Final Report: Post World War Two Survey Sherry Joines Wyatt & Sarah Woodard for David E. Gall

Architects.



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UNCC students in the History 6000 Historic Preservation class spent hours examining newspapers and journals of the post-World War Two era. Without their work this report would have been impossible to produce.

In 1945, the western world was emerging from a long, dark tunnel of economic depression and world-wide war. In the United States, the light at the end of that tunnel illuminated the deficiencies and shortages left after years focused solely on survival. Thus, with the conclusion of war, the country rushed to satisfy the needs and wants of a population overwhelmed and exhilarated by returning servicemen and a newly invigorated economy.

The post-war years saw common citizens experience economic prosperity not previously known. This, in turn, sparked a renewal and explosive expansion of trends begun in the wealthy 1920s. Some of the most notable and important of these patterns, with respect to the built environment, were suburban expansion, transportation improvements and accessibility, and a renewed interest in Modernist ideas about architecture. These three national trends created the three local contexts of community planning, transportation, and architecture in which Charlotte's post-war Modernist architecture developed. An examination of these contexts and the dynamic changes in the booming, post-war New South City of Charlotte between 1945 and 1965 can serve as a case study of the historical climate in which post-war architecture evolved throughout North Carolina.

Context 1: Community Development

With the end of World War II came the return of soldiers, followed shortly by the increase of marriage and birth rates. In Charlotte, as in the rest of the nation, these new families needed places to live, and thanks to Veterans Affairs and Federal Housing Administration programs they had unprecedented access to private, single-family homes. They could also afford their own personal transportation. This meant that new home and car owners no longer had to live near their employment, their hometowns, or the city center.

The influx of soldiers and children, now with choices in where they lived, yielded initial housing shortages, rapid home construction, and suburban expansion, which collectively produced both physical growth of the city and population growth. Such growth was influenced by three factors: efforts in Charlotte to encourage growth, ways growth was viewed at the time, and attempts to manage expansions once the changes began. All these factors and influences created the context of community planning during Charlotte's post-war years.

Immediate Post-War Housing Shortages

War time shortages were felt by nearly every American citizen and housing was one of the areas where rationing was especially visible. The need to channel most of the available building materials to the war effort left few resources for the construction of new civilian housing. Added to this, was the shortage of builders due both to enlistments in service and the demand on remaining construction companies to build government projects.

A rush of anticipation regarding coming growth immediately followed the official end of the war in August of 1945. An article published on August 18, 1945 (three days after VJ-Day) in the *Charlotte Observer*, predicted: "The end of the war and the expected early relaxing of building restrictions are adding new importance to construction plans amounting to large sums of money which have been announced for Charlotte in the postwar period."¹

The optimistic view for Charlotte's development was soon followed by the recognition of the immediate need in the city for new housing. Acting to alleviate the shortage, City Council established a policy which assured builders that the City was prepared to expand utility service, at least within its present limits:

Any real estate firm, development agency, or housing contractor who wants to erect houses on undeveloped property within the city can come down to city hall, get his plans approved, and start work with the assurance that the municipal crews will begin the job of laying necessary water and sewer lines and completing the city's part of the street work so that the finished houses will be ready for immediate occupancy.²

This new policy superceded the former requirement for a developer to complete a portion of the project before utilities were installed.

The "hurry-up" policy adopted by Council did not prevent the anticipated housing shortage and by January of 1946, the situation had reached a critical level. The urgency of the housing shortage is clear in a *Charlotte Observer* reprint of a telegram sent by the chairman of the Citizens Emergency Housing Committee (Chamber of Commerce) to the president of the Chamber of Commerce of the United States in Washington, D.C. The telegram states that "over one thousand veterans and their families registered in our housing survey as needing living facilities in Charlotte." The committee called for the release of government surplus building materials, adjustments to the rent ceiling to provide greater occupancy, and measures to by-pass all red tape and release no longer needed barracks to the city.³ The housing shortage was not merely a local problem as represented in the syndicated political cartoon "Strictly Business," drawn by Dale McFeatters. Published on June 21, 1946, the cartoon illustrates a tornado blowing away a small house with a "For Rent" sign on it. A couple is shown driving beside the airborne house. The man looks questioningly at the woman and her response is recorded in the caption: "Don't just sit there! Follow it!"⁴

In fact, housing shortages were the norm throughout the country. Responding to cries from many cities like Charlotte, the Federal government acted to alleviate the need for five million new homes via two important entities: the Federal Housing Administration (FHA) and the Veterans Administration (VA). The Servicemen's Readjustment Act of 1944 created the VA and established a mortgage aid program similar to that of FHA. "This law," explained historian Kenneth Jackson in *Crabgrass Frontier*, "gave official endorsement and support to the view that the sixteen million GI's of World War II should return to civilian life with a home of their own."⁵ Civilians not eligible for the VA programs turned to the FHA and in the ten years after World War II, Congress approved billions of dollars for additional mortgage insurance for the program.

By 1947, progress was being made in alleviating the housing shortage. The *Charlotte Observer* stated in an article entitled "New Houses Being Built at Fast Rate" that "...for the first time since the war stopped building activities, a large number of individuals are beginning construction of homes." This resumption of activity was directly related to the stabilization in the price of building materials that allowed contractors to give reasonable estimates to prospective home buyers.⁶ The article also indicated that, by this point at least, it was not just returning veterans who were beginning to want housing. It appears that many other "individuals" also wanted a new home – and not merely any available shelter as was the case in the 1946 cartoon described above.

Identifying and Quantifying Growth in Charlotte

Once begun, the building boom of the late 1940s and 1950s, which had been foretold at the close of the war, continued to generated a great deal of interest in Charlotte. Chamber of Commerce publications as well as bondholders' brochures produce by the City Treasurer illustrated the city's expansion in a variety of ways. One of the primary methods for gauging growth in period publications is building permits. Interestingly, building permits strictly for housing were used as the growth indicators in *This is Charlotte, North Carolina: The Queen City,* a circa 1952 Chamber of Commerce publication. Statistics given in this booklet indicate that the number of building permits for housing units had jumped from 185 in 1945 to 1,857 by 1950, then slackened to 723 by 1951. Furthermore, the total number of housing units these permits represented had increased from 194 in 1945 to 3,046 in 1950 then dropped to 1,294 in 1951.⁷ While the increase in building permits form 1945 to 1950 is impressive, it is even more so when one considers that the real quickening in pace did not occur until 1947.

Residential construction continued to receive attention throughout the 1950s and early 1960s. An *Analysis of the Charlotte, North Carolina Housing Market as of April 1, 1965*, published by the Federal Housing Administration, for example, charts the volatility in the numbers of building permits issued for housing units in all of Mecklenburg County. After a peak of 3,136 in 1950 came a sharp decline, falling to 659 units in 1957. Soon, however, permit numbers rose again, peaking for a second time in 1961 with 3,122 permits.⁸ This peak was followed by a gradual slowdown that may represent a stabilization of the housing industry at the end of the study period (see Figure 1).

Figure 1:

3,500 а. 3,122 3,000 2.477 2,500 2,000 1 489 1408 1,500 1.012 1,000 500 ۵ 1959 1953 1955 1957 1951 1961 1963 1950 1952 1954 1956 1958 1960 1962 1964

Number of New Dwelling Units Authorized by Building Permits 1950 - 1965⁹

The *Analysis* also shows the percentage of houses by construction dates within the housing stock of Mecklenburg County in 1965 (Figure 2). Over 50 percent of the housing stock in Charlotte in 1965 had been built between 1950 and 1965 with approximately 35 percent from

1950 - 1960. Between 1955 through March of 1960 alone, 19.2 percent of the housing stock was constructed despite the low numbers for 1957.¹⁰

Figure 2:

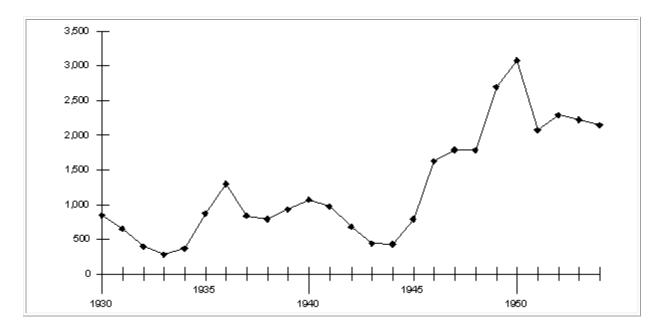
Distribution of Housing Stock in Mecklenburg County by Year in 1965¹¹

Year Built	Percentage of Total Stock
	- 1929 21.2%
	1930 - 1939 9.7%
1940 - 1949 17.7%	
	1950 - 1954 16.0%
	1955 - March of 1960 19.2%
April 1960 - April 1965 16.2%	

The trends for new residential units parallel overall patterns of growth in Charlotte (Figure 3). *The City of Charlotte, North Carolina: Yesterday, Today, and Tomorrow* (a ca. 1955 Bondholders' brochure prepared by the City Treasurer) shows that building permits in the city had increased from 794 in 1945 to 3,079 in 1950.¹² These Charlotte trends, in turn, fit into the nationwide increase of housing starts, which jumped from 114,000 in 1944 to 1,692,000 (an all-time high) in 1950.¹³

Figure 3:

Number of Building Permits (All Types) for Charlotte 1930 - 1954¹⁴



Both the general public and city officials recognized and celebrated the magnitude of growth and its importance at the time. As illustrated in the titles of the various local publications from the period, such as *Charlotte: Spearhead of the New South* (c.1953), *Growing Bigger* (c.1953), *How Shall We Grow?* (c.1955), and *We're a Growing Family* (c.1961).

