city to what historian John Stilgoe has called the “borderland,” where rural countryside and the city, with its modern amenities, merged. The railroad simultaneously provided access to the center city while insulating communities from the urban, lower classes who could not afford the high cost of commuting, creating what historian Robert Fishman has called a “bourgeois utopia.”

By the mid-1860s, railroad commuting was well established in many cities. Outside Philadelphia, “mainline” suburbs developed along the
route of the Pennsylvania Railroad at places such as Swarthmore, Villanova, and Radnor. Lines from New York City extended north and east to Westchester County, Long Island, and New Haven, Connecticut, and west and south into New Jersey. In 1850, 83 commuter stations lay within a 15-mile radius of the city of Boston. The building of a railroad south of San Francisco in 1864 stimulated the rapid growth of a string of suburban towns from Burlingame to Atherton.  

Outside Chicago, which rapidly developed during the railroad era, extensive new suburbs took form in places such as Aurora, Englewood, Evanston, Highland Park, Hinsdale, Hyde Park, Kenwood, Lake Forest, Wilmette, and Winnetka. Eleven separate railroad lines operated in the city between 1847 and 1861, and by 1873 railroad service extended outward to more than 100 communities. The most famous was Riverside, a Picturesque planned suburb west of the city, developed by Emery E. Childs of the Riverside Improvement Company. Designed in 1869 by Olmsted, Vaux, and Company, Riverside would become a highly emulated model of suburban design well into the twentieth century.  

Revolutionizing cross-city travel in the 1830s, horse-drawn cars provided the first mass transit systems by offering regularly scheduled operations along a fixed route. Due to the introduction of the horse-drawn omnibus and later the more efficient horse-drawn streetcar that operated on rails, the perimeters of many cities began to expand in the 1850s. By 1860, horsecar systems operated in New York, Baltimore, Philadelphia, Pittsburgh, Chicago, Cincinnati, Montreal, and Boston.  

Horse-drawn cars increased the distance one could commute in one-half hour from two to three miles, thereby extending the distance between the center city and land desirable for residential development from 13 to almost 30 square miles. Horsecar tracks followed the main roads radiating out from the center city toward the emerging railroad suburbs on the periphery. Transportation began to influence the geography of social and economic class, as the cost of traveling between home and work determined where different groups settled. The middle and working classes settled in neighborhoods closer to the central city accessible by horse-drawn cars, while those with higher incomes settled in the railroad suburbs.  

Following the precedent of Central Park in New York City in 1858, large, publicly-funded, naturalistic parks began to appear in many of America’s rapidly industrializing cities. Aimed at improving the quality of life, they offered city dwellers the refreshing experience of open space, natural scenery, and outdoor recreation. In cities such as Buffalo, Brooklyn, Boston, and Louisville, the desire to connect parks with the central city and each other resulted in the creation of parkways and boulevards that were essentially extensions of park carriage roads. Characterized as wide, tree lined roadways often running alongside natural brooks and streams, these roads quickly became desirable corridors along which new neighborhoods and suburban estates were built for those wealthy enough to travel by horse and carriage.  

**Streetcar Suburbs, 1888 to 1928**  
The introduction of the first electric-powered streetcar system in Richmond, Virginia, in 1887 by Frank J. Sprague ushered in a new period of suburbanization. The electric streetcar, or trolley, allowed people to travel in 10 minutes as far they could walk in 30 minutes. It was quickly adopted in cities from Boston to Los Angeles. By 1902, 22,000 miles of streetcar tracks served American cities; from 1890 to 1907, this distance increased from 5,783 to 34,404 miles.  

By 1890, streetcar lines began to foster a tremendous expansion of suburban growth in cities of all sizes. In older cities, electric streetcars quickly replaced horse-drawn cars, making it possible to extend transportation lines outward and greatly expanding the availability of land for residential development. Growth occurred first in outlying rural villages that were now interconnected by streetcar lines, and, second, along the new residential corridors created along the streetcar routes.  

In cities of the Midwest and West, such as Indianapolis and Des Moines, streetcar lines formed the skeleton of the emerging metropolis and influenced the initial pattern of suburban development. Socioeconomically, streetcar suburbs attracted a wide range of people from the working to upper-middle class, with the great majority being middle class. By keeping fares low in cost and offering a flat fare with free transfers, streetcar operators encouraged households to move to the suburban periphery, where the cost of land and a new home was cheaper. In many places, especially the Midwest and West, the streetcar became the primary means of transportation for all income groups.  

As streetcar systems evolved, cross-town lines made it possible to travel from one suburban center to another, and interurban lines connected outlying towns to the central city and to each other. Between the late 1880s and World War I, a number of industrial suburbs appeared outside...
Concentrated along radial streetcar lines, streetcar suburbs extended outward from the city, sometimes giving the growing metropolitan area a star shape. Unlike railroad suburbs which grew in nodes around rail stations, streetcar suburbs formed continuous corridors. Because the streetcar made numerous stops spaced at short intervals, developers platted rectilinear subdivisions where homes, generally on small lots, were built within a five- or 10-minute walk of the streetcar line. Often the streets were extensions of the gridiron that characterized the plan of the older city.

Neighborhood oriented commercial facilities, such as grocery stores, bakeries, and drugstores, clustered at the intersections of streetcar lines or along the more heavily traveled routes. Multiple story apartment houses also appeared at these locations, designed either to front directly on the street or to form a U-shaped enclosure around a recessed entrance court and garden.

In many places the development of real estate closely followed the introduction of streetcar lines, sometimes being financed by a single operator or developer. East of Cleveland, Ohio, the community of Shaker Village took form after 1904 when O. P. and M. J. van Sweringen set out to create a residential community for middle- and upper-income families. To ensure the fastest and most direct service for home owners they eventually purchased a right-of-way and installed a high-speed electric streetcar to downtown Cleveland. By 1911, the community of Shaker Village was incorporated, establishing a system of local government that would ensure the community’s development as a residential suburb for decades to come.

Streetcar use continued to increase until 1923 when patronage reached 15.7 billion and thereafter slowly declined. There was no distinct break between streetcar and automobile use from 1910 to 1930. As cities continued to grow and the demand for transportation increased, the automobile was adopted by increasing numbers of upper-middle to upper-income households, while streetcars continued to serve the middle and working class population. Streetcar companies, however, in the 1920s remained confident about their industry’s future. By the 1930s, many became mass transit companies, adding buses and trackless trolleys to their fleets to make their routes more flexible. In a few cities—Boston, Chicago, New York, and Detroit—mass transit included elevated trains and subways.

By the 1940s, streetcar ridership had dropped precipitously. The vast increase in automobile ownership and decentralization of industry to locations outside the central city after World War II brought an end to the role of the streetcar as a determinant of American urban form.

**Early Automobile Suburbs: 1908 to 1945**

The introduction of the Model-T automobile by Henry Ford in 1908 spurred the third stage of suburbanization. The rapid adoption of the mass-produced automobile by Americans led to the creation of the automobile-oriented suburb of single-family houses on spacious lots that has become the quintessential American landscape of the twentieth century.

Between 1910, when Ford began producing the Model-T on a massive scale, and 1930, automobile registrations in the United States increased from 458,000 to nearly 22 million. Automobile sales grew astronomically: 2,274,000 cars in 1922, more than 3,000,000 annually from 1923 to 1926, and nearly four and a half million in 1929 before the stock market crashed. According to Federal Highway Administration statistics, 8,000 automobiles were in operation in 1900, one-half a million in 1910, nine-and-a-quarter million in 1920, and nearly 27 million in 1930.

The rise of private automobile ownership stimulated an intense period of suburban expansion between 1918 and the onset of the Great Depression in 1929. As a result of the increased mobility offered by the automobile, suburban development began to fill in the star-shaped city created by the radial streetcar lines. Development on the periphery became more dispersed as workers were able to commute longer distances to work, as businesses moved away from the center city, and as factories, warehouses, and distribution centers were able to locate outside the railroad corridors due to the increased use of rubber-tired trucks.

The popularity of the automobile brought with it the need for a new transportation infrastructure that included the construction and improvement of roads and highways, development of traffic controls, building of bridges and tunnels, and widening and reconstruction of downtown streets. One of the most unheralded structures that facilitated the growth of the suburbs was the perfected mechanical road.
Automobiles required smooth, hard surfaces, and before 1900, even in cities, most roads were unpaved. Asphalt, introduced in the 1890s, became the common road surface by 1916.¹⁴

Beginning in the 1890s, the City Beautiful movement spurred advances in city planning and urban design. Transportation planning, as well as the improvement of streets, was recognized as central to the coordinated growth of urban areas. In cities such as Kansas City, Denver, and Memphis, the collaboration of planners, landscape architects, architects, and local political leaders, forged a rich legacy of parkways and boulevards that linked new residential suburbs with the center city. Highly influential were the writings of Charles Mulford Robinson, a journalist and advocate for Denver’s park and parkway system. These included Improvement of Towns and Cities (1901), Width and Arrangement of Streets (1911), and City Planning, with Special Reference to the Planning of Streets and Lots (1916).

Proposed in 1906 and built between 1916 and 1924, the Bronx River Parkway was one of the first modern parkways designed for automobiles. Sixteen miles in length, the parkway connected suburban communities in Westchester County with downtown New York. The parkway followed the Bronx River through a reservation initially established to reclaim what had become a polluted and unsightly watershed. Featuring a right-of-way ranging from 300 to 1,800 feet, the parkway was extensively planted with trees and shrubs, provided scenic river views, and achieved the illusion of being totally separated from adjoining development. The alignment featured graceful curves and gently followed the undulating topography to give motorists, many of whom were daily commuters, a pleasurable driving experience.¹⁵

Metropolitan areas expanded as streets, parkways, and boulevards extended outward, opening up new land for subdivision. As new radial arterials were built, suburban development became decentralized, creating fringes of increasingly low densities. With commuters no longer needing to live within walking distance of the streetcar line, residential suburbs could be built at lower densities to form self-contained neighborhoods that afforded more privacy, larger yards, and a parklike setting. Neighborhood improvements typically included paved roads, curbs and gutters, sidewalks, and driveways, as well as connections to municipal water systems and other public utilities.¹⁶

Concerns over pedestrian safety emerged as automobile use increased, and by the late 1920s, subdivision designers and housing reformers alike were examining ways to separate neighborhood traffic from arterial traffic and to design neighborhoods that remained safe, quiet, and free of speeding traffic. The “Radburn Idea,” first introduced by Clarence Stein and Henry Wright in their 1928 design for a “Town for the Motor Age,” called for separate circulation systems to serve pedestrians and automobiles. Published a year later in the regional plan for metropolitan New York City, Clarence Perry’s Neighborhood Unit Formula called for a hierarchy of streets of varying widths to control automobile traffic.

In 1916 the United States Congress passed the Federal Aid Highway Act, authorizing expenditure of Federal funds for up to 50 percent of the cost of State road projects within the Federal aid network. During the 1920s, most States established highway departments, and the total miles of surfaced highway in the Nation doubled.¹⁷

During the “golden age of highway building” from 1921 to 1936, more than 420,000 miles of roads were built in the United States. The increase in intercity highways and roads connecting farms with markets made new land available for suburbanization. Advances in highway engineering, including the development of divided highways, bridges and tunnels, and cloverleaves, made automobile travel faster and safer.¹⁸

Suburban areas continued to grow faster than central cities, and the planning of metropolitan highway systems gained increasing attention. High speed roads extending outward from central cities appeared in major metropolitan areas: Lakeshore Drive to Chicago’s northern suburbs opened in 1933; and, in 1936, the Grand Central Parkway was added to the already extensive system of roads on Long Island built under Robert Moses’s direction. In 1940, the opening of the Arroyo Seco Freeway in Los Angeles heralded a new age of freeway construction connecting city and suburb.¹⁹

The Futurama exhibit sponsored by General Motors Corporation at the 1939 New York World’s Fair presented one of the most influential and memorable visions for the future of highway engineering, and with it suburban life. Designed by Norman Bel Geddes, the exhibit featured a huge diorama of the American landscape overlaid with an intricate network of high-speed, multi-lane, limited-access highways joining country and city. Called “magic motorways,” the highways featured total separation of grades and graduated speeds. A ring highway surrounded the city interconnecting with radial freeways that guided suburban commuters to the center city where exit ramps eventually led to underground garages.²⁰
In its 1938 report, *Toll Roads and Free Roads*, the Bureau of Public Roads called for a master plan for highway development, a series of upgraded interregional roads, and the construction of express highways into and through cities to relieve urban traffic congestion. The report also outlined the routes for six transcontinental highways and debated the feasibility of using tolls to support highway construction.21

The emergency of World War II intervened, and Federal highway spending was limited to the improvement of roads directly serving military installations or defense industries. In 1941 President Franklin D. Roosevelt appointed a seven-member Interregional Highway Committee to work with Public Roads administrator Thomas H. MacDonald on recommendations for national highway planning following the war. The committee’s recommendations for an extensive 32,000-mile national network of expressways resulted in the Federal Aid Highway Act of 1944. The act authorized a National System of Interstate Highways, which included metropolitan expressways designed to relieve traffic congestion and serve as a framework for urban redevelopment.22

Since Congress did not appropriate additional funds for the system’s construction until the mid-1950s, State highway departments were forced to rely on other sources, including public bonds, toll revenues, and the usual matching Federal funds earmarked for the improvement of the Federal aid highway network.23

From the end of World War I until 1945, increasing automobile ownership accelerated suburbanization and significantly expanded the amount of land available for residential development. This trend further stimulated the design and construction of a new infrastructure of roads, highways, bridges, and tunnels, laying the groundwork for highway systems that would transform metropolitan areas after World War II.

**Post-World War II and Early Freeway Suburbs: 1945 to 1960**

The fourth and most dramatic stage of suburbanization in the United States followed World War II. The postwar housing boom, manifested in the so-called “freeway” or “bedroom” suburbs, was fueled by increased automobile ownership, advances in building technology, and the Baby Boom. A critical shortage of housing and the availability of low-cost, long-term mortgages, especially favorable to veterans, greatly spurred the increase of home ownership.

Highway construction authorized under the 1944 act got off to a slow start, but by 1951, every major city was working on arterial highway improvements with 65 percent of Federal funds being used for urban expressways. Under President Dwight D. Eisenhower, the Federal Aid Highway Act of 1956 provided substantial funding for the accelerated construction of a 41,000-mile, national system of interstate and defense highways which included 5,000 miles of urban freeways.24

By the late 1950s, the interstate system began to take form and already exerted considerable influence on patterns of suburbanization. As the network of high-speed highways opened new land for development, residential subdivisions and multiple family apartment complexes materialized on a scale previously unimagined. Increasing national prosperity, the availability of low-cost, long-term mortgages, and the application of mass production and prefabrication methods created favorable conditions for home building and home ownership. These factors gave rise to merchant builders, who with loan guarantees and an eager market, were able to develop extensive tracts of affordable, mass produced housing at unprecedented speeds.

The increase of large, self-contained residential subdivisions, connected to the city by arterials and freeways, created a suburban landscape dependent on the automobile for virtually all aspects of daily living. Retailing facilities migrated to the suburbs and were clustered in community shopping centers or along commercial strips. Large regional shopping centers began to appear first along arteries radiating from the center city and then along the new circumferential highways. By 1960, the construction of suburban industrial and office parks added further impetus to the decentralization of the American city and the expansion of America’s suburban landscape.

**LAND USE AND SITE DEVELOPMENT**

**SUBURBAN LAND DEVELOPMENT PRACTICES**
The basic landscape unit of residential suburban development is the subdivision. The development process starts with a parcel of undeveloped land, often previously used for agricultural purposes, large enough to be subdivided into individual lots for detached, single-family homes and equipped with improvements in the form of streets, drainage, and utilities, such as water, sewer, electricity, gas, and telephone lines. In other suburban neighborhoods, groups of attached dwellings and apartment buildings would be arranged within a large parcel of land and interspersed with common areas used for walkways, gardens, lawns, parking, and playgrounds.

Developers and the Development Process

Until the early twentieth century, most subdivisions were relatively small, and suburban neighborhoods tended to expand in increments as adjoining parcels of land were subdivided and the existing grid of streets extended outward. Subdivisions were generally planned and designed as a single development, requiring developers to file a plat, or general development plan, with the local governmental authority indicating their plans for improving the land with streets and utilities. Homes were often built by different builders and sometimes the owners themselves.

As metropolitan areas established large public water systems and other public utilities, developers could install utilities at a lower expense and often used enhancements, such as paved roads, street lighting, and public water, to attract buyers. Early planned subdivisions typically included utilities in the form of reservoirs, water towers, and drainage systems designed to follow the natural topography and layout of streets. Power plants and maintenance facilities were also included to support many of the larger planned developments of multiple family dwellings. Historically the subdivision process has evolved in several overlapping stages and can be traced through the roles of several groups of developers.

The Subdivider

Beginning in the nineteenth century, the earliest group of developers, called “subdividers,” acquired and surveyed the land, developed a plan, laid out building lots and roads, and improved the overall site. The range of site improvements varied but usually included utilities, graded roads, curbs and sidewalks, stormwater drains, tree planting, and graded common areas and house lots. Lots were then sold either to prospective homeowners who would contract with their own builder, to builders buying several parcels at once to construct homes for resale, or to speculators intending to resell the land when real estate values rose. Land improvement companies typically organized to oversee the subdivision of larger parcels, especially those forming new communities along railroad and streetcar lines. Most subdividers, however, operated on a small scale—laying out, improving, and selling lots on only a few subdivisions a year.

The Home Builder

By the turn of the twentieth century, subdividers discovered they could enhance the marketability of their land by building houses on a small number of lots. At a time of widespread real estate speculation and fraud, home building helped convince prospective buyers that the plan on paper would materialize into a suburban neighborhood. Subdividers still competed in the market through the types of improvements they offered, such as graded and paved roads, sidewalks, curbs, tree plantings, and facilities such as railroad depots or streetcar waiting stations. These developers continued to view their business as selling land, not houses, and the realization of subdivision plans took many years.

The Community Builder

The term “community builder” came into use in the first decade of the twentieth century in connection with the city planning movement and the development of large planned residential neighborhoods. Developers of this type were real estate entrepreneurs who acquired large tracts of land that were to be developed according to a master plan, often with the professional expertise of site planners, landscape architects, architects, and engineers. Proximity to schools, shopping centers, country clubs and other recreational facilities, religious structures, and civic centers, as well as the convenience of commuting, became important considerations for planning new neighborhoods and attracting home owners.

Community builders, such as Edward H. Bouton of Baltimore and J. C. Nichols of Kansas City, greatly affected land use policy in the United States, influencing to a large extent the design of the modern residential subdivision. Nichols’s reputation was based on the development of the
Country Club District in Kansas City—an area that would ultimately house 35,000 residents in 6,000 homes and 160 apartment buildings. Because they operated on a large scale and controlled all aspects of a development, these developers were concerned with long-term planning issues such as transportation and economic development, and extended the realm of suburban development to include well-planned boulevards, civic centers, shopping centers, and parks.28

To promote predictability in the land market and protect the value of their real estate investments, community builders became strong advocates of zoning and subdivision regulations. Nichols and other leading members of the National Association of Real Estate Boards (NAREB) sought alliances with the National Conference on City Planning (NCCP), American Civic Association (ACA), and American City Planning Institute (ACPI) to bring the issues of suburban development within the realm of city planning. 29

Community builders often sought expertise from several design professions, including engineering, landscape architecture, and architecture. As a result, their subdivisions tended to reflect the most up-to-date principles of design; many achieved high artistic quality and conveyed a strong unity of design. By relying on carefully written deed restrictions, as a private form of zoning, they exerted control over the character of their subdivisions, attracted certain kinds of home buyers, and protected real estate values. Many became highly emulated models of suburban life and showcases for period residential design by established local or regional masters. 30

The Operative Builder

By the 1920s, developers were building more and more homes in the subdivisions they had platted and improved, thereby taking control of the entire operation and phasing construction as money became available. In the 1930s when the home financing industry was restructured, such “operative builders” were able to secure FHA-approved, private financing for the large-scale development of neighborhoods of small single-family houses as well as rental communities offering attached dwellings and apartments. Depression-era economics and the demand for defense-related and veterans’ housing which followed encouraged them to apply principles of mass production, standardization, and prefabrication to lower construction costs and increase production time.

The Merchant Builder

Federal incentives for the private construction of housing, for employees in defense production facilities during World War II and for returning veterans immediately following the War, fostered dramatic changes in home building practices. Builders began to apply the principles of mass production, standardization, and prefabrication to house construction on a large scale. Builders like Fritz B. Burns and Fred W. Marlow of California began to build communities of an unprecedented size, such as Westchester in southeast Los Angeles, where more than 2,300 homes were built to FHA standards between 1941 and 1944. 31

By greatly increasing the credit available to private builders and liberalizing the terms of FHA-approved home mortgages, the 1948 Amendments to the National Housing Act provided ideal conditions for the emergence of large-scale corporate builders, called “merchant builders.” Because of readily available financing, streamlined methods of construction, and an unprecedented demand for housing, these builders acquired large tracts of land, laid out neighborhoods according to FHA principles, and rapidly constructed large numbers of homes. Since completed homes sold quickly, developers could finance new phases of construction and, as neighborhoods neared completion, move on to new locations.

On Long Island, William Levitt began building rental houses for veterans in 1947. Soon after he shifted to home sales and perfected the process of on-site mass production which became the basis for the large-scale “Levittowns” he created in New York, New Jersey, and Pennsylvania. Outside Chicago, Philip Klutzer, former administrator of the National Housing Agency, with the expertise of town planner Elbert Peets, created the town of Park Forest. In 1949 Fritz B. Burns and Henry J. Kaiser of Kaiser Community Homes built 1,529 single-family homes at Panorama City in California, a suburban community which resulted from the collaboration of Kaiser’s industrial engineers and the Los Angeles architectural firm of Wurdeman and Becket. In the late 1940s, Joseph Eichler began the first of his forward-looking subdivisions of contemporary homes in California.32

Merchant builders greatly influenced the character of the post-World War II metropolis. The idea of selling both a home and a lifestyle was not simply a marketing ploy by developers to ensure sales, it represented the integration of the suburban ideals of home ownership and
community in a single real estate transaction. For many, this meant the attainment of middle-class status, financial prosperity, and family stability—the fulfillment of the American dream.

**Financing Suburban Residential Development**

**Early Trends**

Until the mid-twentieth century, home ownership was costly and beyond the reach of most Americans. In the nineteenth century, most well-established families purchased their homes outright. By the early twentieth century, several organizations were making home ownership possible for many moderate-income families by offering installment plans that required a small down payment and modest monthly payments. These included building and loan associations, real estate developers, such as Chicago’s Samuel Gross, and even companies, such as Sears & Roebuck, which were in the business of selling mail order houses.

In the 1920s, it was common practice for home owners to secure short-term loans requiring annual or semi-annual interest payments and a balloon payment of the principal after three to five years. This meant that home owners needed to refinance periodically and often carried second and third mortgages. This system worked well during times of prosperity, but during a period of economic downturn and declining real estate values, it was disastrous.33

Beginning in the early 1930s, a series of Federal laws dramatically expanded the financing available for the purchase of owner-occupied dwellings and stimulated private investment in the home building industry through the construction of suburban subdivisions and rental apartment villages. The program of Federal home mortgage insurance, established under the National Housing Act of 1934, set the stage for the emergence of large operative builders, and after World War II, merchant builders.

**President’s Conference on Home Building and Home Ownership**

President Herbert Hoover drew attention to housing as a national priority, especially in the aftermath of the stock market crash in 1929 when the growth of the home building industry came to an abrupt halt and the rate of mortgage foreclosures quickly accelerated. In December 1931, he convened the President’s Conference on Home Building and Home Ownership to examine all aspects of the housing industry. The conference attracted several thousand participants, including many of the Nation’s experts in home financing, community planning, house design, and zoning.

The conference was forward looking in seeking solutions for lowering construction costs, for modernizing houses for comfort and efficiency, and for stabilizing real estate values. Conference committees strongly endorsed advances in zoning, construction, community planning, and house design. Of prime concern, however, was broadening home ownership and creating a system of home mortgage credit that provided better protection for both home owners and lending institutions.34

**Federal Home Loan Banking System**

As an initial remedy, the Federal Home Loan Bank Act of July 22, 1932, created the Federal home loan bank system by establishing a credit reserve and authorizing member institutions, primarily savings and loan associations, to receive credit secured by first mortgages. This was an important and lasting step in organizing the system of mortgage financing that remains in place today. Legislation in 1938 created the Federal National Mortgage Association, commonly known as “Fannie Mae,” to buy and sell mortgages from member institutions, making additional money available for home mortgages.35

**Home Owners’ Loan Corporation**

When the Roosevelt Administration began in 1933, home foreclosures were occurring at a rate of 1,000 per day. Through the emergency Home Owners’ Loan Corporation, established by law June 13, 1933, the Federal government forestalled the avalanche of foreclosures and began to stabilize real estate values. For the first time, home owners were able to secure home loans that were fully amortized over the length of the loan—in this case 15 years at five percent rate of interest. Although the short-lived program lasted only three years, it was considered a
success economically and set an important precedent for the use of long-term, low-interest amortized home mortgages, which would a year later become the foundation of the FHA mortgage insurance program.\(^{36}\)

**Federal Housing Administration (FHA)**

The creation of a permanent, national program of mutual mortgage insurance, under Title II of the National Housing Act of 1934 signed into law by President Franklin D. Roosevelt on June 27, 1934, revolutionized home financing and set in motion a series of events that effectively broadened home ownership. The FHA was authorized to provide Federal insurance for privately-financed mortgages for homes, housing subdivisions, and rental housing. Through the development of standards, as well as its review and approval of properties for mortgage insurance, the FHA institutionalized principles for both neighborhood planning and small house design.

The Federal government insured loans granted by private lending institutions for as much as 80 percent of a property’s value. Mortgages were to be fully amortized through monthly payments extending over 20 years. Interest rates were to be relatively low, not exceeding six percent at the time, and required down payments were set at 20 percent of the cost of a home. Amendments to the Act in 1938 allowed Federal mortgage insurance on as much as 90 percent of a home’s value and extended payments up to 25 years. The Housing Act of 1948 further liberalized FHA mortgage terms by allowing insurance on as much as 95 percent of a home’s value and extending the period of repayment up to 30 years.\(^{37}\)

**Defense Housing Programs**

The addition of Title VI to the National Housing Act on March 28, 1941, created a program of Defense Housing Insurance, targeting rental housing in areas designated critical for defense and defense production. This was continued to provide veterans’ housing after the war and eventually enabled operative builders to secure Federal mortgage insurance on as much as 90 percent of their project costs. The FHA and other World War II housing programs, including the Defense Homes Corporation, financed through the Reconstruction Finance Corporation, and public housing projects, funded under the Lanham Act (54 Stat. 1125), were consolidated in the National Housing Agency in 1942, which was renamed the Housing and Home Finance Agency in 1947.\(^{38}\)

**The “GI” Bill**

Under the Servicemen’s Readjustment Act of 1944, commonly called the “G.I. Bill of Rights,” the Veterans Administration (VA) provided guarantees on home mortgages for veterans returning from military service. The liberalized terms of FHA-approved loans enabled veterans to use their “GI” benefit in place of cash, thereby eliminating the down payment on a new house altogether.

**Planning and Domestic Land Use**

Beginning in the 1890s, the City Beautiful movement sparked renewed interest in the formal principles of Renaissance and Baroque planning, especially in the design of downtown civic centers and planned industrial towns. The Columbian Exposition of 1893 demonstrated the value of a comprehensive planning process that called for the development of a master plan and the collaboration of public officials and designers representing several professions. The writings of Charles Mulford Robinson and the example of Daniel Burnham’s Chicago Plan (1909) stimulated interest in city improvements and offered models for imposing a rational and orderly design upon the Nation’s growing industrial cities.\(^{39}\)

Calling for a synthesis of aesthetics and functionalism, the City Beautiful movement gained momentum in the early twentieth century, becoming inseparable from the broader movement for efficiency, civic improvements, and social reform that marked the Progressive era. The movement exerted considerable influence beyond the center city, principally in the form of extensive boulevard and parkway systems, public parks and playgrounds, public water systems, and other utilities. In many cities, these measures established an infrastructure that would support and foster suburban development for decades to come.

Concerned with metropolitan growth, city planners became advocates for a coordinated planning process that embraced transportation systems, public utilities, and zoning measures to restrict land use. Dialogue took place among community builders, who made up the National...
Deed Restrictions

Early land developers maintained control over the development of their subdivisions through the use of deed restrictions. The placement of restrictions on the deed of sale ensured that land was developed according to the original intent; it also protected real estate values for both home owners and the subdivider, who expected to sell improved lots over the course of many years. According to Marc Weiss, restrictions "legitimized the idea that private owners should surrender some of their individual property rights for the common good" and became the "principal vehicle by which subdividers and technicians tested and refined the methods of modern land use planning." Restrictions were attached to the sale of land and considered binding for a specified period of time, after which they could be renewed or terminated. Restrictions were enforceable through civil law suits filed by the developer or other property owners.\(^{40}\)

Deed restrictions were used to establish neighborhood character by controlling the size of building lots and dictate the design and location of houses. With the advice of Olmsted and Vaux about 1870, the Riverside Improvement Company introduced guidelines requiring a mandatory 30-foot setback and setting a minimum cost of construction. In the exclusive neighborhoods of St. Louis, called “private places,” deed restrictions set a minimum cost on dwellings to be built and established mandatory setbacks to ensure that the neighborhood assumed a cohesive and dignified character. Developer Edward H. Bouton’s Roland Park (1891), in Baltimore, Maryland, became recognized as one of the Nation’s most successful residential developments in large part due to an extensive set of deed restrictions that controlled numerous aspects of design and land use, including lot sizes, building lines, setbacks, minimum dwelling values, and requirements for owner residency.\(^{41}\)

The use of such private restrictions was upheld at the 1916 meeting of the NCCP by leading representatives of several professions, including Kansas City community builder J. C. Nichols, city planner John Nolen, and landscape architect Frederick Law Olmsted Jr. During the 1920s, deed restrictions became the hallmark of a range of planned residential communities, fashioned as country club or garden suburbs, that were attracting an increasing professional and rising middle class of American cities.\(^{42}\)

In 1928 the Institute for Research in Land Economics and Public Utilities in Chicago published Helen C. Monchow’s *Use of Deed Restrictions in Subdivision Development*, which set forth a comprehensive list of items to be included in deed restrictions, including design factors such as the height of buildings and lot frontage as well as limitations on occupancy and commercial activities. The Committee on Subdivision Layout at the 1931 President’s Conference adapted Monchow’s list in its recommendations and endorsed deed restrictions—the principal means for ensuring neighborhood stability, maintaining real estate values, and protecting residential neighborhoods from nonconforming industrial or commercial activities—especially in jurisdictions lacking zoning ordinances. The idea that deed restrictions were the foundation of good subdivision design was underscored by the committee’s membership, which included preeminent designers John Nolen, Henry Hubbard, and Henry Wright, and was chaired by Harland Bartholomew, an urban planner and theorist renowned for work in St. Louis and Des Moines.\(^{43}\)

Within the context of worsening economic conditions, developers and community builders alike examined the use of such deed restrictions in creating pleasing neighborhoods of moderate priced homes under the new FHA programs. Real estate practices and the rating system used to approve suburban neighborhoods for FHA-insured loans encouraged the use of restrictions in the 1930s and 1940s as a safeguard for maintaining neighborhood stability and property values. The Urban Land Institute’s *Community Builder’s Handbook*, first published in 1947, advocated deed restrictions, including ones establishing design review committees, to ensure that neighborhoods were maintained in harmony and conformity with the original design intent.

