

THE HISTORIC CONTEXT FOR MODERN ARCHITECTURE IN OKLAHOMA: HOUSING FROM 1946-1976

Lynda S. Ozan
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ABSTRACT

The purpose of this document is to present information regarding Modern Housing in Oklahoma from 1946-1976. Due to the passage of time, many houses in Oklahoma are reaching their respective 50-year birthday, with many more to reach that milestone in the next few years, thus creating a need for analysis in terms of National Register eligibility. With such a high number of resources in all of Oklahoma, the Oklahoma State Historic Preservation Office felt it was necessary provide a history of housing development in Oklahoma, an easy to understand architectural guide for Oklahoma Modern Housing and an eligibility explanation that applies specifically to the Modern Housing resources.

TIMELINE

Late 1940s

Historical Influences: continuing material shortages, GI Bill, FHA, VA, postwar automobile age, suburbs

Building Types: suburbs, apartments, large housing developments

Materials and Constructions: concrete, asbestos, Masonite, slab-on grade, plywood, carports, pre-fabricated housing

Architectural Styles: Modern/International, Colonial Revival, Art Deco, Cape Cod, Ranch, magazine plans

Leading Architects and Builders: Walter Gropius, Richard Neutra, Eliel Saarinen, William Wurster, Frank Lloyd Wright

1950s

Historical Influences: Korean conflict, postwar prosperity, interstate highways, housing developments, Baby Boom, Modern architecture, Cold War/Bomb

Building Types: shopping centers, enclosed shopping malls, motor hotels, corporate headquarters buildings, split-level houses

Materials and Constructions: aluminum, pre-cast/pre-stressed concrete, Thermopane, Permatone, flat and butterfly roofs

Architectural Styles: Modern, Ranch, Cape Cods, Split-Level, Organic

Leading Architects and Builders: Marcel Breuer, Philip Johnson, Eero Saarinen, Paul Rudolph, Louis Kahn, Ludwig Mies van der Rohe, Skidmore, Owning & Merrill, Frank Lloyd Wright, Pietro Belluschi

1960s

Historical Influences: Urban Renewal, space exploration, Civil Rights Movement, Historic Preservation Act of 1966, interstate highways

Building Types: aerospace, trailer parks, historic districts, A-frames, adaptive reuse

Architectural Styles: Brutalism, New Formalism

Leading Architects and Builders: I.M. Pei, Philip Johnson, Eero Saarinen, Paul Rudolph, Ludwig Mies van der Rohe, Bruce Goff, Le Corbusier, Minuro Yamasaki

1970s

Historical Influences: energy crisis, New Urbanism, back-to-the-city movement, Women in industry

Architectural Styles: Neo-Colonial

Leading Architects and Builders: Richard Meier, Michael Graves, Frank Gehry, John Johansen

CONTEXT

The Great Depression and World War II

Prior to World War II, the country was in the grips of the Great Depression. Years of overproduction, a widening gap between wages and productivity, and a downturn in consumer confidence contributed to the economic crisis of the 1920s.

Although Oklahoma agriculture stagnated for a decade, signs of the Great Depression emerged only in 1930 as a drought hit the region. This coincided with the opening of the East Texas oil field, which created a petroleum glut and caused rapidly falling oil prices and extensive layoffs. By the end of 1930 Tulsa and Oklahoma City formed unemployment committees. The economy reached the bottom in the winter of 1932-33. Joblessness exceeded roughly three hundred thousand, out of an urban population of around eight hundred thousand. Rural Oklahomans, which numbered approximately 1.5 million, saw farm income fall at least 64 percent in the 1930s; tenant farmers made up more than 60 percent of the farming population.¹

The Great Depression was overwhelming for most Americans despite the federal relief programs that were created in the 1930s. By the end of the decade the U.S. economy was still in a slump with 9.4 million people unemployed and a gross national product of \$91 billion.² By 1940, however, the U.S. was in a frenzy to build much needed war materials for the conflict in Europe. With the U.S. entry into the war in 1941, industrial expansion continued. By 1945, the gross national product was roughly \$212 billion.³ With the end of World War II and the Great Depression, Oklahoma emerged with economic momentum that carried them through the next 30 years of prosperity.

Riding the Wave of Optimism

After World War II through 1950, the population in the U.S. increased by 14.5%. The population shifted from the North to the West and South in part due to the relocation of industries to warmer climates.⁴ Due to the improvements in medicine during the war years, Americans were living longer, too. The gross national product rose as did the average family income. The postwar economy truly reflected the triumphs of World War II industrial production.

The 1940s in America transitioned to “modern” times. This is the time when greater numbers of women were becoming employed outside the home in skilled, high-paying jobs; child-care centers begin to appear as an industry; plastics and synthetics are utilized for the production of household goods; electric appliances are mass produced; air conditioning provides relief from the summer heat; college enrollment increases dramatically; and, automatic transmission cars made driving easier.

¹ William Mullins, “Great Depression,” *Encyclopedia of Oklahoma History and Culture*, <http://digital.library.okstate.edu/encyclopedia> (accessed September 8, 2014).

² Harold Evans, *The American Century* (New York: Alfred A. Knopf, 1998), 314, and James Gilbert, *Another Chance: Postwar America, 1945-1968* (Philadelphia: Temple University Press, 1981), 8.

³ Ibid.

⁴ Gilbert, 26-27.

Mobile Society

With the rapid construction of freeways and the availability of cheap gasoline, more Americans owned cars post World War II. Between 1940 and 1970 automobile registration more than tripled from 27 million to 90 million in the United States. The growth in ownership allowed people to commute further to their place of employment so that by 1970, the car owner was putting nearly 10,000 miles on their vehicle each year.⁵ This increase in ownership was accomplished through the mass production of automobiles which picked up at the end of World War II; car production came to a complete halt during the war years. It is no surprise that the ratio of car to population changed quickly: 1:13 in 1920, 1:4.8 in 1940, and 1:2.3 in 1970.⁶

The automobile altered the American landscape and contributed to the growth of the highway system. As the highway system developed, interchanges became the driving factor in suburban development. Shopping centers, motels, and residential development grew along the interchanges and highways. Eye-catching buildings and signs had mere moments to grab the commuter's attention and direct them to their business.⁷ The growth of the highway systems made rural and suburban areas more accessible thereby encouraging workers to live further away and the periphery of the city to grow.

Interstate/Highway Development

The Federal-Aid Highway Act of 1944 authorized, but did not fund, the designation of an Interstate Highway System. It was intended to connect metropolitan areas, serve national defense and connect broader points with routes of continental importance. The Act only allowed for the preliminary planning, not construction.⁸ Later Federal Aid Acts (1952, 1954 & 1956) provided construction funding and this is when major highway construction begins in America. While the entirety of the system was to be completed by 1972, it was not finished until the 1980s.

The interstate highways system was to be different than previous systems. The Interstate system was to provide safer traffic flow between, around, and through metropolitan areas. This new system had limited access points and provided for higher capacities than local roads.

Problems arose with the actual construction process, not the planning. Rural areas were the easiest to design and construct. However, urban environments created more of a dilemma. It was not just the physical manifestation on the existing landscape but the political scene that came into play as well. The Interstate Highway Act stipulated that urban highways, when possible, had to be routed through "blighted" neighborhoods. This created a major visual impact and created for significant noise pollution in the already "blighted" areas. Ultimately, in the late 1960s and into the 1970s, urban renewal

⁵ Gilbert, 110, 112-113.

⁶ James J. Flink, *The Automobile Age* (Cambridge, Mass: The MIT Press, 1988), 277-279.

⁷ Gilbert, 113

⁸ Bruce E. Seely, *Building the American Highway System: Engineers as Policy Makers* (Philadelphia, PA: Temple University Press, 1987) 189-191.

played an important role in the construction of the urban component of the highway system.⁹

Non-interstate highways were also being constructed in much the same manner. Efforts to modernize the existing system often occurred with controlled access points and grade separations. While at the state level, these improvements were less dramatic than the Interstate Highway System, they had a profound effect, alleviating traffic congestion during the post-World War II era.

In Oklahoma, even by 1955, only 20 percent of the state's highways had paved surfaces. Economic expansion was fueled by a boom in petroleum drilling and production and an increased federal defense presence. Tulsa and Oklahoma City businessmen encouraged state officials to think in terms of expanding the highway system, this time using the concept of toll roads as a means to overcome the need to spend state-appropriated funds for construction and maintenance.

After World War II, in April 1947, at the suggestion of Governor Roy J. Turner, the Oklahoma Turnpike Authority (OTA) came into being. The commission was authorized to issue bonds, construct, operate and maintain the highway, and return it to the Highway Commission when its cost was recouped. As a result, the Turner Turnpike, generally paralleling U.S. 66 between the Tulsa and Oklahoma City, opened in spring 1953. Revenues generated by the Turner Turnpike proved that a road could be self-sustaining. Subsequently, others opened in the next two decades. The major ones included the Will Rogers Turnpike between Tulsa and Miami (1957), the H. E. Bailey Turnpike, from Oklahoma City through Lawton to the Red River (1964), and the Indian Nations Turnpike, from Hugo north to Henryetta (1966).¹⁰

As part of the Interstate Highway System, Interstate 35 was constructed paralleling the route of U.S. 77 north and south, and Interstate 40 was constructed paralleling the original route of State Highways 3 and 9 east and west. They intersected in Oklahoma City, where they also crossed Interstate 44, of which the Turner and Bailey turnpikes were a part. With the exception of I-44 through Oklahoma City, completed in 1985, the Oklahoma segment of the interstate system was in place by 1975.¹¹

The postwar period of 1946-1976 is a period of transportation opportunity in America. The necessity of road improvement corresponds to the private ownership of the automobile. This, in turn, contributed to the growth of the suburbs, changes in land patterns, and a radical change in architecture, from the business place to home and home ownership.

Living the Dream

⁹ Richard F. Weingroff, "The Greatest Decade 1956-1966: Part II-The Battle For Its Life," <http://www.fhwa.dot.gov/infrastructure/50interstate2.cfm> (access 8 September 2014).

¹⁰ Dianna Everett, "Turnpikes and Toll Bridges," *Encyclopedia of Oklahoma History and Culture*, <http://digital.library.okstate.edu/encyclopedia> (accessed September 8, 2014).

¹¹ Ibid.

Federal government programs influenced the postwar building boom. The National Housing Act of 1934 transformed home financing and shaped residential suburbs. The Veterans Administration (VA) assisted veterans with mortgage support while the Veterans Emergency Housing Act helped to prioritize building materials and surplus factories and facilities toward residential housing construction. While the Federal Housing Administration (FHA) and VA played the major role in the suburbanization process, other housing policies, such as urban renewal, also played a role in the development of the American landscape.

Federal Housing Administration

The FHA provides mortgage insurance on loans made by FHA-approved lenders throughout the United States and its territories. They insure mortgages on single family and multifamily homes including manufactured homes and hospitals. It is the largest insurer of mortgages in the world, insuring over 34 million properties since its creation in 1934.