Where Growth was Occurring: Suburbs and Suburbanites

The intense building boom of the 1945 - 1965 period correlated directly with increases in population. The population of Charlotte in 1940 was 100,899. By 1950, the city had experienced an increase of 32% to 134,042 people.¹⁵ And, by 1960, the population had continued to expand to 201,564 reaching 354,656 by 1970. Increases in population throughout the period were caused both by new people moving to the area as well as by the expansion of the city limits.

More than just a numerical increase, the population growth was especially significant because of *where* it was occurring. *Growing Bigger*, a 1953 bondholder's brochure, compared the population of Charlotte with that of New Orleans, Atlanta, Birmingham, and Richmond. Of those cities, New Orleans was the largest with 583,500 people within its city limits, however, when considering the population of a 75-mile radius around each of these cities, Charlotte led with 1,911,800 people followed by Atlanta with 1,416,800. This comparison has even more impact given that the "in-town" population of Charlotte was only 139,300 while that of Atlanta was 333,500.¹⁶ The *City of Charlotte, North Carolina: Yesterday, Today, and Tomorrow* (1955), illustrated the continued supremacy of Charlotte in this arena. By the end of 1955 Charlotte still led in this arena, the 75-mile radius population of Charlotte was 2,160,334, while that of Atlanta was 1,600,984 -- twenty-six percent less.¹⁷

The 75-mile radius population statistics illustrate that a substantial portion of the population growth in Charlotte was not occurring within the older center city. Instead, growth was focused at the city's edge and was supplemented by the suburban growth of the several small and middle-sized towns that surround Charlotte. Traditionally, the South had been made up of rural crossroads communities, towns and a few small cities. By 1960, however, more than half of the population in the South lived in a town or city – a sharp increase since 1930 when only one-third of Southerners lived in a town or city. Within this thirty year period, the South had become an urban region. Although the urban population in the South was increasing during the post-World War II era, density was not. "This spatial pattern," writes David Goldfield in his book *Cotton Fields and Skyscrapers*, "coupled with vigorous annexation policies, made some southern cities the largest (by area) in the country."¹⁸

Called *conurbation* by geographers, the horizontal chain of urban-like settlement that stretched out from Charlotte connected the city with small and medium sized towns to form a large metropolitan area.¹⁹Developing during the 1950s and 1960s (and continuing today), this has been a crucial phenomenon during the post-World War II period. An April 7, 1957 article in the Charlotte Observer, headlined "Piedmont Seen as Giant City: Metropolis May Put New York in Shade" - reported that research by the Urban Studies Committee at University of North Carolina funded by the Ford Foundation predicted that a "Piedmont Industrial Crescent" would develop from Raleigh to Greenville, S.C. including Durham, Burlington, Greensboro, Winston-Salem, High Point, Salisbury, and Charlotte. "The scientists say that this new type of metropolis will need a new type of government, economic system and social systems."²⁰ A second article, "The Crescentite is Being Studied," (August 9, 1959) reported that after two years of study, the Urban Studies Committee had concluded the following about the average citizen living in the crescent area: 1) one-half of the residents were rural in origin, but only one in five were native to their respective community, 2) those who came from farthest away and who came most recently were most likely to hold white collar jobs, 3) only one-half of residents belonged to a civic organization, 4) residents felt that respect for privacy was more important than "folksy friendliness," and 5) residents placed high importance on "spaciousness" and "beauty."²¹

The crescent research project gives an important portrait of the average suburbanite during the post-war era. First, it was likely that the suburbanite would not have grown up in the area. This fact is supported by in-migration statistics which indicate that approximately 3,000 people moved to the Charlotte area each year from 1950 through 1960.²² Second, the average suburbanite's preferences were for privacy, spaciousness, and beauty.

"Suburbs? They're 'Wonderful,'" published September12, 1959 in the *Charlotte Observer*, profiled the Moores, a suburban Charlotte family. Questioned about their new lifestyle: "'It's wonderful, wonderful, wonderful,' cried Wayne Moores." "'The tranquility I mean. To sum it up in a single word, the tranquility.'" Space to garden, the little stream in the back yard where Mr. Moores can be alone to enjoy nature; for these benefits the family happily overlook the negative aspects of living twelve miles from the city. "The distance to the city almost necessitates a second car for the active housewife. But Kay Moores says distance is a relative thing and the drive which once seemed overly long has turned into nothing more than a brief communion with the four-lane, landscaped pleasures of Providence Road."²³

This type of suburban family ideal was affirmed by President Harry S. Truman during the 1948 White House Conference on Family Life: "Children and dogs are as necessary to the welfare of this country as is Wall Street and the railroads." National and local publicity combined to the belief that the suburban house was essential to a good family life.²⁴ Television became one of the primary propagators of popular culture as more Americans were able to purchase television sets, and many television shows depicted the suburban "good life." Beaver and family, of "Leave it to Beaver," led happy lives in their suburban landscape. The sitcom "I Love Lucy," portrayed the lure of idyllic suburbia when, near the end of the show's run, the Ricardos moved from New York City to suburban Connecticut.

The suburban ideal was not without its critics. Sociologists and feminists pointed to the isolation of families, especially women, from the life of the city and the detrimental effects this might have on both family life and the city itself. Judging from period literature, however, it seems that despite the fact that the leisure promised by the ranch lifestyle in the "country" was often a myth because of time spent commuting, driving children to activities, and "fixing-up" the house the majority of suburban families were happy with their suburban lifestyle.²⁵

Families were not alone in their love of the suburbs. A rural landscape surrounded the new campus of Charlotte College (later UNC-Charlotte) when it was constructed in 1960. Period photographs show an old barn sharing the future quadrangle with the first two college buildings. Traffic flow and accessibility had a great deal to do with the campus site selection, but other factors, such as the naturalistic setting, still evident around the campus, must have also influenced the campus' suburban location.²⁶

Industry found the suburbs to be a promising location as well. An April 21, 1957 *Charlotte Observer* article announced: "Celanese Likes Suburbia." Critics apparently suggested that traffic and getting workers to the site, six miles from downtown, would present a problem, but the company insisted that car pools and credit union loans for automobiles, had forestalled any trouble. Additionally, a cafeteria provided meals since going out for lunch was not practical for most employees.²⁷ Celanese was certainly not the first company to locate in the suburbs; rather, they were part of a national trend of large corporations and industries located away from the center city. In fact, in areas such as New York City, the suburban locations of businesses were actually relocations of company headquarters. Among those who joined the exodus of more than fifty companies out of the New York City between 1955 and 1980 were IBM, Gulf Oil, and Texaco. The reason for leaving: the suburbs presented "an altogether more pleasant way of life for all."²⁸

By 1963, one-half of the industrial employment in the United States was suburban and by 1981, two-thirds of manufacturing was located in industrial parks.²⁹ The concept of suburban industry, while not new in the United States, was still relatively new to Charlotte in 1957. Examples of suburban industrial facilities include the Farmer's Dairy building (c.1950) located at 3300 The Plaza, the Williams and Shelton Company (c.1961) located at 4500 South Boulevard, and the Atlantic Envelope building (c.1964) located at 3434 Monroe Road. In 1968, the North Carolina Telephone Company advertised to potential clients that industrial sites were available within their service territory if you desired "Grass and Trees Around Your Plant."³⁰

While the city was experiencing suburban development around almost its entire perimeter, the greatest concentration was "...centered in the south and east, due mainly to the absence of industry and commerce and, with few exceptions, availability of water and waste facilities," according to a poll of subdivision developers in 1957. The same *Charlotte Observer* article explained that the rush of suburban development was the result of the availability of "suburban elbow room" and was keeping "developers out beating the bushes for more land accessible to water and sanitary sewer systems, preferably city system."³¹ The development in the southern portions of the city was almost exclusively white. Suburban developments intended for African-Americans were largely constructed in the northwest quadrant. The benefit to developers of building African-American subdivisions was that it helped them meet FHA requirements to prevent non-white "infiltration" into white subdivisions.³²

University Heights, located off of Beatties Ford Road, exemplifies African-American suburbs dating from the post-war period. The plan of the development and design of the houses is quite similar to the white subdivision, Montclaire (located off of South Boulevard). However, the houses tend to be smaller in University Heights and the palette of available house plans is significantly narrower. This pattern is especially evident in Lincoln Heights, across Beatties Ford from University Height: all of the dwellings are identical: small, hip roof ranch types with almost no architectural detail. Occasionally two or more units are joined into one structure creating duplexes or triple-plexes. Lincoln Heights, currently in a state of severe decline, is an example of the era's socially and racially biased views of what constituted adequate housing.