By mid-century the use of deed restrictions to qualify prospective home owners and residents based on factors, such as race, ethnicity, and religion, became challenged in American courts. In the landmark decision, *Shelley v. Kraemer*, 334 U.S. 1, 1948, the U.S. Supreme Court determined such restrictions based on race “unenforceable,” providing a legal foundation for the principle of equal access to housing and influencing changes in Federal housing policy.\(^{44}\)

Zoning Ordinances and Subdivision Regulations
Local governments began to impose zoning ordinances in the early twentieth century as a means of controlling land use and ensuring the health, welfare, and safety of the American public. In 1909 Los Angeles passed the first zoning ordinance, creating separate districts or “zones” for residential and industrial land uses. In 1916 New York City was among the first to impose regulations on the height and mass of buildings through local legislation.

In support of the Better Homes movement following World War I, the U.S. Department of Commerce joined private advocacy groups, such as the NCCP, ACA, and ACPI, in encouraging local legislation for zoning. The Department began publishing an annual report, Zoning Progress in the United States, and a series of manuals including *A Zoning Primer* (1922), *A City Planning Primer* (1928), *The Preparation of Zoning Ordinances* (1931), and *Model Subdivision Regulations* (1932). In 1924 the Department’s Advisory Committee on Zoning issued a model zoning enabling act for State governments. By 1926 zoning ordinances had been adopted by more than 76 cities, and by 1936, 85 percent of American cities had adopted zoning ordinances.45

Zoning proposals faced opposition and legal challenges in many localities. In the 1926 case, *Village of Euclid, Ohio v. Ambler Realty Co.* (272 U.S. 365), the U.S. Supreme Court upheld the constitutionality of zoning in which exclusively residential development of single-family houses was supported as the most inviolate of land uses.46

The 1931 President’s Conference upheld zoning regulations and comprehensive planning measures as the primary means for controlling metropolitan growth and as an essential factor in designing and regulating stable residential neighborhoods. This was primarily the work of the Committee on City Planning and Zoning, under the leadership of Frederic A. Delano who had previously chaired the committee for New York’s Regional Plan, which concluded that zoning provisions should promote a sense of community and that residential development throughout the metropolitan region should be organized in neighborhood units based on Clarence Perry’s model.47

### Comprehensive Planning and Regional Plans

Comprehensive planning, coupled with zoning and subdivision regulations, became the focal point of discussions between the Nation’s leading community builders and urban planners beginning in 1912. Organizations such as the ACPI, NCCP, and ACA brought planners, builders, and real estate interests together to promote controls over land use in the Nation’s growing metropolitan areas.

A joint statement of the NAREB and ACPI in 1927 led to the U.S. Department of Commerce’s issuance of a model statute, *A Standard City Planning Act*, to encourage State governments to pass legislation enabling local and metropolitan land-use planning. California became a leader in real estate and planning reform, establishing the Nation’s first State planning statute and enabling subdivision regulations by local ordinance in the late 1920s.48

Regional planning commissions and associations began to form in burgeoning metropolitan areas such as New York, San Francisco, and Los Angeles, for the purpose of planning and coordinating metropolitan growth and developing regional plans. Planning documents such as the multiple volume *Regional Survey of New York and Its Environs* reflected some of the most advanced thinking of the time and addressed a variety of suburban issues such as neighborhood planning, commercial and industrial zoning, recreation, and transportation. Plans would receive substantial attention at the 1931 President’s Conference, and would have far-reaching influence on the development of FHA standards for the design of residential suburbs.49

### TRENDS IN SUBDIVISION DESIGN

Beyond transportation, an important set of “push and pull” factors motivated families in the mid-nineteenth century to establish their home in the “borderland” outside the city. First was the “push” factor: as American cities rapidly industrialized, they became increasingly crowded and congested places perceived to be dangerous and unhealthy. Creating a “pull” factor, domestic reformers, such as Catharine Beecher and Andrew Jackson Downing, provided a strong antidote for urban living by extolling the moral virtues of country living and domestic economy. The Romantic landscape movement, often called the Picturesque, provided a compelling image of life in a semi-rural village where dwellings in a host of romantic revival styles blended into a horticulturally rich, naturalistic landscape. In such an environment, the home became a sanctuary from the evils and stresses of life in the city and a proper setting for the practice of democratic ideals.50
In the *Treatise on the Theory and Practice of Landscape Gardening* (1841), Downing provided extensive instructions on the location, layout, and planting of rural homes. For an American audience, Downing reinterpreted the principles of the English landscape gardening tradition of Humphry Repton and Capability Brown and the writings of English theorist John Claudius Loudon. He introduced readers to the principles of variety, unity, and harmony, which could be applied to the naturalistic design of home grounds that attained an aesthetic ideal characterized as “picturesque” or “beautiful.”

In coming decades, Downing’s ideas would transform the American countryside and attract many followers who would give material form to the suburban ideal. Naturalistic gardening principles espoused by Downing, Robert Morris Copeland, H.W. S. Cleaveland, Maximilian G. Kern, Jacob Weidenmann, and others left their imprint in a variety of subdivision types from gridiron plats to planned curvilinear suburbs.

In the 1890s advances in city planning associated with the City Beautiful movement began to influence both the location and design of residential subdivisions. While the expansion of streetcar lines fostered widespread suburban development, park and parkway systems in many cities became a magnet for upper middle-income neighborhoods. Nineteenth-century influences of informal, naturalistic landscape design gave way to more formal plans based on the Beaux Arts principles of Renaissance and Baroque design, often mirroring the form of planned towns and cities.

In the years preceding and following World War I, American landscape traditions fused with English Garden City influences to form distinctive American garden suburbs with gently curving, tree-lined streets; open landscaped lawns and gardens; and attractive homes in a panoply of styles. While American designers looked to the historic precedents offered by the European continent for inspiration, the residential communities they fashioned were unequivocally American in the treatment of open space, accommodation of the automobile, the entrepreneurship of real estate developers, and reliance on American industry to make housing functional yet aesthetically appealing.

By the end of the 1930s, the American automobile suburb of small, moderately priced homes along curving tree-lined streets and cul-de-sacs had taken form. Reflecting a synthesis of design influences that spanned a century, it was the product of the 1931 President’s Conference on Home Building and Home Ownership and the institutionalization of FHA housing standards among the Nation’s home builders and home mortgage lenders. It provided the template for the quintessential suburb that in the years following World War II would come to typify the American experience.

**Gridiron Plats**

In the United States, the gridiron city plan provided the most profitable means to develop and sell land for residential use. Most American cities laid out in the second half of the nineteenth century were platted in extensive grids. These gridiron plats would guide their future growth, many following the rectilinear land surveys called for by the Northwest Ordinance and the Homestead Act.

The introduction of the streetcar in many cities extended the opportunity for home ownership in suburban neighborhoods to middle- and working-class households by the end of the nineteenth century. Streetcar lines helped form the initial transportation system, overlaying the grid plan of streets and creating a checkerboard of major arterial routes. The gridiron remained the most efficient and inexpensive way to subdivide and sell land in small lots. Many cities extended outward between 1890 and 1920, fulfilling the demand for low-cost houses and providing the template for what has been named the “bungalow suburb.”

A similar pattern occurred in the cities laid out after the introduction of the mass produced automobile. In the San Fernando Valley near Los Angeles, development after 1940 took place on a grid of arterial and collector streets that conformed to the section lines of the rectilinear survey; the grid, measuring one square mile, was further subdivided to allow more intensive development.

Gridiron plats received serious criticism in the twentieth century for several reasons: the uniformity of housing, lack of fresh air and sunlight afforded by their narrow lots, the lack of adequate recreational space, and the speculative nature of home building they fostered. Planners and landscape architects looked first to nineteenth-century Picturesque principles of design and later more formal designs with radial curves as an antidote to the endless monotonous grid of American cities.
Planned Rectilinear Suburbs

The idea for a residential suburb—set apart from center city and accessible by some form of horse-drawn or mechanized transportation—is believed to have originated in the early nineteenth century. These contrasted to urban enclaves with enclosed private gardens, such as Boston’s Louisburg Square, or residential streets arranged around public squares, such as the Colonial-period plan for Savannah, Georgia, which were within walking distance of the center city.

One of the earliest documented residential suburbs is Brooklyn Heights, established in 1819 across the East River from lower Manhattan. Accessible by ferry, the suburb featured a 60-acre plat laid out in a grid with streets 50 feet in width and blocks measuring 200 by 200 feet.56

In 1869, merchant and philanthropist Alexander Tunney Stewart purchased a 500-acre parcel of land on Long Island for the purpose of creating a model planned city, “Garden City,” which was to be connected to Brooklyn and New York City by a private commuter railroad. Engineer Delameter S. Denton developed a plan subdividing the tract into uniform building lots along two parallel streets, and architect John Kellum designed several model homes in picturesque revival styles. Thousands of mature shade trees were planted along the streets, and 15 miles of picket fences were constructed to give the new community the character of a small village. 57

In the Midwest, landscape designer and park planner, Maximilian G. Kern exerted considerable influence on the landscape design and embellishment of neighborhoods based on the rectilinear grid. Kern’s *Rural Taste in Western Towns and Country Districts* (1884) offered developers advice on improving the design of residential streets and public spaces while working within the ubiquitous grid of western town planning. With civil engineer Julius Pitzman, Kern designed Forest Park Addition (1887) in St. Louis, a residential subdivision featuring private streets and long landscaped medians, which became a model for the city’s exclusive neighborhoods known as “private places.”58

Highly influential was the modified gridiron plan used by community builder J. C. Nichols in developing the Country Club District in Kansas City, Missouri, and Kansas. Developed as a garden suburb between 1907 and the early 1950s, the District’s many residential subdivisions formed a grid of long, narrow rectangular blocks interspersed by an occasional curvilinear or diagonal avenue or boulevard. The landscape architecture firm of Hare and Hare, working for Nichols over a 20-year period beginning in 1913, modified the rectilinear grid so that many of the roads running east to west followed the contours of the rolling topography rather than the straight, parallel lines drawn by the land surveyor. Departure from the grid enabled the designers to create triangular islands at the site of intersecting roads which were developed as small parks and gardens.59

Early Picturesque Suburbs

The Picturesque suburb with its plat of curvilinear streets and roads, the product of the Romantic landscape movement, became the means by which upper-income city dwellers sought to satisfy their aspiration for a suburban home within commuting distance of the city. Although Downing’s books focused on the landscape design of individual homes in a rural or semi-rural setting, his ideas for the curvilinear design of suburban villages appeared in his essays, “Hints to Rural Improvements” (1848) and “Our Country Villages” (1850) which were published in the *Horticulturalist*.60

Early Picturesque, curvilinear suburbs, such as Glendale (1851), Ohio, drew from the Picturesque theories of Downing and Loudon as well as the Rural Cemetery movement, which followed the example set in 1831 by Mount Auburn Cemetery outside Boston. By mid-century, rural cemeteries exhibiting curvilinear roadways, naturalistic landscape gardening, and irregular lot divisions that followed the natural topography were appearing outside most major U.S. cities. On a larger scale, early subdivisions reflected similar principles of design, creating a naturalistic, parklike environment for domestic life.61

The most influential of the early Picturesque suburbs was Llewellyn Park, New Jersey, located west of New York City, and platted in 1857 by Llewellyn Haskell. Haskell carried out his idea for a protected, gated country park with the advice of Downing’s former partner Alexander Jackson Davis and landscape architects Eugene A. Baumann and Howard Daniels. The design featured a layout of curvilinear roads and a common natural park, called the “ramble,” and was influenced in large part by Downing’s writings and Olmsted and Vaux’s plans for Central Park, which was taking form in nearby New York City. Illustrated and described in Henry Winthrop Sargent’s supplement to the Sixth Edition of Downing’s *Theory and Practice* (1859), Llewellyn Park became one of the best known and most highly emulated examples of suburban
Riverside and the Olmsted Ideal

Riverside, Illinois, outside Chicago, platted by Frederick Law Olmsted and Calvert Vaux in 1869 for the Riverside Improvement Company, further articulated the ideal for the Picturesque suburb, earning a reputation as the archetypal example of the curvilinear American planned suburb. Located on the banks of the Des Plaines River along the route of the Burlington Railroad, Riverside is recognized as the first clearly documented example in the United States where the principles of landscape architecture were applied to the subdivision and development of real estate.

Olmsted’s plan provided urban amenities and homes that, built at a comfortable density, afforded privacy in a naturalistic parklike setting. The first design requirement was a tranquil site with mature trees, broad lawns, and some variation in the topography. The second was good roads and walks laid out in gracefully curved lines to “suggest leisure, contemplativeness, and happy tranquility,” and the third was the subdivision of lots in irregular shapes. Designed to follow the topography, the curving roads were built without curbs and placed in slight depressions, making them less visible from the individual lots and enhancing the community’s pastoral character.

Riverside established the ideal for the spacious, curvilinear subdivision which would be emulated by developers, planners, and home owners for generations to come. Between 1857 and 1950, Olmsted’s practice, which was continued by Frederick Law Olmsted, Jr., and John Charles Olmsted under the Olmsted Brothers firm, planned 450 subdivisions in 29 States and the District of Columbia, many of them in conjunction with park or parkway systems.

By the early twentieth century, Olmsted’s principles had become the basis for laying out suburban neighborhoods within the emerging profession–al practice of landscape architecture in the United States. Olmsted had many followers including, Ernest Bowditch, Stephen Child, Herbert and Sidney Hare, Henry V. Hubbard, George E. Kessler, and Samuel Parsons, Jr. Parsons and Hubbard became highly influential through their writings, which provided instructions in keeping with the Olmsted principles of subdivision design. Parsons, who was the superintendent of New York’s Central Park for many years and the designer of the Albemarle Park subdivision in Asheville, North Carolina, provided detailed instructions on laying out home grounds and siting houses along steep, hillside slopes in How to Plan the Homegrounds (1899) and The Art of Landscape Architecture (1915).

First published in 1917 and used as the standard professional text into the 1950s, the Introduction to the Study of Landscape Design by Hubbard and Theodora Kimball, influenced several generations of landscape architects. To demonstrate the layout of subdivisions to follow a site’s natural topography, the text illustrated the example of Moss Hill, a subdivision Hubbard and his partner James Sturgis Pray designed in the western suburbs of Boston that was connected to the center city by Olmsted’s “Emerald Necklace” of parks and parkways. In a 1928 article in Landscape Architecture on the influence of topography on land subdivision, Hubbard showed his readers how a curvilinear plan could be fit to varying slopes and subdivided into small, regularly shaped lots.

The 1930s brought renewed interest in Olmsted’s principles after Landscape Architecture reprinted Olmsted and Vaux’s Preliminary Report upon the Proposed Suburban Village at Riverside (1868) and several other selections from the papers of Frederick Law Olmsted. Several months later in a well-illustrated article, “Riverside Sixty Years Later,” Howard K. Menhinick praised the village atmosphere, beauty of the mature plantings, and unified setting created by spacious lots, planting strips, and numerous parks. In the Design of Residential Areas (1934), prominent city planner Thomas Adams recognized Riverside as a leading example of American suburban design. The example of Riverside and later advances in curvilinear subdivision design would be applied to neighborhoods of small homes by the FHA in the mid-1930s and the community building standards of the Urban Land Institute in the 1940s and 1950s.

City Beautiful Influences

A movement for the design of cohesive suburban neighborhoods in the form of residential parks and garden suburbs began to emerge in the 1890s and continued into the early decades of the twentieth century. A general plan of development, specifications and standards, and the use of deed restrictions became essential elements used by developers and designers to control house design, ensure quality and harmony of construction, and create spatial organization suitable for fine homes in a park setting.
Boulevards and Residential Parks

City Beautiful principles, which were expressed in the writings of Charles Mulford Robinson and the creative genius of designers such as George E. Kessler and the Olmsted firm, resulted in the design and redesign of many American cities. They called for the coordination of transportation systems and residential development, and fostered improvements in the design of suburban neighborhoods, such as tree lined streets, installed utilities, and neighborhood parks, many of which were part of the city park systems. Across the Nation, suburbs following naturalistic Olmsted principles emerged such as Druid Hills (1893), in Atlanta, begun by Olmsted, Sr., and completed by the successor Olmsted firm; Hyde Park (1887) in Kansas City and the first phase of Roland Park (1891) in Baltimore, both designs by George E. Kessler.

They also gave rise to grand landscaped boulevards such as Cleveland’s Fairmount Boulevard and parkways such as Boston’s Jamaicaway, which extending outward from the city center became a showcase of elegant homes and carriage houses on wide spacious lots, often built by the Nation’s leading architects and echoing popular Beaux Arts forms. In more modest western cities such as Boise, Idaho, boulevards became major corridors from which cross streets, following the city’s grid, led to quiet neighborhoods of modest homes built by local builders.

Subdivisions built for the upper-income and professional classes could be laid out according to Olmsted principles, with roads designed to follow the natural topography and natural features such as knolls or depressions shaped into traffic circles or cul-de-sacs. Deep ravines or picturesque outcroppings were often left undeveloped or retained as a natural park for the purposes of recreation or scenic enjoyment. The spacious layout of curving streets and gently undulating topography gave way, however, to more compactly subdivided tracts for rising middle-income residents by the 1890s.

Early Radial Plans

Influenced by the City Beautiful movement, a formalism unknown to the early Olmsted and Picturesque suburbs began to influence the design of residential suburbs. Formal principles of Beaux Arts design, drawn from European Renaissance and Baroque periods, emphasized radial and axial components that provided an orderly hierarchy of residential streets and community facilities.

Ladd’s Addition (1891) in Portland, Oregon, would be one of the earliest attempts to adopt a radial plan drawn from Baroque principles of planning for the design of a garden suburb built to accommodate streetcar commuters. Laid out by engineers Arthur Hedley and Richard Greenleaf for developer William S. Ladd, the plan makes use of four wide, diagonal avenues emanating from a central circular park to the four corners of the parcel. Narrower streets running east to west and north to south extended outward to intersect with diagonal cross streets, forming in each quadrant a small diamond-shaped park. A commercial corridor and the streetcar line formed the subdivision’s northern edge. The maintenance and planting of the parks became the responsibility of the city park authority, and by 1910 city landscape architect E. T. Mische had begun an active program of planting. Ladd’s Addition predated, yet appears to have anticipated, the formality of Ebenezer Howard’s English Garden City diagram, which was published several years later.

Because radial plans were relatively simple to lay out, especially on flat terrain, they maintained some popularity into the 1920s appearing in Tucson’s El Encanto Estates in the late 1920s and in Hare and Hare’s plan for Wolflin Estates in Amarillo, Texas. Their greatest expression would occur later in response to the English Garden City movement and relate to advances in American city planning that went well beyond the turn-of-the-century residential park to impose a garden-like setting on the larger and more comprehensive scale of a self-contained community.

Twentieth-Century Garden Suburbs

Garden Suburbs and Country Club Suburbs

As developers like J. C. Nichols defined their role as community builders, they sought increasing control over the design of their subdivisions, devised ways to enhance a neighborhood’s parklike setting and to reinforce the separation of city and suburb. Entrance ways with plantings, signs, and sometimes portals, reinforced a neighborhood’s separation from noisy and crowded arterials and outlying commercial and industrial activity. The circulation network, often laid out in the formal geometry of axial lines and radial curves, imposed a rational order on many new
superblocks which could be developed in a unified manner, with architectural groupings alternating with open parks. A hierarchical circulation system made extensive use of cul-de-sacs that created a sense of enclosure and privacy within each large block. 

principles of English planning with the American Olmsted tradition of naturalistic design.

Nolen and Werner Hegemann and Elbert Peets, would give great complexity to town planning and subdivision design by integrating the

throughout the 1920s efforts were being undertaken to create compatible commercial centers on the periphery or at major points along the streetcar lines or major automobile arteries.

The laying out of traffic circles, residential courts, and landscaped boulevards provided open spaces for planting shade trees, ornamental trees, and gardens. Community parks, often having community centers or club houses, and nearby country clubs provided recreational advantages. Examples such as Myers Park in Charlotte, North Carolina, developed between 1911 and 1943 according to plans by John Nolen, Earl Sumner Draper, and Ezra Clarke Stiles, would receive national recognition for their quality of design and become important regional prototypes.  

Influence of the Arts and Crafts Movement

The Arts and Crafts movement, with its emphasis on craftsmanship, native materials, harmony of building construction with natural environment, and extensive plantings became a popular idiom for suburban landscape improvements, especially on the West Coast. Promoted by editors such as Gustav Stickley and Henry Saylor, these ideas were quickly imitated nationwide by designers intent on creating residential parks that offered housing in various price ranges from clustered bungalow courts to spacious upper-income subdivisions such as Prospect Park (1906) in Pasadena, in large part the work of master architects Charles and Henry Greene. Country club suburbs by Hare and Hare, such as Crestwood (1919-1920) in Kansas City, featured rusticated stone portals and corner parks. In Henry Wright’s residential parks, Brentmoor Park, Brentmoor, and Forest Ridge (1910-1913) outside St. Louis, service entrances were separated from carriage drives, elegant homes were arranged around common parkland, and signs of forged iron and trolley waiting shelters of rusticated stone added to the Craftsman aesthetic.  

American Garden City Planning

English Garden City planning had considerable influence in the United States, coinciding with advances in city planning spurred by the City Beautiful movement and widespread interest during the Progressive era for housing reform which extended to the design of neighborhoods for lower-income residents.

Ebenezer Howard, introduced the Garden City idea in Tomorrow: A Peaceful Path to Real Reform (1898), which was republished as Garden Cities of Tomorrow (1902). Howard diagramed his ideal city as a series of concentric circles devoted to bands of houses and gardens for residents of mixed income and occupations. A large park, public buildings, and commercial shops formed the center of the city, while an outer ring provided for industrial activities, an agricultural college, and social institutions and linked the community to an outlying greenbelt of agricultural land.

Howard’s conceptual diagrams were first translated into the English garden suburbs of Letchworth (1902) and Hampstead Gardens (1905) by Barry Parker and Raymond Unwin, whose theories would have substantial influence on subdivision design in the United States. Designed as socially integrated communities for working-class families, the English suburbs resulted from comprehensive planning and encompassed a unified plan of architectural and landscape design. Limited in both geographical area and population to promote stability, they were designed to provide a healthy environment offering sunlight, fresh air, open space, and gardens. Innovative was the subdivision of the land into superblocks which could be developed in a unified manner, with architectural groupings alternating with open parks. A hierarchical circulation system made extensive use of cul-de-sacs that created a sense of enclosure and privacy within each large block.  

English Garden City planning influenced American residential suburbs in several ways. It strengthened an already strong interest in developing neighborhoods as residential parks, giving emphasis to both architectural character and landscape treatments as aspects of design. It was consistent with the emerging interest in collaborative planning, whereby residential development was to be based on sound economic analysis and draw on the combined design expertise of planners, architects, and landscape architects. It provided models for higher-density residential development that offered attractive and healthful housing at lower costs.  

Through traveling lectures and his influential Town Planning in Practice (1909), English Garden City designer Raymond Unwin called for a formal town center, often taking a radial or semi-radial form that, extending outward in a web-like fashion, gradually blended into more informally arranged streets and blocks. The Garden City movement, under the influence of the designers Frederick Law Olmsted, Jr., John Nolen and Werner Hegemann and Elbert Peets, would give great complexity to town planning and subdivision design by integrating the principles of English planning with the American Olmsted tradition of naturalistic design.
In the United States, the influence of the English garden suburbs melded with interest in Beaux Arts planning and first appeared in the design of Forest Hills Gardens (1909-1911), a philanthropic project sponsored by the Russell Sage Foundation. The design was a collaboration between developer Edward H. Bouton, landscape architect and planner Frederick Law Olmsted, Jr., and architect Grosvenor Atterbury. Located on the route of the Long Island Railroad, Forest Hills was designed to house moderate-income, working-class families and served as a model of domestic reform. The design of both the community and individual homes reflected progressive ideas that upheld the value of sunshine, fresh air, recreation, and a garden-like setting for healthy, domestic life. Unlike the spacious Olmsted-influenced curvilinear suburbs built for the rising middle class, the early Garden City influenced designs in the United States were intended to house lower-income, working-class families. The spaciousness of the American garden suburb was replaced by a careful orchestration of small gardens, courts, and common grounds shaped by the architectural grouping of dwelling units.

Guilford

Guilford (1912), Edward Bouton’s second large suburb for Baltimore, built adjacent to Roland Park and also laid out by Frederick Law Olmsted, Jr., applied many planned features such as radial streets, landscaped medians, cul-de-sacs, and planted circular islands to the American idiom of the residential park for the rising middle class. Integrated with public parks and landscaped streets, it attained a highly controlled artistic expression based on Garden City principles.

Washington Highlands

The plan for Washington Highlands (1916) in Wauwatosa, Wisconsin, by Werner Hegemann and Elbert Peets reflected a fusion of formal and informal elements—allées of evenly spaced trees, symmetrical formal plantings, with curvilinear streets, including a major street that formed a peripheral arc and followed a low-lying stream bed that functioned as a linear park. Through The American Vitruvius: An Architect’s Handbook of Civic Art (1922), Hegemann and Peets would exert considerable influence on the design of metropolitan areas in the United States. During the New Deal, Peets would design the Resettlement Administration’s greenbelt community at Greendale, Wisconsin.

World War I Defense Housing

During World War I, the short-lived United States Housing Corporation of the U.S. Labor Department and the Emergency Fleet Corporation of the U.S. Shipping Board, encouraged town planners and designers of emergency housing communities for industrial workers to adopt Garden City models. Under the leadership of prominent planners and architects Nolen, Olmsted, Jr., and Robert Kohn, these programs encouraged the collaboration of town planners, architects, and landscape architects, and advocated a comprehensive approach to community planning. The AIA sent architect Frederick Ackerman to England to study the new garden cities with the purpose of infusing American defense housing projects with similar principles of design.

For many young designers, working on emergency housing provided an unprecedented opportunity to work on a project of substantial scale and to work collaboratively across disciplines. Dozens of projects appeared across the country in centers of shipbuilding and other defense industries. Many would serve as models of suburban design in subsequent decades. Among the most influential were Yorkship (Fairview) in Camden, New Jersey; Seaside Village in Bridgeport, Connecticut; Union Gardens in Wilmington, Delaware; Atlantic Heights in Portsmouth, New Hampshire; Hilton Village in Newport News, Virginia; and Truxtun in Portsmouth, Virginia.

Mariemont

John Nolen’s town plan for Mariemont (1921), Ohio, was heralded for its achievement in integrating a variety of land uses into a well-unified community, which provided commercial zones, industrial zones, and a variety of housing types that ranged from apartment houses to large period revival homes. The plan embodied a combination of formal and informal design principles and integrated parks and common areas.

American towns and the residential suburbs that followed similar design principles were frequently hybrid plans where a radial plan of a
formal core area extended outward along axial corridors, interspersed by small gridiron areas, and eventually opened outward along curvilinear streets that more closely fit the site’s natural topography and followed Olmsted principles. Streets were laid out to specific widths to allow for border plantings, landscaped medians and islands, and shaped intersections that gave formality and unity to residential streets. Noted architects were invited to design houses in a variety of styles.

Mariemont received considerable recognition as a model of community planning. It was featured in Nolen’s *New Towns for Old: Achievements in Civic Improvements in Some American Small Towns and Neighborhoods* (1927), which popularized suburban planning and provided a number of highly emulated models including Myers Park in Charlotte, North Carolina, initially planned by Nolen in 1911, and completed under landscape architect Earl Sumner Draper. Mariemont was also highly praised in the *Regional Survey of New York and Its Environs* (1929) and the proceedings of the 1931 President’s Conference.

While providing a variety of housing types for mixed incomes, the plan for Mariemont introduced an innovative design of interweaving cul-de-sacs and avenues that accommodated a wide range of housing types from rowhouses to duplexes to spacious detached homes that were grouped into clusters serving particular income groups. Often designed by a single firm, clusters exhibited a cohesive architectural style. The plan also called for convenient commercial services at the core of the community in cohesive architectural groupings characteristic of the English garden cities. Mariemont was designed with a separate industrial zone intended to attract a number of industries. English Tudor Revival influences blended with the American Colonial Revival to form attractive housing clusters and a shopping district. In Nolen’s design, tree lined streets were designed at varying widths to accentuate the village setting and accommodate transportation within the community and the needs of each housing group.77

**The RPAA and Sunnyside**

In 1923 architect-planners Clarence Stein and Henry Wright, along with Frederick Ackerman, Charles Whitaker, Alexander Bing, Lewis Mumford, Benton MacKaye, and others, founded the Regional Planning Association of America (RPAA) to promote Garden City principles as a basis for metropolitan expansion. Although the RPAA was broadly concerned with the retention of open space and agricultural zones, their practical accomplishments were focused on the creation of satellite communities that melded Garden City principles with the immediate needs of housing reform.