Congress created the Federal Housing Administration (FHA) in 1934 and it became a part of the Department of Housing and Urban Development's (HUD) Office of Housing in 1965. When the FHA was created, the housing industry was stalled: two million construction workers had lost their jobs; terms were difficult to meet for homebuyers seeking mortgages; mortgage loan terms were limited to 50 percent of the property's market value, with a repayment schedule spread over three to five years and ending with a balloon payment; and, America was primarily a nation of renters. Only four in 10 households in the United States owned homes.¹²

During the 1940s, FHA programs helped finance military housing and homes for returning veterans and their families after the war. In the 1950s, 1960s and 1970s, the FHA still assisted with single residential units but also helped to stimulate the production of privately-owned apartments for elderly, handicapped and lower income Americans.

FHA-insured loans require very little cash investment to close a loan. These loans have flexibility in calculating household income and payment ratios. The cost of the mortgage insurance is passed along to the homeowner and typically is included in the monthly payment. FHA mortgage insurance provides lenders with protection against losses as the result of homeowners defaulting on their mortgage loans. Loans must meet certain requirements established by FHA to qualify for insurance.

FHA is the only government agency that operates entirely from its self-generated income and costs the taxpayers nothing. The proceeds from the mortgage insurance paid by the homeowners are captured in an account that is used to operate the program entirely.¹³

¹² http://portal.hud.gov/hudportal/HUD?src=/federal_housing_administration (accessed 8 September 2014)

¹³ Ibid.

The influence of the FHA is undeniable as one-quarter of all new housing between 1934 and 1970 involved an FHA mortgage.¹⁴ Through the FHA program and other federal agencies, home ownership increased to 63 percent in 1972, up from 44 percent in 1934.¹⁵ These varieties of programs continued well beyond 1976 and continue to have a major impact in housing today.

Veterans Housing Program

The passage of the Servicemen's Readjustment Act of 1944 (Public Law 346), popularly known as the GI Bill, created a boom for college campuses and urban housing developments that changed the American landscape. More than sixteen million men and women served in World War II. The legislation provided those veterans with unemployment benefits, money for education, and low-interest loans for homes, farms, and small businesses.

The Veterans Administration (VA) guaranteed housing loans and allowed veterans to borrow the entire price of a house without a down payment or mortgage insurance. The home loans could be used for the purchase, construction, improvement or repair of a residential property which the veteran intended to occupy as a home.¹⁶

To make use of this benefit, the veteran must have served in the active military for a period of 90 days or more on or after September 16, 1940, and before the official termination of World War II. The loans were available up to five years after the end of WWII. The Act of 1944 was amended through time allowing for: more time for applications, the inclusion of conflicts (Korean, Vietnam, Cold War), increases in loan amounts, delimiting dates on veterans' entitlements, and coverage on manufactured homes.¹⁷

Urban Renewal

The Housing Act of 1949 brought to the national scene the concept of urban redevelopment, commonly known as urban renewal, the publicly subsidized destruction of old inner-city properties and construction of new development. It set lofty goals: to eliminate slums and blighted areas and provide a decent home for every American family. The legislation authorized: 1) \$1 billion in loans to help cities acquire slums and blighted land for public or private redevelopment and 2) \$110 million every year for five years for write-down grants to cover two-thirds of the difference between the cost of slum land and its reuse value.¹⁸

¹⁴ Cynthia Girling and Kenneth Helphand, *Yard, Street, Park* (New York: John Wiley and Sons, Inc, 1996), 85.

¹⁵ Kenneth Jackson, *Crabgrass Frontier: The Suburbanization of the United States*. (New York: Oxford University Press, 1985) 216.

¹⁶ Julian H. Zimmerman, "The FHA Story in Summary 1934-1959" (Washington, D.C.: U.S. Government Printing Office).

¹⁷ Ibid.

¹⁸ Alexander von Hoffman, "A Study in Contradictions: The Origins and Legacy of the Housing Act of 1949" *Housing Policy Debate*, Volume 11, Issue 2 (Fannie Mae Foundation, 2000), 310.

The act's initial aim was to clear slums, but successive amendments broadened what cities could do with the money. Although Oklahoma was barely a half-century old, cities and towns across the state began their own urban renewal programs.

Tulsa was the first to form an urban renewal authority, which city commissioners approved in July 1959. Planning started in 1961 for the Seminole Hills Project, the state's first urban renewal project. Instead of bulldozing blocks of homes, the city pursued a program of clearing problem properties while rehabilitating others. In June 1968 the authority declared the ninety-one-acre project complete.¹⁹ Tulsa also initiated a downtown urban renewal program, declaring the heart of the district blighted. Dozens of properties were cleared and replaced with a new office complex anchored by the nine-square-block Williams Center. The planning for this Civic area started in the 1920s, long before the urban renewal program but finally came to fruition and was a success under the urban renewal.²⁰

While Oklahoma City did not have the same issues found in older cities, business leaders were concerned that companies were struggling to acquire land for expansion and merchants were concerned about a lack of downtown parking. In March 1958 a proposal for an Oklahoma City Redevelopment Authority was first unveiled. In 1961 the city council authorized the mayor to appoint five commissioners to an urban renewal authority.²¹

Some smaller towns in Oklahoma also pursued urban renewal. McAlester declared a twenty-two-acre section of downtown blighted, relocated businesses in the mid-1960s, and built a \$2 million office building. McAlester also used urban renewal to replace what city leaders called "slum housing" with a public housing project. In Lawton, voters approved urban renewal to clear land around city hall for redevelopment. Miami utilized urban renewal for a 31.2 acre expansion of Northeastern Oklahoma A&M College that was completed in 1965. In Edmond town leaders used urban renewal to clear land for expansion of what was then known as Central State College (now the University of Central Oklahoma). Using \$3.4 million in federal assistance, Edmond officials acquired more than two hundred parcels of property surrounding the campus to make room for new parking lots and buildings.²²

Oklahoma City's urban renewal program was the most extensive in the state, and by the early 1980s the city had cleared hundreds of structures in three areas; downtown, the two-hundred-acre Oklahoma Health Center, and the John F. Kennedy neighborhood. Because of urban renewal, downtown Oklahoma City had a new skyline that included the Kerr-McGee headquarters, Leadership Square, Liberty Tower, Fidelity Bank Tower, Sheraton Hotel, Mid-America Building, Oklahoma Tower, and Corporate Tower. By the

¹⁹ Steve Lackmeyer, "Urban Renewal," *Encyclopedia of Oklahoma History and Culture*, <http://digital.library.okstate.edu/encyclopedia> (accessed September 8, 2014).

²⁰ Cathy Ambler and Elizabeth Rosin, "Urban Renewal as Urban Redevelopment in the Making of a 'Modern' City" (unpublished paper, 2011).

²¹ Lackmeyer.

²² Lackmeyer.

1970s many Oklahoma City residents criticized the program for tearing down historic structures, including the Criterion Theater and Hales Building. The program was also blamed for forcing retailers, including the hometown favorite John A. Brown's department store, to leave downtown to make way for a shopping mall that was never built.

Social Influences

Economic prosperity, shifting populations, increased family size, desegregation, and technological advancements are all themes of the post WWII era. At the same time, society was fearful as they had collective memories of an economic depression and a looming nuclear presence worldwide.

Economy

Stability and diversity were the themes from 1946 to 1976. They were the boom times of World War II and postwar recovery, the dramatic restructuring of the farm economy in the 1950s, and expanded manufacturing activity in the late 1960s and early 1970s.

There was a continued decline in agriculture's share of jobs, from 33 percent in 1940 to 5 percent in 1970, while manufacturing's share grew from 8 percent to 16 percent. In spite of the trauma of the Great Depression, the number of farms only declined from 204,000 to 180,000 during the 1930s. By far the most significant period of farm consolidation and out-migration from rural areas was the 1950s, when the number of Oklahoma farms declined from 142,000 to 95,000.²³

Although population growth began to accelerate in the 1960s, during the entire forty-year period, from 1930 to 1970, Oklahoma's population expanded only 6.8 percent while the national population grew 65.6 percent.²⁴ State manufacturing employment grew from 37,000 in 1939 to 102,000 in 1944, a level that was not to be achieved again until 1965. Oklahomans took advantage of the wartime boom in employment elsewhere; people left to acquire defense jobs, particularly on the West Coast.

Manufacturing employment had expanded from 65,600 in 1950 to 86,600 in 1960. As a result of investment impulses from a prosperous national economy in the 1960s, significant federal assistance in infrastructure development, and new state/local government economic development incentives, sixty-five thousand new manufacturing jobs were added to the state's economic base between 1960 and 1973. A very important but often overlooked development during the 1950s and 1960s was the widespread adoption of mechanical air conditioning. Oklahoma can see its first 90 degree day as early as May and temperatures stay high until as late as October. The productivity of industrial and commercial establishments was enhanced during the heat

²³ Dianna Everett, "Manufacturing," *Encyclopedia of Oklahoma History and Culture*, <http://digital.library.okstate.edu/encyclopedia> (accessed September 8, 2014).

²⁴ United States Government Printing Office, "www.census.gov" (accessed September 8, 2014)

of the summer, and housing was more comfortable. No longer was a hot summer climate a major barrier to attraction of business from cooler climates.²⁵

During the 1960s federal economic programs emphasized fighting poverty, promoting regional development, and improving education. This put Oklahoma in a favorable position to seek federal support; the state had plenty of poverty and badly needed regional development. The 1970s brought huge boost to Oklahoma revenue based on the inflated prices of crude oil. During the energy boom, many people migrated into the state, and population grew 18.2 percent, rising to a little more than three million residents in the late 1970s.²⁶

Segregation

With the removal of the Five Civilized Tribes to Indian Territory (later to be called Oklahoma) segregation was secured as an issue in the Territory. Their removal included the relocation of their African American slaves. After the slaves gained their freedom following the Civil War, they created cohesive, prosperous farming communities that could support businesses, schools, and churches, eventually forming towns. Entrepreneurs in these communities started every imaginable kind of business, including newspapers, and advertised throughout the South for settlers. Many African Americans migrated to Oklahoma, considering it a kind of "promised land."

The passage of many Jim Crow laws by the Oklahoma Legislature immediately after statehood caused some African Americans to become disillusioned with the infant state. By 1941, cracks developed in the Jim Crow system in Oklahoma when the Franklin D. Roosevelt administration insisted that African Americans be treated equally in all industries holding defense contracts. Oklahoma ranked eighteenth in the scramble to attract such contracts. More meaningful change came after World War II when the U.S. Supreme Court intervened on behalf of the budding Civil Rights movement.