Whether white or black, suburban development had similar principles. Kenneth T. Jackson, in his book *Crabgrass Frontier*, cites five characteristics of urban development from 1945 through 1973: 1) peripheral location, 2) low-density, 3) architectural similarity, 4) easy availability, and 5) economic and racial homogeneity.³³ By 1950, suburban growth in the United States was ten times greater than that of the center city.³⁴The suburban boom in Charlotte certainly fit into the national trend.

How Growth was Occurring: City Officials, Developers, & Federal Policy

Key to Charlotte's suburban expansion was annexation. In fact, nearly all of the South's urban population increase after 1950 was added by annexation.³⁵ But, while suburbs were popular, annexation was not. Annexation proposed in Charlotte for 1960 was being debated as early as 1957 when a *Charlotte Observer* article announced: "People are Opposed to City Boundary Extension."City officials approved the extension on July 16, 1957, but in late 1959, a series of articles expressed the continued opposition to the annexation. The 1960 annexation extended the city limits from 32.12 square miles to 64.8 square miles and brought about an increase in the city's official population from 160,000 people to 200,000.³⁶ The newspaper predicted on December 21, 1959, "Those New 'City' Farmers Will Have to Get Rid of Their Country Porkers." By January 1, the effective date for the annexation, the farmers encompassed by the annexation had to dispose of their hogs; all other farm activities would be grandfathered in and gradually phased out.³⁷ Suburban homeowners interviewed for the December 15, 1959 article, "Homeowners Study Annexation," believed that "...it is actually cheaper for a man to live

outside the city." They disagreed with city officials' argument that higher taxes would be offset by conveniences the city government would provide, such as sanitation.³⁸ The annexation took effect on January 1, 1960 and was received with little further comment.

The city limits grew via annexation in 1949, 1960, 1965, and again in the early 1970s to encompass the ever-expanding suburban development. The creation of the suburbs both within and outside the city limits was almost exclusively the realm of the real estate developer. The developer was not a new phenomenon, but residential developments of post-war scale certainly were. It is interesting to examine how Charlotte developers were able to produce housing at such a fast rate and on such an unprecedented scale.

The September 21, 1957 article, "Charlotte Frontiers Rapidly Push Outward," read like a who's who list for Charlotte developers. Local developers commented on what they look for in a potential development and where these locations were, for an *Observer* reporter: "[Lex] Marsh stresses the proximity to schools is a must in his plans;" Ervin Construction Company "has most of its development proposed in the area of pending city limits extension;" and "[C.D.] Spangler agrees the building of Charlotte College in the northerly area will spur development there."³⁹

The first, and perhaps the only, issue of *Home Building in Charlotte* (1959), examines the contributions of Lex Marsh to the Charlotte real estate market. Primarily working with federal programs, he had developed over 1,200 units in addition to Sedgefield Shopping Center by 1959. One major tenet of Marsh's system was volume, which allowed him to save through the use of specialized, production line, construction crews and in-house engineering. Despite Marsh's impressive production, his company was actually ranked fifth out of all local developers in terms of number of units produced in 1958. The leader in this area was Ervin Construction Company with 708 units followed by John Crosland Company with 188 units.⁴⁰

Some of the large developers of the 1950s and 1960s had expanded their companies from small construction firms during the 1940s. Ernest Wood found that these small builders focused on medium size building market.

After World War II, tradesmen who recognized this opportunity began moving up en masse to manage their own contracting firms. The new generation of builders grew so large and so successful that homebuilding for the first time became identified as an industry unto itself.⁴¹

In Charlotte, however, most of the new, big developers had business backgrounds and saw the potential of the burgeoning industry as an investment opportunity. In fact, only Charles Ervin had any hands-on construction experience.⁴² The birth of the homebuilding industry was marked by the founding of the Charlotte Homebuilders Association by Lex Marsh in1945, which predated the founding of the North Carolina Builders Association by seventeen years.⁴³

Other than simple recognition of opportunity, several factors allowed so many developers to be so successful. The advantages gained by developers over traditional, small-scale builders were often directly related to Federal policy and programs. For example, the dominance of large developers during the post-war period was encouraged by FHA policy. The FHA preferred large "operative builders" who saw a development project through from the initial plat to the sale of

completed dwellings rather than small, craftsman builders. This policy institutionalized the preference for mass production which equaled efficiency.⁴⁴

Thomas Hanchett, a Charlotte historian who has conducted pioneering research on the effects of Federal policies during the postwar era, suggests three ways in which the U.S. government influenced developers and made suburban development more attractive: 1) direct financial incentives; 2) indirect means that made building in the suburbs easier, such as money for freeways and tax benefits for home owners and developers; and 3) actions that affected the character and composition of suburban development.⁴⁵

Direct financial incentives came primarily in the form of FHA and VA programs. Both of these programs explicitly favored construction loans for housing being built in the suburbs. "'Interior locations' within the metropolis 'have tendency to exhibit a gradual decline in quality,' warned FHA's *Underwriting Manual*."⁴⁶ The down payment and payback package offered by FHA created what Hanchett calls "...a revolution that extended to the finance industry in general.⁴⁷

Prior to the FHA package, home loans had generally been short term (five years was typical) only available to the wealthy who could afford to make the standard, fifty percent down payment. In contrast, FHA offered thirty year mortgages with only ten percent down. The VA package did not require anything down. As the FHA formula became the industry standard, millions more Americans were able to purchase a home of their own. The difference that this change made was dramatic; before the new mortgage standard only forty-five percent of housing was owner-occupied. This number jumped to sixty-five percent after the new standard.⁴⁸

Financial incentives to developers did not always apply only to residential development. One Federal tax policy, accelerated depreciation, played a key role in the construction of suburban shopping centers. Accelerated depreciation began in 1954 and effectively provided a tax shelter by allowing developers to write off construction costs for new income-producing buildings quickly, and even providing for losses to be claimed against unrelated income. The program proved very attractive to venture capitalists. The number of shopping centers in the U.S. tripled between 1953 and 1956 at least in part because of the tax policy.⁴⁹

Finally, FHA policy, presented in the *Underwriting Manual*, influenced the character of the new suburban neighborhoods. The *Manual* used wealthy and exclusive neighborhoods as their model, creating a prototype that held privacy and homogeneity as the ideal. The segregation of land use was strict, calling for retail to be grouped in "shopping centers" and recommending curving avenues and cul-de-sacs to maximize privacy. The policy also favored single family dwellings without multi-family units interspersed in their midst. The segregation of race and social class was also strict, as illustrated in the *Manual*: "If a neighborhood is to retain stability, it is necessary that properties shall continue to be occupied by the same social and racial classes."⁵⁰

Between 1940 and 1960, almost one-quarter of new houses were subsidized by the FHA or the VA with the pinnacle of that activity occurring in 1955. While this number is impressive, it does not fully explain the far-reaching impact the FHA policy had. In fact, only a few houses in a

particular development might be sold using FHA, but in order to sell even one house in this manner, the whole development had to meet FHA standards.⁵¹

In Charlotte, one FHA program in particular, is readily seen among the surveyed resources. The program known as "608" began in 1946 and insured virtually one hundred percent of construction costs for multi-family developments. Under 608, developers could borrow money to build the project, then set rents to cover the expenses, repay the loan, and pay themselves a profit. Before Congress ended the program in 1950, 7000 middle and upper income apartment projects received 608 subsidies.⁵² In examples such as Scotland Colony and Selwyn Village, both circa 1950, simple one-story duplexes or small, two-story apartment buildings are laid out in a park-like setting accessed by curving streets. The design, referred to as a "superblock" by architectural historian Leland M. Roth, was commonly associated with 608 developments and proved to be popular even after the demise of the 608 program.⁵³ Such examples as Cotswald Homes, built circa 1954, maintain arrangements of simple duplexes in a large lawn set with a large number of trees.