Its first project, Sunnyside Gardens (1924-1928), was built in Queens outside New York City as a model community for moderate-income families and funded by the City Housing Corporation, a limited dividend company formed by the RPAA and headed by Bing. Although local regulations required the designers to adhere to the gridiron street system, the location’s industrial use zoning allowed them to develop each block as a single parcel instead of subdividing it into separate lots. Using architectural groupings to create alternating areas of open and closed space, the designers arranged attached single- and multiple family dwellings to form the perimeter of each block, enclosing a central common set aside for gardening and recreation.78

**Radburn and Chatham Village**

At Radburn, beginning in 1928, Stein and Wright applied Garden City planning principles to the problem of creating an attractive and healthy community of moderately-priced homes. Radburn, initially financed by the City Housing Corporation, was envisioned as a “Town for the Motor Age” derived from the Garden City principles and adapted to the practical needs of an automobile age. Located 16 miles from New York City in Fair Lawn, New Jersey, Radburn was planned as three interconnected neighborhoods each housing up to 10,000 residents. Each neighborhood was to consist of a superblock that was served by a circulation system that separated pedestrian and automobile traffic and instituted a hierarchy of roads to reduce construction costs and promote traffic safety. A variety of house types—detached, semi-detached, row, and apartment—was integrated into the design, as well as schools, recreational facilities, and a shopping center.

Each superblock was carefully designed with an interior park or green, which served as the backbone of the neighborhood with houses fronting on it and pedestrian walks running along its length. The superblocks merged together to form a continuous swath of park, and underpasses were to be introduced to allow pedestrians to pass beneath the motor roads, making it possible for children to walk to school without crossing streets. Narrow cul-de-sacs penetrated each superblock from perimeter feeder streets. Houses were oriented so that living rooms and bedrooms faced private gardens and the central green, while kitchens and garages faced cul-de-sacs that provided automobile
Radburn gained national and international attention for its innovative expression of American Garden City planning in the form of a satellite community of moderately priced homes where the greenbelt was turned inward to form a central common green and the circulation network was designed to accommodate the automobile while ensuring privacy and pedestrian safety. Building on the success of Sunnyside Gardens, Radburn became the fullest expression of what Garden City scholar K.C. Parsons has called the “extraordinary ten-year collaboration” of Stein and Wright and the collaborative design process promoted by the RPAA. The most direct influence of Radburn’s distinctive use of the superblock occurred in the 1930s in the design of the suburban Greenbelt towns of the Resettlement Administration and the resettlement towns built by the Tennessee Valley Authority, particularly Norris, Tennessee. Its influence on the planned communities of the 1960s, such as Columbia, Maryland, and Reston, Virginia, and the New Towns of the 1990s demonstrates its enduring value as a model of Garden City planning.

Most widespread, however, was Radburn’s influence as an ideal model for neighborhood planning and antidote to the monotonous grid of lower-priced speculative housing appearing on the edge of American cities. Radburn received immediate acclaim in the *Regional Survey of New York and Its Environs* (1929) and at the President’s Conference on Home Building and Home Ownership (1931). The FHA adopted many of Radburn’s innovations as “desirable standards,” bringing them into mainstream practices of subdivision design. Those that would define American suburbs for decades to come included the harmonious grouping of small, efficiently designed houses in a village-like setting; a hierarchy of streets from wide feeder streets to short cul-de-sacs designed for pedestrian safety and lower construction costs; and proximity to nearby schools, parks and playgrounds, shopping centers, and recreational facilities.

A philanthropic venture of the Buhl Foundation begun in 1929, Chatham Village in Pittsburgh, Pennsylvania, further refined Garden City principles and made important aesthetic and functional advances in the design of low-to-moderate income, multiple family housing. The design resulted from the collaboration of Stein and Wright, who acted as site planners and project advisors, and a team of local architects, Charles T. Ingham and William T. Boyd, and landscape architects Ralph E. Griswold and Theodore Kohankie. The designers utilized superblock planning, groups of connected dwellings efficiently adjusted to the steeply sloping site, and landscaped garden courts that blended with natural ravines and woodland that surrounded the community on three sides. The project represented the ultimate fusion of Garden City planning and Colonial Revival design and received international acclaim as a highly successful model of Garden City planning. It served as an enduring model for large-scale, FHA-insured rental communities in the 1930s and 1940s, and the planned communities of the 1960s.

The Neighborhood Unit and the 1931 President's Conference

Radburn exemplified the Neighborhood Unit Formula, developed by Clarence Perry of the Russell Sage Foundation, and incorporated in *Volume 7, “Neighborhood and Community Planning,”* of the 1929 *Regional Survey of New York and Its Environs*. Perry’s formula called for the creation of communities large enough to support an elementary school, preferably about 160 acres with ten percent reserved for recreation and park space. Interior streets were to be no wider than required for their use with cul-de-sacs and side streets being relatively narrow. Community facilities were to be centrally located, and a shopping district was to be located on the edge of the community where neighborhood streets joined the main arterials. Perry’s concept was overwhelmingly endorsed at the 1931 President’s Conference and laid a solid foundation for the development of FHA standards in the 1930s.

The recommendations of the 1931 President’s Conference for the design of residential neighborhoods reflected widespread acceptance of the idea of community planning and Perry’s concept of the self-contained neighborhood unit. Mention was made of the advances made in the 1920s, and Radburn was praised for “producing desirable homes with ample open spaces at reasonably low cost.” Such planning served two purposes—the grouping of homes into “reasonably compact residential neighborhoods with spaciousness for health and recreation,” and creating “subcenters for industry” with the object of “lessening the density of congested centers.” The report stated:

> Stability of investment in a home is best assured when the subdivision is a community or neighborhood unit, which is amply protected by deed restrictions that supplement the zoning regulations, developed by real estate dealers of proved ability, and in which there is a strong homes association permanently concerned with the welfare of the neighborhood.
Location was to be selected for “good access, good setting, public services, schools, parks and neighborhood unity,” and subdivision plats were to be developed by an experienced landscape engineer or site planner and were to follow a “balanced plan” that took advantage of “topography, sunlight, natural features, and all sensible engineering and landscape considerations.”

Streets were to be designed for safety and economy and drawn at varying widths depending on the required setbacks, with deeper setbacks allowing for narrower streets. For example, a 60-foot width allowed for a 26-foot roadway and a sidewalk of four to six feet. The size and shape of lots were to be determined by the proposed type of housing, with the width of each lot depending on the size and character of the buildings, cost of the land, community tradition, and potential home owner. The use of longer blocks with fewer cross streets and the subdivision of land into wide, shallow lots were encouraged, departing from previous practices. Homes were to be “located upon narrow winding streets away from the noise and dangers of traffic” and to have proper orientation for sunlight.

Spaciousness was upheld as a “primary principle in good subdivision layout.” The ideal neighborhood was described as one protected by proper zoning regulations, where trees and the natural beauty of the landscape were preserved, and where streets were gently curving and adjusted to the contour of the ground. Open space was viewed as one of the most important considerations for home ownership. It could be achieved in three ways: (1) by subdividing into large lots, (2) by reserving large open areas in the interior of blocks, or (3) by creating parks, playgrounds, or large private spaces nearby.

**FHA Principles for Neighborhood Planning**

The National Housing Act of 1934 created the Federal Housing Administration to restructure the collapsed private home financing system and stimulate private investment in housing. It called for the development of housing standards, a process for real estate appraisal, and a comprehensive program of review for approving subdivisions for mortgage insurance.

**Neighborhoods of Small Houses**

FHA’s Land Planning Division under Seward H. Mott, an experienced site planner, was responsible for establishing principles for neighborhood planning and for reviewing subdivision plans submitted by developers seeking FHA approval. This approval would not only enable developers to secure private financing but would also make low-cost mortgages available for prospective home owners. Mott’s staff translated many of the prevailing ideas about neighborhood design that had been endorsed by the 1931 President’s Conference, including Perry’s Neighborhood Unit Formula, into written standards and basic design principles that could be uniformly applied across the Nation to the design of neighborhoods of small houses. Between 1936 and 1940, FHA published standards and recommended designs in a series of circulars, including Subdivision Development, Planning Neighborhoods for Small Houses, Planning Profitable Neighborhoods, and Successful Subdivisions.

The FHA set forth seven minimum requirements for new subdivisions:

1. Location exhibiting a healthy and active demand for homes.
2. Location possessing a suitable site in terms of topography, soil condition, tree cover, and absence of hazards such as flood, fog, smoke, obnoxious odors, etc.
3. Accessibility by means of public transportation (streetcars and buses) and adequate highways to schools, employment, and shopping centers.
4. Installation of appropriate utilities and street improvements (meeting city or county specifications), and carefully related to needs of the development.
5. Compliance with city, county or regional plans and regulations, particularly local zoning and subdivision regulations to ensure that the neighborhood will become stable (and real estate values as well.)
6. Protection of values through “appropriate” deed restrictions (including setbacks, lot sizes, minimum costs of construction).
7. Guarantee of a sound financial set up, whereby subdividers were financially able to carry through their sales and development program, and where taxes and assessments were in line with the type of development contemplated and likely to remain stable.
FHA issued a set of “desirable standards,” which, although not strict requirements, were additional factors that influenced the approval of a project.

- Careful adaptation of subdivision layout to topography and to natural features
- Adjustment of street plan and street widths and grades to best meet the traffic needs
- Elimination of sharp corners and dangerous intersections
- Long blocks that eliminated unnecessary streets
- Carefully studied lot plan with generous and well-shaped house sites
- Parks and playgrounds
- Establishment of community organizations of property owners
- Incorporation of features that add to the privacy and attractiveness of the community. 89

In 1936, FHA published Planning Neighborhoods for Small Houses as “a subdivision primer” setting forth standards for the design of new subdivisions that provided safe, livable neighborhoods and ensured stable real estate conditions that justified mortgage lending and FHA mortgage insurance. The FHA encouraged large-scale operations, where development was financed and carried out under the direction of an “operative builder” who arranged for the purchase of land, the design of the subdivision plat, and the design and construction of the houses. Such large-scale operations offered a “broader and more profitable use of capital” and permitted the introduction of “industrial methods that resulted in savings in overhead, construction, and merchandising costs.” Developers were able to develop neighborhood plans in a consistent and harmonious manner, and in addition develop “commercial services such as retail stores and gasoline stations necessary to the life of the new community.”90

To Seward Mott, who headed FHA’s Land Planning Division, the legislation’s mandate provided an opportunity to redirect the design of suburban America and to create conditions that would force public officials and planners alike to adopt planning measures and to abandon the rectilinear grid in favor of plans of curvilinear streets. Curvilinear plans had many advantages when compared to rectilinear gridiron plans: they provided greater privacy and visual interest; could be adapted to greater variations in topography; reduced the cost of utilities and road construction; and, by eliminating the need for dangerous four-way intersections, provided a safer environment for domestic activities.91

The curvilinear layouts recommended by FHA in the 1930s set the standards for the design of post-World War II subdivisions. They evolved from Garden City suburbs such as Seaside Village and Radburn, and the organic curvilinear designs of the nineteenth-century Picturesque suburbs. Highly influential were Olmsted and Vaux’s Riverside, with its spacious plan of undulating and recessed, curvilinear streets, and Roland Park with its careful subdivision of land based on topography and the development of curvilinear streets that joined at oblique and acute angles and ended in cul-de-sacs in hollows or on hillside knolls. By the 1930s, such principles of design had been absorbed into the mainstream practices of the landscape architectural profession.

**FHA-Approved Garden Apartment Communities**

Through its Large-Scale Rental Housing Division in the 1930s, FHA became involved in the approval of designs and the creation of standards for large-scale rental housing communities under Section 207 of the National Housing Act. Financed privately by insurance companies or others with large capital, or through public housing bonds issued by municipalities or affiliated agencies, such developments offered low-cost rents for middle-and low-income Americans while providing incentives to the private building industry. FHA mortgage insurance minimized the risk of investing for lenders. The program gained momentum in the mid-1930s when the market for single-family housing was still uncertain, and expanded in the 1940s when additional insurance was authorized for housing in critical defense areas and later veterans’ housing. Rental housing developments, especially those with a sizeable number of units, could take advantage of the economies of large-scale production and the use of standardized components.

FHA architect Eugene Henry Klaber worked closely with operative builders, many of whom hired architects and landscape architects to ensure that approved projects were efficiently designed cost-wise, had a solid plan for management, and were likely to materialize into sound, long-term investments. Efficiency of design required that each housing community be built at a large enough scale to take advantage of the savings offered by superblock planning and the use of standardized materials and methods. Most of these communities incorporated two- and three-story, multiple family dwellings in a variety of floor plans, often having private entrances and sometimes intermingled with rowhouse or
duplicity units. A suburban location and neighborhood amenities further contributed to the stability of real estate values and protected the investment of lenders. In 1940, the FHA issued a series of “Architectural Bulletins,” which provided economical and efficient designs for all aspects of multiple family house design, from the layout of kitchens to the planting of common areas. 92

Many of the reforms and concerns for safety that the RPAA had introduced at Sunnyside, Radburn, and Chatham Village were carried over into the design of apartment communities. These included: the arrangement of housing units to afford privacy, sunlight, and fresh air; separation of internal pedestrian circulation from perimeter motor traffic; and provision of landscaped gardens and grounds away from the noise and activity of major arterial streets. Housing units in developments, such as Colonial Village in Arlington, Virginia, were carefully arranged to fit the existing topography and designed to provide visual appeal, variety, and a village-like atmosphere. 93

Such designs would provide attractive dwellings at a higher density and lower cost than neighborhoods of single family homes. To achieve the highest standards of safety and quiet, the standards for projects containing several hundred units called for the development of superblocks with garden courts, ample throughways with pedestrian underpasses and walkways, parking and garage compounds, centralized trash stations, and the elimination of service alleys. Clearance between buildings was carefully considered to provide adequate light, free circulation of air, and privacy. A maximum height of three stories was recommended unless elevators could be provided. Landscaping around foundations, common areas, and the circulation network, was recommended depending on rental costs and project’s capitalization. In addition to playgrounds and common areas, larger developments included stores, recreation centers, and medical offices. 94

Shopping Centers and Neighborhood Planning

As other aspects of Clarence Perry’s neighborhood unit, shopping districts would become a desirable feature for FHA-approved neighborhoods. The idea that suburban communities provide shops and other businesses was not new. Since the development of Riverside in the mid-nineteenth century, planned suburbs had been designed with village or town centers providing commercial services. What was new, however, was the idea that the location and design of shopping centers be considered critical to the quality of life and the retention of real estate values in neighborhoods of moderately priced homes. The construction of shopping centers was to be coordinated with subdivision development, often reflecting similar scale and architectural character, and subject to restrictions that would prohibit activities and discourage appearances viewed as incompatible with residential life. Especially problematic at a time when commuters were relying more and more on the automobile was providing safe, adequate parking for shoppers and finding a suitable location and design for the much-needed filling station. 95

In the late 1920s, planners for the growing metropolitan areas of Los Angeles and New York City recommended zoning measures and deed restrictions to control the location, setback, and design of suburban stores and businesses. Several articles appearing in the Architectural Record in the early 1930s drew attention to a number of suburban shopping areas, including several of California’s drive-in markets and the Radburn Plaza Building in New Jersey. Particularly influential was the Park and Shop (1930), designed by architect Arthur Heaton for the real estate firm Shannon and Luchs and built at Cleveland Park along one of major arteries leading out of downtown Washington D.C. The shopping center was one of the first built and managed by a single operator to offer a variety of shops serving household needs, including a grocer, delicatessen, and cleaners. Derived from California’s drive-in markets, Park and Shop featured a string of shops in an L-shaped configuration that formed two sides of a parking court that bordered the street and was flanked on the other side by a gasoline station. In the May 1932 issue of Architectural Record, architect Albert Frey and editor A. Lawrence Kocher presented the design for Park and Shop among a group of shopping centers that were illustrated by simple diagrams and promoted as an alternative to the Main Street of America’s small towns. In the February 1934 issue, Clarence Stein and Catherine Bauer praised Heaton’s Park and Shop and the Radburn Plaza Building as a models for successful neighborhood planning. 96

Explaining FHA’s new standards, Seward Mott recommended that local businesses and retail stores be limited to “centers grouped on the main thoroughfares at important intersections and at convenient intervals.” “Such centers,” he wrote, “could be planned as a unit with architectural control, adequate parking facilities and with a sufficiently large area from which to draw customers.” FHA’s Planning Neighborhoods for Small Houses (1936) included a set of diagrams for small neighborhood shopping centers that could be built adjacent to but separate from the residential streets of new subdivisions or large-scale rental developments. FHA’s Planning Profitable Neighborhoods (1938) illustrated an unidentified example obviously imitating Heaton’s Park and Shop with the following caption: “A shopping center conveniently located, well designed and restricted in extent to actual need is a neighborhood asset. Adequate off-street parking facilities and service alleys are essential.” Shopping centers meeting these requirements were built in a number of FHA-approved subdivisions, including Colonial Village and Buckingham Community in Arlington, Virginia; and they often included a service station as an integral component. 97
The Postwar Curvilinear Subdivision

Through FHA’s publication of standards for neighborhood planning and its comprehensive review and revision of subdivisions for mortgage approval, curvilinear subdivision design became the standard of both sound real estate practice and local planning. As FHA-backed mortgages supported more and more new residential development on the edge of American cities, local planning commissions adopted some form of the FHA standards as subdivision regulations. Thus, by the late 1940s, the curvilinear subdivision had evolved from the Olmsted, City Beautiful, and Garden City models to the FHA-approved standard, which had become the legally required form of new residential development in many localities in the United States. Based on the Garden City idea, the greenbelt communities built by the U.S. government under the Resettlement Administration during the New Deal became models of suburban planning, incorporating not only the Radburn Idea but also the FHA standards for neighborhood design.

The curvilinear subdivision layout was further institutionalized as the building industry came to support national regulations that would standardize local building practices and reduce unexpected development costs. One of the most influential private organizations representing the building industry was the Urban Land Institute (ULI), established in 1936 as an independent nonprofit research organization dedicated to urban planning and land development. Sponsored by the National Association of Real Estate Boards (NAREB) and serving as a consultant to the National Association of Home Builders (NAHB), ULI provided information to developers about community developments that supported land-use planning and promoted the idea of metropolitan-wide coordination as an approach to development.

In 1947 the ULI published its first edition of the Community Builder's Handbook. Providing detailed instructions for community development based on the curvilinear subdivision and neighborhood unit approach, it became a basic reference for the community development industry and, by 1990, was in its seventh edition. In 1950 the NAHB, the primary trade organization for the industry, published the Home Builders' Manual for Land Development.

Thus, by the late 1940s, the concept of neighborhood planning had become institutionalized in American planning practice. This form of development, in seamless repetition, would create the post-World War II suburban landscape.

HOUSE AND YARD

THE DESIGN OF THE SUBURBAN HOME

The central motivation for the invention of the suburban house was the desire of Americans to own a single-family house in a semi-rural environment away from the city—what would become the American dream. Several factors influenced the evolution of suburban house design:

* The lowering of construction costs, accomplished with the invention of the balloon-frame method of construction in the 1830s and successive stages of standardization, mass production, and prefabrication.
* The translation of the suburban ideal into the form of an individual dwelling usually on its own lot in a safe, healthy, and parklike setting.
* The design of an efficient floor plan believed to support and reinforce the ideal family.

The evolution of the American home reflects changing concepts of family life and the ideal suburban landscape. From 1838 to 1960, the design of the single-family, detached suburban home in a landscaped setting evolved in several broad stages from picturesque country villas to sprawling ranch houses on spacious suburban lots.

The Suburban Prerequisite: The Invention of the Balloon Frame

The widespread adoption of the balloon-frame method of construction, invented in Chicago in the 1830s, along with the invention of wire nails and the circular saw, transformed the character of American housing in the mid-nineteenth century. The lightweight balloon frame consisted of narrow wooden studs and larger joists arranged in a box-like configuration capable of absorbing load-bearing stresses. In comparison to traditional post-and-beam and masonry methods, balloon framing could be quickly assembled at a lower cost with fewer and less experienced...
workers. Allowing considerable freedom of design in both exterior massing and interior layout, it was well-suited for building homes in the Romantic Revival and Picturesque styles that were coming into vogue in the mid-nineteenth century.\textsuperscript{100}

**Rural Architecture and Home Grounds, 1838 to 1890**

The suburban home first appeared as a rural villa for the fairly well-to-do family in the mid-nineteenth century. Located “on the edge of the city,” it was intentionally designed as a therapeutic refuge from the city, offering tranquility, sunshine, spaciousness, verdure, and closeness to nature—qualities opposite those of city. This ideal was aggressively and persuasively articulated through pattern books, the writings of domestic reformers, and popular magazines. As house designs became adapted for more modest incomes and as advances in transportation lowered the cost of commuting, suburban living became affordable to an increasingly broad spectrum of the population.

**Early Pattern Books**

Alexander Jackson Davis’\textsuperscript{a} *Rural Residences* (1838) marked the transition from builders’ guides, which focused on techniques of joinery and architectural detailing, to a new generation of pattern books. Pattern books were directed at the prospective home owner and featured plans and elevations for ornamented villas and cottages in a variety of romantic revival styles all set in a semi-rural, village setting. Catharine E. Beecher’s *Treatise on Domestic Economy* (1841) called for domestic reform, promoting the idea that rural living was ideally suited for family life, and offering elevations and floor plans for simple houses designed for efficiency and family comfort. With the publication of *Cottage Residences* (1842) and *Architecture of Country Houses* (1850), Andrew Jackson Downing soon after popularized a market for pattern books that offered a variety of house types and styles suited for country or village living.

Downing gave detailed architectural expression to the ideal of living in a semi-rural environment, offering designs for villas for the well-to-do and less expensive cottages for lower-income households. Through designs that conformed to a romantic aesthetic for the “beautiful” or the “picturesque,” Downing promoted revival styles described as “Italianate,” “Tudor Revival,” “Bracketed,” “Swiss,” “Gothic Revival,” and “Tuscan.” His books also illustrated decorative architectural elements, such as brackets and vergeboards, that could be crafted by most country builders to embellish the simplest home.\textsuperscript{101}

Pattern books appeared by a number of architects, including Calvert Vaux, A. J. Bicknell, George E. Woodward, Orson Squire Fowler, William H. Ranlett, and Gervase Wheeler. *Godey’s Lady’s Book*, a popular magazine, also offered its readers designs for rural villas and cottages, thereby establishing the important role of periodicals in fostering domestic reform and affecting popular taste.\textsuperscript{102}

**Landscape Gardening for Suburban Homes**

Downing’s *Treatise on the Theory and Practice of Landscape Gardening* (1841) was the first American published guide for laying out and planting domestic grounds. A nurseryman by trade, Downing fostered an avid interest in horticulture, encouraging home owners to enhance village streets and domestic grounds with plantings drawn from the vast numbers of native and exotic trees and shrubs becoming available in the United States. His books offered simple layouts, extensive instructions, and plant lists for landscaping villas and cottages, often on modestly-sized rectangular parcels of land. To Downing, even the smallest domestic yard was a pleasure ground that offered a sense of enclosure and privacy from the outside world and could be developed with curvilinear paths, lawns, overlooks, tree plantations, specimen trees, and a variety of gardens.

Instructions and site plans for embellishing the grounds of suburban homes appeared regularly in a number of periodicals, including *The Horticulturalist*, *Hovey’s Magazine of Horticulture*, and *Garden and Forest*. Between 1856 and 1870, plan books appeared by a number of other landscape gardeners, including Henry W. Cleaveland, Robert Morris Copeland, George E. and F. W. Woodward, and Jacob Weidenmann.\textsuperscript{103}

Frank J. Scott was among the first to recognize that the new homes being built outside cities formed neighborhoods that were suburban, not rural, in character. His comprehensive landscape manual, *Art of Beautifying Suburban Home Grounds of Small Extent* (1870), was intended to help the middle-class home owner achieve beautiful landscape effects that were low in cost and easy to maintain, including graded lawns, ornamental trees and shrubs, and foundation plantings. His influence was extensive, and by the 1870s, suburban streets began to take on a
Eclectic House Designs and Mail Order Plans

After the Civil War, a new generation of pattern books appeared offering greater variety and complexity in house design and plans well-suited to suburban house lots. Henry Hudson Holly’s *Modern Dwellings in Town and Country, Adapted to American Wants and Climate* (1878) was among the first to advocate architectural eclecticism in which visual and artistic effects—in the design of chimneys, gables, and porches, for example—became important aspects of stylistic appeal. Such books popularized late nineteenth-century styles including the Shingle, Stick, Eastlake, Second Empire, and Queen Anne Revival styles.105

Mail order services further democratized home building and added variety and complexity to Victorian-era house design. *Model Homes for the People, A Complete Guide to the Proper and Economical Erection of Buildings* (1876) was the first in a series of best-selling, inexpensive catalogs by George and Charles Palliser that offered detailed architectural plans by mail for a small fee. *Ladies’ Home Journal*, under the editorship of Edward Bok beginning in 1889, and a host of catalogs by architects George F. Barber, Robert W. Shoppell, William A. Radford, and others similarly made available architect-designed plans for a nominal cost. This practice continued in the twentieth century, carried on by architect-sponsored small house service bureaus and stock plan companies, such as Garlinghouse of Topeka, Kansas.107

The Homestead Temple-House

Working-class families sought separation from the city and privacy from neighbors in modest, detached homes on the narrow, rectangular lots of gridiron subdivisions. By the 1860s, a freestanding house type, the “homestead temple-house,” gained popularity in the rapidly growing industrial cities of the Northeast and Midwest. Derived from the earlier Greek Revival house and typically adorned by a stylish doorway or colonnaded porch, the house was turned so that the gabled end faced the street and the floor plan extended deeply into the lot.107

The Practical Suburban House, 1890 to 1920

The expansion of streetcar transportation in American cities coincided with fundamental changes in the perception of the ideal family and a revision of what constituted the best suburban home. Progressive ideals emphasizing simplicity and efficiency called for house designs that reflected less hierarchical relationships, technological innovations, and a more informal and relaxed lifestyle.108

New subdivisions provided utilities and amenities not available elsewhere. In many places, they benefited from the street improvements, park and boulevard systems, and public utility systems that resulted from the City Beautiful movement and an emerging interest in city planning as the means for Progressive reform.

Technological innovations introduced to improve household life—central heating, gas hot water heaters, indoor plumbing, and electricity—entailed expensive mechanical systems that increased the cost of construction. The reduction of floor space and the use of standardized plans helped offset the rising cost of home construction and put home ownership within reach of more Americans. First appearing in the 1890s, the bungalow reflected the desire for an affordable single-family house for households without servants. These houses, and a somewhat large type known as the foursquare, were sold by catalog and became the first mass-produced houses in the United States.109

The Open Plan Bungalow

By 1910, the bungalow had become the ideal suburban home and was being built by the thousands, giving rise to what has been called the “bungalow suburb.” The typical bungalow was a one- or one-and-a-half-story house having a wide, shallow-pitched roof with broad overhanging eaves. The interior featured an open floor plan for family activities at the front of the house and private bedrooms at the back or upstairs. The wide open front porch, a distinctive feature of the ideal bungalow, provided a transition between interior and outdoors.110

The design of the bungalow was influenced by the Prairie School movement of the Midwest, the California Arts and Crafts movement, and a number of vernacular housing types. Part of the bungalow’s appeal was its adaptation of these and other architectural influences in the form of
**Historic Residential Suburbs in the United States, 1830--1960**

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A small comfortable house. The suburban bungalow—in styles ranging from English Cottage styles to the Mission Revival style of the Southwest—was popularized nationwide by periodicals such as *Western Architect, Ladies' Home Journal, Craftsman, and Bungalow Magazine*. Numerous catalogs and books appeared, many in multiple editions, including William A. Radford’s *Artistic Bungalows* (1908), Henry L. Wilson’s *Bungalow Book* (1910), Henry H. Saylor’s *Bungalow Book* (1911), H. V. Von Holst’s *Modern American Homes* (1913), Gustav Stickley’s *Craftsman Homes* (1909) and *More Craftsman Homes* (1912), and Charles E. White’s *Bungalow Book* (1923).

### The American Foursquare

The American foursquare made its appearance in the 1890s, and by the 1930s, was a fixture of American neighborhoods. A typical foursquare was a two-and-one-half-story house having a raised basement, one-story porch across the front, and plan of four evenly sized rooms on each floor. Often crowned with a pyramidal roof and dormers, the foursquare appeared in a variety of architectural styles, the most popular being the Colonial Revival.

### Factory Cut, Mail Order Houses

The availability of complete, factory cut homes, which could be ordered by mail from illustrated catalogs, was largely responsible for the widespread popularity of the bungalow and foursquare. The Hodgson Company of Dover, Massachusetts, was one of the first to market factory cut dwellings, sheds, and cottages. During the first decade of the twentieth century, several companies—Aladdin of Bay City, Michigan; Sears and Roebuck; and Montgomery Ward—began to market pre-cut homes that could be shipped by railroad and assembled on site. This trend grew in popularity and at the height of its popularity in the 1920s the industry included a host of other companies, including the Gordon-Van Tine Company of Davenport, Iowa, and Pacific Ready-Cut of Los Angeles.

The success of mail order home building depended on inexpensive transportation, vast selection of housing types and prices, financial arrangements where home owners could pay in installments, and marketing programs whereby designs were constantly being revised and retired as new ones reflecting changing popular taste were introduced. Thousands of pre-cut houses were sold and shipped annually. Sears alone offered approximately 450 ready-to-build designs ranging in style, type, and size from small bungalows to multiple family apartment houses. Sears’s sales reached 30,000 by 1925 and nearly 50,000 by 1930.

### Introduction of the Garage

Shelter for the automobile became an increasingly important consideration after 1900. Driveways were readily accommodated in the progressive design of new neighborhoods having road improvements such as paved surfaces, gutters and curbs, and side-walks. The earliest garages were placed behind the house at the end of a long driveway that often consisted of little more than a double tract of pavement. By the end of the 1920s, attached and underground garages began to appear in stock plans for small homes as well as factory-built houses. Among the earliest homes with built-in garages were the detached and semi-detached models designed by architect Frederick Ackerman in 1928-1929 for Radburn, New Jersey. The design of an expandable two-story house with a built-in garage and additional upper-story bedroom was introduced by the FHA in 1940. By the 1950s, garages or carports were integrated into the design of many homes.

*Keith’s Magazine, Carpentry and Building, Building Age,* and *American Carpenter and Builder* were among the first magazines to offer instructions for building garages. William A. Radford is credited with popularizing the term “garage” and introducing the first catalog devoted to the type in 1910. Manufacturers of pre-cut homes, such as Aladdin Homes, began to offer a variety of mail order garages, often matching the materials and styles of popular house types.