Segregation was ingrained in the policies of the FHA, the agency that guided housing expansion during the period. FHA encouraged developers to consider their market based on income and race. They commonly exhibited bias toward minorities when they refused to underwrite houses in areas where whites were not the majority; this practiced is called redlining. By the late 1950s only 2% of new homes underwritten by FHA were occupied by minority populations.²⁷

FHA encouraged the use of restrictive covenants to enforce homogeneity. The court systems enforced the restrictive covenants until the 1948 Supreme Court decision in *Shelly vs. Kramer*. After this case, restrictive covenants could not be listed in deeds; however, it was controlled based on who was allowed to purchase houses in the area. FHA announced in 1950 that it would no longer insure mortgages on properties subject

²⁵ Everett, "Manufacturing."

²⁶ Ibid.

²⁷ Andrew Weise, *Places of Their Own: African American Suburbanization in the Twentieth Century*, (Chicago: University of Chicago Press, 2004), 101.

to covenants, but racial segregation in housing remained a problem through 1976 and into modern times.

The Civil Rights Act of 1968 had the largest impact on desegregation in housing. The Act is outlined as follows:

- Refusal to sell or rent a dwelling to any person because of his/her race, color, religion or national origin. Discrimination against a person in the terms, conditions or privilege of the sale or rental of a dwelling.
- Advertising the sale or rental of a dwelling indicating preference of discrimination based on race, color, religion or national origin
- Coercing, threatening, intimidating, or interfering with a person's enjoyment or exercise of housing rights based on discriminatory reasons or retaliating against a person or organization that aids or encourages the exercise or enjoyment of fair housing rights.²⁸

During the period of 1946 to 1976, white population in the central city areas begins to decrease and the suburban white population increases. During this same period, non-white population increased in the central city area. The social influences from 1946-1976 impacted the design of subdivisions and postwar housing. Houses had to expand to meet the demands of larger families and more consumer goods, including multiple automobiles.

Community Planning and Development

Postwar development occurred outside existing communities. Contributing factors to subdivision development include the availability of land and new highway systems. These developments had similarly styled houses, setbacks and street patterns and could be just houses or be fully developed communities with all the amenities.

Covenants, Ordinances, Zoning

The FHA, along with city managers and planners, found covenants and zoning to be a way of enhancing the appeal of new residential developments. Zoning laws and ordinances are enforceable by governmental authorities; covenants are obligations tied to the property through the deed recordation process. Local zoning helped to establish a minimum design standard for the layout process of subdivisions. Zoning influenced lot size, street patterns, parks, green spaces and sidewalks.

In 1938, the FHA recommended the following eight protective covenants in new residential developments:

1. Regulation of land use,
2. Placement of buildings using side yard and setback regulations,
3. Prohibition of subdivided lots,
4. Prohibition of multiple dwellings per lot,
5. Design control through approval of qualified committees,
6. Prohibition of nuisances and temporary dwellings,

²⁸ *Civil Rights Act of 1964* ([Pub.L. 88-352](#), 78 [Stat. 241](#), enacted July 2, 1964)

7. Prohibition of occupancy of properties by inharmonious racial groups,
8. Appropriate provisions for enforcement

The restrictions were to be recorded within the plat and have a life span of 25 years minimum. In 1940, they added the following two recommendations: limitation of permitted improvement cost and dwelling floor areas and reservation of public utility easements.²⁹

As suggested earlier, other restrictions in the covenant process utilized by developers regarded race. These restrictive covenants excluded home ownership from African Americans, Mexicans, Asians, Native Americans and Jewish families. These restrictions were used through the early postwar period.³⁰ Unfortunately these practices were accepted by the FHA until the passage of the Civil Rights Act in 1968.

Location, Location, Location... and Design and Features

The FHA, Urban Land Institute (ULI) and the National Association of Home Builders (NAHB) developed guidelines for postwar subdivision development. These guidelines were typically stricter than local zoning. Aside from topography and plant stock, subdivisions created during this time across the country were oddly similar. Curvilinear streets, long blocks, sidewalks with crosswalks, parks and/or open spaces were the norm; gone were the deadends, deep lots and angular patterns. Many times, but not always, subdivisions from this period had a variety of price points and dwelling types.

Based on the specified market, developers geared amenities towards client's needs. Developments geared towards families with children often included reserved lots for schools and playgrounds. Most included community centers and in warmer climates, swimming pools. For those developments with lower incomes, developers leaned towards placement near shopping centers or included one in their development plans; the people living in the more affluent developments were willing to drive to shopping centers.

Streets were designed to be curvilinear so that residents drove more slowly through the development and to discourage through traffic. Most developments had limited access points into them. Sidewalks were provided on at least one side of each street, depending on local ordinances. Rolled curbs were preferred because they were easier and cheaper than square curbs. Curbs were intended to provide a limit of protection for the pedestrian from vehicles.

Most developments from this period utilized signage to indicate a specific development. They could be simple sign posts or elaborate structures. These were located on the periphery of the development. Landscaping was also a key element of the subdivision. Developers planted in the common areas, boulevards and between the sidewalk and street.

²⁹ United States Federal Housing Administration, *Planning Profitable Neighborhoods*, 9, 28, 34

³⁰ Gwendolyn Wright, *Building the Dream: A Social History of Housing in America* (Cambridge, Mass: MIT Press, 1981), 212.

By complying with FHA and ULI development suggestions, developers secured their chances of obtaining FHA funding. Also by following these recommendations, the developers had a greater chance of selling lots/houses because buyers found them appealing.

Materials

When World War II ended, the country turned their thoughts to peacetime building. However, building materials were in short supply, and what supplies did exist were still under strict control. New and non-traditional materials were available in abundance; the building industry wasted no time in finding ways to utilize these resources. The shift from traditional architectural styles to “modern” styles is clearly indicated by these new materials.

Various metals found their way into the buildings of the 1940s and 1950s. Aluminum was exploited by the construction industry following the war. Not only did the aircraft industry continue to use it, but the construction industry found it useful for windows, doors and siding. Weathered steel found its way into the construction industry in the late 1950s. It is a high-strength alloy that is more resistant to corrosion and, when exposed to normal outdoor conditions, develops a protective brown patina. The steel was used for I-beams, channels, window ledges and columns.

Concrete was also readily available and extensively used post-World War II. It was used in a variety of forms including concrete block, pre-cast concrete, reinforced poured concrete, and cast stone. Exterior applications of brick, stucco or wood usually disguised concrete construction in housing. As technology advanced through the 1950s, a wet-method of application developed and started to be applied to buildings: pneumatically applied mixture of concrete mortar.³¹

Simulated masonry imitates the appearance and characteristic of stone. They were made from a variety of materials: cement, minerals, epoxy, and fiberglass. This material could be molded and colored to look like a variety of stones. The use of simulated masonry products reached its peak in the 1950s. Examples of trade names included Perma-Stone and Silverstone.³²

Gypsum block and gypsum tile were made of gypsum and fiber (usually wood). Gypsum was popular as a building material in the first half of the 20th century due to its fire-retardant properties. Although manufactured and used in construction until the 1960s, gypsum blocks and tiles were replaced with the preferred gypsum wallboard.³³ Gypsum board is a panel of gypsum core typically encased in paper. First patented in 1894, it

³¹ Anne T. Sullivan, “Shotcrete” in *Twentieth-Century Building Materials History and Conservation* (New York: McGraw-Hill, 1995), 103-107.

³² Ann Milkovich McKee, “Simulated Masonry” *Twentieth-Century Building Materials History and Conservation* (New York: McGraw-Hill, 1995), 175-179.

³³ Susan Escherich, “Gypsum Block and Tile” in *Twentieth-Century Building Materials History and Conservation* (New York: McGraw-Hill, 1995), 163-167.

became a staple building material in the 1930s. In the 1940s, gypsum board with decorative surfaces and foil-insulating layers was introduced; vinyl-covered gypsum board was introduced in the late 1950s. Since World War II, gypsum board has been used in countless commercial, industrial, and residential buildings (as well as others) for walls and ceilings.³⁴

Fiberboard, or wallboard, is a rigid sheet building material used to insulate or sheath building interior and exterior walls. It is composed primarily of fiber (such as wood, grasses, straw, jute, flax, hemp, sawdust, bark, and newspaper) and is manufactured in various densities and thicknesses. Fiberboard can be either a consistent composition or laminated. It is classified in three categories: insulation board, medium density fiberboard, and hardboard. War-related industries were a major consumer of wallboard products in the early 1940s; it was used for walls on Quonset huts. After the war, the construction industry used fiberboard in widespread application and by 1957, the number of patents relating to fiberboard exceeded 600.³⁵

Plywood, also used widely in the 1940s and 1950s, is a composition of layered hardwood or softwood veneers bonded together with an adhesive. It is resistant to splitting, can be molded into compound curves, has dimensional stability and a high strength-to-weight ratio. Plywood was used largely for sheathing and subflooring. Finished hardwood panels were introduced in the mid-1940s and widely used by the 1950s.³⁶

Glue laminated timber was first used in American buildings in the 1930s. It consists of wood laminations glued together with the grains of the laminations longitudinally parallel. Douglas fir and Southern pine are common species used for these laminates. During the war, the military used glue laminated timber for trusses and arches in drill halls, storage facilities, aircraft hangers, and factories. After the war, churches became the largest market for the material, although they were also used in schools, supermarkets, warehouses, factories, auditoriums, and hangars.³⁷ Laminates were not confined to wood. Decorative plastic laminates consist of “layers of kraft paper impregnated with a synthetic resin and cured under heat and pressure to form an insoluble, homogenous piece.”³⁸ Decorative plastic laminates were first introduced in 1907 by Leo Baekeland, who established the General Bakelite Company. In 1913, two engineers from Westinghouse left that company to form the Formica Insulation Company, after developing a laminate substitute for mica, an electric insulator. After

³⁴ Kimberly Konrad and Michael Tomlan, “Gypsum Board” in *Twentieth-Century Building Materials History and Conservation* (New York: McGraw-Hill, 1995), 269-271.

³⁵ Carol Gould, Kimberly Konrad, Kathleen Milley and Rebecca Gallagher, “Fiberboard” in *Twentieth-Century Building Materials History and Conservation* (New York: McGraw-Hill, 1995), 120-125.

³⁶ Thomas Jester, “Plywood” in *Twentieth-Century Building Materials History and Conservation* (New York: McGraw-Hill, 1995), 132-135.

³⁷ Andrew McNall and David Fischetti, “Glue Laminated Timber” in *Twentieth-Century Building Materials History and Conservation* (New York: McGraw-Hill, 1995), 137-139.

³⁸ Anthony Walker, Kimberly Konrad and Nicole Stull, “Decorative Plastic Laminates” in *Twentieth-Century Building Materials History and Conservation* (New York: McGraw-Hill, 1995), 127-131.