Federally and locally encouraged growth in Charlotte during the 1950s, brought about new challenges in the management of increasing population, subdivisions, vehicles, and industries. In the January 27, 1957 *Charlotte Observer* article, "Pushing County for Space: How Big Will Charlotte Get?" the Chairman of the Chamber of Commerce Industrial Promotion Committee stated: "For the past three years, the Charlotte area has averaged one new industry every two weeks." The influx of new industry attracted new employees who helped fuel new suburban development. With new employees and new suburban development came the need for new hospitals, sewer systems, and especially new schools.⁵⁴ Such entities as the Chamber of Commerce Industrial Promotion Committee had been successful in their efforts to boost Charlotte's economy and growth; now it was up to the planners to manage it.

Community Planning

Growth, of course, was the main objective of local leaders with regard to the planning function of local government and still is. But as Robert Penn Warren noted in *Flood*, 'the trouble was not so much what was not there. It was what was there.' - the cheap hotels, service stations, fast food emporia, shopping centers, and the highways that made it all possible. This reflected an American, not merely a southern, pattern, but the coincidence of rapid growth, during the automobile age and the prevailing planning philosophy exaggerated trends in southern cities.⁵⁵

Until the early 1940s, planning was unheard of in Charlotte. As Thomas Hanchett writes, "Like many mid-sized cities, especially in the South, Charlotte proudly maintained a tradition of minimal local government." Charlotte broke away from this tradition on December 20, 1944, however, with the creation of the first Charlotte Planning Board.⁵⁶

The creation of the Charlotte Planning Board was part of a wave of hundreds of new planning agencies set up across the nation from 1944 through 1946. These agencies were created for various reasons, depending on the city. There was a need to plan to meet requirements of the war effort in cities where factory workers were flocking to war jobs. There was also a general fear of post-war depression. For other cities, such as Charlotte, the Federal Highway Act of 1944, which provided \$125 million for urban roadways, was a major impetus.⁵⁷

The 1944 Highway Act, was a precursor to the promise of even more federal money after the end of the war. City officials, recognizing the necessity of pre-planning to being eligible for post-war money, created the Charlotte Planning Board in late 1944. Wasting no time, the Board developed a standard house ordinance by 1945. In 1946, a subdivision ordinance with minimum street widths and lot sizes was instituted, and Charlotte's first zoning ordinance was passed in 1947.

The initial project of the board, however, was the city's first plan, *A Pattern for Charlotte*, in 1944. Rather than constituting a city plan, however, the document was primarily devoted to arguing for the necessity of city planning. It did, however, point out the likelihood of a housing shortage after the war, which did in fact, occur in 1945-46.⁵⁸

It is important to recognize that, during the 1940s and 1950s, the Charlotte Planning Board was not the only body influencing the development of the city. Traditionally, the Chamber of Commerce had played a major role in the informal planning process and it continued in this role during the early post-war period. The Chamber's focus on growth is apparent in their 1945 report, which concluded that "Charlotte needs 3,000 homes, at least three major apartment houses, one 20-story office building, an auditorium and civic center, a supper club and an indeterminate number of warehouses, small manufacturing concerns and scores of other facilities." Other needs cited in the report included a parking deck (called a "large many-story building for automobile parking") and a cross-town boulevard. This report was given to Phillip Schwartz of the Division of Commerce and Industry, Department of Conservation and Development, who was assessing the state's needs.⁵⁹ The Charlotte Observer frequently acknowledged the Chamber's power. In 1958, the paper stated: "Scratch beneath the surface of any local government program in Charlotte or Mecklenburg these days and you're likely to find a Chamber of Commerce committee." By 1960, the statement was even more blatant: "We are pleased to acknowledge its bossism and wish it continued health."⁶⁰

While city officials and the Chamber of Commerce boosted home building during the post-war shortage, the Charlotte Planning Board sought to control development. In a November 20, 1945 letter to the City Council, the Board requested that future developments outside the city limits, but within the one-mile sphere of influence, be denied unless approved in advance by city engineers and city council. These measures were intended to curb the "...many developments [that] have mushroomed into being with small, inadequate water and sewer lines; narrow streets, and a sort of patchwork layout not in conformity with approved residential planning."⁶¹

The Planning Board was also beginning to be involved in planning for industrial growth. By 1946, the Board was discussing the establishment of a wide 'industrial belt' from North Charlotte to Wilkinson Boulevard, which would meet "...the need for a separate industrial

district which would be served by railway feeder lines and supplied with water-sewer service into the area."⁶² The Planning Board's idea of industrial development in the northwest quadrant of the city can be seen in the many industrial buildings and truck terminals dating from the early post-war period in this area.

Having laid the groundwork for city planning, the Board produced *A Master Plan Outline for Charlotte, North Carolina* in 1949. Compared to the 1944 document, this plan has a great deal more substance. Its authors assessed current conditions in the city: "With certain exceptions its industrial, business, and residential districts are not clearly defined......Thus, like many other large urban centers, Charlotte has reached the point in its development where major reconstructions are essential, not only to assure future growth, but to meet present needs." The plan also records that the "Extension of the city limits of January 1, 1949 brought about immediate need for water [and sewer] system expansions to service the ten square miles of added territory." Based on current conditions, the plan identified essential public projects such as water and sewer, and also made recommendations aimed at enhancing the current growth, such as an auditorium.

The 1953 plan, *How Shall We Grow, A Planning Program for Mecklenburg - Charlotte* showed a shift in local thought about planning for the future. The authors write: "To an increasing extent the problems of the future development of the City and the County are interrelated, and planning for that future development must be in terms of the whole county."The plan explained, "Outside the City it is important for the county to be able to zone for business centers at proper intervals along major highways instead of allowing the growth of 'ribbon developments' along the road-side which are unsightly, increase the chance of automobile accidents, and make any future highway widenings prohibitive in cost."⁶³ Building permits were finally required outside of the city limits in 1954. By the late 1950s, the scope of urban planning was wider still. On March 3, 1957 the *Charlotte Observer* published "A 10-Year Plan for All Cities," a document from the National Planning Association, which called for a nationwide, 10-year planning effort that would result in local plans coordinated with regional and national ideas. According to the NPA, this effort was necessary to modernize the nation's urban centers which were becoming obsolete. "The condition of our larger cities handicaps the operations of business, increasing the costs of production and distribution, and thereby makes America poorer."⁶⁴

Probably influenced by the National Planning Association, *The Next Twenty Years: a General Plan for the Development of the Charlotte Metropolitan Area* was produced in 1960 with a title suggesting that the series of short-term plans had been inadequate in dealing with the city's immense expansion. This is the most fully fleshed out Charlotte city plan from the 1945 - 1965 period.

The 1960 plan used projected patterns of population increase as its base. Not surprisingly, the population chart forecast the largest expansion to occur in the southeastern part of the city. Next, the plan projected the amount of land needed for uses such as business and industry by 1980. Appropriate locations for industrial development were delineated in the north and northwestern parts of the city, while retail was to be developed in residential areas in close coordination with the major thoroughfare plan. Retail facilities should be "clusters" of buildings

"set well back from the street, with adequate off-street parking facilities"– a contrast "to the past practice of lining both sides of a street with scattered retail stores for blocks or miles."⁶⁵

The Next Twenty Years was the first plan to directly address Charlotte's residential development. The plan prescribed "comparatively low levels" of density in residential areas to create "yards and open spaces, a quiet, restful atmosphere and family privacy." The residential areas should be organized into neighborhoods, each "with its own school, playground and shopping services." The plan promoted setting aside large areas for use as residential areas as imperative in avoiding blight from close proximity with industrial areas.⁶⁶

Community development, defined as suburban expansion, the distribution of the bourgeoning population, and the necessity of planning by the city government, was influenced directly and indirectly by the forceful impact of the car on society. As planning was becoming a standard component in Charlotte's government, the car was becoming a standard component of the Charlotte family.

Context 2: Transportation

During World War II, Charlotteans, like all patriotic Americans, were ready to drive. Wrote Thomas K. MacDonald, "Everyone in the United States is waiting for the close of the war to get in a car and go some place."⁶⁷ In Charlotte, the desire to move, to drive, and to transport started well before the Second World War. Native American trading routes, the Great Wagon Road, and other routes of European migration and settlement established Charlotte's location. These routes became roads. Later, the railroad was introduced, and then the paved road. Next came the highway and the airport. Highways became multi-lane and divided. The airport grew. Finally, in 1962, Interstate-85 arrived. The settlement of the city of Charlotte as it is known today, and its continued growth, are direct results of transportation.