### Home Gardening and the Arts and Crafts Movement

The American Arts and Crafts movement spurred an avid interest among home owners in gardening and a desire to integrate a home’s interior space with its outdoor surroundings. To unify house and garden and integrate indoor and outdoor living, many bungalow designers used natural construction materials, incorporated porches and courtyards into their designs, and encouraged the arrangement of yards with simple terraces, rustic paths, and garden rooms. Periodicals such as *The Craftsman* featured articles for embellishing the grounds of bungalows with patios, gates, fountains, pools, arbors, pergolas, and rockery. Features such as hanging vines, water gardens, and creeping ground covers added...
to the variety and rich textures of the Arts and Crafts garden.

Books by landscape architects educated home owners about domestic yard design; these included Ruth B. Dean’s *The Livable House, Its Garden* (1917), Herbert J. Kellaway’s *How to Lay Out Suburban Home Grounds* (1907 and 1915), Elsa Rehmamn’s *The Small Place: Its Landscape Architecture* (1918), and Grace Tabor’s *Gardening Book* (1911), *Making the Grounds Attractive with Shrubbery* (1912), *Suburban Gardens* (1913), and *Planting Around the Bungalow* (1914). Plan books such as Eugene O. Murmann’s *California Gardening* (1914) provided gardening advice, planting plans, and plant lists for home owners according to local climate and growing conditions.

Garden writing flourished in popular magazines, such as *Ladies’ Home Journal, House and Garden, Country Life in America, House Beautiful, Garden Magazine*, and *Woman’s Home Companion*. Garden columns—by Frances Duncan, Wilhelm T. Miller, and Grace Tabor—and articles by noted designers, nursery keepers, and amateur gardeners, showcased successful gardens, provided horticultural information, and offered gardening advice.115

Horticulturist Liberty Hyde Bailey of Cornell University bridged the gap between science and practical landscape gardening. As editor of *Country Life in America* and author of *Garden-Making: Suggestions for the Utilizing of Home Grounds* (1898) and *The Practical Garden Book* (1904), he translated his extensive botanical knowledge into simple principles for suburban gardeners. 116

With the publication of Helena Rutherford Ely’s *A Woman’s Hardy Garden* in 1903, Victorian practices of carpet bedding and lush displays of exotic plantings gave way to simpler gardens featuring harmonies of color, seasonal changes, and perennial displays. Numerous books by successful amateur gardeners followed including, Louise Shelton’s *The Seasons in a Flower Garden* (1906), Louise Beebe Wilder’s *Colour in My Garden* (1918), and Nellie Doubleday’s *American Flower Garden* (1909) written under the pseudonym Neltje Blanchan.117

**Better Homes and the Small House Movement, 1919 to 1945**

After World War I, improving the quality of American domestic life took on special importance. Alliances formed among architects, real estate developers, builders, social reformers, manufacturers, and public officials—at both national and local levels—to encourage home ownership, standardized home building practices, and neighborhood improvements.

**The Better Homes Campaign**

Better Homes in America, Inc., a private organization founded in 1922, spearheaded a national campaign for domestic reform focused on educating homeowners about quality design and construction. Promoted by *The Delineator*, a popular Butterick publication for women, the organization gained the support of U.S. Secretary of Commerce Herbert Hoover and formed a nationwide network of local committees that encouraged both the construction of new homes and home remodeling projects. A national demonstration home, “Home Sweet Home,” a modernized version of songwriter John Howard Paynes’s Long Island birthplace, was constructed on the National Mall in 1923, and “Better Homes Week” activities and competitions were held nationwide. Annual competitions recognized the work of architects, such as Royal Barry Wills of Boston and William W. Wurster of San Francisco, whose small house designs would influence popular taste nationwide for homes described as New England Colonial or Monterey Revival.118

**Architect-Designed Small Houses**

The Small House Architects’ Service Bureau was established in Minneapolis in 1919 with the purpose of providing architect-designed plans and technical specifications to builders of small houses. A “small house” was defined as one having no more than six rooms. Sponsored by the AIA, the bureau was a nonprofit organization made up of architects from all parts of the country devoted to the problem of designing small homes in a variety of popular forms and styles. Home builders could order complete working drawings from *The Small House*, a periodical, or plan catalogs such as *Small Homes of Architectural Distinction* (1929). The bureau endeavored to raise the public’s awareness of the value of professional design and encouraged home owners and builders to secure a local architect to supervise construction.119

In New York, the Home Owners Service Institute, headed by architect Henry Atterbury Smith in the 1920s, ran the weekly “Small House Page” of the Sunday *New York Tribune*, sponsored local design competitions and model home demonstrations, and published *The Books of A
Thousand Homes (1923). The institute raised the variety and quality of American homes by disseminating a large number of working drawings and plans nationwide—all the work of professional architects such as Frederick L. Ackerman and Whitman S. Wick—and forming alliances with private trade groups and manufacturers, including the American Face Brick Association, Curtis Woodwork Company, and National Lumber Manufacturers Association.  

Popular magazines—including Better Homes and Gardens, American Home, House and Garden, Garden and Home Builder, McCall’s, and Sunset—reflected the growing interest in home improvement and appealed increasingly to owners of small homes. They carried articles on new house designs, interior decoration, and gardening, as well as advertisements for the latest innovations in manufactured products. Trade pamphlets such as Richard Requa’s Old World Inspiration for American Architecture by the Monolith Portland Cement Company of Los Angeles reflected emerging alliances between the building industry and designers interested in promoting regional trends.

The small house of the 1920s appeared in many forms and a variety of bungalow and period revival styles, the most popular being drawn from the English Tudor Revival and a host of American Colonial influences, including Dutch, English, French, and Spanish. The movement resulted in a great diversity of architectural styles and types nationwide as regional forms and the work of regional architects attracted the interest of an increasingly educated audience of prospective home owners.

Federal Home Building Service Plan

Although the demand for architect-designed small houses was seriously curtailed during the Great Depression, AIA-sponsored service bureaus continued to operate in a number of major cities across the United States, including Boston, New York, Memphis, Houston, and Los Angeles, where they found support from local savings and loan associations interested in ensuring that the homes they mortgaged were a sound investment. In 1938, the Federal Home Loan Bank Board, Producers Council of the NAREB, and the AIA joined together to sponsor the Federal Home Building Service Plan, a program of certification which, during the next decade, helped make home financing available to home owners who used service bureau plans and retained the services of registered architects to supervise construction. Although regionally-inspired Colonial Revival designs dominated, new forms such as the California Ranch house, appeared in the portfolios of approved architect-designed plans.

Landscape Design for Small House Grounds

By the late 1920s, professional landscape architects, such as Stephen Child and Sidney and S. Herbert Hare, had well established reputations for subdivision design and small residential projects in upper-income planned suburbs, such as Tucson’s Colonia Solana and Kansas City’s Country Club District. In 1923, the Home Owners Service Institute drew attention to the value of using the services of a professional landscape architect to arrange dwellings on site, lay out home grounds, and develop planting schemes in neighborhoods of small suburban homes. Garden City planners Stein and Wright recognized the profession’s role in creating moderate-income neighborhoods when they hired Marjorie Sewell Cautley to assist their work at Sunnyside and Radburn, and encouraged the Buhl Foundation in Pittsburgh to hire Ralph E. Griswold to assist with the layout and planting of Chatham Village.

Mrs. Francis King (Louise Yeomans King), a leader in the garden club movement, introduced the “Little Garden Series” in 1921, marking an increasing interest in the design of the small suburban lot. The series, which included Fletcher Steele’s Design in the Little Garden (1924), brought home owners practical and aesthetic advice from professional landscape architects and successful gardeners. Other books by landscape architects reflecting this trend included Myrl E. Bottomley’s Design of Small Properties (1926), Cautley’s Garden Design (1935), Frank A. Waugh’s Everybody’s Garden (1930). Helen Morgenthau Fox’s Patio Gardens (1929) and Richard Requa’s Architectural Details of Spain and the Mediterranean (1927), both featuring Spanish and Mediterranean influences, encouraged the development of regional gardening forms that corresponded to emerging trends in house design and were suited to the warmer climates of California and Florida.

Public and Private Initiatives: The Efficient Low-Cost Home, 1931-1948

As the Great Depression deepened, housing starts declined precipitously, coming almost to a standstill. Discussion of the ideal small house took on new urgency with the collapse of the home building industry and the rising rate of mortgage foreclosures.
With the recommendations of the Nation’s leading experts, the 1931 conference endorsed the objective of reforming the Nation’s system of home financing, improving the quality of housing for moderate and lower-income groups, and stimulating the building industry. For house design, these measures meant improving the design and efficiency of the American home while lowering its cost. Through a combination of private and public efforts, the design of efficient, low-cost housing—in the of form single, two-family, and multiple family dwellings—became a national priority, reflecting to a large extent the recommendations made by the conference committees.

The Committee on Design brought together experienced architects and developers who called for improvements in small house design such as building houses in well planned groups to avoid the monotony created by the repetition of uniform houses on narrow lots and siting houses to benefit from sunlight, air, and outdoor space. Representatives from trade organizations, building associations, and materials manufacturers formed the Committee on Construction, which upheld the need for labor and time conserving methods, standard building codes, improved standards of workmanship, education and research by trade associations, and economies of prefabrication. Another committee examined the affordability of heating, ventilating, and air conditioning, and set basic requirements for plumbing and sanitation, electric wiring, and refrigeration.123

The Committee on Landscape Planning and Planting, which brought together landscape architects experienced in residential design and representatives of the organizations such as the Garden Club of America and National Council of State Garden Club Federations, upheld the importance of attractive yard design and landscape plantings to enhance a home owner’s comfort and enjoyment as well as increase property values.124

**FHA’s Minimum House and Small House Program**

Through its approval of properties for mortgage insurance and the publication of housing and subdivision standards, the FHA instituted a national program that would regulate home building practices for many decades. House designs, first published in *FHA’s Principles of Planning Small Houses* (1936), were updated periodically. Circulars, such as *Property Standards, Recent Developments in Building Construction, and Modern Housing*, addressed issues of prefabrication methods and materials, housing standards, and principles of design.

The five FHA house types that appeared in *Planning Small Houses* in 1936 offered “a range in comfort of living,” and in succession a “slightly increasing accommodation.” Illustrated by floor plans and simple elevations, each type was void of non-essential spaces, picturesque features, and unnecessary items that would add to their cost, following FHA’s principle for “providing a maximum accommodation within a minimum of means.” Houses could be built in a variety of materials, including wood, brick, concrete block, shingles, stucco, or stone. To increase domestic efficiency, new labor saving technologies were introduced: kitchens were equipped with modern appliances, and the utility room’s integrated mechanical system replaced the basement furnace of earlier homes.125

The simplest FHA design became known in the home building industry as the “FHA minimum house.” Measuring 534 square feet and having no basement, House A was a one-story, two-bedroom house designed for a family of three adults or two adults and two children. A small kitchen and larger multipurpose living room extended across the front of the house, while two bedrooms and a bathroom were located off a small hallway at the back of the house. The slightly larger House B provided 624 square feet of living space and had more lasting appeal.126

Houses C and D were two-story homes, having two upstairs bedrooms, with the latter offering a simple attached garage. House E, a compact two-story, three-bedroom house, was the largest and most elaborate of FHA’s early designs. Illustrated with a classically inspired doorway and multi-circular light in the street-facing gable, it demonstrated that a house could be “attractively designed without excessive ornamentation.”127

FHA’s 1940 edition of *Planning Small Homes* introduced a dramatically different, flexible system of house design based on the principles of expandability, standardization, and variability. Praised for its livability, the simple one-story “minimum” house became the starting point from which many variations arose as rooms were added or extended to increase interior space, often forming an L-shaped plan. Exterior design resulted from the combination of features such as gables, porches, materials, windows, and roof types. Factors such as orientation to sunlight, prevailing winds, and view became as important as the efficient layout of interior space. Fireplaces and chimneys could be added, as well as basements. The revised edition also included designs for two-bedroom, two-story houses having central-hall and sideline-stair plans, some
The new FHA principles provided instructions for grouping similarly designed houses in cul-de-sacs and along streetscapes by varying the elements of exterior design in ways that avoided repetition and gave the neighborhood an interesting and pleasing character, for example, by varying the placement of each house on its lot and introducing a variety of wall materials and roof types. The principles were directed at operative builders who, taking advantage of the cost-reducing practices of standardization and more liberal financing terms, were becoming increasingly aware of the advantages of building homes on a large scale and, for the first time, were creating what has become known as “tract” housing.

**FHA’s Rental Housing Program**

FHA’s Large-Scale Rental Housing Division worked closely with operative builders to design apartment villages that were efficient cost-wise, but also attractive and desirable places for moderate-income renters. Utilizing superblock planning and incorporating garden courts and common greens, they were strongly influenced by Stein and Wright’s Garden City projects at Sunnyside Gardens, Radburn, and Chatham Village, as well as the highly recognized World War I defense housing communities of Seaside Village at Bridgeport, Connecticut, and Yorkship Village at Camden, New Jersey.

The overall aesthetic effect of garden apartment villages relied on the varied and irregular massing of units within a superblock, separation from automobile traffic, an interlocking arrangement of housing units to fit a site’s topography which avoided the appearance of either rowhouses or large apartment blocks, and the provision of landscaped walkways, gardens, and recessed entry courts. Staggered roof lines and unifying cornices, fascia, and dentil friezes, and the repetition of modest and similar architectural embellishments—doorways, transoms, mouldings, window surrounds, roof designs—unified each complex’s overall design.

Economies of scale and the use of standardized building components dictated the design of communities such as Buckingham in Arlington, Virginia. Functional efficiency and cost reduction relied on the use of standardized components and appliances, the development of consolidated mechanical systems, and an efficient arrangement of rooms within each apartment, and of apartments within each dwelling unit. Influenced by Henry Wright, who had advised on the design of Buckingham and whose *Rehousing Urban America* was published in 1935, FHA architect Eugene H. Klaber developed a series of efficient “unit plans,” which published in FHA’s monthly “Architectural Bulletin” (1940), guided much market-rate rental housing construction through World War II.

**Prefabricated Houses**

The 1930s became a decade of experimentation. A number of private organizations assumed the role of “scientific housers” with the purpose of creating a house that a majority of American wage earners could afford. Others explored the principles of mass production and prefabrication to reduce the cost of building materials and housing.

Bemis Industries, Inc., under the direction of Albert Farwell Bemis, experimented with prefabricated modular systems using a variety of materials including steel, gypsum-based blocks and slabs, and composition board and steel panels to create a series of model homes; this work established the principles for Bemis’s three-volume *The Evolving House* (1936), which became a standard reference work on prefabrication. Bemis pursued a three-fold strategy: first, simplify the house by eliminating seldomly used space; second, streamline the construction process by using time and labor-saving equipment, materials, and techniques; third, apply principles of modern industrial management for production based on economies of scale and the sequential production of components.

The John B. Pierce Foundation of New York City examined the American home from the standpoint of efficiency. Through space-and-motion studies of family living habits, the foundation developed the prototype for a 24 by 28 foot house, having four rooms and a bath which became a community building standard. The foundation developed a number of models, including a demonstration village at its laboratory in Highbridge, New Jersey, and worked with manufacturers to develop small marketable dwellings using innovative materials and prefabricated components, which were manufactured on a large scale and purchased by the U.S. government during World War II.

In 1935, the Forest Products Laboratory of the U.S. Department of Agriculture developed a “stress-skin” plywood house, which spurred a
series of efforts to develop insulated, prefabricated wood panels that could be manufactured on a large scale and shipped for easy assembly on site. Such prefabricated systems were adopted by a number of manufacturers, including the Celotex Company of Chicago and Homasote Company of Trenton, New Jersey, which would both become leading manufacturers of housing for defense workers during World War II. 134

In its annual revision of Recent Developments in Building Construction, FHA reported on new developments and provided a list of the materials and methods approved by the U.S. Bureau of Standards. In 1940 the list included methods ranging from a system of steel panel construction manufactured by Steel Buildings, Inc., of Ohio to concrete construction methods promoted by the Portland Cement Association.135

Prefabricated methods took on increasing importance with the onset of World War II as the construction of both temporary and permanent housing in places determined critical for defense production became a national priority. The need to speed production and lower construction costs guided these efforts, many of which were funded under the Lanham Act and public housing programs. After the war, manufacturers continued to shape the suburban landscape based on principles of mass production and prefabrication. Federal loans for the construction of manufacturing plants through the Reconstruction Finance Corporation made it possible for manufacturers such as Carl Strandlund of Chicago and Harvey Kaiser in California to fund large-scale efforts to produce housing components that could be shipped and assembled on site to provide housing for the families of returning veterans.136

Many attempts to produce factory-made prefabricated dwellings experienced limited success and failed, including the demountable Acorn houses introduced in 1945 by Carl Koch and John Bemis of Massachusetts and the porcelain-enamel steel Lustron House, manufactured from 1947 to 1950, the invention of manufacturer Carl Strandlund and architect Morris Beckman.

To architects such as William Wurster and Walter Gropius, prefabrication promised a solution to housing America’s lower-income families. During the 1940s, Gropius worked closely with Konrad Wachsmann and the General Panel Corporation to develop a system of prefabrication that would markedly reduce the cost of housing. Although the final model called “the Packaged House” was technically a success, the company’s efforts to market the system and remain financially solvent failed.137

More successful were house manufacturers such as National Homes Corporation of Lafayette, Indiana, and Gunnison Homes of New Albany, Indiana, which readily adapted their factory operations to postwar conditions and offered a number of designs suited to the needs, incomes, and tastes of postwar middle-income home buyers. These companies engaged the services of well-known architects, including Royal Barry Wills and Charles M. Goodman, and offered expanding portfolios with the latest in interior and exterior features, such as heat-insulated windows and exposed redwood ceilings.138

Postwar Suburban House and Yard, 1945-1960

By 1945, several factors—the lack of new housing, continued population growth, and six million returning veterans eager to start families—combined to produce the largest building boom in the Nation’s history, almost all of it concentrated in the suburbs. From 1944 to 1946, single-family housing starts increased eight-fold from 114,000 to 937,000. Spurred by the builders’ credits and liberalized terms for VA- and FHA-approved mortgages by the end of the 1940s, home building proceeded on an unprecedented scale reaching a record high in 1950 with the construction of 1,692,000 new single-family houses.139

The experience of World War II demonstrated the possibilities offered by large-scale production, prefabrication methods and materials, and streamlined assembly methods. In 1947 developer William Levitt began to apply these principles to home building in a dramatically new way, creating his first large-scale suburb, Levittown on Long Island, which would eventually accommodate 82,000 residents in more than 17,500 houses.140

Levitt’s idea was to lower construction costs by simplifying the house, assembling many components off-site, and turning the construction site into a streamlined assembly line. The economy of using factory produced building components, such as pre-cut wall panels and standardized mechanical systems, significantly lowered the cost of construction. By adapting assembly line methods for horizontal or serial production, Levitt and Sons was able to systematically and efficiently assemble the components on site. The construction process was divided into 27 steps, each performed in sequence by a specialized crew. The tasks, skills, and manpower to complete each step were precisely defined and
each member was trained to perform a set of repetitive tasks, enabling work crews to move efficiently and quickly through each site, thus establishing the firm’s reputation for completing a house every 15 minutes.141

The vast subdivisions of Cape Cods and later Ranch homes, mocked by critics as suburban wastelands, represent not only an unprecedented building boom, but the concerted and organized effort by many groups, including the Federal government, to create a single-family house that a majority of Americans could afford. Levitt actually perfected a construction process that had been in the making for more than two decades. Other developers did the same, including Harvey Kaiser at Panorama City, near Los Angeles, and Philip M. Klutznick of American Community Builders, Inc., at Park Forest, Illinois. The success of Levitt and others resulted in the emergence of large-scale developers, called “merchant builders,” who would apply their successful formulas for building large communities in one location after another, often accommodating changing tastes, economics, and consumer demand in new and improved house designs.142

**From the FHA Minimum House to the Cape Cod**

The Cape Cod provided most of the low-cost suburban housing immediately following the war and was built in groups of varying sizes, sometimes numbering the hundreds. Often located on curvilinear streets and cul-de-sacs that reflected the FHA guidelines for neighborhood planning, Cape Cods appeared in a variety of materials, including sheets of insulated asbestos shingles available after the war in an increasing assortment of colors.

The Cape Cod that eager prospective renters lined up to inspect in the first Levittown in June 1947, was one-and-a-half stories and built on a concrete slab. Its 750 square feet of living space was divided into a living room, a kitchen, two bedrooms, and a bath. Set on a lot of 6,000 square feet, the exterior of the house—with a steeply pitched gable roof pierced by two dormers above a clapboarded first story—was a variation on a Cape Cod cottage and was a somewhat larger version of the FHA minimum house, which had been improved and expanded in FHA’s 1940 *Principles for Planning Small Houses*.143

Large-scale subdivisions not only took form on the periphery of the Nation’s largest metropolitan areas, but also around many smaller cities. For middle- and upper-middle-income families, especially in the East, simplified versions of pre-war “small house” designs such as brick or clapboarded Cape Cod and other Colonial Revival forms continued in popularity, in large part due to architect Royal Barry Wills, who published numerous plan books, including *Houses for Good Living* (1940), *Better Homes for Budgeteers* (1941), *Houses for Homemakers* (1945), and *Living on the Level* (1955).144

**The Suburban Ranch House**

The suburban Ranch house of the 1950s reflected modern consumer preferences and growing incomes. With its low, horizontal silhouette and rambling floor plan, the house type reflected the nation’s growing fascination with the informal lifestyle of the West Coast and the changing functional needs of families.145

In the 1930s California architects Cliff May, H. Roy Kelley, William W. Wurster, and others adapted the traditional housing of Southwest ranches and haciendas and Spanish Colonial revival styles to a suburban house type suited for middle-income families. The house was typically built of natural materials such as adobe or redwood and was oriented to an outdoor patio and gardens that ensured privacy and intimacy with nature. Promoted by *Sunset Magazine* between 1946 and 1958 and featured in portfolios such as *Western Ranch Houses* (1946) and *Western Ranch Houses* by Cliff May (1958), May’s work gained considerable attention in the Southwest and across the nation.146

In the late 1940s popular magazine surveys indicated the postwar family’s preference for the informal Ranch house as well as a desire to have all their living space on one floor with a basement for laundry and other utilities and a multipurpose room for hobbies and recreation. Builders of middle- and upper-income homes mimicked the architect-designed homes of the Southwest, offering innovations such as sliding glass doors, picture windows, carports, screens of decorative blocks, and exposed timbers and beams, which derived as much from modernistic influences as those of traditional Southwestern design.147

Builders of low-cost homes, however, sought ways to give the basic form of FHA-approved houses a Ranch-like appearance. By late 1949, Levitt & Sons had modified the Cape Cod into a Ranch-like house called “The Forty-Niner,” by leaving the floor plan intact and giving the
house an asymmetrical facade and horizontal emphasis by placing shingles on the lower half of the front elevation and fitting horizontal sliding windows just below the eaves. Picture windows, broad chimneys, horizontal bands of windows, basement recreational rooms, and exterior terraces or patios became distinguishing features of the forward-looking yet lower-cost suburban homes.¹⁴⁸

In the 1950s, as families grew larger and children became teenagers, households moved up to larger Ranch houses, offering more space and privacy. With the introduction of television and inexpensive, high-fidelity phonographs, increasing noise levels created a demand for greater separation of activities and soundproof zones. The split-level house provided increased privacy through the location of bedrooms on an upper level a half-story above the main living area and an all-purpose, recreation room on a lower level. The Ranch house in various configurations, including the split level, continued as the dominant suburban house well into the 1960s.

**The Contemporary House**

The influence of Frank Lloyd Wright, Walter Gropius, Marcel Breuer, Richard J. Neutra, Mies van der Rohe, and other modernists inspired many architects to look to new solutions for liveable homes using modern materials of glass, steel, and concrete, and principles of organic design that utilized cantilevered forms, glass curtain walls, and post-and-beam construction. The contemporary home featured the integration of indoor and outdoor living area and open floor plans, which allowed a sense of flowing space. Characteristics such as masonry hearth walls, patios and terraces, carports, and transparent walls in the form of sliding glass doors and floor-to-ceiling windows became hallmarks of the contemporary residential design.¹⁴⁹

The principles of European modernism expressed in the International Style had been introduced to the American public in the 1932 Museum of Modern Art exhibition. The Century of Progress World’s Fair at Chicago in 1933 introduced Americans to a number of modern houses, including the House of Tomorrow by George Fred Keck, noted for its polygonal form, innovative use of glass, and showcase of modern building materials.¹⁵⁰

James and Katherine Ford’s *Modern House in America* (1940) and professional magazines, such as the Architectural Record, Progressive Architecture, and Architectural Forum, promoted modernistic architect-built homes and featured the work of a rising generation of modernists including Edward D. Stone, Paul Thiry, William Lescaze, George Howe, Alden B. Dow, Pietro Belluschi, and Gregory Ain. Under the editorship of John Entenza, the Case Study Series in Arts and Architecture from 1945 and 1966 included designs for 36 houses that reflected new approaches to domestic design and featured mass production techniques, innovative planning, and new materials. The series not only featured outstanding examples of upper-income homes in California by noted designers such as Charles and Ray Eames, Raphael Soriano, and Ralph Rapson, but also a proposed but never-executed 260-home subdivision in San Fernando Valley, designed by A. Quincy Jones, Jr., and Frederick E. Emmons and co-sponsored by merchant builder Joseph Eichler and the Producers’ Council.¹⁵¹

Architects and others promoted the development of small houses reflecting modernistic design principles to meet the postwar housing shortage through plan books and detailed instructions that pointed out the construction and space efficiencies offered by modern design. Such books included *The Small House of Tomorrow* (1945) by Los Angeles architect Paul R. Williams; *Tomorrow’s House: How to Plan Your Post-War Home Now* (1945) by designers George Nelson and Henry N. Wright; and the Museum of Modern Art’s *If You Want to Build a House* (1946) by Elizabeth B. Mock.¹⁵²

Frank Lloyd Wright’s Usonian houses of the 1930s were forward looking with their horizontal emphasis, flat and sloping roofs, large windows, corner windows, and combination of natural wood and masonry materials. Wright continued to explore the problem of the small home, designing in 1938 an interesting group of quadruplexes, the Suntop Houses, at Ardmore, Pennsylvania. He gave new form to the Usonian house in the 1950s, and published *The Natural House* (1954), where he elaborated on his principles of organic design to create livable dwellings that integrated home and site.

Private organizations, such as the Revere Quality House Institute, Southwest Research Institute, and John D. Pierce Foundation, promoted the use of modern principles of design by sponsoring award programs and offering seals of approval for successful innovative designs. These programs encouraged the collaboration of developers and modernist architects and recognized the broadening array of new and innovative home building materials and prefabricated methods of construction.¹⁵³
Modernism was embraced as the rental housing market expanded in the suburbs of large cities. Title 608 of the National Housing Act, which

Postwar Suburban Apartment Houses

and above-ground balconies.

series of contemporary homes, whose facades by the end of the 1950s were dominated by overhanging eaves, broad gables, transparent walls,

sources such as Koch’s

In the 1950s AIA sponsored a Homes for Better Living award program in conjunction with House and Home, Better Homes and Gardens, and the National Broadcasting Corporation. This program recognized successful merchant-built communities such as Hollin Hills in Alexandria, Virginia, which featured the innovative domestic architecture of Charles M. Goodman.155

Appealing to an increasingly well-educated and prosperous audience, popular magazines heralded innovations in contemporary house design. The distinction between the Ranch and contemporary house became blurred as each type made use of transparent walls, privacy screens of
design concrete blocks, innovations in open space planning, and the interplay of interior and exterior space. House Beautiful promoted

Wright’s designs as well as other upper-income homes in the modernistic styles. Better Homes promoted designs to meet the incomes of a

wider range of families and showcased successful owner-built designs alongside those of established architects, such as architect Chester

Nagel’s home in Lexington, Massachusetts. In the late 1940s Better Homes began to recognize outstanding examples, which were showcased as “Five Star Homes.” Other magazines offered similar awards, including Parents’ Magazine, which sponsored the “Best Home for Family Living” competition.156

Exploring the possibilities inherent in combining modern design and prefabrication methods, architect Carl Koch and John Bemis introduced the popular, mass-produced Tech-built house in the early 1950s. From 1952 to 1956, the U.S. Gypsum Corporation sponsored a well-publicized demonstration project at Barrington Woods, Illinois, which featured model homes by a number of leading designers. In addition, sources such as Koch’s At Home with Tomorrow (1958) and Jones and Emmons’s Builder’s Homes for Better Living (1957) spurred a whole series of contemporary homes, whose facades by the end of the 1950s were dominated by overhanging eaves, broad gables, transparent walls, and above-ground balconies.

Postwar Suburban Apartment Houses

Modernism was embraced as the rental housing market expanded in the suburbs of large cities. Title 608 of the National Housing Act, which guaranteed builders 90 percent-mortgages on multiple family projects conforming to FHA standards, continued until the mid-1950s.

Publication of Clarence Stein’s Toward New Towns (1951) revived interest in models for low- and mid-rise apartment villages, such as the Phipps Apartments at Sunnyside Gardens and the modernistic Baldwin Hills in Los Angeles. Housing Design (1954) by Columbia University professor Eugene Klaber set forth principles of unit-planning similar to those Klaber had developed for the FHA two decades earlier. FHA began to provide mortgage insurance for apartment buildings having elevators in the late 1940s. By the 1950s apartment buildings were equipped with improved mechanical systems, elevators, up-to-date appliances, central air conditioning, outdoor balconies, and newly available prefabricated components such as steel-framed windows and sliding glass doors.157

Unlike their urban counterparts built on the site of cleared slums, high-rise suburban developments, which became increasingly popular in the late 1950s, were modeled after Le Corbusier’s vision for the “radiant city” and luxury high-rise apartment houses in American cities, including Mies van der Rohe’s Promontory Apartments (1949) and Lake Shore Drive Apartments (1951) in Chicago; Frank Lloyd Wright’s Price Company Tower (1952) in Bartlesville, Oklahoma; and 100 Memorial Drive (1950) in Cambridge, Massachusetts, by the firm of Kennedy, Koch, DeMars, Rapson, and Brown. Their location along major expressways leading from the center city was motivated by convenience of

location as well as advances in air conditioning, elevator design, mechanical systems, and structural design.158

Contemporary Landscape Design

New directions in landscape design accompanied the development of the Ranch house and contemporary residence in California. Emphasis on

the integration of indoor and outdoor living encouraged the arrangement of features such as the patios and terraces, sunshades and trellises,

swimming pools, and privacy screens. Several of the Case Study houses in Arts and Architecture featured the landscape work of Garrett

Eckbo. Architects such as Paul Williams designed houses “with the living side facing a private garden.” Sunset magazine publicized western
gardens by Doug Baylis, Thomas Church, and Eckbo, a number of which formed the grounds of Ranch houses designed by Cliff May, and
published *Landscape for Western Living* (1956). In addition, Thomas Church’s *Gardens Are for People: How to Plan for Outdoor Living* (1955), and Garrett Eckbo’s *Landscape for Living* (1950) and *Art of Home Landscaping* (1956) brought to a national audience simple principles for organizing the domestic yard into dignified lawns, private patios, informal garden rooms, and activity areas with simple, easy-to-maintain plants and shrubbery.\(^{159}\)

The modern style sought to achieve an integration of interior and exterior space by creating lines of vision through transparent windows and doors to patios, intimate garden spaces, zones designed for special uses, and distant vistas. Hedges, freestanding shrubbery, and beds of low growing plants, arranged to form abstract geometrical patterns, reinforced the horizontal and vertical planes of the modern suburban house.\(^{160}\)

Developers of contemporary subdivisions often secured the services of landscape architects as site planners to lay out their subdivisions and advise on the layout and planting of common areas, street corners, streets, and sidewalks. Others urged home owners to consult with landscape architects on the design of their suburban yards. The Southwest Research Institute encouraged such collaboration and recognized its achievement in suburban neighborhoods of contemporary homes, such as Hollin Hills in Alexandria, Virginia, where several landscape architects, including Dan Kiley, drew up planting plans for home owners and advised the developer on the planting of common areas.\(^{161}\)

**ENDNOTES**

Please note: Many of the following references include sources for further reading.