World War II, the application of Formica and similar competitive products were widely used in cinemas, diners, and kitchens.³⁹

Fiber reinforced plastic (FRP) includes a wide range of polymers (such as acrylics, vinyls, and polyesters) combined with reinforcing fibers (predominately asbestos, carbon fibers and glass fibers). The most common combination used for building construction was glass fiber with unsaturated polyester resins, often colored and with stabilizers to produce a rigid or semi-rigid material. FRPs were used prior to World War II, but the process of producing them required great heat and pressure for curing the glass fibers. In 1941, the cold low-pressure method of molding resin polyesters was introduced making the manufacture of the product most cost-effective. In the late 1940s, corrugated translucent sheets were introduced and Kalwall, which was developed in the 1950s, became a popular building material for wall panels.⁴⁰

Vinyl siding was first introduced as wall cladding in the late 1950s to early 1960s by a manufacturing plant in Columbus, Ohio. Manufactured primarily with polyvinyl chloride (PVC), vinyl siding's properties include impact resistance, rigidity, and strength. Vinyl siding was initially plagued by manufacturing difficulties that resulted in an inconsistent product. However, by the early 1970s the manufacturing process had evolved to improve the product's speed of production, impact resistance, and range of colors. The manufacturing process is accomplished by co-extrusion, whereby two layers of PVC are laid down in a continuous extrusion process. The weight of vinyl siding is predominately PVC resin (80 percent), with the remaining 20 percent composed of ingredients that establish color, opacity, gloss, impact resistance, flexibility, and durability. Although vinyl siding was introduced primarily as a remodeling wall cladding material, its use grew steadily over the next decades, and it is now the most commonly used siding product in the United States, as it surpassed aluminum siding in the early 1980s.⁴¹

Porcelain enamel is basically a thin coating of glass fused to metal at temperatures above 800 degrees; iron, steel, aluminum and stainless steel are the most common substrates for architectural enamels. The first uses of porcelain enamel in buildings were in the 1890s; it was not used widely until the 1920s when it was used for bathroom fixtures and appliances. In the 1930s it was adapted for use on storefronts, in restaurants, in theaters, and on gas stations - uses that carried over into the late 1940s. After the war, new technology enabled thinner coatings and its application to lighter weight metals, such as aluminum, and it became an accepted material for spandrel panels on the new curtain wall buildings. An interesting application was its use as the exterior and interior wall panels of the Lustron houses, built in the late 1940s.⁴²

³⁹ Ibid, 127-129.

⁴⁰ Ibid, 142.

⁴¹ Vinyl Siding Institute, "History," *American Vinyl Siding Institute*, <http://www.vinylsiding.org/aboutsiding/history/index.asp> (accessed 10 March 2011); "Brief History of Aluminum and Vinyl Siding," *House Home Repair*, <http://www.househomerepair.com> (accessed 1 April 2011)

⁴² Jester, 255-259

Windows in buildings have long been important features, but after World War II, large windows became walls of windows as Modern architecture evolved. Plate glass is a transparent glass that is thicker and stronger than typical window glass and has little or no distortion. Until the late 1950s, it was produced by casting and rolling large sheets that were ground and polished; the introduction of the float process in 1959 eliminated the need to grind and polish. The availability of large sheets made plate glass ideal for windows in commercial buildings, as well as others requiring large expanses of glass. By the 1950s, plate glass could be insulated and tempered.⁴³

Glass block, also known as glass brick or hollow glass tile, was used in the 1940s and 1950s for exterior windows and partition walls in factories, offices, schools, and apartments. The blocks typically were used as masonry units and they came in a variety of sizes and patterns. In the late 1950s, ceramic-coated glass blocks were available in blue, green, yellow, and coral.⁴⁴

Structural glass usually refers to colored opaque glass slabs used as decorative building cladding. It is glass fused at high temperatures, rolled into slab form, slowly annealed, and mechanically polished; it is resistant to abrasion and warping. It was sold in a variety of colors and widely used in the 1920s and 1930s on storefronts, in building lobbies, movie theaters, restaurants, gas stations, auto dealerships, and in residential kitchens and bathrooms. It was a popular material of the Art Deco and Art Moderne styles. Its use was carried into the 1940s as a material that worked well for Modern architecture, but by the early 1950s the market for structural glass was diminished as tastes changed and other materials (such as porcelain enamel, see above) were favored.⁴⁵

Spandrel glass was a product introduced in the 1950s. It was widely used for office buildings, storefronts, shopping centers, schools, motels, and hotels. Initially it referred to ceramic-coated plate glass used for spandrels, but today the term is broadly used to include any glass used for spandrels. The spandrel glass usually covered the space above and below the horizontal strip windows where knee walls and spandrel beams are located.⁴⁶

The postwar period was an exciting time in construction in America. Many new and nontraditional materials were introduced and, in some cases, completely replaced earlier materials. But as the traditional building materials industries recovered after the war, they too were used in abundance during the building boom. Millions of houses were site-built wood-framed buildings clad with wood siding and thousands of buildings were faced with brick and stone.

⁴³ Konrad, 182-185

⁴⁴ Dietrich Neuman, Jerry Stockbridge, and Bruce Kaskel, "Glass Block" in *Twentieth-Century Building Materials History and Conservation* (New York: McGraw-Hill, 1995), 194-198.

⁴⁵ Carol Dyson, "Structural Glass" in *Twentieth-Century Building Materials History and Conservation* (New York: McGraw-Hill, 1995), 201-204.

⁴⁶ Robert McKinley, "Spandrel Glass" in *Twentieth-Century Building Materials History and Conservation* (New York: McGraw-Hill, 1995), 206-208.

Site Development, Architecture and Landscaping

The majority of homes constructed during the 1940s through 1970s displayed the popular architectural forms and styles of the period, resulting in a similar appearance regardless of their location. This uniformity was a result of close adherence to FHA guidelines by local and regional builders, the ready availability of standardized building materials, and the influence of plan books and nationally distributed magazines that promoted the architectural styles of the era. As a result, with the exception of regional variations in materials and setting, Minimal Traditional, Ranch, and Split-level homes built across the country looked alike.

Across the U.S., including Oklahoma, companies and builders developed plans for the “small house” during the 1940s and 1950s, following the FHA requirements. To make up for the compact size the following factors were taken into consideration: minimizing the use of interior partitions to increase the room size; adding the appearance of height through the use of floor-length windows, skylights, and open ceilings; minimizing hall space by incorporating it into other rooms; utilizing built-ins and storage walls; grouping rooms by function; isolating the private “quiet” areas of home; and planning the circulation and zoning to include adequate receiving space at the main entrance.⁴⁷

The FHA house types could be placed on lots as narrow as 35 feet, although 40 feet was the preferred minimum width. Both the FHA and ULI advised developers to consider lot conditions, vistas, sunlight, and prevailing breezes when siting homes. The kitchen was to be protected from the afternoon sun, if possible, and the living room and bedrooms were to have sunlight during part of the day. Garage placement was recommended to be near the front of the yard and attached to the house by a shared wall or covered walkway. This placement provided maximum space in the backyard and shortened the driveway, thereby reducing the cost.⁴⁸

During the postwar baby boom, as the birth rate increased and average family size grew, the small size of a typical house was perceived as a limitation, and the demand for a larger house emerged. The Ranch house, with its increased square footage and more bedrooms and baths, was seen as an answer for growing families in a time of economic prosperity. The massing of the Ranch expanded to create a one-story rambling floor plan occupying the larger suburban lots that were predominant in the 1950s and 1960s. The Ranch form and other modern and spacious styles of housing quickly came to dominate postwar architecture beginning in the mid-1950s. (see table)

⁴⁷ Norman Cherner, *Fabricating Houses From Component Parts* (New York: Reinhold Publishing Corporation, 1957), 17-18.

⁴⁸ United States Federal Housing Administration, *Principles of Planning Small Houses* (1936), 34-35.

Average House Size by Year⁴⁹

Year	Average square footage
1940	1,177
1950	983
1954	1,140
1955	1,170
1956	1,230
1970	1,400
1975	1,645

With an increase in square footage came an increased number of bedrooms and bathrooms. In 1950 only 34 percent of homes had three bedrooms; however, this number had increased to 70 percent by 1956. The design of postwar homes specifically responded to the needs of the young family. Although Ranch houses of the 1950s featured less square footage than the average 1920s house, their one-story layout was well suited to women who envisioned fewer trips up and down stairs and were attracted by the advertised modern conveniences.⁵⁰ Also key to the postwar home design was an open floor plan based on zoned planning that granted the housewife the visibility required to watch her children play in the living room from her prescribed location in the kitchen or dining area. Similarly, large picture windows and sliding glass doors provided both visual and physical access to the backyard and the patios that became outdoor extensions of indoor living space.

One of the more noticeable changes to residential design in the postwar era is the removal of the front porch. Homebuyers still wanted porches, but they preferred them at the back where they had increased privacy. As a result, the traditional porch shifted from its prominent location on the front to the rear of the house, where it became the patio.⁵¹ Builders were agreeable to eliminating the porch because they were an added construction expense. The popular Cape Cod, Ranch, and Split-level homes of the postwar era did not lend themselves to porch additions and most “outdoor living” improvements were completed on the patio.

Interior Spaces

Interior layout changed with the introduction of the Ranch house, which utilized a three-zone layout that provided for private area, informal, and formal living areas. The bedroom area did not change much from its architectural predecessors and was removed from the public areas by a hallway. The more public rooms, including the living room, were located at the front of the house, with the less formal rooms situated at the rear, adjacent to the backyard and rear patio, which served as an extension of the interior living space. Informal living areas included the garage, the outdoor yard, and patio.

⁴⁹ United States Department of Labor, *New Housing and Its Materials*, 1940-56, 27; U.S. Census Bureau, <http://www.census.gov/const/C25Ann/sfttotalmedavgsgft.pdf> (accessed 4 April 2011).

⁵⁰ Wright, 251.

⁵¹ Community Builders Council of the Urban Land Institute, *The Community Builders Handbook* (1948), 88.

The number of rooms in the postwar house decreased with the open planning concept, which resulted in reducing the number of interior walls to allow rooms to serve multiple functions and small homes to feel more spacious. The formal entry way was often eliminated in an attempt to add more living space to the floor plan, and in many cases, the living room became the primary point of entrance. Decorative shelving, planters, or interior screens provided a separation between the entrance and the overall living space.⁵²

The design and layout of postwar kitchens were believed to be the most important factor in the sale of a house. With the kitchen more than any other room, women were able to influence the purchase of a home. An efficient layout, ample light, and modern amenities and appliances were critical. Overall, the planning and design took into consideration the three main kitchen activities: food storage and preparation, cooking and serving, and cleaning and dish storage. Although floor plans differed, the layout of components was important. It was understood that storage and counter space were essential, the sink should be placed between the refrigerator and the range, the refrigerator and pantry should be near the exterior door for easier unloading, and the range should be nearer to the dining room for easier serving.

The formal dining room, a staple of the prewar house, was displaced in some postwar homes. The open planning concept and the general desire of housewives to feel less isolated in the kitchen often resulted in a combined living-kitchen space that included space for a dining table and chairs. One reason for the decline in dining rooms was the reevaluation of interior rooms and their usage in relation to allocating building costs. As dining rooms were used less frequently with the more casual approach to day-to-day living, they were deemed unnecessary by many builders and home buyers.⁵³ Where the dining room was still in keeping with the open planning concept, it was no longer a formal space and served other functions, such as a secondary living room.