When the United States entered the war, car production was severely curtailed as materials and energy were applied to the war effort, but after the war, production revived and car ownership skyrocketed. People were eager to get behind the wheel and go. Anywhere, everywhere, somewhere, nowhere. To the drive-in, the drive-thru, or the drive-up. Across the nation, motor vehicle registrations rose from 30 million during the war to 60 million by 1955.⁶⁸ This steep national increase was mirrored in Mecklenburg County. In 1945, there were 34,000 motor vehicle registrations.⁶⁹ By 1950, the number had increased to 64,411.⁷⁰ The ascent leveled off in the early 1950s,⁷¹ but by 1965, the county had 140,243 registered motor vehicles.⁷² In twenty years, car ownership in Mecklenburg County had more than quadrupled.

Nationally, the groundwork for this post-war car boom was laid in the first two decades of the twentieth century, when vehicle registrations rose from 8,000 to 8,000,000 nationwide.⁷³ It was during the 1920s that automobile interests became a major lobbying force at all levels of government, and traffic planners began to think "they could solve congestion problems by diverting traffic away from densely settled areas."⁷⁴ The end result was the construction of miles of limited access, "by-pass" roads. In 1945, it was onto these 1920s roads, cutting through low-density areas, that the wave of new car owners sped, newly released from the material

deprivation of the depression and war. Subsequently, new drivers began to demand more roads built in the previously developed, suburban, limited access pattern.

Between the two world wars, North Carolina's only four-lane highway was Charlotte's Wilkinson Boulevard. In the mid-1940s, when plans for Independence Boulevard began, Wilkinson was still the city's only major road. In 1944, the Charlotte Planning Commission asserted:

While North Carolina at one time was one of the leading States in the Nation from the standpoint of modern highways, we, like other states, have had to forego the construction and maintenance of our highways due to the war. As soon as men and material are available we must insist upon a program of street and highway development that will not only take care of traffic needs, but be so constructed as to provide every possible safety feature.⁷⁵

The city's first large post-war road construction project was Independence Boulevard, heralded and decried by many. The four-lane, undivided road opened in 1949, but was not exactly a superhighway. It had at- grade intersections and some on-street parking in the early years.⁷⁶ "Nonetheless, it marked the start of decades of Federal road projects that would widen city thoroughfares and provide new connections to surrounding regions."⁷⁷

Other highways followed, some altogether new, some expansions of existing streets and roads. A 1946 newspaper article gave a litany of various street and highway construction, widening, and improvement projects.⁷⁸ Park Road was widened in 1956 to four, undivided lanes from Tremont Avenue to the city limits, and "from the city limits to a point beyond Briar Creek it will be a dual lane affair with 22-foot paved strips on either side of a 14-foot divider."⁷⁹

Wealthy individuals able to invest in land on the edge of town favored these new roads, and though there were protests, they came only from those who lived in the road's path, and generally that population was too poor to create much opposition. In the case of Independence Boulevard, for example, the route of the road was carefully charted to avoid Myers Park and the upper-income neighborhoods surrounding it by swinging to the northeast through the less-influential, middle-class Chantilly neighborhood.⁸⁰

The form and design of these new roads was advocated in the 1944 Charlotte Planning Commission publication, *A Pattern for Charlotte*, which called for "new high-type freeways" with two lanes in either direction divided by a grassy median. It was pointed out that the current, standard roads produced "ribbons" of uncontrolled development and were unattractive, while "high-type freeways" were safer and sterilized against side developments, thus retaining original capacity and attractiveness.⁸¹ Despite their perceived, or actual, advantages, in reality, limited access was difficult to achieve and new highway projects and improvement projects continued to incorporate at-grade intersections. Still, many of these projects did yield divided lane formats, though the roadside proved to be quite vulnerable to development.

Generally, the media waxed poetic about the sprawling new highways. One 1956 *Charlotte Observer* article was entitled "Mecklenburg Roads Paved with Gold."⁸² The author of a 1950

local newspaper article, "Charlotte Grows into Gigantic 'Hub' as Highways Branch Out from City," was particularly enamored with the new streets:

These hard surfaced arteries, in a large measure, are Charlotte's lifeline. The city's pulse is counted on those traffic meters the highway officials occasionally throw across the roads. Up and down these concrete and macadam spokes flow tremendous quantities of goods which make Charlotte the commercial center of the Carolinas. Through these arteries come the millions of motorized people who find here that which they seek in exchange for their money.⁸³

Transportation, particularly by automobile, and alleviation of the traffic congestion caused by this form of mobility, were hot topics for the city. Planning reports, road expansion, and widening projects, and stories about the need for new and larger roads fill the news papers during the post-war years. Even when a story told of problems with automobiles or traffic, reporters and editors tended to focus on the benefits of the new, car-oriented lifestyle.

A 1957 story cited earlier in this report discussed the problems the Celanese Corporation of America might have faced in its suburban location, but each potential disadvantage was swept away.⁸⁴ Another article, this one from 1961, analyzed of the dwindling number of shops and shoppers in downtown Charlotte. The writer gave numerous examples of the ease of suburban shopping verses the hassles of downtown parking, businesses' independent hours of operation, difficulties faced by the pedestrian at congested intersections, and high downtown property tax rates. The reporter compares downtown to shopping centers in a way as that furthered the accepted idea that the suburban shopping center was the best way to satisfy customers' needs, while treating downtown as a place which needed to "catch up" to the car-catering world of suburbia.⁸⁵

As more and more car owners whizzed away from downtown and into the "country" on Charlotte's new and expanded streets, architecture, planning, and zoning began to accommodate the vehicles. Homes began to make more space for the car. Garages became part of house plans between the wars, with *Architectural Record* noting in 1937 that "the garage has become a very essential part of the residence."⁸⁶ This trend accelerated in the post-war years. The carport was a cheap alternative, but it was the attached garage that nearly swallowed the house, often occupying about one-third of the house's square footage by the 1960s⁸⁷.

Other forms of architecture developed specifically to cater to the car and driver. Some were alterations of earlier building types while some were altogether new. Motels and motorcourts, descendants of the tourist camp, usually had parking directly in front of every unit. The term "motel" was first coined in 1926 to specifically denote an establishment where guests could park their cars just outside their rooms. In 1952, the first Holiday Inn opened in Memphis, Tennessee, starting what would becoming the first motel chain. In 1948, there were 26,000 motels in the United States. That number more than doubled to 60,000 by 1960, doubling again by 1972. Kenneth Jackson wrote that by 1972, "an old hotel was closing somewhere in downtown America every thirty hours. And somewhere in suburban America, a plastic and glass Shangri La was rising to take its place."⁸⁸

In 1933, the first drive-in theater opened in Camden, New Jersey, and by 1958, there were over 4,000 in the United States. Nearly twelve years earlier the first drive-in restaurant, Royce Hailey's Pig Stand, had opened in Dallas. In the late 1920s, White Tower became the first franchise fast-food restaurant. Roughly three decades later, the first McDonald's restaurant opened in 1955. Just five years later, the nation was home to 228 McDonald's.⁸⁹

In 1955, the Reverend Robert Schuller, the pastor of the Reformed Church of America, begin holding services at a drive-in theater in Garden Grove, California. With the slogan, "Worship as you are . . . in your car," his drive-in church expanded and he constructed pulpit and office space. In 1969, with 6,000 members, the church built a "Tower of Power" designed by Richard Neutra, which was often referred to as "a shopping center for Jesus Christ." This was replaced in 1980 by Philip Johnson's 125 foot high "Crystal Cathedral." This church is 415 feet long and is covered with 10,000 pieces of glass. Before each service, two 90-foot glass walls swing open for the drive-in worshipers.⁹⁰

Another driver-oriented concept was the shopping center. The car-bound customer often did not live close to downtown and was no longer willing to park his or her car and walk throughout downtown to shop. This new customer wanted to park in front of his destination. Country Club Plaza (1925) in Kansas City was the first modern shopping center and included offices on the second floor. By the 1930s, the planned shopping center had become recognized as the best way to service the motorized consumer. As a result of the Depression and World War II, there were only eight shopping centers nationally in 1948. In 1949, Cameron Village opened in Raleigh as the nation's first major, large-scale, modern, planned retail center. The first enclosed mall, Southdale Shopping Center, opened in 1956 near Minneapolis.⁹¹

In the Queen City, Charlottetown Mall's opening day was October 28, 1959. One of the earliest regional malls in the nation, and the first mall in the South, it originally featured birdcages, waterfalls and pools, skylights, tropical plants, fish, and flowers. Unlike later malls, Charlottetown's second floor was reserved for offices, whose tenants included life insurance companies, an Avondale Mills office, and Harris Crane, Inc. Also on the second floor was an auditorium.