3. Anne D. Keating, *Building Chicago* (Columbus: Ohio State University Press, 1988), 14; Jackson, 92-93; Stilgoe, 140; Goldfield and Brownell, 259.
5. McShane and Tarr, 111; Fishman, 138.
9. Foster, 16.
11. Foster, 49, 52.
14. Tarr and Konvitz, 211.
23. Rose, 26; Rowe, 194.
24. Rose, 92; Rowe, 195.
29. See Weiss, 53-60.
30. Ibid., 3-4.
31. Hise, 143.
34. Scott, 284.
37. FHA, *FHA Story*, 5, 13-17; Jackson, 203-09.
38. “Defense Housing in Brief Retrospect: The Aims and Achievements of Certain Housing Agencies—A Symposium,” *Landscape Architecture* 33, no. 1 (October 1942): 14-19; FHA, FHA Story, 14-15. This bulletin is primarily concerned with legislative incentives that stimulated and influenced private investment in suburban real estate and home construction. The 1937 United States Housing Act (50 Stat. 888) established a Federal program of urban public housing and slum clearance under the United States Public Housing Authority, and the 1940 Lanham Act (54 Stat. 1125) established the Federal Works Agency and expanded Federal public housing programs to include housing for defense workers. In 1942, the FHA and the public housing programs were consolidated in one agency.
40. Quotation is from Weiss, 49.
42. Weiss, 70-72.
44. The FHA’s appraisal system not only encouraged the expansion of residential development on the periphery of many metropolitan areas, but also is said to have contributed to the “redlining” of many urban neighborhoods by the banking industry. For a discussion of the politics and effects of racial restrictions, see Jackson, 197-203, 208-15; G. Wright, *Building the Dream*, 247-48.
45. Weiss, 67, 72-78, 183-84; Jackson, 241-42.
46. G. Wright, Building the Dream, 213.
47. Committee recommendations can be found in Gries and Ford, eds., Planning, 29-38.
49. Scott, 208-10, 289-93. The first of its type, the Los Angeles Regional Planning Commission was founded in 1922; it influenced zoning regulations in local municipalities and in 1927 adopted a county zoning ordinance. The New York regional plan was developed between 1922 and 1931 under the direction of the Russell Sage Foundation with the expertise of preeminent Garden City planners.
52. Archer discusses other influential books, including William Ranlett, The Architect (1847); Henry Cleaveland, William Backus, and Samiuel Backus, Village and Farm Cottages (1856); Gervase Wheeler, Homes for the People (1855); Calvert Vaux, Villas and Cottages (1857); John Claudius Loudon, The Suburban Gardener and Villa Companion (1838); George E. Woodward, Woodward’s Country Homes (1865); articles in The Horticulturalist by Downing, Howard Daniels and others.
55. Rowe, Making a Middle Landscape, 198.
59. Newton, 471-72. See also Worley, J. C. Nichols.
60. Archer, 150; Schuyler, Apostle of Taste, 206-08.
61. Archer, 154. Archer also discusses the early suburbs of New Brighton on Staten Island and Evergreen Hamlet near Pittsburgh.
63. Newton, 468. See also Archer, 155-56; Schuyler, New Urban Landscape, 162-66.
65. Garvin, 263. Early Olmsted projects included Tarrytown Heights (1870-1872), New York; Parkside (1872-1886) in Buffalo; Fisher Hill (1884) in Brookline, Mass.; Druid Hills (1889), in Atlanta; Sudbury Park (1876-1892) near Baltimore. Later suburbs by the Olmsted Brothers further perfected the curvilinear suburb combining its naturalistic principles with features inspired by the garden city movement, such as planted medians and cul-de-sacs, and building a reputation on large projects such as Roland Park (1901) and Guilford (1912) in Baltimore; Alta Vista (1900) in Louisville; St. Francis Woods (1915) in San Francisco, and Palos Verdes (1926) near Los Angeles. See also Arley A. Levee, “The Olmsted Brothers’ Residential Communities,” The Landscape Universe (Wave Hill, N.Y.: Catalog of Landscape Records in the United States and National Park Service, 1993), 29-48.


74. See Stilgoe, 225-38; Newton, 474-78; Susan L. Klaus, A Modern Arcadia (Amherst: University of Massachusetts Press with the Library of American Landscape History, 2001).


79. Stein, 36-73; H. Wright, 42. See also Rowe, Making a Middle Landscape, 200-01; Cynthia L. Girling and Kenneth I. Helphand, Yard—Street—Park (New York: John Wiley & Sons, 1994), 59-64.


84. Gries and Ford, eds., Planning, 6-7, 21, 66, quotation is from 76.

85. Ibid., 59.

86. Ibid., 54-55.

87. Ibid., 52-54, 59, 76.


95. Designed as a complete “suburban village,” Riverside, Illinois, included a commercial center close to the commuter rail station. Planned communities such as Roland Park in Baltimore, Forest Hills Garden on Long Island, Shaker Village outside Cleveland, and Mariemont in Hamilton County, Ohio, were all built with village centers, squares, or blocks that provided space for shops and other services near the local train station, along streetcar routes, or at prominent street intersections. In conjunction with the development of early automobile suburbs in Kansas City in the early 1920s, J.C. Nichols introduced suburban shopping on a regional scale in his development of Country Club Plaza at a primary site within city’s developing system of metropolitan roadways; it was designed to accommodate numerous stores and provide off-street parking for motorists. Other community builders planned similar centers, including Hugh Prather’s Highland Park Shopping Center (1931) in Dallas, Texas.


97. Mott, “Federal Housing Administration,” 260; FHA, Planning Neighborhoods; FHA, Planning Profitable Neighborhoods (Washington, D.C.: GPO, 1938), 18. The example appears to be the Spring Valley/Wesley Heights Shopping Center in Bethesda, Maryland, which was built by Shannon and Luchs (ca. 1935).

98. Southworth and Ben-Joseph, 88; Rowe, Making a Middle Landscape, 202, 205-06. See also Girling and Helphand, 90-94, 94-102; Kelly, 35-37.

99. Weiss, 45.


105. Clark, 74-75; Gowans, 42.


107. Gowans ascribes the term “homestead-temple house” to this housing type, 94-99.

108. Clark, 131-32,


111. Gowans, 84; Rowe, *Making a Middle Landscape*, 73.


117. Woodburn, 248, 259.


124. Committee report can be found in Gries and Ford, eds., *Planning*, 163-209.


127. Ibid., 28-33.


129. Ibid., 37-43.


132. Hise, 56-57; Bruce and Sandbank, 10-11.
133. Hise, 58, 62-63; Bruce and Sandbank, 11-12.
134. Ibid., 11, 13-14, 74.
138. Mason, 56-57; Better Homes and Gardens 33, no. 3 (March 1955), 192.
139. Jackson, 233.
140. Ibid, 235.
141. Clark, 221-23; Jackson, 234-35; G. Wright, Building the Dream, 251-53.
142. See also Clark, 217-36; G. Wright, Building the Dream, 256-58, and, for profiles on postwar developers, Mason, 48-51.
143. Kelly, 16, 18, 59-65; Rowe, Modernity and Housing, 196-97; Jackson, 235; Girling and Helphand, 94-102.
145. Clark, 211; Rowe, Making a Middle Landscape, 73-77.
147. Clark, 201.
148. Kelly, 80-84.
149. Rowe, 82-84.
152. For architects working in this style, see Mason, 73-77.
157. Mason, 78; Rowe, Modernity and Housing, 126-27; Stein, 86-91, 188-216.
158. Architectural Record, eds., Apartments and Dormitories (New York: F.W. Dodge, 1958), 9. Lake Shore Drive Apartments and 100 Memorial Drive were recognized in the AIA’s Centennial list of the fifty most influential buildings in America.
159. Rowe, Making a Middle Landscape, 93-94; Hines, 168; Marc Treib, “Thomas Church, Garrett Eckbo, and the Postwar California Garden,” in Preserving the Recent Past 2, ed. Slaton and Foulks, 2-149. See also Marc Treib and Dorothee Imbert, Garrett Eckbo (Berkeley: University of California Press, 1997).
HISTORIC RESIDENTIAL SUBURBS IN THE UNITED STATES, 1830--1960

Name of Multiple Property Listing

F. ASSOCIATED PROPERTY TYPES

Historic properties associated with the context, “The Suburbanization of Metropolitan Areas in the United States, 1830 to 1960, take the form of historic districts that are primarily residential in character and located outside the historic core of American cities. These districts meet the following definition of a historic residential suburb:

A geographic area, usually located outside the central city, that was historically connected to the city by one or more modes of transportation; subdivided and developed primarily for residential use according to a plan; and possessing a significant concentration, linkage, and continuity of dwellings on small parcels of land, roads and streets, utilities, and community facilities.

This definition applies to a broad range of residential neighborhoods that, by design or historic association, illustrate significant aspects of America’s suburbanization. In the simplest form, it applies to an entire subdivision based on historic boundaries indicated on the original or successive plats. The definition may also apply to smaller areas within the originally plated subdivision, or a grouping of contiguous subdivisions that during the historic period collectively assumed a cohesive identity as a historic neighborhood or suburb. This identity may have resulted from similar characteristics of design, interrelated patterns of development, or common relationship to important local events or trends of development.

The following typically meet this definition and may be surveyed, evaluated, and documented for National Register listing using the guidelines found in this bulletin:

* planned residential communities;
* residential neighborhoods that through historic events and associations have achieved a cohesive identity;
* single residential subdivisions of various sizes;
* groups of contiguous residential subdivisions that are historically interrelated by design, planning, or historic association;
* residential clusters along streetcar lines, landscaped boulevards, or other major thoroughfares;
* entire villages built along railroads, trolley lines, or parkways; and
* concentrations of multiple family units, such as duplexes, double and triple-deckers, and apartment houses.

Nonresidential resources located within or adjacent to a historic neighborhood may contribute to significance if they are integrally related to the neighborhood by design, plan, or association, and share a common period of historic significance. These include: shopping centers; landscaped boulevards and parkways; scenic and recreational parks and playgrounds; institutions and facilities that supported and enhanced suburban domestic life (e.g. schools, churches, stores, community buildings, libraries, and civic centers); and transportation facilities associated with daily commuting, including train stations, bus shelters, boulevards, and parkways.

With special justification of individual significance, suburban resources may qualify for individual listing in the National Register of Historic Places, for example, a park embedded within a district that is the work of a notable master or the home of an important local leader whose influence extended beyond the neighborhood to affect the growth and history of the larger community, municipality, State, or nation.

This multiple property form may also be useful in documenting several other property types that, although falling outside the context of suburbanization, share similar design characteristics and patterns of historic development. They may be nominated to the National Register on individual registration forms or in other multiple property groups. Such types include: vacation or resort developments; mill villages and company towns; urban residential neighborhoods; clusters of park housing; resettlement communities; and public housing developments.

Nominations for such property types will generally require contextual discussion beyond that provided in Section E of this multiple property form. The bibliography provided in Section I lists a number of references useful in evaluating mill villages, planned industrial communities, and resettlement communities. In addition, a number of State-based multiple property submissions provide context on specialized groups of residential resources, such as Lustron houses, luxury apartment houses, and World War I-era, defense-related housing. The Public Housing in the United States, 1933 to 1949, MPS (forthcoming) provides a nationwide context examining the federally-subsidized housing built under the Public Works Administration, United States Housing Authority, and Federal Works Agency. A number of Federal agencies have developed multiple property submission and other contextual studies useful in evaluating specialized housing types; these include studies on post-World
The following section addresses selected methods and sources for research and fieldwork, including a discussion of how the landscape characteristics outlined in National Register bulletin *Historic Residential Suburbs: Guidelines for Evaluation and Documentation for the National Register of Historic Places* apply to historic subdivisions and neighborhoods. A description, statement of significance, and registration requirements for each associated property type follow. This information is intended to assist those using this multiple property documentation form to examine the historic development of residential neighborhoods in large metropolitan areas as well as smaller cities and towns and to identify historic districts that may be eligible for listing in the National Register for Historic Places. It is also useful in preservation planning, helping surveyors, residents, and preservation professionals identify the many characteristics that contribute to the historic significance of a neighborhood and should be preserved in order to maintain historic integrity.

**Research and Fieldwork: Methods and Sources for Understanding the Historic Development of a Historic Residential Suburb**

A study of the historic development of a suburban community for the purpose of developing a local context requires a combination of historical documentation and fieldwork. Researchers and field surveyors should be familiar with the historic context in Section E of this multiple property documentation form and have a general understanding of the techniques for identifying, evaluating, and documenting historic landscapes set forth in *Historic Residential Suburbs* (pages 73-111).

Before beginning survey work, researchers should acquire a preliminary understanding of the historic evolution and growth of the metropolitan region surrounding the area under study. This means developing a knowledge of transportation systems as well as the history of patterns of incorporation and annexation that have affected jurisdictional boundaries. It extends to the role of developers, important local planning practices, such as zoning or subdivision regulations, emergence of public utilities, and popular housing types. Researchers should also consider the relationship of residential development to local industries or institutions, such as colleges, governmental agencies, or businesses, which created a demand and provided the economic basis for the construction of suburban homes.

A bibliography of secondary sources should be compiled and examined under study prior to conducting any research of primary sources or a field survey of residential suburbs. Primary sources should be consulted to fill gaps in the secondary literature. For a comprehensive list of the kinds of sources useful in developing a local context and documenting local neighborhoods, researchers should consult “Historical Sources for Researching Local Patterns of Suburbanization” on pages 79-81 of *Historic Residential Suburbs*. These sources include subdivision plats, historic transportation maps, real estate deeds, fire insurance maps, master plans and other planning documents, newspaper advertisements, promotional materials, and historic periodicals. A familiarity with local collections and source materials will help the researcher develop a strategy for further research and fieldwork.

During field work, surveyors should take special note of and record information about neighborhoods, as well as individual resources, that are likely to represent important property types and illustrate important aspects of the region’s suburbanization. Such properties may include:

* residential subdivisions, or groups of contiguous subdivisions, that represent broad national trends in transportation, subdivision design, community planning, architecture, or landscape architecture;
* neighborhoods that possess historic associations with events or activities in the history of a local community or metropolitan area, or represent locally distinctive methods of construction or design characteristics;
* clusters or streetscapes having historic values, associations, or design characteristics that distinguish them from the larger subdivision of which they were originally a part;
* single homes associated with persons important in our past or distinctive for their architectural design or method of construction, or as the work of a master;
* and community centers, schools, libraries, parks, boulevards and parkways, and shopping centers within or adjacent to a residential neighborhood which are associated with important historic events or possess architectural distinction.
HISTORIC RESIDENTIAL SUBURBS IN THE UNITED STATES, 1830--1960

Historic residential suburbs exhibit diverse physical characteristics and reflect national trends in various ways. A subdivision platted in the 1830s, but developed over a period of many years due to local economic conditions, availability of mortgage financing, or the relationship between developers and builders, may exhibit a broad range of architectural styles and housing types. The homogeneous physical character of other suburbs, on the other hand, may be the result of any of the following factors:

* relatively short period of development;
* planning specifications for lot size, uniform setbacks, or the relationship of dwellings to the street and to each other;
* deed restrictions dictating dwelling cost, architectural style, or conditions of ownership;
* local zoning ordinances and subdivision regulations;
* housing of a similar size, scale, style, and period of construction, built by a single or small number of architect or builders;
* unifying landscape design, including features such as gateways, signs, common spaces, tree lined streets, walls and curbs, and street patterns; and
* adherence to FHA standards to qualify for mortgage insurance.

A number of historic residential suburbs meet the definition of a designed historic landscape set forth in the National Register bulletin *How to Evaluate and Nominate Designed Historic Landscapes* because they have been created according to a plan with definite boundaries for the purpose of residential development, and developed according to established principles of design drawn from the professional fields of landscape architecture and community planning. Some may reflect conventions of planning, such as deed restrictions, zoning limitations, and subdivision regulations. Others may have evolved in a less formal, and unregulated manner within the larger grid of a growing metropolis. Because of their extensive acreage and the substantial amount of open space characteristic of most American suburbs in the form of spacious landscaped streets, private yards, and, in some cases, parks and playgrounds, they can be documented through an examination of landscape characteristics. Interior and exterior circulation networks have played an extremely important role in both shaping the physical character of historic neighborhoods and determining the quality of domestic life. Aspects of development such as response to the natural environment, land uses and activities, cultural influences, vegetation related to land use, clusters, and small-scale features are particularly useful in determining the historical forces that shaped a neighborhood, as well as the physical characteristics or community facilities that distinguish its type and character. For example, the design of planned Picturesque suburbs in the nineteenth century relied upon a designer’s response to the cultural tastes of prospective home owners, a practical understanding of hydrology and civil engineering, an appreciation of a site’s natural topography and scenic beauty, and expanding markets for exotic plant materials.

For these reasons, this multiple property form and the National Register bulletin *Historic Residential Suburbs* encourage surveyors to document historic neighborhoods and subdivisions as cultural landscapes. Such a landscape approach calls upon surveyors to 1) examine each community’s physical and social evolution as a series of layers imprinted on the land, and 2) identify the component landscape characteristics that define the suburban neighborhood’s historic character. A familiarity with historic maps, plats, and transportation maps for a particular area before beginning a field survey will help surveyors understand the physical evolution of a suburban community and prepare them to identify...
Layers Defining a Neighborhood’s Evolution

The physical character of most historic residential suburbs resulted from three distinct stages of planning, each of which can be read as a layer imprinted on the land. The first layer concerns the selection of a parcel of land dedicated for residential use and subdivision; it is defined by geographical location, size, relationship to natural topography and cultural factors, such as proximity to places of employment and availability of transportation. The second corresponds to the design of the subdivision, usually in the form of a predetermined plan or plat with precise boundaries; it includes an internal circulation network, a system of utilities, blocks of buildable house lots, and, sometimes, community facilities. The third layer represents the arrangement of each home and yard with its dwelling, garage, lawn, driveway, gardens, walls, fences, and plantings. The length of time in which each layer took form depends on the particular history of the subdivision, local building and real estate practices, and factors such as economics, availability of financing, and the demand for housing in a particular location. Some of the factors to consider when evaluating each layers are listed below.

Location

A number of factors typically influenced the selection of a location for residential development, the foremost being the presence of a transportation system that made daily commuting to the city or other places of employment possible. Other factors include demographic trends, local demand for housing, opportunities for employment, local zoning regulations, availability of water and other utilities, proximity to commercial or recreational facilities, and the cost of purchasing and developing a particular parcel of land. Historic maps and information gathered to develop the context for local patterns of suburbanization, such as proximity to historic transportation routes, should help researchers understand this layer.

Subdivision Layout

Generally recorded in the form of a plat or a general development or master plan, the layout of a subdivision is characterized by the organization of space providing an internal circulation network, a system of utilities, blocks of buildable house lots, and, sometimes, community facilities, such as parks, playgrounds, and schools. A number of factors influence subdivision design, including natural topography, site drainage, availability of utilities, picturesque qualities, and relationship to nearby roads or transportation systems. Subdivision design often reflected principles and practices drawn from the profession of landscape architecture and legal tools, such as deed restrictions, to ensure that a developer’s vision and homeowners’ expectations were fulfilled. Documenting this layer requires a knowledge of the 1) principal trends in subdivision design; 2) roles of real estate developers, site planners, homebuilders, architects, and landscape architects at various periods of history; 3) contributions of well-known theorists and practitioners to American landscape design; and 4) influential examples that established precedents or served as models locally, regionally, or nationally.

Design of House and Yard

This layer, often called the “home grounds,” represents the spatial arrangement of each home with its dwelling, garage, lawns, walks, driveway, walls and fences, plantings, and activity areas. This layer typically reflects information about the economic status, lifestyle, and social and cultural attitudes of a neighborhood’s residents. House design in American suburbs has been influenced by a succession of popular sources: pattern books, catalogs and magazines offering plans by mail, availability of pre-cut houses that could be ordered by mail and constructed onsite, plans circulated through architects’ service bureaus and Better Homes organizations, FHA standards for planning small homes, and successful designs promoted by merchant builders and prefabricators. The design of the house and yard may also be influenced by deed restrictions, subdivision regulations, prevailing trends in building construction, and the need to house the automobile. Domestic yard design may reflect trends in gardening popularized by guides such as Frank Scott's *Art of Beautifying Suburban Home Grounds of A Small Extent* (1870) and Garrett Eckbo's *Landscape for Living* (1950). Documenting this layer requires a knowledge of the 1) chronological periods...
Landscape Characteristics

The following list of landscape characteristics can be used as a guide for organizing information gathered during research and fieldwork. A knowledge of landscape characteristics related to the suburban development of a particular metropolitan area is valuable in developing topologies for suburban planning, domestic architecture, and landscape design. Information about landscape characteristics is useful in assessing a neighborhood’s historic significance and integrity and documenting the property for National Register listing or a determination of eligibility.

The first four characteristics are processes--natural and cultural--that shaped a neighborhood’s physical character and defined it as a social community during the historic period. These processes link a neighborhood to significant themes in history, such as trends in community planning, distinctive patterns of subdivision design or house construction, or the relationship of a neighborhood’s residents to the expansion of a local industry. The remaining characteristics are physical components that define the residential character of the land and place a neighborhood in the context of historic patterns of suburbanization.

An understanding of these formative processes and the identification (and dating) of landscape components enable researchers to define the layers listed above spatially and chronologically, describe the physical evolution of a suburb, and explain the varied forces that shaped its development. Such information establishes a sound, factual basis for understanding historic significance, assessing historic integrity, and making decisions about National Register eligibility.

Land Use and Activities

The selection of land for residential subdivision has historically resulted from a combinations of factors, including demographics, proximity to transportation, availability of water and other utilities, and opportunities for employment. Topographic features, such as floodplain, deeply-cut stream valleys, and escarpments, often influenced the choice of land considered suitable for residential development.

Predominantly residential in use, subdivisions typically contain single-family houses, multiple family housing, or a combination of the two. Facilities that support domestic life and provide recreational pleasure, such as playgrounds, parks, schools, shops, libraries, churches, clubhouses, community buildings, swimming pools, and golf courses may also be present. While the suburban yard with its lawn, gardens, and plantings is a distinguishing feature of American suburbs, many suburbs also include common areas that function as parks or playgrounds.

Subdivision development relies on the availability of public utilities, including water, sewer, electricity, natural gas, telephone, and road maintenance. Before the advent of water mains, the design of many subdivisions included reservoirs and water towers and, even in the twentieth century, apartment villages often included power generating and sewage treatment plants.

Private deed restrictions have been used since the nineteenth century to limit development within suburban subdivisions to residential use and exclude nonconforming activities such as industry or commerce. Since the 1920s, local zoning ordinances and subdivision regulations have been adopted in many jurisdictions to control the use and character of residential neighborhoods. In addition, master plans, comprehensive plans, and regional plans have been adopted in many localities to specify both the location and the density of residential construction.

Response to the Natural Environment

Climate, topography, soil, and the availability of water historically determined the suitability of sites for residential construction. Water has always been a critical factor for residential development, and many early suburbs incorporated provisions for reservoirs and water towers. The advent of public systems of water, especially in metropolitan areas, facilitated residential subdivision on a large scale.

Historically natural topography was a strong determinant of design, influencing street patterns, site drainage, the size and shape of building lots, and provision of community parks. Many planned suburbs were carefully designed to follow the natural topography of the land. In areas
Early neighborhoods are more likely to reflect indigenous or regional building materials, including stone, brick, adobe, tile, and wood. With the design of dwellings, in reference to sun and wind direction, to maximize natural lighting conditions and air circulation. Twentieth-century concerns for domestic reform led designers such as Henry Wright and the Federal housing agencies to encourage individual lots as well as the arrangement of rooms, placement of windows, and provisions for outdoor living (e.g. porches, patios, and gardens). Twentieth-century concerns for domestic reform led designers such as Henry Wright and the Federal housing agencies to encourage the design of dwellings, in reference to sun and wind direction, to maximize natural lighting conditions and air circulation.

Whether the result of popular trends or professional landscape design, the organization of the domestic yard includes the arrangement of the house and garage in relationship to the street or common areas; the placement of walks and a driveway; and the division of front, back, and side yards into areas for specialized uses. Depending on their period of development, domestic yards typically included walks, driveways, lawns, trees and shrubbery, foundation plantings, and a variety of specialized areas, including gardens, patios, swimming pools, play areas, storage sheds, and service areas.

Patterns of Spatial Organization
Spatial organization applies to both the subdivision of the overall parcel and the arrangement of the yard, sometimes called the “home ground.” The expansion of public utilities, particularly water and sewer mains, as well as improvements in transportation influenced the design of many new neighborhoods. Prevailing trends of city planning and principles of landscape design exerted substantial influence on the spatial organization of new subdivisions. In some places, the gridiron plan of the city was simply extended outward, providing rectilinear streets and new blocks of evenly sized house lots. In others, a larger parcel was developed to form a more private, or nucleated, enclave separate from busy thoroughfares; such subdivisions frequently reflected principles of landscape architecture in the layout of streets and lots to follow the existing topography and create a parklike setting that fulfilled the ideal of domestic life in a semi-rural environment.

A general plan or plat, drawn up in advance and often filed with the local government, indicated the boundaries of the parcel to be developed, provision of utilities and drainage, and the layout of streets and lots. The general plan was drawn up by the developer, often with the assistance of a surveyor, engineer or site planner. Written specifications accompanying a general plan sometimes prescribed design requirements such as the distance to which buildings must be set back from the street; the size, style, or cost of houses to be built; and any restrictions on the use of land or the design of individual housing lots. Deed restrictions and covenants were commonly attached to the sale of house lots to specify the size, scale, style, and cost of dwellings and in other ways controlled the setback and placement of a house on its lot. In addition, local zoning ordinances and subdivision regulations influenced the character of suburban neighborhoods by placing limits on the density, number of dwellings per acre, height of dwellings, distance between dwellings, and the distance, or setback of each dwelling from the street.
**Cultural Traditions**

The design of American suburbs springs from advances made in England and the United States in the development of picturesque and Garden City models for suburban living. With the rise of suburbs, regional vernacular forms of housing gave way to a wide variety of house types and styles popularized by pattern books, periodicals, mail order catalogs, stock plan suppliers, and small house architects. Popular housing forms were often modest adaptations of high-style domestic architecture. Similarly, popular garden magazines and landscape guides exerted influence on the design of domestic yards and gardens.

The romantic allusions to historic European prototypes that characterized mid-nineteenth-century housing styles, promoted by landscape designer Andrew Jackson Downing and others, gave way to an eclecticism of style by the end of the century that derived from the mainstream architectural styles and achievements of the Nation’s emerging architectural profession. Regionalism, native materials, and local building traditions persisted in homes of the Arts and Crafts movement before World War I; their widespread publication as modest bungalows by editors, such as Gustav Stickley and Henry Wilson, resulted in the diffusion of examples nationwide. Similarly, following World War I, great interest in America’s rich and diverse cultural heritage resulted in the popularity of revival house styles and types, typically drawn from English, Dutch, Spanish, and other Colonial traditions and associated with a particular geographical region. Deed restrictions in the exclusive planned communities sometimes dictated a homogeneous style of housing adapted to local climate, regional building traditions, or prevailing cultural tastes. In the case of Palos Verdes, California, this meant the Spanish Colonial Revival style, and in communities like Shaker Village, Ohio, preference persisted for the English Colonial and Tudor Revival styles.

The majority of residential neighborhoods of the period, however, were distinguished by a variety of styles drawn from many stylistic traditions, many of which had little association with the cultural identity or traditions of the region where they are located. Such nationalization of housing styles based on historical prototypes, such as the Cape Cod or Monterey Revival, as small house architects, designers of stock plans, and manufacturers of pre-cut, mail order houses adapted colonial forms for modern living and marketed them to a national audience.

By the mid-twentieth century, the emergence of prefabricated building components further contributed to the nationalization of small house types and styles that, while American in derivation, bore little or no association to the history of the region where they were located. By the 1950s, types such as the Cape Cod and western Ranch house were adopted by large-scale builders and appeared in large numbers and multiple variations across the country.

The values and traditions that shaped life in American suburbs are typically viewed as stemming from a mainstream of American culture, one often interpreted as quintessentially middle-class. Such neighborhoods often possess strong cultural associations derived from the social values and experiences shared by past generations. Having evolved and changed over the course of many years, many neighborhoods have also become identified with a succession of home owners and residents representing different economic, immigrant, or racial groups that contributed to the prosperity and vitality of the growing metropolis.

**Circulation Networks**

Roads and walkways provide circulation for automobiles and pedestrians within a suburban neighborhood. The circulation network is a key organizing component of the subdivision site plan and often illustrates important aspects of design. Distinctive street patterns may reflect a designer’s response to natural topography, adherence to established principles of design, adoption of popular trends, or imitation of successful prototypes. Suburban roads typically formed a rectilinear gridiron, a network of naturalistically curving streets, or a formal combination of axial and radial elements.