Perhaps one of the most popular interior spaces to come out of the postwar era is the family room, which is still a popular feature in twenty-first-century homes. Also known as the recreation (or “rec”) room, den, or game room, the family room developed as middle-class families embraced the relaxed home atmosphere and family togetherness. Introduced in the 1950s, it became standard by the mid-1960s; an NAHB poll found that 70 percent of homes constructed in 1965 included a family room (or rec room).⁵⁴ In the 1950s, during its early period of use and “experimentation,” the family room’s relation to other established living areas varied from house to house. The early family rooms were multi-functional and served as a catch-all for family leisure and work activities. However, its function changed by the 1960s to focus more on leisure, and its location in the home became standardized. It moved from its early position next to the formal living room to a

⁵² James Jacobs, “You Can’t Dream Yourself a House,” *The Evolving Postwar Dwelling and Its Preeminent Position within a Renewed Consumer World 1945-1970*, 130-135.

⁵³ Kate Rogers, *The Modern House, USA: Its Design and Decoration* (New York: Harper and Brothers, 1962), 147.

⁵⁴ James Jacobs, “Social and Spatial Changes in the Postwar Family Room,” 70.

third zone of the house that was more isolated, typically separated from the living room by the kitchen or located in the basement.⁵⁵ When discussing the difference between the family room and living room in a 1964 study, a woman from Boston, Massachusetts, mentioned that she liked “an active family room, and that is where the TV is” as compared to a quiet living room for reading, knitting, and drinks.

Architects

During the postwar construction boom, individuals who wanted to construct a house outside a planned subdivision had the option of using an already prepared plan or hiring an architect to develop plans. They would then work with the architect and contractor during the actual construction process. In much the same way, developers and builders could rely on stock plans or hire an architect. Although the FHA provided minimum design standards and examples of acceptable floor plans, they did not intend to create stock plans for general use. Rather, they encouraged builders to retain an architect to develop plans that were appropriate for the specific location and climate.⁵⁶ *Popular Mechanics* magazine and other publications of the period also urged prospective home builders to work with a professional architect and experienced contractor to complete the job.⁵⁷

Although the use of architects was highly encouraged, it appears that only a small number of homes were built with architect-designed plans. According to FHA estimates, no more than 5 to 10 percent of privately-built, single-family homes were designed or supervised by architects in 1949. However, it appears that their role increased in the 1950s. At that time, a survey of NAHB members revealed that 27 percent had hired a registered architect for a fee while 46 percent had hired a design professional. Only 7.2 percent of builders had an architect on staff, and 6 percent used a plan service.⁵⁸ Few merchant builders retained architects to draw up plans. Rather, they typically relied on draftsmen or building designers whose role in the process was to get the builder's concepts into a form suitable for bidding and construction. These designers were often familiar with the FHA requirements, site conditions, and local code. If builders did not have in-house draftsmen or designers, they could purchase plans from a plan service or consult plan books, often written by architects.

In 1949 the NAHB and the AIA formed a joint committee to encourage collaboration between architects and builders. It came to be referred to as the AIA Committee on the Home-Building Industry. Their goal was to “promote utilization of architectural services by merchant builders, and to collaborate with associations in the home-building field.”⁵⁹ One of the first activities was a national design competition, co-sponsored by the NAHB and *Architectural Forum* magazine, with additional support from supply manufacturers.

⁵⁵ Jacobs, 71-78.

⁵⁶ United States Federal Housing Administration, *Principles of Planning Small Houses* (1936), 2.

⁵⁷ Allan Carpenter, “How to Plan, Build, and Pay for Your Own Home: A Primer for Home Builders,” *Popular Mechanics* (1950), 171.

⁵⁸ Christopher Martin, *Tract House Modern: A Study of Housing Design and Consumption in the Washington Suburbs, 1946-1960* (PhD Dissertation, Columbia College of Arts and Sciences, George Washington University, 2000), 113.

⁵⁹ Martin, 123-124.

The purpose of the competition was to “bring better design to the small house, including better use of space and materials.” Entrants were to design a three-bedroom house no larger than 1,000 square feet that met FHA and VA requirements and conformed to a 60-by-100-foot lot. Winning plans were published in national builder magazines, including *American Builder*, *Practical Builder*, and *Builder*.⁶⁰ Although the AIA Committee on the Home-Building Industry worked to foster collaboration efforts, progress nationwide was slow. In 1956 *House & Home* magazine reported that there were less than 100 architectural firms working directly with speculative builders. Those architects that were working with builders tended to be modernists who were relatively young when they began the collaborative efforts. This disparity between younger modernists and older established architects may have been related to finances, as builders preferred to work with less experienced architects with lower fees than more experienced architects with higher fees.

Conclusion

Housing production increased significantly after World War II, affecting most cities and towns throughout the country, including those in Oklahoma. The period from 1946-1976 marks the movement to “modern” times as new technologies and innovations changed how Oklahomans lived. New houses were built with modern conveniences such as appliances and televisions; this necessitated new industrial areas to manufacture consumer goods which necessitated housing for the workers. New shopping centers with retail were constructed to meet the need of Oklahomans with more disposable income. New schools were built to educate the growing population. New churches were built in growing communities. “New” was good; new buildings met the needs of the new America.

New construction during this period shifted from traditional styles to Modern architecture, a specific trend of leaving the traditions behind. Designs were clean and straight forward with little applied ornamentation. Modern architecture was reflected in Oklahoma thanks to many practicing architects educated at the University of Oklahoma; Bruce Goff, Herb Greene, Blaine Imel, and Robert Roloff to name a few. Builders and contractors who developed new neighborhoods and built thousands of houses in Oklahoma also used Modern approaches of the period which favored Minimal and Ranch style houses.

The Oklahoma Landmark Inventory, the database of historic resources in Oklahoma maintained by the Oklahoma State Historic Preservation Office, has many resources from this period in its collection. However, thousands of these houses were constructed in the state between 1946 and 1976. These resources are just now starting to be recognized for their importance in the state’s architectural and developmental history. Future study of these resources will aid in the identification of those that are worthy of protection as valuable symbols of the postwar period of Oklahoma optimism and affluence when the state arrived in the “modern” times.

⁶⁰ Martin, 126.

DETERMINING NATIONAL REGISTER ELIGIBILITY

Properties documented through comprehensive survey or Section 106 action should be evaluated to determine if they meet the National Register Criteria. This involves more in-depth field review and research; this typically results in a recommendation regarding the National Register eligibility of an individual property or grouping of related resources as a potential historic district. The following provides guidance for evaluating postwar residences, neighborhoods, and subdivisions under National Register Criteria A and C. These are the criteria most likely to be applied to postwar properties.

The evaluation methodology is based on the following National Register Bulletins:

- *Historic Residential Suburbs: Guidelines for Evaluation and Documentation for the National Register of Historic Places*
- *How to Apply the National Register Criteria of Evaluation*
- *How to Complete the National Register Registration Form*
- *How to Complete the National Register Multiple Property Documentation Form*

Defining significance under National Register Criteria A and C requires a close analysis of information about the development and design of a particular neighborhood and an understanding of local, metropolitan, and national trends of suburbanization (see Context). The property(ies) is viewed in relationship to the broad patterns of suburbanization that shaped a community, state, or the nation and to determine whether the area under study meets one or more of the National Register Criteria for Evaluation. This is also true for individual properties.

How one determines a period of significance for postwar properties is no different than those that pre-date World War II. Please refer to the National Register Bulletin *How to Complete the National Register Registration Form* for guidance on how to choose the period of significance.

Evaluation Methodology:

Historic Districts

The evaluation of a neighborhood as a potential historic district builds upon the information collected during survey and research efforts. This information is analyzed against the National Register Criteria, resulting in an eligibility recommendation. If the district conveys significance under the National Register Criteria and retains historic integrity, it is considered eligible for listing in the National Register.

Buildings within a district must be classified as contributing and noncontributing, which assists with the assessment of integrity. A contributing resource within a district, be it buildings, structures, objects, and/or sites, is one that is built within the period of significance and possess historic integrity. Resources built or substantially altered before or after the period of significance are classified as noncontributing.

Contributing properties should generally retain their overall form and massing and not detract from the sense of time and place. The majority of properties in the district should retain a degree of integrity. Coordination with the OK/SHPO is recommended to identify the level of documentation necessary to detail this status. In many cases, the documentation includes a listing of properties within the potential district by address along with their contributing or noncontributing status.

A statement should be prepared that explains the evaluation process and eligibility recommendation; it is included in the overall survey documentation. The eligibility statement for a district should include the following basic information:

- National Register area of significance (e.g. Criterion A: Community Planning and Development)
- National Register level of significance: local, state, or national
- Period of significance
- Narrative statement of significance, including a discussion that conveys the importance of the district at the appropriate level and discussion of comparison districts, if necessary
- List of properties and contributing or noncontributing status
- Narrative description of historic boundary, including justification
- Map delineating historic district boundary

Individual Properties

As with historic districts, the evaluation of an individual resource builds upon prior information from the survey and research. The information is analyzed against the National Register Criteria and results in an eligibility recommendation. The resource is eligible for listing if it conveys significance under the National Register Criteria and retains historic integrity.

A statement should be prepared that explains the evaluation process and eligibility recommendation; it is included in the overall survey documentation. The eligibility statement for an individual resource should include the following:

- National Register area of significance (e.g., Criterion A: Community Planning and Development)
- National Register level of significance: local, state, or national;
- Period of significance
- Narrative statement of significance, including a historic context that conveys the importance of the resource at the local or regional level, and discussion of comparison properties, if necessary
- Narrative description of historic boundary, including justification
- Map delineating property boundary

National Register Criterion A

Criterion A relates to the association with events or trends that have made a significant contribution to the broad historical patterns of the country, state, or region. There are many influences on national trends in housing. These include government legislation and loan programs, social history, and community planning and development, all of which may relate to the development of a neighborhood, subdivision, or individual property during the 1946-1976 period.

In accordance with the Historic Residential Suburbs in the United States, 1830-1960 Multiple Property Document (*Historic Residential Suburbs MPD*), Criterion A applies when:

- A neighborhood reflects an important trend in the development and growth of a locality or metropolitan area
- A 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
- A neighborhood is associated with the heritage of social, economic, racial, or ethnic groups important in history or a locality or metropolitan area
- A 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

Although the *Historic Residential Suburbs MPD* only discusses Criterion A in relation to suburbs constructed through 1960, the same criteria can readily be applied to a more defined and expanded period of postwar housing development, from 1946 to 1976, for neighborhoods, subdivisions, and individual residences.

To be eligible for the National Register under Criterion A, a direct and significant association with one or more National Register areas of significance should be established for an individual residence or a grouping of residences (neighborhood or subdivision). Postwar housing is a significant national trend in housing; however, association with this time period is not sufficient to meet National Register Criteria. For example, the fact that a house or neighborhood is associated with the postwar period because it was constructed following World War II does not provide enough contextual information to evaluate its relative importance, even at the local level, or to demonstrate significance under Criterion A. The building or neighborhood should demonstrate a particular and significant aspect of the postwar housing themes as identified in the historic context to be eligible for the National Register. The history developed for an area will assist in identifying the important themes and events that may be associated with a neighborhood or individual residence.