Drive-in restaurants, drive-thru banks, and drive-in movie theaters enabled patrons to be served without ever leaving their cars, while motels and shopping centers allowed customers to keep their cars close at hand. In order to keep all those cars running, gas stations proliferated. Between 1920 and 1950, service stations "became, as a group, one of the most widespread kinds of commercial buildings in the United States."⁹² Wrote one local newspaper reporter in 1957, "Nearly everywhere you look in Charlotte a new service station is poking up its gassy head."⁹³

Architecture also moved to accommodate transfer trucks. With a booming economy, and better, bigger roads, trucking became an important industry across the nation, and especially in Charlotte. This spurred the construction of trucking terminals and hubs along Charlotte's major transportation corridors. A trucking terminal is a large complex with a two-story main office, usually brick, fronting the road or street. Behind the office, or in some cases, to the side of the office, is a long, one-story platform or dock. A trucking hub has the same lay out, but the dock

is connected to a rail line. Charlotte's best examples are located along North Graham and North Tryon Streets. These complexes were usually executed with some degree of Modernist style.

In addition to generating new building types, transportation and the car also redefined Charlotte's zoning. Much of the 1944 and 1949 city plans focused on traffic, public parking downtown, and the creation of plenty of off-street parking at new buildings. The 1944 plan suggested creating off-street parking through underground parking garages, "open air parking buildings," or the use of the "new automatic method of parking automobiles."⁹⁴ A 1964 statewide parking study stated that "if they [cars] are to be used they must be given adequate space for movement and storage. . . the primary function of a street is to carry traffic and not for the storage of automobile," indicating that in the mid-1960s, parking was still an unresolved issue for planning and zoning officials.⁹⁵

Recommended zoning in *How Shall We Grow?* (1955) stated that "where existing neighborhood shopping facilities are being enlarged or new development undertaken, zoning regulations can help relieve traffic congestion by including requirements for adequate off-street parking space."⁹⁶ That same publication recommended that the county have zoning in order to create "business centers at proper intervals along major highways instead of allowing the growth of 'ribbon developments' along the roadside."⁹⁷ Such development was deemed unsightly, unsafe, and prohibitive of future highway widenings.⁹⁸ The resulting car-accommodating zoning produced vast parking lots and fostered the standardization of extremely deep setbacks for buildings. Despite their warnings against ribbon development, the new zoning policies contributed to spread of asphalt-encircled roadside commercial operations.

As certain corridors developed into major, multilane routes, planners began to be concerned about the "dumping" of cars onto a small number of major arteries. The 1949 plan pointed out:

Most of the streets developed . . . have been planned by private subdividers, often without any consideration whatever for the street pattern in adjoining neighborhoods. The result is evident in the maze of dead-end streets which impede traffic flow and throw an abnormal traffic load upon the few primary streets which lead into and out of the downtown district.⁹⁹

"Road dumping," still a problem cited in the mid-1950s *How Shall We Grow?*, continues to cause trouble today.¹⁰⁰

Beyond planning, architecture, and zoning, transportation even played a role in the location of a public university. In the mid-1960s, the seeds were being sown for the construction of the Charlotte campus of the University of North Carolina. One of the main advocates for the construction of the school noted that money could be saved by not constructing dormitories, focusing instead on creating a commuter campus.¹⁰¹ The site selection committee reported that the chosen location was "considered by highway engineers as one of the most accessible points in Mecklenburg."¹⁰² Their report went on to cite problems created by a limited amount of land

on which to expand at other colleges, such as Wake Forest University's original campus and the University of North Carolina at Greensboro, whose "founding fathers simply did not envision their phenomenal growth and the advent of students having their own cars."¹⁰³ The result was a relatively low density suburban campus, located so far from the city center that it has only been within the last ten to fifteen years that retail, residential, and service development has begun to surround the school.

It was in this context of rapidly expanding and improving transportation that Charlotte's suburbs and roadside services developed. Lewis Mumford was quoted in an AIA publication of the early 1960s as saying that the city "has been disappearing before our eyes, sinking under a tidal wave of motorcars and parking lots . . . being thinned out into a suburban conglomeration," and such was the case in post-war Charlotte.¹⁰⁴ With better roads and accessible car ownership, people were empowered to live and work away from the center of the city. Subdivisions filled with buildings to house both humans and cars, sprang up in the surrounding countryside. Offices and industrial operations built on inexpensive suburban land. Eventually, banks, shops, gas stations, restaurants, theaters, and other retail and service outlets crept out of town to provide the suburbanite with the comforts of the city center, all made possible by the highway and automobile.

The impact and evolution of transportation in Charlotte and the development of suburban living occurred in tandem with the renewal of the pre-war Modernist movements in architecture. New building types and forms were constructed largely in the suburbs and almost always accommodated the all-powerful car. The Modernist style, applied both to new and existing types, reflected the forward-looking, future-oriented goals of a nation and a New South just released from depression and war, with sights set on the moon.

Context 3: Architecture

Prior to World War II, the Prairie style, the International style, and the work of Frank Lloyd Wright had gained only limited acceptance in an America dominated by traditional architectural styles. It was into this America, whose architectural tastes were generally historically oriented, that European architects and landscape architects introduced European Modernism at the beginning of World War II. Most notable of these immigrants were the Germans, Walter Gropius and Mies van der Rohe, and the Swiss architect, Le Corbusier. The ideas of the European Modernists and those of American architects already working in a Modernist vocabulary developed in tandem, with the Europeans exercising the most influence over this new architecture. Gropius, van der Rohe, Le Corbusier, and others not only practiced Modernist and International style architecture in the United States, they also taught it. Their greatest impact was made in the late 1940s, with the accumulated needs of building in the postwar years and the rush of veteran enrollments in schools of architecture infiltrated by European Modernism....With one accord the educational establishment gave way to expatriate leadership, and in one school after another curricula based on Beaux-Arts theory and practice were dealt the coup de grace.¹⁰⁵

This new Modernism spread to architecture schools across the country and, though Colonial Revival remained the dominant style, particularly for residential designs, Modernism entered American architecture.

The basic tenets of Modernism emphasized function and utility; abstract beauty, sculptural form, and symbolism; honesty in materials and honesty; and the use of modern materials and technology as well as an emphasis on the use of natural materials. Some of the most prominent and outspoken proponents of various aspects of Modernism in America were Walter Gropius, Ludwig Mies van der Rohe, Le Corbusier, Frank Lloyd Wright, Eric Mendelsohn, Rudolph Schindler, and Richard Neutra.

Wright's Usonian houses, the term he coined in reference to his simple and affordable, yet comfortable and technologically advanced homes, were the predecessors of most of the postwar, Modernist homes found in Charlotte. Hand-in-hand with his Usonian homes was his concept of Broadacre City, a decentralized suburb which fused the agrarian myth with the public's growing desire to leave the city. Wright was also influential, along with architects such as Eero Saarinen, in promoting an architecture that was more than functional purism. Buildings such as Wright's Guggenheim Museum suggested "mystical and psychological symbolism" in its sculptural form.¹⁰⁶

	-
Walter Gropius	-

Walter Gropius was another architect influential in the development of post-war Modernism in the United States. Gropius was the director of the Bauhaus from 1919 to 1928. He arrived in America in 1937 to become the chairman of the Department of Architecture at Harvard. He introduced the Bauhaus curriculum which, in a relatively short period of time, transformed architecture schools across the nation, bringing the International Style into the mainstream of architectural education, if not completely into the mainstream of popular American culture.

Ludwig Mies van der Rohe also came to the United States from Germany in 1937. In 1938, he was named the director of the Architecture Department at the Illinois Institute of Technology in Chicago. Here, he began designing a new campus for the school where he exercised his ideas about technology, universal functionality, and anonymity of architecture. Of this campus design, Leland Roth wrote, "From the comprehensive plan down to the smallest detail, a

pervasive abstract technological ideal governs all."¹⁰⁷ In Chicago, Mies's Lakeshore Drive Apartments (1948-1951) are composed of twenty-one foot bays which create two towers that are each three by five bays. Veneer I-beams are applied to the exterior to create a symbolic structure, brace the skin, and add a third dimension to the building. "The Lake Shore apartments became the paradigm of aloof, anonymous glass boxes that began to appear in every American city, beginning with Bunshaft's Lever House."¹⁰⁸ Mies "viewed architecture as an expression of the order and reason that are embodied in structure, which in turn, is dependent on science and the technology of the time. . . He admonished his contemporaries: 'All forms not dictated by structure should be suppressed.'"¹⁰⁹

Such Modernism was introduced to North Carolina chiefly through the experimental Black Mountain College near Asheville and the School of Design at North Carolina State College (now University). Black Mountain was established in 1933 by John Andrew Rice and other former professors from Rollins College in Winter Park Florida.¹¹⁰ That same year, artist Josef Albers came to the new school to develop art and architecture programs similar to those at the Bauhaus.¹¹¹ He was followed by many former Bauhaus artists, professors, and students.