Curvilinear street patterns derived from the Picturesque suburbs of the mid-nineteenth century in which roadways and land forms were engineered to take advantage of natural drainage and topographic variations, thereby ensuring the creation of a spacious, parklike setting and enhancing the scenic and romantic qualities of the landscape. By the turn of the twentieth century, the City Beautiful and City planning movements drew from formal Beaux Arts plans to form more complex arrangements based on axial and radial symmetry in which, geometric in form, curvilinear elements followed radial curves. In the 1930s, the Federal Housing Administration perfected the curvilinear subdivision in designs that accommodated long blocks of evenly-sized house lots, eliminated four-way intersections, discouraged through traffic, reduced construction costs, and imparted a village setting.
By the 1930s, the idea that subdivisions be laid out with a hierarchy of roads—which was central to Clarence Perry’s Neighborhood Unit formula—gained widespread acceptance. Major roads provided entry into and circulation through a subdivision (e.g. loop or perimeter road, central boulevard or parkway, and collector roads), while others formed tiers, spur roads, cul-de-sacs, crescents, short courts, or traffic circles. Entry roads provide important links to the surrounding community, metropolitan area, and local and regional systems of transportation, including highways, parkways, train lines, subways, and streetcar lines. Sidewalks, paths, and recreational trails form a circulation network for pedestrians, which may follow or be separate from the network of streets.

Circulation networks contain specific features such as embankments, planted islands or medians, traffic circles, sidewalks, parking areas, driveway cuts, curbing, culverts, bridges, and gutters, that contribute to aesthetic as well as functional aspects of design. Streets and roads were typically recessed below the grade of adjoining house lots in subdivisions laid out according to principles of landscape architecture. Grade separations, in the form of tunnels (underpasses) and bridges (overpasses), may be present in communities having separate circulation systems for pedestrians and motorists.

**Boundary Demarcations**

Fences, walls, and planted screens of trees and shrubs may separate a suburban neighborhood from surrounding development and provide privacy between adjoining homes. Gates, gate houses, pylons, signs, and planted gardens typically signified the entrance to many early planned subdivisions, and may be important aspects of design. The sense of enclosure created by siting houses on curvilinear streets and cul-de-sacs was considered a desirable feature of FHA-approved subdivision design in the 1930s. It was derived from the pioneering work of landscape architect Frederick Law Olmsted, American Garden City designers, Clarence Stein and Henry Wright, and neighborhood theorist Clarence Perry.

Boundaries between housing lots may be unmarked to allow for spacious, free-flowing lawns between dwellings or they may be marked by fences, walls, hedges, gardens, or walkways. In some places, deed restrictions limited or prohibited the construction of fences. Retaining walls between house lots or along streets are common in areas having steeply sloping topography. In multiple family housing developments, a sense of enclosure and privacy may be provided by the arrangement of dwellings to create recessed entry courts, private gardens, patios, and playgrounds.

**Vegetation**

Plantings as well as trees retained from earlier land uses added to the beauty and privacy of each home, as well as contributed to a neighborhood’s garden setting or parklike quality. Trees, shrubs, and other plantings in the form of lawns, shade trees, hedges, foundation plantings, and gardens often contribute to the historic significance and integrity of older neighborhoods. Whether stemming from the original plan or subsequent beautification efforts, plantings often resulted from conscious efforts to create an attractive neighborhood or a unified semi-rural setting. Preexisting trees—often native to the area—may have been left standing on house lots or neighborhood parks. Street trees planted for shade or ornamental purposes may reflect a conscious program of civic improvements by the subdivider, a municipal or local government, village improvement society, or community association. Parks, playgrounds, and public buildings such as schools and community buildings may have specially designed plantings. In addition, the grounds of individual residences may be notable examples of domestic landscape design or the work of master landscape designers. By the 1930s neighborhood planting was considered important for maintaining long-term real estate values.

While the plantings of individual yards typically reflect the tastes and interests of homeowners, they may also reflect once popular trends in domestic landscape design or include vegetation left from previous land uses. Neighborhood plantings are frequently dominated by grassy lawns, occasional specimen trees, shade trees, and shrubbery. Regional horticultural practices, as well as historic trends, may be reflected in the choice of native species or exotic species well adapted to the local conditions and climate. Plants may have a strong thematic appeal for their seasonal display (for example, flowering apple trees, magnolias, azaleas and rhododendrons, oleanders and crape myrtles, sugar maples, palm trees, and golden rain trees). In the 1950s neighborhood associations in some areas engaged landscape architect to develop landscape plans for home owners at a modest cost.

**Buildings, Structures, and Objects**
Dwellings and buildings associated with domestic use, including garages, carriage houses, and sheds, make up most of the built resources in a residential neighborhood. Some neighborhood will include schools, libraries, churches, shopping centers, community halls, and even a train station or bus shelter.

Dwellings may reflect the trends and styles prevailing during the time period when the suburb took form. These may have been designated by the developer through written standards, the provisions of legal deed restrictions, or agreements with architects and builders. Neighborhoods of moderate-priced homes beginning in the 1930s typically contained numerous similarly designed models that reflected similar methods of construction, materials, and architectural features. Depending on the subdivision’s pattern of development, one or more architects and/or builders may be associated with the design of the dwellings. In addition, to homes built on site, some neighborhoods may contain houses whose components were precut or manufactured in factories and shipped for assembly on site.

Bridges, culverts, and retaining walls may be present on roads and paths, especially where the topography is rugged and cut by streams, ravines, or arroyos. Although somewhat rare, grade separations—which were the hallmark of the separation of pedestrian and motor traffic in the Radburn Idea and inspired by the arches in New York’s Central Park—may also be present. Aboveground evidence of utility systems may include water towers, reservoirs, street lighting, telephone poles, drains, and sewer covers. Underground utilities include water mains, gas mains, sanitary sewer mains, stormwater drains, and sewers, and, in some places, telephone and power cables. Large apartment villages frequently contained facilities such as a power-generating plant, sewage treatment plant, or maintenance garage.

Clusters
Although a historic residential suburb generally reflects an even distribution of dwellings, some also contain clusters of buildings in the form of apartment villages, shopping centers, educational campuses, and recreational facilities. Such clusters are often integral aspects of neighborhood planning and contribute to design and social history.

Archeological Sites
Historic residential suburbs may contain pre- and post-contact sites, such as quarries, mounds, and mill sites, which have been left undisturbed in a park or on the undeveloped land of a flood plain, ravine, or outcropping. Existing homes and domestic yards that yield information related to data sets and research questions important in understanding patterns of suburbanization and domestic life may also be contributing archeological sites.

Small-scale Elements
Small-scale elements dating from the historic period contribute collectively to the significance and integrity of a historic neighborhood. Such elements include lamp posts, curbs and gutters, stairs and stairways, benches, signs, and sewer covers. Outdoor fireplaces, pergolas, gazebos, fountains, monuments, and statuary may be present in common areas or individual yards.

Significance of Historic Residential Suburbs
Suburbanization is the process of land development on or near the edge of an existing city, usually occurring at a lower density than the central city. In the United States, the development of residential neighborhoods has led this process and has influenced the physical character of the American landscape as cities have expanded outward. Even though many preservationists think of suburbs as relatively recent developments and a new type of cultural landscape, most having been built since the end of World War II, Americans have been extending their cities outward by building suburban neighborhoods since the mid-nineteenth century.

Demographically, suburbanization spurred the growth of population on the edge of cities. In the second half of the nineteenth century, American cities grew rapidly as they industrialized. The degraded conditions of the city, coupled with a growing demand for housing in an environment that melded nature with community, created pressures for suburbanization. Advances in transportation, particularly the widespread expansion of railroads and, after 1887, the electric streetcar, made it possible for Americans to commute greater and greater distances between home and places of employment.
Historically, the residential subdivision has been the building block of America’s suburban landscape. Its origin can be traced to the historic development of locality or metropolitan area. Their local expression of national trends of design, financing, planning, etc. and for their role in contributing to the character, identity, and process of suburbanization or reflect important innovations of design that had far-reaching influence on the development of subdivisions elsewhere in the Nation or region, the majority of America’s historical neighborhoods and subdivisions will be significant at the local level for planning and development, landscape design, social history, and other aspects of culture. While many suburbs represent milestones in the environment, apart from the noise, pollution, and activity of the crowded city, but close enough to the city for commuting daily to work.

Postwar suburbs—the result of one of the largest building booms in American history—represented a new and distinctive stage in the succession of suburban neighborhood types. They, furthermore, created an almost seamless suburban landscape in the extensive territory they occupied, the manner in which large numbers of homes were rapidly mass-produced, and the dispersed pattern of settlement made possible by the construction of modern freeways.

**Historic Residential Suburbs: Four Subtypes**

Under the context, “The Suburbanization of Metropolitan Areas in the United States, 1830 to 1960,” historic residential suburbs are classified into four subtypes based on advances in transportation technology, extending from the use of steam-driven railroads, horse-drawn cars, and electric streetcars in the nineteenth century to the expansive rise of automobile ownership and development of parkways, highways, and freeways in the twentieth century. Summarized below, the subtypes are explained in greater detail under the topic, “Trends in Urban and Metropolitan Transportation,” which appears on pages 16-25 of *Historic Residential Suburbs* and in Section E, Statement of Historic Contexts (pages E3—E46) of this multiple property form.
SUBTYPE I. Railroad and Horsecar Suburbs, 1830 to 1890

Suburbs of this type were generally platted during the period 1830 to 1890 in association with the advent of passenger service on the railroad lines extending outward from major American cities, such as New York City, Philadelphia, Boston, and Chicago, or the outward extension of inner-city routes carrying horse-drawn omnibuses and carriages to serve outlying communities and neighborhoods. Several cities, including Brooklyn, Buffalo, Boston, Chicago, and Minneapolis, began to develop park and parkway systems during this period.

Railroad suburbs of this period were designed in the form of semi-rural, suburban villages, centered on a railroad depot with a nearby commercial center and outlying residential streets. Those following the example of Riverside (1869) in Illinois and designed to attract rising merchant and professional classes offered apartment or row housing near the village center and outlying homes on spacious, tree-shaded lots on gracefully curving streets, interspersed with small landscaped parks. Water towers and reservoirs often provided a water supply. Natural features, such as ravines, river bluffs, and rock outcroppings, were often left in a natural state and equipped with rustic trails, to serve as community parks and add to the picturesque character of the community.

Residential neighborhoods closer to the center tended to follow a rectilinear grid and be more densely built often in the form of row-housing, small cottage-like and multi-story “homestead temple-houses,” multi-story dwellings offering rental flats, which were affordable to lower-income, working-class residents. These were located close to horsecar routes or train stations, and in some cases, grew up around public squares and parks. In the nation’s older cities, landscaped parkways and boulevards served as carriage roads for those who could afford private carriages, thus encouraging the development of fine neighborhoods and private estates which offered restful, picturesque scenery while still being within a reasonable distance of city businesses. In St. Louis, deed restrictions and trust indentures were imposed in some subdivisions to create exclusive residential enclaves called “private places.”

Houses of this period varied in style from Picturesque villas and cottages of the Romantic Movement, which were promoted by pattern books of the period, to single-family and multiple-family dwellings in a range of eclectic Victorian-era styles (Italianate, Tudor, Tuscan, Shingle, Stick Style, Eastlake, Queen Anne) built by local builders often from architect-designed plans ordered by mail from magazines such as Godley’s Lady’s Book and catalogs by Henry Hudson Holly, Charles and George Palliser, and George Barber. Many homes in upper-income suburbs were designed by established architectural firms in the popular styles of the period and often included spacious grounds and carriage houses.

SUBTYPE II. Streetcar Suburbs, 1888 to 1928

Suburbs of this type were generally platted adjacent to the linear streetcar routes that radiated in a star-like fashion from the center of American cities. These districts are defined by their proximity to streetcar lines (and in some cases railroad or interurban lines) and take on a variety of forms, from small subdivisions consisting of one or two blocks of speculative housing within the city’s grid to large planned suburbs with wide landscaped boulevards along which streetcars operated such as Roland Park in Baltimore, Shaker Village outside Cleveland, and Ladd’s Addition in Portland. Deed restrictions controlled the cost and type of construction, setback of houses from the street, and profile of residents in many planned subdivisions. Accustomed to developing the general plat, laying out the streets and utilities, and dividing the land into house lots, subdividers more and more took on the role of building houses and even offering installment plans to attract potential buyers.

Many of the earliest streetcars were built up with housing similar to that found along the horsecar routes many of which the electric streetcar replaced. However, as the popularity of architecturally complex and ornate Victorian house designs diminished by the turn of the century, they were supplanted by smaller, simpler, and more efficient bungalows and foursquares, many reflecting the influence of the Queen Anne Revival, Arts and Crafts movement, and Colonial Revival. At the same time the number of catalogs offering mailorder plans greatly multiplied, housing
HISTORIC RESIDENTIAL SUBURBS IN THE UNITED STATES, 1830--1960

Associated with introduction and rise of the mass-produced automobile as a popular mode of family transportation. During this period, public transportation in the form of subways, elevated transit, streetcars, and gasoline-powered buses provided the primary means for commuting to places of employment. What distinguished Early Automobile Suburbs from the earlier Streetcar Suburbs was not the means by which residents commuted to work but rather the accommodation of the automobile in the design of streets, homes, and yards, and their location newly improved arterial roadways and parkways. Curbs and gutters, durable pavement, sidewalks, driveways, and garages became desirable features in new neighborhoods. The desire to cut the cost of street construction and underground utilities as well as the apparent need to restrict automobile traffic and provide pedestrian safety, led to innovations in subdivision design that favored the elimination of cross streets, longer blocks of houses, and a hierarchy of roads of varying widths and purposes. Such concerns were basis for Clarence Perry’s Neighborhood Unit Formula, which was featured in the Regional Survey of New York and Its Environments (1929) and endorsed by the President’s Conference on Home Building and Home Ownership (1931). It was embodied in the design for Radburn, New Jersey, (1928-29), the “Town for the Motor Age” which made extensive use of cul-de-sacs and incorporated a swathe of common parkland with a system of footpaths to separate pedestrian and automobile traffic. As more and more Americans purchased automobiles, the design of both house and yard was transformed by the need for driveways, garages, sidewalks, and side entrances. With the rising popularity of the automobile by the 1930s, specialized neighborhood shopping centers, with parking areas, were designed adjacent to subdivisions and along arterial roadways to serve nearby residents and commuters traveling by automobile.

In the 1920s, more and more new subdivisions reflected careful planning and the collaboration of developers, community planners, landscape architects, and architects. Garden suburb designers sought to retain an area’s natural topography and enhance its natural beauty through plantings of shade and ornamental trees along residential streets and implement curvilinear elements that contrasted sharply with the formality and geometric precision of the earlier radial and axial plans. Call for mixed-priced housing in Mariemont and Radburn. Many new suburbs were designed as communities offering a variety of housing accommodations, shopping facilities, parks, playgrounds, recreational facilities, and nearby schools and libraries.
Widespread prosperity and optimism along with the increasing availability of architect-designed plans helped raise the quality and stylishness of both the suburban home and neighborhood in the 1920s. Period revival homes, particularly Tudor Revival and a variety of American Colonial gained widespread popularity among builders and home owners in neighborhoods platted as garden suburbs with carefully deed restrictions and laid out with tree lined streets, small parks, landscaped medians, and spacious lots. The so-called “Country Club” suburbs based on community builder J.C. Nichols’s successful subdivisions for the rising professional classes in Kansas City, which offered lots to be built upon by locally prominent architects and nearby amenities such as golf courses, parks, and shopping centers. The preponderance of middle-income housing, however, occurred in less grandiose but imitative neighborhoods of small homes in a variety of period revival styles popularized by manufacturers of pre-cut, mail order houses, such as Aladdin and Sear, Roebuck, and the AIA-sponsored small house service bureaus and local Better Homes organizations. The American home building industry gained momentum during this period as manufacturers offered standardized building materials and mass-produced components, such as prefabricated windows and doorways that evoked traditional Colonial or Tudor designs, and trade associations advertised widely and formed alliances with architects, real estate developers, and Better Homes organizations. These cooperative efforts helped promote architectural standards and building practices that lowered the cost of construction while elevating the quality, design, and stylish appeal of the average suburban house.

At the same time, efforts were underway by housing reformers to provide more efficient designs, improved construction methods, and modern utilities for moderately-priced homes that lower-middle and lower-income families could afford. Private and public research organizations explored efficiency of floor plans, use of prefabrication methods, and development of cost-efficient, low-maintenance and durable building materials.

The Great Depression called a halt to the 1920s building boom and reform in the financing of home mortgages. With the creation of the Federal Housing Administration (FHA) in 1934 and the implementation of a program of long-term, self-amortizing mortgages, offered by private lenders and insured by the FHA, builders and architects looked to the design of efficient small houses that could be built at greatly reduced prices that met FHA standards for low-cost, easy to replicate designs. FHA’s small house program and large-scale rental housing program issued standards for neighborhood planning that emphasized open space and spaciousness whether in the form of nearby parks, recreational facilities, or large yards and gardens. The Federal programs encouraged the emergence of operative builders who took charge of land subdivision, neighborhood improvements, and the construction of all homes, sometimes with the design assistance of one or more architects. Innovations that economized on space, reduced construction costs, and provided modern conveniences and utilities were encouraged; these encouraged developers to employ the principles of standardization and economies of scale and to use prefabricated methods and materials to construct large groups of similarly designed homes, whether detached single-family homes along the quiet streets of a well-planned neighborhood, or clusters of low-scale group housing or multiple family dwellings carefully arranged for privacy and pleasure within a superblock. To ensure traffic safety and reduce construction costs, FHA adopted cul-de-sacs, turning circles, courts, and crescents from the Garden City models and long, uninterrupted blocks of homes along gracefully curving roadways that followed the natural topography from the Olmsted-influenced practices of the landscape architectural profession. The FHA small houses of the 1930s were small, space-efficient, functional designs lacking much of the stylistic ornamentation and architectural variety characteristic of the so-called “small homes” of the 1920s.

In many places, particularly in cities of the West, like Los Angeles, the grid of central city was extended further and further out into the periphery to accommodate progressively larger and larger subdivisions of small homes built in similar styles, materials, and sizes by operative builders, such as Fritz Burns and Harvey Kaiser. While the FHA considered curvilinear designs “desirable,” the agency granted approval for mortgage insurance to many rectilinear, grided subdivisions that met FHA’s other requirements, including the requirement that deed restrictions be imposed in locations lacking protective zoning ordinances. With the increased urgency for housing near critical defense industries after 1940, the requirements for long-term economic stability were dropped and more and more incentives appeared for standardization, large-scale construction, and prefabricated methods and materials, encouraging the development of larger and larger subdivisions of “tract” housing.

**SUBTYPE IV. Post-World War II and Early Freeway Suburbs, 1945 to 1960**

The subdivisions developed immediately after the war exhibited a continuing emphasis on the use of prefabricated methods of construction and use of the mass-produced and widely marketed manufactured building materials and components, such as asbestos siding and steel casement windows. Subdivision design closely followed the layouts introduced by the Federal Housing Administration (FHA) in the 1930s.
Emphasis was placed on developing economics of scale and cost-saving methods that would quickly and inexpensively produce small homes. Joseph Eichler, as well as successful models of Ranch and Contemporary houses.

Increasing emphasis was placed on the efficient division of blocks in proportions that allowed for wider and shallower house lots that could better accommodate new horizontal house types, designed after Cape Cod and Ranch houses, often with attached garages and carports. As yards grew in size, the land set aside for parks diminished, often being replaced by suburban school grounds with playing fields and playgrounds embedded within the neighborhood.

Beginning in 1947, the Urban Land Institute through its *Community Builders Handbook* had increasing influence on the design standards for planned residential suburbs, especially those developed with the expertise of experienced designers—planners, landscape architects, and architects—according to carefully developed design standards. Private organizations, such as the Revere Quality House Institute and the Southwest Research Institute, and the publishers of popular magazines, such as *Better Homes and Gardens* and *House Beautiful*, encouraged professional collaboration and high standards for the design of forward-looking neighborhoods and homes. These organizations promoted the use of principles and materials of modern design, often as a way to lower construction costs while maintaining efficiency of space, utility, and comfort: they recognized the advances in subdivision design and housing being made by developers, such as California merchant builder Joseph Eichler, as well as successful models of Ranch and Contemporary houses.

Emphasis was placed on developing economics of scale and cost-saving methods that would quickly and inexpensively produce small homes for increasing numbers of American families. The cost of materials dramatically increased in the postwar economy, forcing developers to streamline the design of small homes through the reduction of traditional design details, elimination of chimneys and fireplaces, reduction of interior hallways, use of prefabricated components, installation of wallboard and other inexpensive materials, and other cost-saving measures.

Directly after the war, Federal housing initiatives made loans available through the Reconstruction Finance Corporation for factory construction, making it possible for manufacturers (including Carl Strandlund and Harvey Kaiser) to develop prefabricated house designs, such as the Lustron house, and produce them on a large scale. With limited success companies, such as U.S. Steel, developed prefabricated house designs for the postwar buyer.

Developers approached the challenge of building low-cost homes for American families in the postwar period in several ways. Such developers were able to capitalize their projects through loans initially available under Title VI of the National Housing Act and through sales to prospective owners who qualified under FHA and VA-insured loan programs, which by the end of the 1940s offered increasing liberal terms: low-interest, thirty-year loans with little or no down-payment. Former Federal housing administrator-turned-developer Philip Kluztnick undertook the planning and construction of an entire town at Park Forest, Illinois, with the help of town planner Elbert Peets and a number of architects and builders; Park Forest offered housing in a variety of forms from single, detached houses to rental apartment villages and a range of suburban facilities such as schools and shopping centers. In Los Angeles, Fritz Burns and Harvey Kaiser built communities, such as Panorama City, that housed more than a thousand families in architect-designed, moderately-priced homes built of factory-made parts.

Most influential was William Levitt, who created Levittown on Long Island by developing a method of on-site mass production, in which houses were constructed in phases by coordinated teams of skilled laborers who moved in succession from house to house, gaining a reputation for completing during peak production a home every 15 minutes. Levitt personified the merchant builder, who in addition to producing quickly large numbers of homes, developed effective marketing strategies by securing FHA approval and offering a constantly changing variety of house types with the latest amenities and conveniences. Such merchant builders rapidly turned over their investment in one community enabling them to move on to a new location and new market.

As the “Baby Boom” continued and prosperity returned in the 1950s, larger homes were offered with the latest appliances and greater amenities—many derived from the popular Ranch and Contemporary houses, such as brick hearths, eat-in kitchens, and recreation rooms. Two distinctive house types emerged by the end of the 1950s: the highly popular and ubiquitous split level, which improved upon the Ranch house by adding interior floor space, separating household activities, and providing greater privacy; and the glazed, gable-fronted Contemporary house which, promoted by western architects, increased the flow and light of interior space, expanded views of the outside, and projected a bold forward-looking image.
With the expansion of arterial highways and freeways and dramatically increased automobile ownership in the 1950s, developers were able to acquire large tracts of land at lower costs further from urban centers. This sometimes contributed to a phenomenon called “leap-frogging,” in which suburban communities grew up at a substantial distance from the center city and from each other. This enabled developers to plan larger and more spacious subdivisions while offering homes at attractive lower prices. While bus service replaced streetcars as a means of commuting between home and the center city, the increasing reliance on the automobile and truck in the 1950s spurred the development of outlying regional shopping centers, industrial parks, corporate campuses, and freight terminals, located near high-speed roads and freeways.

Registration Requirements

A historic residential suburb meeting any of the requirements listed below when placed in an appropriate local, metropolitan or regional context may be listed in the National Register of Historic Places. Entire subdivisions based on their historic boundaries or any combination of residential resources that comprise a neighborhood or community meeting the definition for “historic residential suburb” on page F-47 may be listed as a historic district under the Historic Residential Suburbs in the United States MPS. Such a district must possess the physical and associative characteristics typical of one or more of the four subtypes described above and date to a period of significance that includes all or a portion of the period of suburban development, 1830-1960.

Ideally, it is desirable to identify and register the largest unit having significance and integrity as a historic residential suburb, for example, an entire subdivision, or a group of subdivisions that have assumed a collective identity as a single neighborhood or community. In addition to historic districts, single resources within a suburban landscape—including a neighborhood variety store, planned shopping center, library, clubhouse, suburban civic center, or a public park—may listed in the National Register under this multiple property group. Such a resource, however, must possess important historic associations, design characteristics, or information potential for which it individually meets Criterion A, B, C, or D of the National Register of Historic Places. In cases where resources predate events and activities associated with suburbanization or relate to other aspects of history or prehistory, they should be evaluated under an appropriate historic context, for example, exploration and settlement, agriculture, or historic archeology.

To be eligible for National Register listing, a historic residential suburb must possess significance in at least one of the four aspects of cultural heritage specified by Criteria A, B, C, and D of the National Register Criteria for Evaluation. In addition, neighborhoods less than 50 years of age must meet Criteria Consideration G by possessing exceptional importance.

Evaluating Significance Based on Associations with Important Events and Persons

Historic residential suburbs typically reflect the outward spread of metropolitan areas and the growth and development of communities. For this reason, residential districts are commonly evaluated under Criterion A for their association with important events or patterns in community history or with groups of residents (not specific individuals) who collectively made important contributions to the area’s prosperity or identity as a place of industry, government, education, or social reform.

Criterion B applies to neighborhoods directly associated with one or individuals who made important contributions to history. Such individuals must have exerted important influence on the neighborhood’s sense of community or historic identity and they must have gained considerable recognition beyond the neighborhood. This includes prominent residents, such as leading political figure or social reformer. Criterion B also applies to neighborhoods that are associated with important developers and best represent their contributions to significant local or metropolitan patterns of suburbanization. Subdivisions representing the work of prominent site planners, architects, or landscape architects should be evaluated under Criterion C, unless they also served as their residence during an important period of their career. For more information about applying Criterion B, refer to the National Register bulletin, Guidelines for Evaluating and Documenting Properties Associated with Significant Persons.

Criterion A applies when--

* Neighborhood reflects an important historic trend in the development and growth of a locality or metropolitan area.
* Suburb represents an important event or association, such as the expansion of housing associated with wartime industries during World War
II, or the racial integration of suburban neighborhoods in the 1950s.
* Suburb introduced conventions of community planning important in the history of suburbanization, such as zoning, deed restrictions, or subdivision regulations.
* Neighborhood is associated with the heritage of social, economic, racial, or ethnic groups important in the history of a locality or metropolitan area.
* Suburb is associated with a group of individuals, including merchants, industrialists, educators, and community leaders, important in the history and development of a locality or metropolitan area.

**Criterion B applies when --**
* Neighborhood is directly associated with the life and career of an individual who made important contributions to the history of a locality or metropolitan area.

The following areas of significance are commonly applied to historic neighborhoods important under Criterion A or B for their association with important events and persons.

* **Government** applies to those that reflect early or particularly important responses to government financing, adherence to government standards, or the institution of zoning by local governments.
* **Education, medicine, or government** may be areas of significance when a significant concentration of residents was associated with a locally important center of government, hospital, or university.
* **Industry** applies when a suburb, by design or circumstance, served the need for housing for workers in a particular industrial activity, such as defense production during World War II.
* **Transportation** recognizes the direct association of a neighborhood or community with important advances in transportation and incorporation of innovative transportation facilities, such as a railroad station or circulation system that separates pedestrian and motor traffic.
* **Social history** recognizes the contributions of a historic neighborhood to the improvement of living conditions through the introduction of an innovative type of housing or neighborhood planning principles, or the extension of the American dream of suburban life or home ownership to an increasing broad spectrum of Americans.
* **Ethnic Heritage** recognizes the significant association of a historic neighborhood with a particular ethnic or racial group.
* **Community Planning and Development** recognizes the contribution a neighborhood makes to the historic growth and development of the city, for example, by providing much-needed housing to serve a local industry or by introducing a concept of community planning that influenced subsequent patterns of local or metropolitan development.

**Evaluating Significance Based on Distinctive Characteristics of Design**

Historic residential suburbs often reflect popular national trends in subdivision design, such as the Picturesque style of the nineteenth century or FHA-recommended curvilinear plans. They may also reflect popular architectural styles, housing types, and principles of landscape architecture. Such districts are evaluated under **Criterion C** to determine if they embody the distinctive characteristics of a type, period, style, or method of construction; or represent the work of a master architect, landscape architect, or community planner. Historic neighborhoods that form “a significant and distinguishable entity whose components,” including streets and homes, “lack individual distinction” are also evaluated under **Criterion C**.

Qualifying physical characteristics, under Criterion C, may be present in the overall plan, the architectural design of dwellings and other buildings, and the landscape design of the overall subdivision or of individual homes, parks, or parkways. Significance under Criterion C requires that the features that mark distinction in planning, architecture, and landscape design remain intact and recognizable.

Organization of space is a key factor in ascribing significance in community planning and landscape architecture. Visible in the general or master plan and aerial photographs, spatial organization is defined by the relationship between design and natural topography, the arrangement of streets and house lots, the arrangement of buildings and landscape features on each lot, and the provision of common spaces, such as walkways, playgrounds, and parks. The recognition of important local patterns may require examining records held by the local planning or zoning office, the development company, or architectural firms involved with construction, as well as making comparisons with other suburbs in the local area from the same period of time. Significance in landscape architecture may also derive from special features such as a unified
Distinctive architectural design may be present in a variety of building types—dwellings, garages, carriage houses, community buildings, gatehouses, and sheds. Buildings may reflect a cohesive architectural type and style with some variation (e.g. Cape Cod or Ranch) or they may reflect a variety of period or regional styles such as Tudor Revival, Colonial Revival, or Mediterranean. Homogeneity or diversity of housing types and style may be an important architectural characteristic and be an important indicator of the overall design intent of the suburb as well as its period of development. Information about the developer and the various architects and landscape architects involved in the design of a subdivision is important to understanding the character of a residential subdivision, ascribing design significance, and placing a suburb in a local, metropolitan, State, or national context.

**Criterion C applies when--**
* Collection of residential architecture is an important example of distinctive period of construction, method of construction, or the work of one or more notable architects.
* Suburb reflects principles of design important in the history of community planning and landscape architecture, or is the work of a master landscape architect, site planner, or design firm.
* Subdivision embodies high artistic values through its overall plan or the design of entranceways, streets, homes, and community spaces.

Areas of Significance commonly apply to residential historic suburbs eligible under Criterion C:

* **Community Planning and Development** applies to areas reflecting important patterns of physical development, land division, or land use.
* **Landscape architecture** applies when significant qualities are embodied in the overall design or plan of the suburb and the artistic design of landscape features such as paths, roadways, parks, and vegetation.
* **Architecture** is used when significant qualities are embodied in the design, style, or method of construction of buildings and structures, such as houses, garages, carriage houses, sheds, bridges, gate houses, and community facilities.
* **Engineering** applies when a subdivision reflects important advances in reshaping land for residential purposes or providing utilities, such as water and electric power.