In addition, the house or neighborhood should be differentiated from other similar examples. Not all postwar houses and neighborhoods can be significant examples of the response to housing needs following World War II. It should be understood and demonstrated that an individual residence or district is an important example representing the area of significance if there are similar properties or groups in the area.

To identify relative importance among similar properties, refer to the historic context and consider whether the neighborhood or property is:

- One of the firsts of its type
- Influenced other property development
- A subdivision that introduced a new concept
- Distinctive from others and why

A number of National Register areas of significance under Criterion A, as identified in the National Register Bulletins, may relate to residential postwar housing. Eligibility is derived from a demonstrated significance at the local, state, or national level, to one of the identified National Register areas of significance. It is common that more than one area of significance related to Criterion A may apply to a neighborhood. It is expected that neighborhoods or groups of houses are more likely than individual residences to be found eligible applying Criterion A, as groups of houses are more likely to demonstrate the areas of significance. Individual residences may be eligible under Criterion A, but it is often more challenging for a single property to demonstrate a trend or pattern of association. To be eligible, a property should demonstrate the area of significance and also retain sufficient integrity to represent the area of significance. Areas of significance most likely found to be applicable to postwar housing are outlined in the following sections.

a. Area of Significance: Community Planning and Development

Community Planning and Development is defined in the National Register Bulletins as: the design or development of the physical structure of communities. It is further defined in the *Historic Residential Suburbs MPD* as an area of significance that:

. . . 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.

The area of significance under Criterion A includes the influence of developers or municipalities on subdivision planning and land use, such as the developer's initiation of an important trend that led to the growth of a specified location or suburban area. It should be noted that Community Planning and Development is also an area of significance under Criterion C, which applies to areas reflecting important patterns of physical development, land division, or land use. Under Criterion C, it is reflected more in the design aspect and physical layout of a development.

Community Planning and Development as an area of significance is often related with another area of significance: Social History. Both areas of significance relate to neighborhood planning principles that influence residential growth and human existence on the landscape. These two areas of significance are most frequently applied to

residential neighborhoods and subdivisions of the postwar period and cited in National Register Nominations.

When considering the application of Criterion A: Community Planning and Development, the following questions may assist in determining if a property possesses significance related to this theme:

- Is this subdivision or residence an innovative or trendsetting response to community planning?
- Did an important local or metropolitan trend in subdivision development originate in the subdivision?
- Was the subdivision associated with a particular industry during its development or was it associated with a significant local event?

b. Area of Significance: Social History

Social History is defined in the National Register Bulletin as the history of efforts to promote the welfare of society; the history of society; and the lifeways of its social groups. It is also defined in the *Historic Residential Suburbs MPD* as an area of significance that recognizes the contribution 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. This area of significance may also demonstrate trends in choices of residential location and demographics. As an area of significance, Social History often overlaps with another area of significance: Community Planning and Development.

When considering the application of Criterion A: Social History, the following questions may assist in determining if a property possesses significance related to this theme:

- Does the subdivision or neighborhood demonstrate the accomplishment of the American dream of homeownership for a distinct group of individuals?
- Does the subdivision have a model or housing type that is innovative in improving living conditions?
- Was the neighborhood associated with important local events that have an important role in suburban growth and development?

c. Area of Significance: Ethnic Heritage

Ethnic Heritage is defined in the National Register Bulletins as the history of persons having a common ethnic or racial identity. It is also defined in the *Historic Residential Suburbs MPD* as an area of significance that recognizes the significant association of a historic neighborhood with a particular ethnic or racial group. The significance may be seen in trends in racial, ethnic, or religious segregation through restrictive covenants, sales, or financing.

When considering the application of Criterion A: Ethnic Heritage, consider the following question to determine if a property possesses significance related to this theme:

- Does the neighborhood, subdivision, or residence demonstrate an association with an ethnic group and demonstrate a response to segregation, restrictive covenants, or other issues with financing or home ownership?

d. Additional Areas of Significance

Other areas of significance may apply to postwar residential housing on a more limited basis. Again, the specific history must support significance in order for a property to be considered eligible for listing in the National Register. These areas include:

- Transportation—housing related to important advances in transportation
- Government—housing related to government financing, adherence to government standards, or the institution of zoning by local governments
- Economics—postwar building boom affected social history and economics
- Education or Medicine—housing built to accommodate an educational institution or medical facilities
- Industry—housing built to house workers or developed in response to a housing need caused by industry
- Natural Resources—housing that relates to available water and relationship to prior land use (such as the conversion of a farm/ranch to a subdivision)

National Register Criterion C

As defined in the National Register Bulletins, Criterion C relates to the physical design or construction of a property. For a property or district to be considered eligible for the National Register under Criterion C, it must meet one of the following criteria:

- Embody distinctive characteristics of a type, period, or method of construction
- Represent the work of a master
- Possess high artistic value
- Represent a significant and distinguishable entity whose components may lack individual distinction (historic districts)

As outlined in the National Register Bulletins, distinctive characteristics are the physical features or traits that commonly recur in individual types, periods, or methods of construction. To be eligible, a property must clearly contain enough of those characteristics to be considered a true representative of a particular type, period, or method of construction. It is not necessary for properties to represent high-style forms or the work of noted architects. Rather, postwar properties may be eligible as intact examples of postwar architectural styles and forms if they meet the criteria and integrity requirements.

Criterion C is the most likely to be applied to individual postwar residential resources and subdivisions. Although architect-designed and high-style examples of postwar residences may qualify as the work of a master or for high artistic value, the majority of traditional and vernacular postwar residential properties will be significant for embodying distinctive characteristics of a type, period, or method of construction. Groups of postwar properties that lack individual distinction yet represent a significant and distinguishable entity may be eligible as a historic district.

In accordance with the *Historic Residential Suburbs MPD*, Criterion C applies when:

- A collection of residential architecture is an important example of a distinctive period of construction, method of construction, or the work of more notable architects
- A suburb represents the 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
- A subdivision embodies high artistic values through its overall plan or the design of the entranceways, streets, homes, and community spaces

Although the *Historic Residential Suburbs MPD* only discusses the application of Criterion C to suburbs constructed through 1960, the same can readily be applied to a more defined and expanded period of housing from 1946 to 1976.

More than one area of significance may relate to individual properties or historic districts. For example, a subdivision that resulted from the collaborative efforts of real estate developers, architects, and landscape architects may have significance in the areas of Community Planning and Development, Architecture, and Landscape Architecture. In addition, individual properties and historic districts may also meet National Register Criterion A areas of significance. Three National Register areas of significance under Criterion C, as identified in the National Register Bulletins, typically relate to residential postwar housing: Architecture, Community Planning and Development, and Landscape Architecture.

To be eligible, a property must serve as an important example within the context and retain sufficient integrity to represent the area of significance. Due to the pervasiveness of postwar residential architecture, properties will typically be significant at the local level, although some properties may also have significance at the state level. Eligible properties should retain historic integrity, character defining features, and architectural elements that characterize the style or form.

Not all intact postwar residences are significant either individually or collectively as examples of architectural forms and styles from the period. Keep in mind also that within a specific geographic area, more than one postwar residence or district may be eligible for the same area of significance. It should be understood and demonstrated that an individual residence or district is an intact and distinguishable representation of the historic context and period of significance.

The three areas of significance associated with Criterion C most likely to be found applicable to postwar housing are outlined below, along with specific examples of properties that have been listed in or determined eligible for the National Register.

a. Area of Significance: Architecture

Architecture is defined in the National Register Bulletin as the practical art of designing and constructing buildings and structures to serve human needs. Architecture applies when significant qualities are embodied in the design, style, or method of construction of buildings and structures.

To be individually eligible, postwar resources should embody a distinctive characteristic of a type, period, or method of construction. To demonstrate significance, individual properties should retain enough distinct characteristics to be considered a true representative of a particular type, period, or method of construction. Properties may be significant as an example of the popular architectural styles or forms from the postwar period if they display key character-defining features and if they are important within the context of the community or region. A comparison with similar postwar properties within the community is necessary to determine if the individual property is a distinguishable example of the type, period, or method of construction. Early postwar properties that influenced residential architecture within a community or region and properties that represent the innovative use of designs or materials from this period of residential development may also meet Criterion C: Architecture.

Several prefabricated housing companies experienced great success in the postwar era, with thousands of their homes erected across the country. Some of these companies relied on standardized construction materials (e.g., dimensional lumber) that were developed and widely accepted prior to the postwar period.

One prefabricated company was innovative, yet less proliferate with their standardization methods, and had only a limited number of homes produced. The Lustron Corporation erected approximately 2,500 houses nationwide during the brief time the company was in operation. A Lustron home may be significant for representing the relatively rare and innovative system of panelized prefabricated housing using steel framing and porcelain enamel coated steel panels employed by the company during the postwar era. Currently, there are three Lustron houses in Oklahoma listed in the National Register of Historic Places. Individual examples of prefabricated housing from local or regional companies may also be considered significant within the local context. Likewise, an individual house that was used to test the development of a prefabricated housing system in the postwar period may represent innovations. Collections of prefabricated houses that are significant within their context should be considered as potential historic districts.

Collections of properties that represent “a significant and distinguishable entity whose components may lack individual distinction” may also meet Criterion C: Architecture as a historic district. As is the case with an individual property, groups of properties must

stand out amongst other examples within the community or region to be considered eligible. Due to the large number of postwar subdivisions and neighborhoods found in many communities nationwide, they should be compared with other subdivisions and neighborhoods to determine if they are important within the context of postwar residential architecture in the community or region. The history should identify local development patterns, which will provide guidance for determining significance.

It is unlikely that vernacular or traditional postwar residences will meet Criterion C: Architecture as the work of a master or for possessing high artistic value. However, individual residences or subdivisions may have significance as the work of a noted architect who is significant or influential in the community or region. As outlined in the National Register Bulletins, to meet Criterion C the property should reflect a particular phase or aspect of an architect's work or a particular idea in their theme or craft; association with a recognized architect is not enough. Research efforts should identify if individual properties or subdivisions are associated with significant local architects and if the properties are important examples of their work.

b. Area of Significance: Community Planning and Development

As previously discussed in the section on Criterion A, Community Planning and Development is defined in the National Register Bulletins as the design or development of the physical structure of communities. It is important to note that Community Planning and Development is also an area of significance under Criterion C. As outlined in the *Historic Residential Suburbs MPD*, Community Planning and Development may apply to residential historic suburbs under Criterion C that reflect important patterns of physical development, land division, or land use. Postwar properties that meet Criterion C: Community Planning and Development will likely be grouped within subdivisions and neighborhoods that are able to convey patterns of land use and development and are better evaluated as districts. It differs from Criterion A, which emphasizes the trends in development and subdivision planning, as opposed to the physical features.