In 1937, Walter Gropius and Marcel Breuer were commissioned to produce plans for a group of buildings at Black Mountain College.¹¹² However, these buildings were not constructed due to fund-raising difficulties. Instead, a simplified version of Gropius and Breuer's concept was carried out between 1940 and 1944 under A. Lawrence Kocher.¹¹³ Kocher was a former managing editor of the *Architectural Record* and joined the Black Mountain faculty in 1938. Gropius and Breuer visited on several other occasions, and in 1948, Buckminster Fuller taught in the school's Summer Art Institute.¹¹⁴ The school closed in 1956.¹¹⁵

Better known to the general public was the School of Design at North Carolina State College. In 1948, Henry Leveke Kamphoefner, a professor of architecture from the University of Oklahoma, became the first dean of the School of Design. Kamphoefner was a staunch promoter of Modernism and perceived a progressive atmosphere in North Carolina. In a 1949 statement for the State College yearbook, Kamphoefner referred to North Carolina as "the most progressive state in the South," and that in such a state, "the opportunities are unlimited for the school's graduates to contribute to the solution of problems in building design, planning and general construction."¹¹⁶ Kamphoefner also wrote to Albers, "When my colleagues and I decided to come to North Carolina, being near Black Mountain College was considered by all of us to be one of the advantages."¹¹⁷

The School of Design and its faculty produced some of the most striking examples of Modernist architecture in the state. Matthew Nowicki was a young Polish architect who came to the School of Design in 1948. He designed Raleigh's Dorton Arena, which was completed in 1953, after his early death in a plane crash. The spectacle of the imposing arena, its sweeping roof line, and its architect's untimely death, created a new and heightened awareness of Modernist architecture in North Carolina.¹¹⁸

Other faculty members produced remarkable and award-winning smaller structures. Eduardo Catalano, an Argentine architect, built his own home with a thin hyperbolic paraboloid roof. George Matsumoto, G. Milton Small, School of Design graduate Robert P. Burns, Jr., and

Kamphoefner designed many Modernist residences. Architectural dignitaries who visited the school included Frank Lloyd Wright, Mies van der Rohe, and Buckminster Fuller, who was a visiting professor in the 1950s while he was working on his geodesic dome design.¹¹⁹

Beyond the city of Raleigh, the influence of the School of Design reached across the state. During the postwar period, as architects graduated from N.C. State, some made their way to fast-growing Charlotte where the greatest influence of Modernist tenets appeared in commercial and institutional architecture. By contrast, homes in Charlotte remained conservative, with only the occasional client interested in or open to Modernist architecture.¹²⁰ Nonetheless, this limited activity was enough for several firms and architects to practice, in some cases exclusively, in the Modernist style. A.G. Odell Associates was one such firm, as was J.N. Pease. Other smaller firms and independent architects also prospered.

The best known and most prolific Modernist architect in Charlotte was A. G. Odell, Jr. Odell was the son of a wealthy Concord textile family, and after graduating from Cornell University, he began practicing in Charlotte in 1939. Though trained in Beaux Arts theory, Odell was always interested in Modernist architecture. He was a conservative businessman with a conservative, Tudor Revival style house, but he was a flamboyant personality with a house whose exterior concealed a remarkably Modernist interior.¹²¹

The firm was arranged with Odell as the head; it was a "seventy-five person one-man office." He was in charge of every piece of incoming correspondence and oversaw all the marketing. The firm was divided into four departments with Odell heading the design department. The administrative department consisted of project managers. The production department created working drawings, and finally a construction department supervised the building of the project.¹²²

Although Odell's education pre-dated the formation of State's School of Design, his firm was linked to the school. In 1957, when the congregation of Concordia Evangelical Lutheran Church indicated that they would like to use a less expensive roofing material than the copper Odell's plans called for, Dean Kamphoefner wrote to the congregation saying, "the material is and must be an integral part of the design," and went on to congratulate them on "bringing to one of the smaller North Carolina communities an outstanding example of first-rate contemporary architecture."¹²³ In addition, various architects from the firm, including Odell himself visited the School of Design regularly for critiques, and Odell recruited heavily from State.¹²⁴

According to Michael Warner, who was hired by Odell in 1966, Odell was most proud of his Blue Cross Blue Shield building on the edge of Chapel Hill. He also liked the Modernist churches he designed, particularly Concordia Evangelical Lutheran Church (1957). He retired in 1982, but continued to come to his office every day, believing that a gentleman should never stay home during the day. Late in his retirement, he had his nurse drive him to the office.

Another major Charlotte firm producing Modernist architecture was J.N. Pease Associates. Founded in 1938 by World War I veteran, Colonel J. N. Pease, the firm's first large scale commission was Fort Bragg. Pease was from Colombus, Georgia and after the first World War, worked in New York City. He came to Charlotte towards the end of the Depression, but with the outbreak of World War II, returned to service, leaving the firm in the hands of George Rollins and James Stenhouse.¹²⁵

When the Colonel, as Pease was called, returned to Charlotte, he became heavily involved with the Chamber of Commerce, politics, and the newspaper in his efforts to promote his work and be a good citizen of the city, looking out for Charlotte's best interests. Through his civic involvement and promotion, the firm built a client base that included Duke Power, the City of Charlotte, Knight Publishing Company, Lance, Inc., A&P, Republic Steel, and other corporations.¹²⁶

Pease also worked to gather the best engineers and architects he could find. The firm provided good benefits and Pease tried to keep his employees satisfied, happy, and productive. The firm was one of the first in the state to incorporate architectural and engineering practices under one roof.¹²⁷

After World War II, J.N. Pease, Jr. completed school at Auburn University and came to work at the firm. Norman, as he was called, had been trained in the Modernist theories of Gropius, van der Rohe, etc., and brought these ideals to the firm. Up to this point, the Beaux Arts-trained James Stenhouse had been the firm's major designer, but Norman Pease's Modernist ideas set the design tone for the firm between 1955 and 1985. Norman began to bring in more Modernist architects, one of whom was Stewart Basel from New York City. According to architect John Duncan, Norman was especially proud of his Home Life building on East Morehead, which has been demolished.¹²⁸

The firm was arranged with Colonel Pease as the head until his 1973 retirement at the age of 98. He was followed by a board of directors which included Stenhouse, Rollins, John Ward, and Norman Pease. Next came architects, junior partners, and associates. Basel was in charge of assigning projects to a designer. From the designer, it went to a project architect and draftsmen, and then on to an engineer.¹²⁹

Another important Modernist architect practicing in Charlotte was Jack Boyte. Under the GI Bill, he went to college at Georgia Tech where he met Frank Lloyd Wright, who looked at his drawings and said, "You've got work to do." He graduated in 1951 and came to work in Charlotte for architect Lewis Asbury. In 1960, he established his own firm. Most influenced by van der Rohe, Wright, I.M. Pei, and the International Style, Boyte kept his firm small, never employing more than twelve people. He lists Odell's Coliseum as the best or most important Modernist building in Charlotte. He was also an admirer of the recently altered NCNB Building on Tryon Street.¹³⁰

Boyte enjoyed his small, informal office. When a project came into the office, he sat down with a few of his employees and one would "run" with it. He did most of the design work and very little drafting, and had everyone involved in all projects.¹³¹

These architects, like others nationwide, utilized Modernist architecture mostly in commercial and institutional construction. Examples are located throughout Charlotte. The best illustrations are office buildings, but other representatives include truck terminals, drive-in restaurants,

schools, and industrial buildings. The forms of buildings, and alterations to existing forms which evolved as a result of improved transportation and the growing dependency upon the automobile, are discussed in the section on transportation.

In Charlotte's center city, only a few Modernist buildings survive without significant alterations. While office buildings outside downtown were able to spread out with only one or two stories, downtown offices were forced to conform to the existing pattern of vertical growth and line up along the street like their neighbors from the previous century. Thus post-war, downtown buildings were similar to their predecessors in terms of verticality and set-back, but were usually larger and rarely incorporated traditional styles, instead turning to Modernism to present a clean, shiny new face to the core of the city.

One example of Modernism in the downtown area is the Wachovia Building at 129 West Trade Street. Built in 1956, with A.G. Odell and Harrison and Abramovitz as architects, the first four floors of the building comprise a base that carries fourteen stories above. The first floor is mostly glass, and interior integrity has been lost. The remainder of the base is clad in concrete panels and is topped with a narrow metal rail. The first floor above the base is glass and is recessed. The remaining upper floors are clad in concrete panels which are arranged to create angled projections between single pane, fixed sash windows.