Where subdivision design resulted from the collaboration of real estate developers, architects, and landscape architects, significance in all three areas—community planning and development, architecture, and landscape architecture—should be recognized and the contributions of designers representing each profession documented. Historic suburbs may be eligible under Criterion C for their reflection of important design characteristics or as the work of a master; those that made important contributions to the theory of landscape design or community planning may also be significant under Criterion A.

**Evaluating Significance Based on Ability to Yield Important Information**

**Criterion D** is applied to the evaluation of pre- or post-contact sites, such as remnant mills and farmsteads that predate land subdivision and remain intact in parks, stream valleys, floodplain, or steep hillsides. Such sites may provide information important to historic contexts other than suburbanization. In addition, historical archeology of home grounds may provide important information about the organization of domestic grounds, vernacular house types, gardening practices, or patterns of domestic life. When used in tandem with documentary sources, historical archeology helps define data sets and research questions important in understanding patterns of suburbanization and domestic life. For additional guidance, consult the National Register bulletin, *Guidelines for Evaluating and Registering Archeological Sites and Districts*.

**Criterion D applies when--**
* A neighborhood, or portion of it, is likely to yield important information about vernacular house types, yard design, gardening practices, and patterns of domestic life.

**Exceptional Importance under Criterion Consideration G**

**Criterion Consideration G** states that properties that have achieved significance within the past 50 years may qualify for National Register listing if they are an integral part of a historic district that meets the criteria or if they have exceptional importance. The post-World War II
building boom, spurred by the availability of low-cost, long-term mortgages for home owners and financial credits for builders, resulted in the widespread development of suburban subdivisions that were not only large in size but also vast in number. In coming years as many of these approach 50 years of age, there will be increasing pressure to evaluate their eligibility for listing in the National Register.

Specific dates for the overall site design and the construction of component resources are needed to determine when a case for exceptional importance is necessary to support eligibility or listing. Such a case must be made for subdivisions which were platted and laid out and where the majority of homes were constructed within the last 50 years. It is also required for neighborhoods importantly associated with events that occurred within the past 50 years even though the homes were built during an earlier period, for example an older neighborhood importantly associated with the Civil Rights movement.

Because subdivisions were typically constructed over a period of many years, it is not uncommon to encounter a subdivision where streets and utilities were laid out and home construction begun more than 50 years ago, but where construction continued into the recent past. As a general rule, when a neighborhood as a whole was laid out more than 50 years ago and the majority of homes and other resources are greater than 50 years of age, a case for exceptional importance is not needed. In such cases, the period of significance may be extended a reasonable length of time (e.g., five or six years) within the less-than-50-year period to recognize the contribution of resources that, although less-than-50 years of age, are consistent with the neighborhood’s historic plan and character.

When the majority of homes and other resources, however, are less than 50 years of age, a case for exceptional importance is required. Exceptional significance must be evaluated within an appropriate local, metropolitan, or regional context, and may be based on highly significant aspects of local or national history. Such examples should retain a high degree of historic integrity and have had a leading role in introducing important advances in subdivision planning or house design, or be associated with events that were highly influential or pivotal in affecting the course of history at the local, metropolitan, State, or national level. Subdivisions found not to possess exceptional importance should be reevaluated when the majority of resources achieve 50 years of age. For further guidance in evaluating exceptional importance, see National Register bulletin Guidelines for Evaluating and Nominating Properties That Have Achieved Significance within the Last Fifty Years (rev. 1996).

Determining Aspects and Level of Significance
Properties related to the same historic context are compared to identify those eligible for listing in the National Register and to determine the level -- local, State, or national — at which the property is significant. Many residential districts will be eligible at the local level for their illustration of important aspects of community growth and development and their reflection of the broad trends that shaped suburbanization in the United States. State level of importance is generally attributed to those that 1) established a precedent or influenced subsequent development within a metropolitan area or larger region within one or several adjoining states; 2) possess outstanding characteristics of community design, landscape architecture, or architecture within the context of design statewide; or 3) represent the work of one or more master planners, landscape architects, or architects, whose work in subdivision design or suburban housing gained professional recognition in that particular State.

While significance depends to a large degree on the local or regional context, the following qualities and associations typically indicate important aspects of a neighborhood’s history and reflect important local or metropolitan trends for which a historic residential suburb may qualify for National Register listing at the local or State levels of importance:

* The neighborhood’s planning and construction is related to the expansion of local industry, wartime industry, important stages in metropolitan development, or broad national trends such as returning GI’s, the Better Homes movement, and the bungalow craze.

* The neighborhood—through its site plan, overall landscape design, and house design—reflects historic principles of design or achieved high artistic quality in the areas of community planning, landscape architecture, or architecture.

* The subdivider and site-planners responsible for the platting and construction of the subdivision figured prominently in the suburban development of the locality or region and made substantial contributions to its character and the availability of housing.
HISTORIC RESIDENTIAL SUBURBS IN THE UNITED STATES, 1830–1960

* Neighborhood was associated with important patterns of ethnic settlement that contributed to local growth and development.

* Neighborhood reflects the efforts of entrepreneurs, developers, and designers to initiate housing reform by creating a cohesive assemblage of dwellings in a park-like or pleasing setting.

* Suburb contributes to the suburbanization of a community or metropolitan area and reflects demographic patterns related to important themes in community’s development, for example, to provide homes for those working in important local industries or to utilize innovative planning tools to create an ideal suburban environment.

* Suburb possesses the artistic design and many of the physical characteristics intended by the developers, planners, landscape architects, architects, and engineers working collaboratively during the period of significance.

* Neighborhood reflects the principles and practices of subdivision design and residential development representative of mainstream national trends from 1830 to 1960.

* Suburb reflects artistic qualities of landscape design in the layout of streets, the arrangement of homes on house lots, the planting of vegetation for ornamentation or shade, and the creation of a parklike setting.

* Neighborhood’s design represents the work of the one or more established professional designers, site-planners, landscape architects, architects, or engineers.

* The subdivision design resulted from the collaboration of professionals representing several fields of design, such a landscape architecture and architecture.

* Neighborhood exemplifies the role that a certain type of developer (subdivider, home-builder, community builder, operative builder, or merchant builder) played in the growth and development of the locality or metropolitan region.

* Subdivision contains a collection of residences in types and styles representative of local building practices, economic trends, and popular tastes in suburban housing associated with one or more stages of a community’s suburbanization.

* Community was designed to conform to FHA-standards and represents one of the “earliest,” “most successful,” “largest,” “finest,” or “most influential” examples locally.

* Suburb possesses a high degree of integrity and exhibiting distinctive elements of design in the subdivision plan, landscape architecture, or domestic architecture.

* Neighborhood reflects important advances, established principles, or popular in trends in community planning, landscape architecture, and architecture.

* Suburb contains homes in a variety of period styles, or representing the work of one or a number of noted architects.

* Collection of residential architectural includes fine examples of one or more locally important housing types (e.g. bungalows and four squares).

* Residential area was associated with important local industries or local events and activities that are known to stimulated and sustained suburban growth and development.

* Neighborhood was historically associated with important events in the recent past, such as local efforts during the Civil Rights movement to
Historic residential suburbs in the United States, 1830--1960

Name of Multiple Property Listing

Residential suburbs significant at the national level of importance are those whose plan, landscape design, or architectural character introduced significant innovations that strongly influenced the design of residential suburbs nationwide. It can be applied to neighborhoods strongly illustrative of significant patterns of demographic and social change associated with the emergence of the Nation’s leading cities or metropolitan areas. It may be present in properties possessing outstanding distinction for design in community planning, landscape architecture, architecture, or engineering, or in pivotal examples of the work of master designers who received national or international acclaim for their contributions to the design of residential suburbs in the United States.

Evaluations of national significance for individual suburbs must be made through the national context in comparison with other similarly associated properties to determine those having the greatest influence, possessing the highest artistic qualities, or best representing a particular type of subdivision or housing design or the work of a master. In addition, properties must possess a high degree of integrity that derives from the historic plan, buildings, and other landscape characteristics, especially those features directly related to the aspects of significance on which national importance is based. Such properties may be considered for study and designation as National Historic Landmarks under the themes, Transforming the Environment, Expressing Cultural Values, and Developing the American Economy.

Historic residential suburbs having national significance under the multiple property listing, Historic Residential Suburbs in the United States, 1830 to 1960, are those:

* Pivotal in the advancement of important principles and practices of subdivision design, residential development, and house and yard design. Such suburbs may be known for the introduction or advancement of a concept or idea of lasting or substantial influence in the history of America’s suburbanization. They may also be recognized as representing a highly important milestone, outstanding achievement, or major turning point in the evolution of home building practices or subdivision design. (NHL Criterion 1)

* Reflecting in an outstanding manner highly significant national patterns of suburbanization. Such neighborhoods might be strongly illustrative of one or more stages of suburban development and clearly represent the physical and social evolution of an American city or metropolitan area that played a highly significant role in the growth and development of the Nation as a whole or contributed significantly to the character, identity, or economic prosperity of a particular region. (NHL Criterion 1)

* Possessing outstanding distinction as one of the Nation’s finest examples of an important type of suburb, superlative examples of community planning or landscape design, or a collection of homes having outstanding merit in architecture or landscape architecture. (NHL Criterion 4)

* Possessing outstanding distinction as the work of a master designer or the collaborative work of designers representing several disciplines (for example, community planning, architecture, landscape architecture, and engineering). Works considered significant for this reason should be evaluated in the context of all similar works by the same designers or group of designers to determine those having the greatest influence, possessing the highest artistic qualities, or best representing the contributions of the designer or group of designers to the evolution and character of American suburbs. (NHL Criterion 4)

* Representing a highly influential work of a developer, planner, landscape architect, or architect who is recognized as having substantial influence on the character of subdivision design, domestic architecture, or yard design nationally or internationally as documented through awards, contemporary criticism, professional influence, or scholarly interest. Such properties must have a high degree of integrity and be strongly illustrative of the principles and practices for which the developer or designer’s reputation was based and through which the
* Representing a suburban environment composed of an integral set of suburban streets, yards, homes, and community resources that collectively compose an entity of exceptional historic or artistic significance or illustrate in an outstanding manner a way of life or culture significant in the growth and suburbanization of American cities. Historic districts designated under Criterion 5 typically also meet NHL Criteria 1 or 4. Such nationally significant districts might be, for example, the subdivision most strongly illustrative of FHA’s principles of neighborhood planning and containing a highly distinctive and intact collection of house types and yards designed to FHA’s principles of small house design, or an exemplary neighborhood that was highly illustrative of and figured prominently in promoting the Better Homes movement of the 1920s. (NHL Criterion 5)

Existing NHLS associated with the context, “The Suburbanization of Metropolitan Areas in the United States, 1830-1960, include:

* Brooklyn Heights Historic District, New York: Platted in the early nineteenth century, this early suburb was originally accessible to Manhattan by ferry. It became one of the New York’s most prestigious residential communities and today provides a rich index of nineteenth-century domestic design. (January 12, 1965)

* Glendale Historic District, Ohio: An early railroad suburb in the Early Picturesque style outstanding for the innovative curvilinear design of its streets, the incorporation of parks, and a varied collection of domestic architecture representing the Romantic period styles and house types. (May 5, 1977/NHL Criteria 1 and 4)

* Riverside Landscape Architecture District, Illinois: Considered the archetypal example of the naturalistic curvilinear suburb and designed by Frederick Law Olmsted and Calvert Vaux in 1868, the community introduced the concept of an ideal Picturesque suburban village designed according to the principles of landscape architecture. (August 29, 1970)

* Jackson Ward Historic District, Richmond, Virginia: Considered by the turn of the twentieth century to be the hub of one of the Nation’s foremost African American business communities, the district encompasses the neighborhood that was home to many of the city’s African American leaders and residents. (June 2, 1978)

* East End Historic District, Galveston, Texas: Regionally distinctive collection of nineteenth century homes, many designed by one of State’s earliest and finest professional architects, associated with the city’s emergence as a flourishing maritime port and one of the State’s largest centers of trade and commerce. (May 11, 1976)

* Monument Avenue Historic District, Richmond, Virginia: Nation’s only grand-scaled residential Boulevard designed with a double roadway and a series of impressive monuments. Designed to encourage residential development west of the city, the broad tree-lined avenue became a showplace of mansions built by prominent local leaders. (December 9, 1997/NHL Criterion 4)

* Greenbelt, Maryland: One of the most complete and intact of the three Greenbelt communities built by the Resettlement Administration in the 1930s and an outstanding example of American Garden City planning. (February 18, 1997/NHL Criteria 1, 3, and 4)

* Baldwin Hills, Los Angeles, California: Late example of American Garden City planning using superblock and interior green which gained national and international recognition. (January 3, 2001/NHL Criteria 1 and 4)

National Register properties currently being studied for NHL designation include:

* Mariemont Historic District, Ohio: An outstanding example of American Garden City planning by preeminent town planner John Nolen and a highly distinctive collection of small houses and group housing by some of the Nation’s premier architects. Influential on FHA principles of neighborhood planning in the 1930s.

* Radburn, New Jersey: Designed by Clarence Stein and Henry Wright as a “Town for the Motor Age,” this was one of the most celebrated and influential of the early automobile suburbs and an internationally recognized example of American Garden City planning. It illustrated the principles of collaborative planning endorsed by the RPAA, introduced the innovative Radburn Idea, and embodied Clarence Perry’s Neighborhood Unit Formula, which influenced FHA principles of neighborhood planning in the 1930s.

* Chatham Village Historic District, Pittsburgh, Pennsylvania: An outstanding and influential example of Garden City superblock planning, which was the result of detailed economic analysis and collaboration among site planners, architects, and landscape architects.

Some additional National Register properties that may merit study for potential NHL designation include:
Assessing Historical Integrity

For National Register eligibility, a historic residential suburb must possess historic integrity, that is it must visibly reflect the overall physical appearance it gained during the period of historical significance. Historic integrity is the composite of seven qualities: location, design, setting, materials, workmanship, feeling, and association. Historic integrity requires that the various features that made up the neighborhood in the historic period be present today in the same configuration and similar condition. These qualities are applied to dwellings, as well as roadways, open spaces, garages, and other aspects of the historic design.

The presence of certain characteristics may be more important than others. Where the general plan of development has importance, integrity should be present in the original boundaries, circulation pattern of streets and walkways, and the division of housing lots. Where architectural design is of greatest significance, integrity will depend heavily on the design, materials, and workmanship of individual houses. Elements such as roadways, the arrangement of house lots, walls, plantings, walkways, parkland, ponds, statuary, and fountains may likewise contribute strongly to importance in landscape architecture. Although historic plantings generally enhance historic integrity, it is important to recognize that as trees, shrubs, and other vegetation mature, they may sometimes erase intended vistas.

Changes and additions to the neighborhood since the period of significance, including infill development, substantial additions, widened roads, and nonhistoric recreational facilities, diminish historic integrity and are considered noncontributing. Historic subdivisions containing such changes are eligible for listing despite these changes if the overall historic plan is intact and a substantial number of historic characteristics possessing integrity of design, location, materials, and workmanship are present. The amount of infill and other changes that a historic neighborhood can withstand before losing integrity will depend on its size and scale, the presence of significant features, and the suburban context in which it developed. The division of suburban lots beyond that specified in historic plans and deed restrictions threatens a historic neighborhood’s integrity of design and should be viewed as a compatible pattern of development only if the subdivision occurred as a result of historically important events during the period of significance.

The seven qualities of integrity are applied to historic neighborhoods in the following ways:

**Location** is the place where significant activities that shaped the neighborhood took place. This quality requires that to a large extent the boundaries that historically defined the suburb remain intact and correspond to those of the historic district being nominated. It also requires that the location of streets and the size and shape of the house lots have remained constant. The location of historic suburbs was often determined by proximity to transportation corridors (streetcar lines, commuter railroads, parkways, or highways) and accessibility to places of employment. While the presence of historic transportation systems may add to a district’s historic significance their loss or relocation does not
Design is the composition of elements comprising the form, plan, and spatial organization of a historic neighborhood. This includes the arrangement of streets, division of blocks into house lots, arrangement of yards, and construction of houses and other buildings. Design may have resulted from conscious planning decisions set forth in the historic plat, project specifications, building contracts or deed restrictions, or it may be the result of the personal tastes and individual efforts of homeowners to shape their domestic environment. Integrity of design can be affected by changes to the size of housing lots by recent subdivision or consolidation and alterations to individual dwellings in the form of additions, siding, window replacements, and other changes. Small-scale additions, such as the construction of modest porches or garages, may not detract in a major way from the historic character of individual homes and the neighborhood. Large-scale additions, however, that double the elevation, add substantially to the mass of a historic house, or alter the spatial relationship between house and street generally threaten integrity of design.

Setting is the physical environment within and surrounding a historic suburb. Many historic neighborhoods were designed to provide a semi-rural environment within commuting distance of the city, joining nature and urban amenities. A semi-rural character was often created through the design of an open, parklike setting of landscaped streets, private yards, and sometimes, public parks. Subdivisions were often surrounded by buffers of trees or bordered by undeveloped stream valleys to reinforce the separation of city and suburb. Integrity of setting requires that a strong sense of historical setting be maintained within the boundaries of the nominated property. This relies to a large extent on the retention of built resources, street plantings, parks and open space. Elements of design greatly affect integrity of setting, and those consistent with the neighborhood’s historic character or dating from the period of significance add to integrity. Small-scale elements such as individual plantings, gateposts, fences, swimming pools, playground equipment, and parking lots detract from the integrity of setting unless they date to the period of significance. The setting outside many historic neighborhoods will have changed substantially since the period of significance. Evidence of early streetcar or railroad systems in large part has disappeared, and arterial corridors have been widened and adapted to serve modern automobile traffic. Historic train stations, stores, churches, schools and community buildings, however, may still be present, and may be nominated separately, or, if located within or on adjoining parcels, may be included within the boundaries of a historic residential suburb.

Materials include the construction materials of dwellings, garages, roadways, walkways, fences, curbing, and other structures, as well as vegetation planted as lawns, shrubs, trees, and gardens. The presence of particular building materials (e.g., stone, stucco, brick, or horizontal siding) may be important indicators of architectural style and methods of construction that give some neighborhoods a cohesive historic character. Integrity of materials in an architecturally significant neighborhood requires that the majority of dwellings retain the key exterior materials that marked their identity during the historic period. The retention of original materials in individual dwellings may be less important in assessing the integrity of a neighborhood significant for its plan or landscape design. Original plant materials may enhance the integrity, but their loss does not necessarily destroy it. Vegetation similar in historic species, scale, type and visual effect will generally convey integrity of setting although integrity of materials may be lost.

Workmanship is evident in the ways materials have been fashioned for functional and decorative purposes to create houses, other buildings and structures, and a landscaped setting. This includes the treatment of materials in house design, the planting and maintenance of vegetation, as well as the construction methods of small-scale features such as curbs and walls. Integrity of workmanship requires that architectural features in the landscape, such as portals, pavement, curbs, and walls, exhibit the artistry or craftsmanship of their builders and that the vegetation historically planted for decorative and aesthetic purposes be maintained in an appropriate fashion and replaced in kind when damaged or destroyed.

Feeling, although intangible, is evoked by the presence of physical characteristics that convey the sense of past time and place. Integrity of feeling reflects the cumulative effect of setting, design, materials, and workmanship. A streetcar suburb retaining its original street pattern, lot sizes, and variety of housing types and materials will reflect patterns of suburban life reminiscent of the late nineteenth and early twentieth centuries.

Association is the direct link between a historic suburb and the important events that shaped it. Continued residential use and community traditions, as well as the renewal of design covenants and deed restrictions, help maintain a neighborhood’s integrity of association. Additions
and alterations that introduce new land uses and erase the historic principles of design threaten integrity. Integrity of association requires that a historic neighborhood convey the period when it achieved importance and that, despite changing patterns of ownership, it continues to reflect the design principles and historic associations that shaped it during the historic period.

ENDNOTES


163. NHL Criteria are not listed for most designations made prior to the publication of the NHL criteria in the regulations for the National Historic Landmarks Program, 36 CFR Part 65, Section 4, of February 2, 1983.

164. The examples listed are recommendations for further study based on existing National Register documentation. This list is not considered final or comprehensive.
G. Geographical Data

This multiple property context applies principally to metropolitan areas within the United States of America and its territories. It also applies to other communities within the United States, including small cities, industrial towns, and resort areas that historically experienced patterns of growth and residential development similar to the suburbanization of large American cities.

H. Summary of Identification and Evaluation Methods

The vast body of literature on America’s suburbanization is growing, covering many disciplines and reflecting diverse opinions. The Historic Residential Suburbs in the United States, 1830-1960, MPS and the corresponding National Register bulletin Historic Residential Suburbs: Guidelines for Evaluation and Documentation for the National Register of Historic Places (2002) attempt to bring together current scholarship and preservation practice relating to the history of suburban neighborhoods in the United States. Both were developed to encourage the expansion of existing historic resources surveys, foster the development of local and metropolitan contexts, and facilitate National Register nominations for a broad range of suburban properties, including neighborhoods historically associated with important local events and persons, notable examples of subdivision design and planning, collections of domestic architecture, and individual resources such as parkways, shopping centers, and schools that contributed to a community’s suburban identity, important patterns of growth, and historic character.

Under the multiple property listing, Historic Residential Suburbs in the United States, 1830–1960, MPS, historic districts and associated suburban resources, such as schools and shopping centers, may be listed in the National Register of Historic Places. The nationwide context, “The Suburbanization of Metropolitan Areas in the United States, 1830 to 1960,” found in Section E of the Multiple Property Documentation Form, brings together diverse information nowhere else available in a single source. It contains an annotated text identifying the important patterns of suburbanization that shaped the nation’s leading cities and influenced the character of residential neighborhoods throughout the nation. The text is supplemented by a set of chronologies highlighting the milestones in themes, such as transportation, federal legislation encouraging home ownership, subdivision planning and design, and the architectural design of suburban resources.

The contextual information, registration requirements, and guidelines set forth in the Multiple Property Documentation Form and Historic Residential Suburbs are intended to guide preservation programs, including State Historic Preservation Offices (SHPOs), Certified Local Governments (CLGs), Federal Historic Preservation Programs, and Tribal Historic Preservation Programs, in developing local historic contexts, planning surveys, and establishing registration requirements for historic neighborhoods and subdivisions that represent local, State, or regional patterns of suburbanization. The guidelines should also be useful in understanding the significance of related resources that fostered suburbanization and shaped the metropolitan landscape, including mass transit, parkways and parks, and public water systems. The current form sets forth registration requirements for four subtypes of historic residential suburbs based on the succession of transportation technologies that fostered suburbanization and determined the character of residential neighborhoods. The context, however, provides information about other property types historically associated with the rise of suburban neighborhoods, such as shopping centers and parks. Additional contextual information and registration requirements for these can be included in amendments to the multiple property form or discussed in individual nominations.

Developing a National Context for Suburbanization

Professor David L. Ames of the Center for Historic Architecture and Design, University of Delaware, initiated the development of the national context for suburbanization following a study conducted by the Center in the early 1990s of the suburbanization of New Castle County near Wilmington, Delaware, and a survey of Wilmington neighborhoods. The project was directed by Mary Mulchahey Chase with the assistance of Dr. Ames and Rebecca Siders, and resulted in the publication Suburbanization in the Vicinity of Wilmington, Delaware, 1880-1950+/: A Historic Context (Chase, et al, June 1992).

Through this study, Wilmington suburbs became a laboratory for identifying historical source materials, applying the National Register
By 1990 New Castle County was facing increasing challenges in preservation planning for early twentieth-century properties, particularly subdivisions. Previous survey efforts had largely bypassed twentieth-century buildings, and no clear guidelines existed to inform further survey activities. The region’s earliest subdivisions were threatened by change and the buildings within them were aging and at risk from deterioration, demolition, and renovations that compromised their historic integrity. As a result the New Castle County Department of Planning sought guidance in evaluating the extent to which historically significant properties related to suburbanization were distributed in the vicinity of Wilmington. The State Historic Preservation Office and the Grant Selection Committee of the State Review Board for Historic Preservation responded to the county’s request by making the development of an historic context on suburbanization a high priority for funding under the Historic Preservation Fund subgrant program for FY 1991. Such a context would serve as a guide for future survey and treatment activities and also fulfill a priority established in the Delaware Comprehensive Historic Preservation Plan.¹⁶⁶

In FY 1991, the Center for Historic Architecture and Engineering received a matching funds grant from the Historic Preservation Fund to develop a historic context examining the process of suburbanization in the vicinity of Wilmington, Delaware, primarily in the early twentieth century. The project was conducted for the Delaware State Historic Preservation Office, Division of Historical and Cultural Affairs, with the assistance of the grants-in-aid program for preservation planning administered by the National Parks Service, U.S. Department of the Interior. The historic context was developed in accordance with the planning process described in the Delaware plan and its companion volume, the Historic Context Master Reference and Summary, as well as the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation. All activities relating to the development of this context were carried out in consultation with the staff of the Delaware State Historic Preservation Office, Division of Historical and Cultural Affairs. An advisory committee established to assist in the preparation of the historic context consisted of Valerie Cesna (preservation planner, New Castle County), Eldon Homsey (Wilmington architect), Carol E. Hoffecker (professor, Department of History, University of Delaware), April Veness (assistant professor, Department of Geography, University of Delaware), and Steve Del Sordo (State historian) and Alice Guerrant (State archaeologist), both from the Delaware State Historic Preservation Office. The committee met three times between 1 January and 31 March 1992, and provided guidance in regard to several aspects of the project, and offered the survey team guidance concerning a variety issues, including the presentation of data, terminology, and the definition of associative property types.¹⁶⁷

Based on the Wilmington study and a close examination of literature on the history of suburbanization in America, Dr. Ames developed a nationwide context and a methodology for developing local contexts and surveying historic suburbs, which were put forth in “A Context and Guidelines for Evaluating America’s Historic Suburbs for the National Register of Historic Places (1998).” The document was several years in the making. As bibliographical research was underway, Dr. Ames participated in meetings with members of the National Register staff and presented his findings in a number of forums representing several preservation and design professions: urban planning, architecture, landscape architecture, preservation planning, history, and preservation education. Dr. Ames’ paper on the origins of the American suburbs from the perspective of working-class suburbs was presented in 1993 at the Fifth National Conference on American Planning History (Chicago). In March 1994, initial findings were tested at the National Register workshop at the Annual Meeting of the National Conference of State Historic Preservation Officers (Washington, D.C.), where Dr. Ames spoke on historic suburbs as an issue that presented new challenges for National Register programs. Dr. Ames reached a broader audience in 1995 when he spoke at the first Preserving the Recent Past Conference (Chicago) on the relevance of examining postwar suburbs as part of a continuing process of suburbanization that began in the mid-nineteenth century and as the most recent in a series of chronologically-based historic property types that began with railroad and horsecar suburbs. In addition, Dr. Ames set forth his findings in a chapter entitled, “Understanding Suburbs as Historic Landscapes through Preservation,” in Changing Suburbs: Foundation, Form, and Function (ed. Harris and Larkham, 1999) and in a paper entitled “Perspective: Teaching Urban Through a Suburban Lens,” published in the Autumn 1993 issue of Urban Affairs. Dr. Ames also presented his findings at the Between City and Country: Preservation and the Suburbs Conference sponsored by the Connecticut Trust for Historic Preservation (Waterbury) in 1994, and, in 1995, at the Public Policy Forum sponsored by Hood College (Frederick, Maryland) and the Annual Meeting of the Urban Affairs Association (Portland, Oregon). The evolving context provided a basis for the graduate course, “The American Suburb,” which Dr. Ames taught at the
Dr. Ames’s research was organized around four broad trends that represent the historic forces that shaped America’s suburbs:

1. Demographic trends in suburban and metropolitan areas
2. Evolution of transportation systems
3. Evolution of subdivision design and suburban development practices, and
4. Financing and design of suburban homes.