When considering the application of Criterion C: Community Planning and Development, the following questions may assist in determining if a property or district possesses significance related to this theme.

- Does it convey historic design principles related to community development?
- Does the plan reflect important advances, established principles, or popular trends in community planning?
- Did it introduce patterns of subdivision design, housing, financing, or building practices that became influential in the local community or regional area?

c. Area of Significance: Landscape Architecture

Landscape Architecture is defined in the National Register Bulletins as the practical art of designing or arranging the land for human use and enjoyment. Further, in the *Historic Residential Suburbs* Bulletin, it 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. Neighborhoods may have significance for Landscape Architecture if they have special features that reflect design of the period, including tree plantings, street lighting, landscaped yards and open spaces, scenic vistas, roadways and entrances, or conservation of natural features. Landscape Architecture significance most often will apply to historic suburbs and districts, but it may also apply to individual postwar residences that retain a designed landscape from the historic period. Individual properties and subdivisions may also have significance for an association with a noted landscape architect who is significant or influential in the community or region.

The property should reflect a particular phase or aspect of a landscape architect's work or a particular idea in their theme or craft; association with a recognized landscape architect is not enough. Research efforts and the historic context should identify if an individual property or subdivision is associated with a significant local landscape architect and if it best represents that architect's work.

Integrity Requirements

After determining if an individual property or historic district has significance under the National Register Criteria, it is necessary to assess whether the property or district retains sufficient historic integrity to be considered eligible for listing. According to the National Register Bulletin *How to Apply the National Register Criteria for Evaluation* historic integrity is the ability of a property to convey its significance. The evaluation of integrity can be subjective, but it should be grounded in an understanding of a property or district's physical features and how such features relate to significance as established through the historic context. The following guidance provides for the integrity evaluation of individual postwar residences and residential historic districts in a consistent manner.

Aspects of Integrity

Within the concept of integrity, the National Register criteria recognize seven aspects or qualities that, in various combinations, define integrity. To retain historic integrity, a property should possess several, but not necessarily all, of these aspects. Due to the pervasiveness of postwar homes, a higher degree of integrity should be required for individual residences and historic districts to differentiate those resources that are able to convey significant historic associations or distinctive characteristics of a type, period, or method of construction.

The seven aspects of integrity are the following:

1. Design: The combination of elements that create the form, plan, space, structure, and style of a property.
2. Materials: The physical elements that were used in the original design and construction.
3. Workmanship: The physical evidence of the crafts used in the construction of a property.
4. Location: The place where the historic property was constructed or the place where the historic event occurred.

5. Setting: The physical environment of a historic property.
6. Feeling: An expression of the aesthetic or historic sense of a particular period of time.
7. Association: The direct link between an important historic event or person and a historic property.

The following sections discuss in more detail the seven aspects of integrity as they apply to individual postwar residences and potential historic districts.

Design. Integrity of design is a combination of elements that create the form, plan, style, and spatial organization of a property or district. In a historic subdivision or neighborhood, the arrangement of houses, lots, yards, and streets comprise the design. Street plantings, parks, and other open spaces may be present as design features within a historic district. The *Historic Residential Suburbs Bulletin* notes a distinction between planned subdivisions and unplanned neighborhoods: 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.

Changes to the size of housing lots and additions or alterations to individual houses can affect the integrity of design. Street pattern and land use changes can also alter the design of a historic subdivision or neighborhood. The extent of such changes, and their cumulative effects in the case of a district, needs to be weighed. For example, a subdivision that has experienced alterations to the original street patterns, subdivided lots, and infill development within the original green spaces no longer retains integrity of design.

Location. Location is the place where the historic property or district was constructed or the place where the historic event occurred. For a planned subdivision, integrity of location requires that the boundaries that historically defined the area remain intact. The size of lots and placement of streets and open space should also remain unchanged. In general, an individual residence that was relocated to a new site no longer retains integrity of location.

Materials. Integrity in terms of materials recognizes the important contribution that exterior building materials make to a property's sense of place and time. The original exterior materials reflect owner's preferences, local availability or materials and the building technology of the period. Construction materials vary from those that are man-made and used in buildings, roads, sidewalks, and fences to the natural vegetation planted in yards, terraces, and gardens. All are part of the building's or district's significance.

Cladding is the primary visible construction material and a distinctive feature of many postwar residences. It is also one of the most common exterior alterations to postwar houses. The original cladding materials used on many postwar homes, such as

asbestos-based siding that was discovered to be unsafe, were commonly removed or encapsulated. Although installation of modern siding materials, such as horizontal vinyl, has less adverse effect when it visually approximates the house's original material and design, replacement of historic siding with modern materials greatly diminishes the integrity of materials. It is important to note that aluminum siding was developed and heavily promoted during the postwar period and may be original to the property. In this instance it should not be considered as a loss of integrity. Other non-compatible replacement siding materials may include replacement cedar siding, vinyl shingles, and modern stone veneer, such as lava rock, that is inconsistent with the historic appearance.

Outlined in the *Historic Residential Suburbs Bulletin*, houses may be considered contributing to a historic district where new siding: (1) visually imitates the historic material; (2) has been thoughtfully applied without destroying and obscuring significant details; and (3) is not accompanied by other alterations that substantially or cumulatively affect the building's historic character. However, in a historic district significant under Criterion C: Architecture, the majority of houses should retain the original exterior construction materials.

Workmanship. Integrity of workmanship recognizes the importance of local building traditions, earlier technology, and the craft of the workers to historic properties. Workmanship may be simple and straightforward or elaborate and complex. Like materials, workmanship is critical to a property's sense of place and time and preserving it is essential to preserving the overall integrity of a property.

Setting. Setting refers to the physical environment of a property and the character of the place in which the property or district played its historical role. Integrity of setting is especially important for historic districts because it ties the individual properties together as an ensemble. Whether urban, suburban or rural, setting contributes in powerful ways to a historic property's sense of place.

Incompatible additions and new construction can compromise the integrity of the setting in a variety of ways including dramatically changing the ratio of built space to open space on a property or interrupting the consistency of building spacing and setbacks in a district.

Feeling and Association. These two aspects of integrity can often be assessed together. The aspect of feeling results from the presence of physical features that convey the property's historic period of significance. A property or district retains integrity of association if it continues to convey the important event or activity to an observer.

Continued residential use can contribute to integrity of association. Historic subdivisions or neighborhoods often have a semi-rural character that is reflected through their combination of urban amenities, like streets and sidewalks, and natural features, including private yards and public parks. When present in a historic district, the retention

of such a semi-rural character contributes to the integrity of setting, feeling, and association.

Assessing Significance and Integrity

Different aspects of integrity affect the eligibility of a property or district in different ways, depending on how each relates to the property's significance. For example, since Criterion A relates to significance achieved through historical associations, the integrity aspects of location, setting, feeling, and association weigh more heavily in evaluating a property or district. Generally, historical associations are absent when a property is moved from its original location. Integrity of design, workmanship, and materials are also important, but alterations that affect these aspects may not result in the same level of diminished integrity for structures found to be significant under Criterion A. Since Criterion C relates to the architectural significance of a property or district, the integrity aspects of design, workmanship, and materials are typically more important when evaluating a property or district under this criterion. These features allow a building to characterize its type, period, or method of construction. Location and setting may be important under Criterion C when the design responds to the immediate environment.

The presence of certain physical features may be more important than others depending on the reason for a property's or district's significance. The *Historic Residential Suburbs MPD* notes the link between integrity and significance as follows: Where the general plan of development has importance, integrity should be present in the original boundaries, circulation patterns of streets and walkways, and the division of housing lots. Where architectural design is of great 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, park land, ponds, statuary, and fountains may likewise contribute strongly to importance in landscape architecture. In general, the loss of important aspects of integrity would render an individual residence or district ineligible under Criteria A and C.

Retention of Character-defining Features

An important part of establishing integrity is determining whether a property or district retains the essential physical features that are considered character-defining and enable it to convey its historic identity. The process of establishing integrity involves the following steps:

- (1) defining the essential physical features related to significance
- (2) determining if the features are retained and visible enough to convey significance
- (3) determining which aspects of integrity are important to the property's significance and if they are present

The amount of change to a property or district (its loss of integrity) needs to be weighed against its historical significance in making eligibility recommendations. In general, a postwar house that possesses integrity would retain all its important aspects of integrity. For an individual property significant under Criterion C: Architecture, this should include original exterior materials, architectural elements, and massing; original configuration of

doors and windows; and spatial relationships within its lot and to the street. A district significant under Criterion C: Community Planning and Development should retain its overall layout, landscape features, and circulation patterns, and include a collection of buildings that convey their original character.

Alterations

Alterations to a property or district are weighed against its character-defining features and significance to determine historic integrity. Using the period of significance as a benchmark for evaluating resources and historic districts, alterations introduced after the period of significance are generally considered to negatively impact historic integrity. For a property to retain physical integrity, its current appearance should closely resemble its appearance during the time the property derived its significance. Not all alterations will result in a loss of historic integrity as explained through the lists and examples of alterations; however, due to the large number of residences constructed during the postwar period, the integrity requirements for an individual property should be more stringent than for homes that pre-date this period of rapid residential expansion.

Postwar houses, although often designed to be small and compact, have often been enlarged with garages, family rooms, porches, or additional bedrooms. Large-scale additions to houses that resulted in additional stories or substantially altered footprints diminish historic integrity. Additions that are modest in size have less effect on integrity, especially if the alteration is not visible from the primary elevation or is made to a house that contributes to a historic district rather than one considered for individual significance. For properties within potential historic districts, the *Historic Residential Suburbs* Bulletin recommends the following:

When evaluating the extent to which the addition changes the dwelling's individual character and the character of the streetscape of which it is a part, it is important to consider the size, scale, and design of the addition as well as its placement on the house lot. Information such as original setback requirements, historic design guidelines, and deed restrictions may also be useful in assessing the effect of additions on historic integrity.

When evaluating a historic district, the ultimate decision as to whether or not it retains sufficient integrity depends upon the district's overall condition and continued ability to convey significance. For historic districts, the presence of features from outside the period of significance or absence of features from within the period of significance are additional alterations to be considered. Alterations to the spatial organization of lots and neighborhoods, circulation elements and patterns, and landscape features can affect the integrity of a district.

a. Individual Residences

Because they represent a property type with many similar examples in almost every community nationwide, postwar homes should be critically assessed for historic

integrity. It is recommended that integrity requirements be strictly applied whereby a loss of the aspects of integrity that make the property significant may render an individual property ineligible.

Alterations That Do Not Compromise Integrity.

Common alterations that typically do not result in diminished integrity for an individual residence include:

- Small-scale additions to the rear of the building, such as modest porches, garage additions to the side or façade or a detached garage
- In-kind replacement of entrance doors and garage doors
- Replacement windows that match the original size and configuration
- Addition of ramps and decks to the rear of the house
- Alteration of the original landscape, including plantings and trees, modern decks and patios located on the side or rear of the property, and playground equipment or swimming pools

It should be noted that several non-compromising alterations may have a cumulative effect and result in the loss of integrity. For example, a house with a small addition, modern garage door, and replacement windows is no longer able to convey its significance and is considered not eligible for listing in the National Register as an individual property.