In documenting these trends, Dr. Ames relied heavily on the transportation model first proposed by Sam Bass Warner, Jr., in his seminal study *Streetcar Suburbs: The Process of Growth in Boston (1870-1900)* (1962), which documented the relationship between the rise of streetcar transportation and the metropolitan growth of Boston. Dr. Ames’ examination of working-class suburbs was strongly influenced by Richard Harris’s research on Canadian suburbs, which appeared in *Unplanned Suburbs: Toronto's American Tragedy, 1900 to 1950* (1996). He also relied on scholarship on suburbanization by Muller (1981), G. Wright (1981), K. Jackson (1985), Binford (1985), Fishman (1987), Keating (1988), Stilgoe (1988), Chase (1995), and others. The recognition of four principal types of historic residential suburbs, each chronologically based on the development of transportation technologies (railroad and horsecar, electric streetcar, early automobile, and late automobile and freeway), stems from Warner’s pioneering research (1962), J. S. Adam’s paper on the residential structure of midwestern cities in the *Annals of the Association of American Geographers* (1970), Joel Tarr’s chapter, “From City to Suburb,” in Alexander Callow, Jr., ed., *American Urban History* (1973); Clay McShane and Joel Tarr’s paper, “The Centrality of the Horse in the Nineteenth Century City” (republished in Raymond Mohl, ed, *The Making of Urban America*, 1997); Peter O. Muller’s analysis of suburbanization in *Contemporary Suburban America* (1981), and the results of Susan Mulchahey Chase’s previously mentioned research on Wilmington, Delaware (1992). The conceptual framework of chronological periods based on developments in transportation technology, subdivision planning, financing, and house design and the contextually-based survey methodology introduced by Dr. Ames in the 1998 draft form the core of the current bulletin and multiple property form and are recommended as a sound and useful approach for evaluating the nation's rich legacy of suburban properties. 169

After review by the National Register staff, National Park Service in Washington, D.C., Dr. Ames’ study was circulated for review and comment as a draft National Register bulletin in September, 1998. The National Register program received constructive comments on the draft bulletin from a broad range of preservationists and design professionals, university professors, and public historians, representing different professional perspectives and disciplines. Comments and recommendations received indicated a wide range of opinion on how the topic of historic suburbs should be approached for National Register purposes. All recommendations were carefully considered in making revisions, determining the final formats of the multiple property form and bulletin, and deciding what additional research was needed. Based on the comments received, National Register historian Linda Flint McClelland developed the format of the final bulletin and revised the text of the national context to include additional sources and document additional topics of interest to preservationists and design professionals. Presentations made at several professional meetings and workshops provided opportunities for further discussion of perspectives and information exchange; these included the annual meetings of the Southeast Conference of State Historic Preservation Offices (Ames, Brown, Burns, and Kriviskey) in Richmond, Virginia, in November 1999; Colorado Preservation Inc. (McClelland) in Denver in February 2000; National Trust for Historic Preservation (McClelland) in Los Angeles, November 2000; Colonial Revival in America Conference (McClelland) at the University of Virginia in November, 2000; National Conference of State Historic Preservation Officers (Callahan and Kurtz) in Washington, D.C., March 2001, and Alliance for Historic Landscape Preservation (McClelland) at the Clearing, Wisconsin, in April 2001. 170

Considerable discussion surrounded the selection of an inclusive set of dates covering the historic period of America’s suburbanization. The dates 1830–1960 should be used as a general guide and adjusted to accommodate local historical events and associations. In keeping with advances in transportation technology, the organizing framework for the suburbanization context, we have used 1830, the date of the introduction of the steam-powered locomotive, for the purposes of this bulletin. 1960 was selected as a logical closing date based on the current literature that provides a historical assessment of twentieth-century suburbanization and for the practical purposes of contextual development and field surveys. The history of specific local and metropolitan areas may support other dates that better reflect local patterns and trends. While the origins of planned new towns such as Columbia, Maryland, and Reston, Virginia, and many early examples of the so-called “planned unit developments,” or “PUDs,” have been traced to the American Garden City movement, addressing them was determined
Requests for additional guidance on evaluating suburban neighborhoods as cultural landscapes led to the development of a methodology similar to that presented in earlier National Register bulletins on designed and rural historic landscapes. The landscape approach put forth in Associated Property Types in Section F on pages F57—F61 and in Historic Residential Suburbs is based on an understanding that suburban neighborhoods possess important landscape characteristics and typically took form in a three-layered process: selection of location; platting and layout; and design of the house and yard. Surveying and evaluating residential historic districts as cultural landscapes equip preservationists to recognize multiple aspects of a neighborhood or subdivision’s social and design history and to identify the significant values and characteristics essential for their appreciation and preservation. The landscape approach offers a suitable framework for integrating information about the social history and physical design of America’s suburban places because they 1) were shaped by economic and demographic factors, 2) resulted from broad based decisions about how land could be best used to serve human needs, and 3) were designed according to established principles of landscape architecture, civil engineering, and community planning.

The steadily growing number of secondary sources by scholars and practitioners involved in the study of suburban neighborhoods provided additional perspectives and knowledge. The authors expanded the search of secondary sources to include a number of topics requested by reviewers, including the Better Homes movement of the 1920s, the rise of small house architect and merchant builders, trends in suburban apartments and multiple family housing, the highly influential Federal Housing Administration principles of housing and subdivision design of the 1930s, trends in African American suburbanization, prefabricated methods of house construction, and the landscape design of home grounds and suburban yards. Where gaps in secondary literature existed, primary sources such as historic reports, technical bulletins, landscape and architectural guides, and conference proceedings were examined. As a result, the Statement of Historic Contexts in Section E was expanded, and additional bibliographical sources were added to the Major Bibliographical References in Section I and the recommended reading list in Historic Residential Suburbs (pages 120-34). Substantial efforts were made to provide the most up-to-date list of sources of information, including materials currently in print or likely available in a strong central or university library or through a library loan program. The upsurge of interest among scholars in suburbanization has resulted in a rapidly expanding body of literature, making unintentional omissions inevitable. New bibliographical sources can be added in future amendments to the multiple property form.

Several reviewers of the 1998 draft requested that the discussion of planning be expanded to include company towns, philanthropic projects, and government-sponsored communities. Providing a comprehensive history of such developments was beyond the scope of the present context, which is primarily concerned with the development of privately financed, constructed, and marketed homes and neighborhoods. References, however, have been included in cases, such as Forest Hills Garden and Chatham Village, where the planning, design, or history of an industrial town or philanthropic project provided an important model or exerted substantial influence on the design of privately developed suburbs. Greenbelt communities, public housing, and defense housing projects are discussed only to the extent that they influenced the design of private residential communities or illustrated prevailing trends in housing or subdivision design, leaving their social history and the administrative histories of the programs that created them to be told elsewhere. Selected bibliographical entries for these kinds of communities have been included in the bibliography and list of recommended reading materials.

Bibliographical References

Through an extensive search of scholarly literature, authors Ames and McClelland developed the detailed text with annotated chronologies making up the Statement of Historic Contexts in Section E (page E-3) with the purpose of providing a summary of significant patterns in America’s suburbanization: transportation, land development practices, subdivision design, home financing, and popular trends in house and garden design. They gathered information from many sources to trace the history of home financing, the evolution of subdivision design, and changing methods and materials of home construction. They examined the contributions that planners, landscape architects, developers, public officials and expert gardeners, made to the planning and landscape design of typical suburban neighborhoods, yards, and gardens. They also closely considered the collaborative efforts of designers representing several professional fields, which in some cases led to the development of suburbs, such as Riverside, Myers Park, Sunnyside Gardens, Roland Park, Radburn, Baldwin Hills, that have received national and, in some
cases, international recognition for their outstanding design and pivotal influence on what is recognized as the American planned residential suburb.

Secondary Literature

Numerous histories and case studies in recent decades have examined America’s suburbs from various points of view. Several general histories were particularly valuable in developing a national context. These include: Sam Bass Warner, Jr., Streetcar Suburbs (1962); Gwendolyn Wright, Building the Dream: A Social History of Housing in America (1981); Kenneth T. Jackson, Crabgrass Frontier: The Suburbanization of the United States (1985); Robert Fishman, Bourgeois Utopias: The Rise and Fall of Suburbia (1987); John R. Stilgoe, Borderland: Origins of the American Suburb, 1820-1939 (1988). Also valuable were a number of scholarly papers appearing in the Journal of Urban History, Journal of the Society of Architectural Historians, Winterthur Portfolio, Journal of American History, Perspectives on Vernacular Architecture, and a number of specialized anthologies.

Several studies of metropolitan development in major American cities were extremely helpful in developing the national context and represent findings that have widespread applicability to the development of suburbs nationwide; these include: Anne Keating, Building Chicago: Suburban Developers and the Creation of a Divided Metropolis (1988); Warner, Streetcar Suburbs (1962); Gregory Hise, Magnetic Los Angeles: Planning the Twentieth Century Metropolis (1997); Barbara Kelly, Expanding the American Dream: Building and Rebuilding Levittown (1993).


For information about the historic design of suburban houses and yards, the authors relied upon general studies: G. Wright, Building the American Dream (1981); Clark, The American Family Home (1986); Alan Gowans, The Comfortable House (1986); Rowe, Making a Middle Landscape (1991); Robert Handlin, The American Home (1979); Mason, History of Housing in the U.S. (1982). Also several studies provided additional detail about specialized house types: these included Robert Winter, California Bungalow (1980); Clay Lancaster, American Bungalow, 1880s-1920s (1985); Katherine Stevenson and H. Ward Jandl, Houses by Mail (1986). Additional insights were gained from articles in journals, conference proceedings, and anthologies; most helpful were several scholarly articles by David Gebhard in Journal of the Society of Architectural Historians (1967) and Winterthur Portfolio (1987 and 1992); various chapters in Elizabeth Smith, ed., Blueprints for Modern Living: History and Legacy of the Case Study Houses (1989), Jan Jennings, ed., Roadside America: The Automobile in Design and Culture (1990), and articles appearing in several volumes of Perspectives in Vernacular Architecture.
The proceedings of the Preserving the Recent Past conferences provided valuable articles on the origins of the ranch house, contemporary house design, prefabricated methods of construction, and the landscape architecture of Garrett Eckbo and Thomas Church. The recent publication of *Pioneers of American Landscape Design* (New York, 2000) enabled the authors to trace the careers and work of leading designers and planners. These included A. J. Downing, the Frederick Law Olmsted, Sr., Frederick Law Olmsted, Jr., John Nolen, Henry Hubbard, and Henry Wright, as well as regional practitioners such as Maximilian G. Kern, George Kessler, Earle Sumner Draper, Stephen Child, O. C. Simonds, Sidney Hare, S. Herbert Hare, and Clarence Stein. *Pioneers* also provided insights into the careers of lesser-known, but equally influential individuals, such as Kate Sessions, Mrs. Francis King, and Wilhelm Miller who contributed to allied fields such as horticulture and garden-writing. In addition, Virginia Tuttle Clayton, *The Once and Future Gardener* (2000); Anne Leighton, *American Gardens of the Nineteenth Century* (1987); and Elisabeth Woodburn, “American Horticultural Books,” in *Keeping Eden* (ed. Punch, 1992) provided substantial insight into the influence of popular magazines and books on the design of suburban yards and gardens.

For information about the history of suburban parkways and highways, the authors relied upon Christopher Tunnard and Boris Pushkarev, *Mannmade America. Chaos or Control?* (1966); Tom Lewis, *Divided Highways* (1997); Bruce Seely, *Building the American Highway System* (1987); and Mark Rose, *Interstate* (rev. 1990), as well as nominations for the Merritt Parkway, Bronx River Parkway, and Parkways of the National Capital Region. For an understanding of the evolution of the neighborhood shopping center, the authors relied on Richard Longstreth, *The Architecture, the Automobile, and Retailing in Los Angeles, 1920-1950* (1997), and The Drive-In, the Supermarket, and the Transformation of Commercial Space in Los Angeles, 1914-1941 (1999); Rowe, *Making a Middle Landscape* (1991); Beth Lynn Savage, “The Inception and Early Historical Development of the Planned Shopping Center in the Washington Area from 1930 to 1942” (1989).

**Primary Sources**

Although secondary sources were extensively relied upon in developing the Statement of Historic Contexts in Section E, selected primary resources were consulted to gain more detailed information about topics for which scholarly treatment in secondary literature was incomplete. Generally these took the form of historic treatises, periodicals, technical reports and accounts, and historic plats and plans, these included Olmsted and Vaux Company’s *Preliminary Report upon the Proposed Suburban Village at Riverside* (1868), articles pertaining to FHA’s small house and large-scale rental housing programs, which appeared in the Architectural Forum and Architectural Record; articles by practitioners Stephen Child, Marjorie Sewell Cautley, Henry Hubbard, Seward Mott, and Arthur A. Shurtleff which appeared in Landscape Architecture; John Nolen, *New Towns for Old: Achievements in Civic Improvements in Some American Small Towns and Neighborhoods* (1927).

Extremely valuable for understanding the dramatic advances in residential planning of the 1930s were the proceedings of the 1931 President’s Conference on Home Building and Home Ownership (Washington, D.C., 1932); technical publications of the Federal Housing Administration, especially *Planning Neighborhoods for Small Houses* (1936), *Principles of Planning Small Houses* (1936; rev, 1940), *Recent Developments in Dwelling Construction* (1940), and *Planning Profitable Neighborhoods* (1938); Henry Wright, *Rehousing Urban America* (1935); Clarence Perry, *Housing for the Machine Age* (1939); several monographs published in Harvard University’s Planning series: Robert Whitten and Thomas Adams, *Neighborhoods of Small Houses* (1931), Thomas Adams, *Design of Residential Areas* (1934), and Theodora Kimball and Henry V. Hubbard, *Our Cities Today and Tomorrow: A Survey of Planning and Zoning Progress in the United States* (1929).

Historic pattern books, landscape guides, and house catalogs, many currently available in libraries as reprints, were consulted. In addition, advertisements, historic periodicals, and catalogs of stock plan houses, manufacturers of pre-cut mail order houses, trade organizations, Small House Architect Service Bureaus, and research organizations, such as the Southwest Research Institute, provided a rich visual index of America’s domestic design. These sources included Andrew Jackson Downing, *Theory and Practice of Landscape Gardening* (1841), *Cottage Residences* (1842), and *Architecture of Country Homes* (1850); Calvert Vaux, *Villas and Cottages* (1864); Charles and George Palliser, *Pallisers’ Model Homes* (1878); Frank Scott, *The Art of Beautifying Suburban Home Grounds* (1870); Bruce and Sandbank, ed. *A History of Prefabrication* (1943); John Hancock Callender, *Before You Buy a House* (1953); Garrett Eckbo, *Art of Home Landscaping* (1956).

**National Register Documentation and Historic Resource Surveys**
National Register documentation, including multiple property listings, proved to be a valuable source of documentary information about American suburbs, verifying the broad national patterns identified by academic studies and other secondary sources. More than 7000 residential districts have been listed in the National Register of Historic Places since 1966. This attests to the expertise and interest in state historic preservation programs and throughout the preservation and design professions in documenting historic neighborhoods. It also underscores the value of the National Register as an archive of information about America’s historic places.

To represent highly important developments and provide coverage from several geographical areas and chronological periods, the authors gave particular attention to nominations and multiple property submissions from the following metropolitan areas: Phoenix and Tucson, Arizona; Los Angeles, California; Washington, D.C.; Atlanta, Georgia; Boise, Idaho; Des Moines, Iowa; Chicago, Illinois; Baltimore, Maryland; St. Louis and Kansas City, Missouri; Albuquerque, New Mexico; New York and Buffalo, New York; Raleigh and Charlotte, North Carolina; Cleveland and Cincinnati, Ohio; Portland, Oregon; Memphis, Tennessee; and Milwaukee, Wisconsin. Particular attention was given nominations related to subthemes, such as prefabricated methods of house construction, private-sector multiple family housing, and African American patterns of suburbanization, and to the evaluation of subdivisions achieving significance within the past 50 years, as seen in the nominations for Arapahoe Acres in Englewood, Colorado; a CLG-sponsored survey for Hollin Hills in Fairfax County, Virginia; and a proposed multiple property submission for Eichler-built communities in California.172

In addition, methods used to survey and document historic residential neighborhoods in several other States were examined to provide a comparison with the Wilmington study, including Arkansas, Arizona, Georgia, New Jersey, North Carolina, Texas, and Virginia. Several publications, sponsored by State Historic Preservation Offices, CLGs, local historical commissions, and others, provided valuable guidelines for researching and documenting historic residential suburbs; these include Catherine Bishir and Lawrence Earley, Early Twentieth Century Suburbs in North Carolina; Robert Craig, New Jersey’s Buildings Contracts and Mechanic Liens (New Jersey Department of Environmental Protection, 1999); Bruce Jensen and Mary Dillman, Guidelines for Listing Your Neighborhood in the National Register of Historic Places (Texas Historical Commission, 1999); “Georgia’s Living Places: Historic Houses in Their Landscaped Settings,” (Georgia Department of Natural Resources, 1991). Valuable insights into state and local survey methods were provided by papers given at the Preserving the Recent Past conferences (1995 and 2000) by Claudia Brown, Deborah Abele and Grady Gammage, Julie Ernst, and Diane Wray, as well as the multiple property submissions for residential neighborhoods in Phoenix, Arizona; Des Moines, Iowa; Brookline and Newton, Massachusetts; Albuquerque, New Mexico; Buffalo, New York; Raleigh, North Carolina; and Memphis, Tennessee.

Because various survey methods are practiced nationwide and State survey forms take many different forms, it was decided that the methodology presented in Historic Residential Suburbs should offer a variety of resources and suggested approaches to facilitate a comprehensive approach to survey and evaluation. For example, these include charting the development and expansion of metropolitan transportation systems, compiling annotated lists of developers and subdivisions, and creating overlays that trace suburban evolution over several chronological periods. This approach allows each State and local program flexibility and freedom to shape surveys, set priorities for planning, and utilize data-gathering techniques and technology consistent with established practices and budgetary restraints and the limitations posed by jurisdictional boundaries.

ENDNOTES

166.Ibid.


169. For sharing their research and experience at National Register workshops held during the 1999 SESHPO Conference (Richmond) and 2001 NCSHPO Conference (Washington, D.C.), the National Register extends appreciation to David Ames, University of Delaware; Claudia Brown, North Carolina SHPO Office; John A. Burns, Fairfax County (Virginia) Board of Architectural Review; Bruce Kriviskey, Fairfax County Planning Office; Peter Kurtze, Maryland SHPO office; and Bill Callahan, Nebraska SHPO office.

170. The MPS and bulletin Historic Residential Suburbs encourage the development of local and metropolitan contexts and recognize that, although the national contexts end in 1960, the history of suburbanization in many communities may warrant examining patterns of suburbanization and evaluating subdivisions that extend beyond that date. Studies of the recent past are encouraged that examine patterns and identify resources that are exceptionally important and therefore merit evaluation under Criterion Consideration G before they reach fifty years of age. (See page F-64 of the multiple property form and pages 96-97 of Historic Residential Suburbs for a discussion of evaluation under Criterion Consideration G).

171. For complete citations for the sources mentioned in Section H and a complete list of the literature and other sources used in developing the national context for suburbanization, see the endnotes for the Statement of Historic Contexts in Section E, starting on page E-39.

172. A complete list of multiple property submissions appears in Major Bibliographical References in Section I (page I-114). Specific citations for nominations and multiple property documentation used as sources can be found in the endnotes to the Statement of Historic Contexts in Section E, starting on page I-113.
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United States Department of the Interior
National Park Service

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Name of Multiple Property Listing

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### Selected Pattern Books, Landscape Guides, and House Catalogs (Reprints and Recent Editions)


Dissertations and Theses


Clark, James Everett. "The Impact of Transportation Technology on Suburbanization in the Chicago Region, 1830-1920." Ph.D.
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Name of Multiple Property Listing


**Theses**


**National Register Documentation**


Selected Multiple Property Listings for Further Reading

*Multiple Property Submission “covers” are available at* <www.nr.nps.gov>

- Apartment Hotels in Birmingham, 1900-1930, TR, Alabama
- Lustron Houses in Alabama MPS, Alabama
- Spanish Revival Residences in Mobile MPS, Alabama
- Historic Apartment Buildings MPS, Arkansas
- Historically Black Properties in Little Rock’s Dunbar School Neighborhood MPS, Arkansas
- Little Rock Apartment Buildings MPS, Arkansas
- Educational Buildings in Phoenix MPS, Arizona
- Residential Subdivisions and Architecture in Phoenix MPS, Arizona
- Roosevelt Neighborhood MRA, Arizona
- Bungalow Courts of Pasadena TR, California
- Lilian Rice-Designed Buildings at Rancho Santa Fe MPS, California
- Los Angeles Branch Library System TR
- Residential Architecture of Pasadena, California, 1895-1918: The Influence of the Arts and Crafts Movement MPS
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Winterhaven, Florida MPS
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Hyde Park Apartment Hotels TR, Illinois
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Name of Multiple Property Listing

Brookline MRA, Massachusetts
Newton MRA, Massachusetts
Stoneham MRA, Massachusetts
Water Supply System of Metropolitan Boston MPS, Massachusetts
Worcester Three-Deckers TR, Massachusetts
Residential Structures in Kansas City, Missouri, by Mary Rockwell Hook TR
St. Joseph MPS, Missouri
Armour Boulevard MRA, Missouri
Suburban Schools in Butte MPS, Montana
Nineteenth Century Terrace Houses TR, Nebraska
Lustrons in New Jersey, MPS
Operating Passenger Railroad Stations, TR, New Jersey
Multi-Unit Dwellings in Albuquerque MPS, New Mexico
Albuquerque Downtown Neighborhoods MRA, New Mexico
Twentieth Century Suburban Growth of Albuquerque MPS, New Mexico
A.T. Stewart Resources, Garden City, New York, TR
Hudson Highlands MPS, New York
Masten Neighborhood Rows TR, New York
Olmsted Parks and Parkways TR, Buffalo, New York
African-American Neighborhoods in Northeastern Winston-Salem MPS, North Carolina
Early Twentieth Century Raleigh Neighborhoods TR, North Carolina
Eastlake Houses of Ashly TR, Ohio
Hobart Welded Steel Houses TR, Ohio
Architecture of Ellis F. Lawrence MPS, Oregon
Craftsman Bungalows in Deschutes County MPS, Oregon
HISTORIC RESIDENTIAL SUBURBS IN THE UNITED STATES, 1830--1960

Name of Multiple Property Listing

Middle-Class Apartments in East Portland MPS, Oregon
Philadelphia Public Schools TR, Pennsylvania
Pittsburgh Public Schools TR, Pennsylvania
Early Twentieth Century Schools in Puerto Rico TR
Single-Family Houses in Rhode Island MPS
Cement Construction in Richard City MPS, Tennessee
Lustron Houses in South Dakota MPS
Memphis Park and Parkway System MPS, Tennessee
Oak Ridge MPS, Tennessee
Public Schools of Memphis, 1902-1915, MPS, Tennessee
Residential Resources of Memphis MPS, Tennessee
Entrepreneurial Residences of Turn-of-the-Century Provo, Utah, TR
Perkins Addition Streetcar Suburb TR, Utah
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Hilltop Neighborhood MPS, Washington
Olympia Residential Architecture MPS, Washington
Women’s History in Olympia MPS, Washington
Ernest Flagg Stone Masonry Houses of Milwaukee County TR, Wisconsin

Public Library Facilities of Wisconsin MPS

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Terell, John C. Prospect H.D. NRHP Nomination, California SHPO, April 7, 1983.


Reference Services and Specialized Repositories

The Catalog of Landscape Records in the United States <www.wavehill.org/catalog> A national catalog designed to assist researchers records and repositories documenting the work of landscape architects and landscape architectural firms in the United States. Catalog publishes a quarterly newsletter featuring special collections, advances in records management such as planning digital collections, and researcher queries.

WAVE HILL
675 West 252nd Street
Bronx, New York 10447-2899
Email: catalog@wavehill.org

US COPAR/Cooperative Preservation of Architectural Records. A national network of state or regional committees committed to the preservation of architectural records. A national Newsletter for COPAR was published from 1980-1985 and 1996-1997. Regional guides to architects and architectural firms have been published for New York City, Chicago, Boston, and Philadelphia. A nationwide list of state and regional committees is maintained by the Massachusetts committee and is available electronically <http://libraries.mit.edu/rvc/mcopar/coparcontactinfo.html>. National inquiries should be addressed to:

C.Ford Peatross
Curator of Architecture, Design, and Engineering Collections
Prints and Photographs Division
Library of Congress
Washington, DC 20540-4840
Email: cpea@loc.gov

U.S. Geological Survey <http://mapping.usgs.gov> makes available U.S.G.S topographic maps. As part of the Global Land Information System (GLIS), it also makes available the aerial surveys, called digital orthophoto quadrangles or DEQ's, used to revise digital line graphs and topographic maps <http://earthexplorer.usgs.gov>.
VAF/Vernacular Architecture Forum <www.vernaculararchitecture.org> maintains a link to a bibliography of published writings on topics such as vernacular housing, landscape design, and planning. Organization regularly publishes a newsletter which contains current bibliography. Proceedings of annual meetings are published periodically by the University of Tennessee Press, Knoxville, and University of Missouri Press, Columbia.

Library of Congress <www.lcweb.gov> maintains an extensive library collection, including books, periodicals, prints and photographs, maps, and microform versions of collections in other repositories. A catalog of bibliographical references and a number of research tools are available online. The Manuscripts Division contains the Frederick Law Olmsted Papers and records of the American Civic Association. Prints and Photographs Collection maintains many original materials and offers an online catalog of many of its holdings; its holdings include the maps of the Sanborn Fire Insurance Company, which are currently being digitized (along with those maintained by the Bureau of Census) and are being made available to libraries on cdrom by a private vendor. A complete set of Garden and Forest is available online <lcweb.loc.gov/preserv/prd/gardfor>.


Division of Rare Books and Manuscripts Collection, Cornell University, Ithaca, New York <http://rmc.library.cornell.edu/collections/>. A special collection of manuscripts, drawings, blueprints, and other records pertaining to landscape architecture, architecture and city planning, includes records of masters of design such as John Nolen and Clarence Stein, as well as records of the Regional Plan Association responsible for the New York Regional Plan of the 1920s.

National Agricultural Research Library, Beltsville, Maryland <www.nal.usda.gov/>. Extensive library of books on agriculture, horticulture, and landscape architecture, and circulars and bulletins produced nationwide by agricultural extension services and agricultural research stations, including those on home landscaping, roadside plantings, and village improvements. Online catalog, Agricola, is available <www.nal.usda.gov/ag98/english/catalog-basic.html>.

Environmental Design Archives, University of California, Berkeley <www.ced.berkeley.edu/cedarchives/>. Collections document the work of many prominent West Coast architects and landscape architects, including Julia Morgan, Charles Sumner Greene, Garrett Eckbo, Thomas D. Church, and William Wurster. An index describing each collection and providing biographical and bibliographical information is available <www.oac.edlib.org>.

collection of books, catalogs, plans, periodicals, and oral history collections covering themes in architecture, planning, landscape architecture, and New York area development. Many of the Avery's extensive collection of trade catalogs, architectural guides, and periodicals are available in microform in major libraries.

**Frances Loeb Library**, Harvard University, Graduate School of Design, Cambridge, Massachusetts. <www.gsd.harvard.edu/library/special collections.html>. Special collections include manuscripts, drawings, and plans by a number of noted architects, planners, and landscape architects, including Arthur C. Comey, Eleanor Raymond, Charles Mulford Robinson, Hugh Stubbins, Arthur Shurcliff, Dan Kiley, Robert H. Whitten, Walter Gropius, and John C. Olmsted. Also includes the photographs of photojournalist Jessie Tarbox Beals, including numerous views of residences and gardens.


**Library of the Arnold Arboretum**, Jamaica Plain, Massachusetts <www.icls.harvard.edu/>. In conjunction with the Institute for Cultural Landscape Studies, the library maintains an expanding collection of works in landscape conservation, design, history, management, and preservation, particularly related to activities in the northeastern United States.


**Eichler Network** <www.eichlernetwork.com>. California-based organization provides technical information about history and home repair to owners of homes built by merchant Builder Joseph Eichler. In addition to website, network publishes a regular newsletter.

**National Archives and Record Centers** <www.nara.gov>. Several record groups (R.G.) contain information about federal housing programs as well as a wealth of statistical and research data acquired on local housing trends, methods of home construction, and home financing. Although most records are located in Archives II in College Park, Maryland, additional records may exist in regional repositories. Preliminary inventories (P.I.) are available on-line and in published form for most record groups.

Records of the **Federal Housing Administration (FHA)**, dating from 1934, are found in R.G. 31 (P.I. 111, 1965, and P.I. 45, 1952) and includes selected applications for FHA-approved homes, cartographic and written records pertaining to selected examples of FHA-insured, large-scale rental housing complexes, and real estate survey records and rating maps. Records include a representative group of applications for FHA mortgage approval. Unfortunately many of the administrative files for FHA's early years have been lost.

Records of the **Emergency Fleet Corporation of the U.S. Shipping Board** are found in R.G. 32 (P.I. 97, 1956) and the U.S. Housing Authority of the U.S. Department of Labor are found in R.G. 3 (P.I. 140, 1962) include textual, cartographic, and photographic records of World War I emergency housing, 1918-19.

Records for the **National Housing Administration** established in 1942 to consolidate all federal housing programs (U.S. Public Housing Authority, Federal Housing Administration, Federal Home Loan Bank Board, and World War II housing programs) into one agency are found in the Records of the Housing and Home Finance Agency, R.G. 207 (P.I. 164). These include FHA files on housing statistics and market analyses as well as the records of the Central Housing Committee which was established in 1935 upon the recommendation of the National Resources Board and served as a clearinghouse on all matters pertaining to housing, including land use, prefabricated methods of construction, and financing.

Records of the **Federal Home Loan Bank Board** are found in R.G. 195 (P.I. NC-94, 1965, manuscript form); cartographic records include several hundred small house designs approved for use by the Federal Home Building Service Plan, 1938-1942. Records of Defense Homes Corporation, 1940-1949, are among the Records of the Reconstruction Finance Corporation in R.G. 234. Records of the U.S.

**Historic Periodicals**

**Popular Magazines**

- American Builder
- The American Home
- American Homes and Gardens
- Better Homes and Gardens
- Building Age (later Building Age and The Builder's Journal)
- Bungalow Magazine
- California Arts and Architecture
- California Garden
- Carpentry and Building
- Cosmopolitan
- Country Life in America
- The Craftsman
- Delineator
- The Family Circle and Parlor Annual (The Family Circle)
- Garden and Forest
- The Garden Magazine (Garden Magazine and Home Builder)
- Gardener's Monthly and Horticulturist
- Good Housekeeping
- Harper's Monthly
- The Horticulturist
- The House Beautiful
- House and Garden
- Hovey's Magazine of Horticulture
- Keith's Magazine
- Ladies' Home Journal
- Living Magazine
- McCall's
- National Builder
- Parents' Magazine
- Park and Cemetery and Landscape Gardening
- Scribner's Magazine
- The Small House
- Sunset Magazine
- Woman's Home Companion
- Western Horticultural Review (Horticultural Review and Botanical Magazine)

**Professional and Trade Periodicals**

- American Architect
- American Architect and Building News
- American Builder
- American Carpenter and Builder
American City
American Civic and Planning Annual
American Garden
Annals of Real Estate Practice
Architectural Forum (formerly Brickbuilder)
Architectural Record
Architectural Review and American Builder’s Journal
Arts and Architecture
City Planning
Historical Garden Club of America bulletins
Historical Journal of the New England Garden History Society
House and Home
Housing
Inland Architect
Insured Mortgage Portfolio
Landscape Architecture
NAHB Builder
National Real Estate Journal
Perfect Home
Popular Home
Professional Builder
Progressive Architecture (formerly Pencil Points)
Regional Planning Notes
Southwest Builders and Contractors
Urban Land Institute Bulletin
Western Architect

Recommended Reading

Related National Register Bulletins

Defining Boundaries for National Register Properties
Guidelines for Evaluating and Documenting Properties Associated with Significant Persons
Guidelines for Evaluating and Nominating Properties That Have Achieved Significance Within the Last Fifty Years (rev. 1996)
Guidelines for Local Surveys: A Basis for Preservation Planning (rev. 1985)
How to Apply the National Register Criteria of Evaluation
How to Complete the National Register Multiple Property Documentation Form
How to Complete the National Register Registration Form
How to Evaluate and Nominate Designed Historic Landscapes
How to Prepare National Historic Landmark Nominations
Researching A Historic Property (rev. 1998).
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HISTORIC RESIDENTIAL SUBURBS IN THE UNITED STATES, 1830--1960
Name of Multiple Property Listing

Videotape, The Multiple Property Approach