Alterations That Compromise Integrity.

Common alterations causing the loss of integrity through diminishment of character-defining features and therefore significance of an individual residence include:

- Removal of house from original setting
- Large-scale additions that substantially add to the mass of a historic house, including attached garages that are prominent on the front façade
- Additions that alter the spatial relationship between the house and street
- Installation of modern siding materials, such as vinyl
- Alteration of window and door openings that are inconsistent with the original size and configuration
- Reconfigured front entrances, including the addition of entrance vestibules and porches
- Altered roof lines, including added dormers and second stories
- Loss of character-defining features, such as deep eave overhangs and exposed beams
- Addition of incompatible architectural elements that detract from the original style or form, such as Colonial details on a Contemporary residence
- Enclosure of carports or incorporation of garages into interior living space

It is important to note that surveyors should use professional judgment and evaluate alterations, including unsympathetic additions, on a case-by-case basis. In some instances the alterations listed may not rule out a property for individual eligibility.

b. Historic Districts

The *Historic Residential Suburbs* Bulletin describes the special considerations for assessing the historic integrity of a historic subdivision or neighborhood:

Determining overall integrity requires knowledge of both the physical evolution of the overall district and the condition of its surroundings, including the design and materials of houses, the character of streets, and spatial qualities of community parks and facilities. Evaluations should take into consideration the extent to which landscape characteristics remain intact or have been altered. They should also be prepared to assess the cumulative effect that multiple changes and alterations may have on a neighborhood's historic integrity. A historic district should retain the spatial organization, physical components, aspects of design, and historic associations that it acquired during its period of significance. The period of significance is the indicator against which resources should be compared to determine whether or not they contribute to a neighborhood's history and, thus, its integrity.

Alterations introduced after the period of significance are generally considered to negatively impact historic integrity. As explained in the *Historic Residential Suburbs* Bulletin, alterations or additions made after the period of significance can affect a house's contributing status. Houses with modest additions that have little to no effect on the original design can still be classified as contributing. The size, scale, and design of the addition, as well as its placement on the lot, should be considered. A residence with replacement vinyl siding may be considered contributing if no other alterations are present and it still conveys the original appearance. Cumulative alterations for an individual property will generally result in noncontributing status within a historic district. In general, at least half of the properties in a historic district should be considered contributing for the district to be considered eligible for the National Register.

Alterations That Do Not Compromise Integrity.

Common alterations that typically do not result in diminished integrity in a historic district include:

- Exterior alterations to a small number of properties within the district, including siding and alterations of garages and carports
- Subdivision of a small number of lots within the district
- A small amount of infill construction, especially if similar in scale
- Loss or relocation of a historic transportation system that supported the genesis of subdivision
- Loss of original plant materials, especially where vegetation of a similar scale and visual effect has been retained
- Maturation of trees that obscure original vistas
- Loss of a small number of features within a historic district, which may include residences, ancillary buildings, roads, or parks
- Maintenance of streets, paths, and sidewalks, including in-kind replacement of materials
- Small number of noncontributing properties

As with individual residences, it should be noted that several non-compromising alterations may have a cumulative effect and result in the loss of integrity for a historic district. For example, a district with several residences that have exterior alterations, in addition to infill construction and loss of the original transportation system, may no longer convey its significance and would be considered not eligible for listing in the National Register.

Alterations That Compromise Integrity.

Common alterations causing diminished integrity to a historic district include:

- Changes to the size of housing lots through division or consolidation outside the period of significance
- Multiple infill properties that detract from the size and scale of buildings within a district
- Loss of entire sections of a planned neighborhood
- Cumulative alterations and additions to a large number of houses
- Large number of noncontributing properties
- Alteration to an internal road network or access roads resulting in changed circulation patterns; redesign of park landscape and circulation features
- Widespread changes to land use

Defining Historic Boundaries

The National Register Bulletin *Defining Boundaries for National Register Properties* provides guidance for establishing historic boundaries for individual properties and historic districts. This bulletin, along with specific guidance from the OK/SHPO, should be referenced when defining historic boundaries for postwar resources. When establishing boundaries for postwar residential districts, it is important to note the following:

- The extent of the original subdivision or neighborhood plat(s) and associated additions and/or re-plats, which may assist in identifying boundaries
- Historic land use within the original subdivision or neighborhood, including schools, churches, commercial nodes, formal recreational areas, and green spaces
- Concentrations of noncontributing properties, which may influence where the boundary is drawn
- Fieldwork observations, including changes to the landscape, setting, and circulation patterns
- Defined perimeters

This specific guidance follows and builds upon the guidance of *Historic Residential Suburbs* Bulletin, with supplemental guidance provided to address the challenges that the large number of vernacular homes of the postwar era poses to the evaluation of National Register eligibility of both individual houses and districts. This methodology is intended to offer a streamlined approach as well as consistency in regards to documentation standards and National Register eligibility recommendations.

MODERN HOUSING ARCHITECTURAL STYLES

Minimal Traditional

Foundation: concrete

Siding: typically only one siding material, wood; when multiple siding materials exist, they should be the same color

Entrance Door: under the cross gable when one exists; usually a traditional paneled wood door (occasionally with a multi-pane window in the upper half)

Roof: side gable with a cross gable; asphalt shingled; steeply pitched; very minimal eave overhang

Chimney: brick; not prominent

Garage: if there is one, it is free-standing







Ranch

Foundation: concrete

Siding: wood, brick, stone, asbestos and wood shingles are common; frequently two or more materials were used

Entrance Door: sheltered by main roof; can be found as double or single entry doors in the panel or solid wood door (occasionally small rectangular windows can be found in the top third of the door)

Window: metal and wood versions of double-hung, casement, sliding and awning; large picture windows on the façade are a common occurrence

Roof: low pitched, wide overhanging eaves which typically shelters entry door; hipped, cross gable or side gable.

Chimney: large masonry structure located within the interior of the house; typically off-center

Garage: integrated into the volume of the house





Split-Level

Foundation: concrete; occasionally faced with masonry units

Siding: wood shingle, clapboards or a masonry veneer; contrasting materials is common in articulating the two-story volume

Entrance Door: found in single or double entries with panel or solid pattern

Window: large and close to the floor in the living area; smaller in the private areas of the house and set higher in the wall

Roof: low pitched; hipped or gable; clad with asphalt shingles

Chimney: typically brick and not prominent

Garage: typically integrated into the house on the lower level of the two-story volume





International

Foundation: concrete

Siding: smooth, unornamented surface; expanses of window-less wall surfaces

Entrance Door: un-accentuated; deliberately obscured

Window: metal, often casement; on more “recent” buildings they are typically floor-to-ceiling sized

Roof: flat; no ledge at roofline

Chimney: not prominent

Garage: located on rear or side when present and at the basement level





Contemporary

Foundation: concrete; occasionally faced with masonry units

Siding: natural materials or wood stone or brick; occasionally concrete block

Entrance Door: panel or solid pattern in wood; typically recessed in wall junctions or through carport

Window: present in gable ends; large panes of glass; typically windows are located in bands

Roof: very low pitch; commonly flat in low snow areas; deep overhanging eaves; exposed roof framing

Chimney: massive and prominent; brick or stone

Garage: open carports are common with this style; however, they are also appended or incorporated into the massing of the house.





Shed

Foundation: concrete

Siding: wood in vertical, diagonal, horizontal or shingle patterns

Entrance Door: inconspicuous, varied in pattern

Window: very few in public areas; varied patterns and asymmetrical; ribbons of high clerestory windows are found high on the wall

Roof: multi-directional with no overhang

Chimney: rectangular, simple and clad with wood or plywood

Garage: if one exists it is incorporated into living space



Organic

Foundation: concrete, stone

Siding: stone, wood, brick

Entrance Door: typically concealed; glass, pane and panel, solid

Roof: flat, conical, multi-peaked

Chimney: typically not prominent

Garage: typically it is an outbuilding





A-Frame

Foundation: concrete; wood piers

Siding: wood in vertical, diagonal, horizontal or shingle patterns

Entrance Door: pane and panel; sliding

Window: sliding or fixed pane; extending into gable peak

Roof: steeply sloped in the shape of an “A”; clad with wood or asphalt shingles

Chimney: minimal; unobtrusive

Garage: typically detached





New Formalism

Foundation: concrete; elevated above street level

Siding: smooth, unadorned; stone, brick and/or marble

Entrance Door: paired with large spans of glass

Window: concealed behind large concrete screens or columns; commonly large, fixed panes of glass

Roof: flat, slab

Chimney: not prominent

Garage: on rear or side of building if one exists





Brutalism

Foundation: concrete

Siding: concrete, brick, and stucco

Entrance Door: inconspicuous; solid pattern

Window: recessed, often in vertical slits

Roof: flat

Chimney: not prominent

Garage: included in building volume





Postmodern

Foundation: concrete

Siding: smooth surface; brick, stucco, concrete

Entrance Door: solid, pane and panel, glass

Window: double hung, fixed, sliding; typically floor-to-ceiling

Roof: gable, flat, shed; metal, asphalt shingle

Chimney: not prominent

Garage: incorporated into massing





Mansard

Foundation: concrete

Siding: brick veneer or wood clapboard with faux quoins at corners

Entrance Door: recessed in main body of house with a simple segmental arch above; typically in paired wood panel design

Window: extends to ground level or has a wood panel beneath the glass; typically has multi-pane pattern

Roof: dual pitched hipped roof with dormer windows on steep lower slope

Chimney: not prominent

Garage: façade or side



Stylished Ranch (Spanish, Colonial Revival, Neoclassical, French, Tudor, Storybook)

Foundation: Concrete

Siding: Wood, brick, stone, asbestos and wood shingles are common; frequently two or more materials were used; stucco common on Spanish and Tudor; half timbering common on Tudor

Entrance Door: Sheltered by main roof; can be found as double or single entry doors in the panel or solid wood door (occasionally small rectangular windows can be found in the top third of the door)

Window: Metal and wood versions of double-hung, casement, sliding and awning; large picture windows on the façade are a common occurrence; diamond pane common on Tudor and Storybook

Roof: Low pitched, wide overhanging eaves which typically shelters entry door; can be hipped, cross gable or side gable; vergeboard common on Storybook

Chimney: large masonry structure located within the interior of the house; typically off-center

Garage: Integrated into the volume of the house





Neo-Colonial

Foundation: concrete; sometimes with brick veneer

Siding: clapboard, wood shingle, brick veneer

Entrance Door: recessed under porch or hood; typically with transom and sidelights

Window: double-hung and picture windows; shutters are expected

Roof: side gable with overhanging eaves; clad with asphalt shingles

Chimney: brick and located at the gable end or rear elevation

Garage: outbuilding or small one-story appendage



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