The Home Federal Savings and Loan Building at 139 South Tryon Street (c. 1967), though slightly out of the survey time period, is a good example of small-scale Modernism downtown. At only eight stories high, the building is dwarfed by its current neighbors, but is still vertically oriented. This verticality is divided by prominent, projecting concrete sunshades between floors. Ribbon windows create another horizontal element. A side entrance is reached by crossing an Oriental bridge over a small water feature. The main lobby incorporates a sunken floor, a spiral stair with open risers, and a mezzanine level.

Another downtown Modernist office building is the 1961 North Carolina National Bank Building at 200 South Tryon Street. This building and the radically altered 1961 Kutter Building across the street may have been the first two Miesian, glass and steel skyscrapers in North Carolina. The NCNB Building consists of a four-story base supporting a glass and steel tower with eleven stories available for occupancy. The tower's skin remains intact, but the base has been completely stripped and gutted. NCNB planned this building to be eighteen stories high in response to Wachovia Bank's 1958 fifteen-story building at 139 West Trade Street.

Geographically and stylistically in between downtown and residential suburban areas is East Morehead Street where one finds Charlotte's highest concentration of Modernist office buildings. These buildings are generally one to three stories high and are horizontally oriented. Original tenants were those one might expect in a downtown setting, such as insurance companies, corporate headquarters or division offices, and various small, white-collar offices. These structures generally have a uniform setback away from the street with lawns and naturalistic plantings, but parking is to the rear of most and the lawns are not as big as those found in more suburban locations. They incorporate various elements of Modernism, such as ribbon windows, aluminum trim, terrazzo floors, entry areas with little articulation, and flat roofs.

Just beyond the city center, a key Modernist complex was constructed. Completed in 1950, A.G. Odell's Coliseum and Ovens Auditorium brought his firm and the city national recognition. The Coliseum is round and enclosed by a dome which, at the time of its construction, was the largest in the world. The Auditorium has a glass-walled lobby with an elegant mezzanine level. It is a notable sign of the times that such a grand public complex was not built in the city center, the traditional home to large-scale, civic buildings, but instead was constructed at the furthest reaches of the Charlotte's pre-war suburbs on the edge of a broad four-lane transportation corridor.

The Coliseum complex was an exception for the use of Modernism along the transportation corridors. For the most part, Modernism was applied to smaller service-oriented buildings. Drive-in restaurants including the c. 1955 South 21 Drive-In (3631 South Boulevard), truck terminals such as the c. 1960 Overnite complex (5204 North Graham Street), bank buildings such as the c. 1954 American Commercial Bank at West Morehead Street and Freedom Drive, and retail buildings like the Park-N-Shop stores are all examples of Modernist buildings. These and others along the corridors exhibit Modernism through the use of streamlined, horizontal features, such as banding and ribbon windows. They are usually one or two stories in height. In addition, they almost always incorporate at least one car accommodating feature such as a portecochere, garage, large parking lot, or drive-thru window.

As people and businesses moved to the suburb, so too did schools and churches. In the post-war years, school construction was booming nation-wide as cities struggled to educate the population of baby boom children. Charlotte was no exception. Sixteen schools were constructed in the Queen City between 1950 and 1955. For the five years between 1956 and 1961, four new senior highs, nine new junior highs, and fourteen new elementary schools were proposed.¹³² All of these schools were Modernist in design, and the majority were sited in woods, approached by curving drives, sometimes incorporating natural ravines or creeks into the landscape.

In the post-war years, architects begin to take a greater interest in school design, in part because it afforded them an opportunity to utilize Modernism. They advocated their work as beneficial to school boards, tax payers, and students. Odell wrote in his 1954 AIA President's Message, "Time and time again, the services of an architect have enabled a school board to build far better schools for far less money than had been thought possible."¹³³ Architects also saw the use of the style as a way to open the public's eyes to Modernism. Said one writer in *Southern Architect*, "Unless architects accept the opportunity which they now have to make each school a school designed and suited to one particular site and location and to specific purposes, he misses an opportunity for developing a deeper and more sincere appreciation of architecture by the lay public."¹³⁴

In addition to architects' desires to spread Modernism, and their proclamations of the benefits of Modernist schools, thought and theory on school planning during the post-war years pushed school architecture in the direction of Modernism. Recommendations for the size of school sites

necessitated that they be located in suburban areas, and large, open sites allowed for the spread of one-story buildings, which lent themselves best to Modernism. The following suggestions are from a 1957 book entitled *Planning Functional School Buildings*: Primary schools with 200 students or less should have four acres. Elementary schools, defined as grades 1-6, 1-8, or 4-8, should have six acres plus one additional acre for each 75 pupils. Junior high schools should have 12 acres, plus one for each 50 students. High schools should have 25 acres, plus one for each 50 students.¹³⁵ Large school sites recommended by educational consultants Engelhardt, Engelhardt, Leggett, and Cornell had been adopted in Charlotte by 1956 and though the exact size of these larger sites is not given, the acreages listed above are probably close to those adopted in Charlotte.¹³⁶ Similar site size recommendations can be found in a variety of school planning documents from the survey period, and they often remain the standard today.

School theorist William W. Caudill stated that in 1950, educators and architects began to work together to create inexpensive, pupil-oriented schools. He went on to say that by 1950, "the battle between 'contemporary' and 'traditional' was won. The public not only begin to accept 'modern,' but to demand it. So the architects had no choice but to try to produce logical schools."¹³⁷ School buildings should be constructed not to impress adults, but to provide for the student, and educators, local officials, parents, and architects were advocating that the light-filled modern school was the way in which to create the most positive, comfortable learning environment for the pupil.¹³⁸

This "humanistic approach" also promoted Modernism as architecturally honest. Caudill writes that such an approach,

holds too that logically 'form follows function' and, beyond that, that form should express function. It sees virtue in a school which says honestly and clearly in every line, 'I am a school; I am here to do a job and I am not ashamed to show you what I am and what I am doing, for I am doing it well.' On the other hand, this apporach sees a positive evil in schools which pretend to be colonial mansions or wear ornamental costumes, archaic or modern.¹³⁹

The push for the use of Modernism in school construction was a nation-wide movement, and Charlotte was certainly a participant. There is a striking resemblance between plans for a high school in Northport, Long Island produced by a New York firm, and that of Garinger High School, opened in 1959, and designed by A.G. Odell, Jr.¹⁴⁰ Both sites have a round library located in a central quad, which is surrounded by detached classroom, gym, administration, cafeteria, and auditorium buildings. Other plans from across the country were published in various school planning reports and are reflected in school buildings throughout Charlotte.¹⁴¹ Charlotte schools were noted at the national level in *Architectural Record* for "sensible pioneering in their campus plans, their schools-within-schools, their general education laboratories, and their concern for the development of the individual pupil as well as for the way they have helped the city grow."¹⁴²

Another aspect of Modernism is the expression of Modernist ideas through landscape architecture. Many of the individual homes surveyed retain their Modernist, naturalistic

landscape, but the broader landscape, specifically that of the curvilinear subdivision, has an integrity which is easy to recognize and a history which is better documented.

Emanating from the much earlier English Garden City ideals and the Romantic American suburbs such as Llewellyn Park and Riverside, the curvilinear subdivision became nationally institutionalized roughly one hundred years after its earliest introduction in the United States. During those first one hundred years, curving streets were incorporated into middle and working class subdivisions, but along the lines of existing or extended city grids, as opposed to the truly curvilinear lay-outs of the upper-class, self-contained subdivision. Between the mid-nineteenth century and the 1940s, the design of the pleasant, curvilinear subdivision moved from belonging exclusively to the wealthy, to becoming the pattern for subdivisions at large. This change was facilitated by the availability of inexpensive land that did not necessarily have to be divided in the most efficient manner, and which could be accessed via new roads by lower income families who could now afford a car.

As the government stepped in to the process of land development, the FHA sought to insure that financing was extended only to low-risk projects. One result was the standardization of the curvilinear street. The lay-out lent itself to privacy, and with few, if any through streets, and only one or two entrances, the influx, or even passing-through of "undesirable" people was curtailed. Curvilinear streets could also be used to lessen the number of four-way intersections, which were thought to be dangerous for automobile drivers.¹⁴³

Popularization and standardization of subdivisions was furthered with the establishment of the Urban Land Institute (ULI) in 1939. This non-profit organization conducted research in the field of planning and land development and supported the FHA approach to subdivision design. ULI's *Community Builders Handbook*, first published in 1947, was in its seventh edition in 1990, and continues to provide instructions for community development based on the curvilinear subdivision. These forces, combined with the public's enthusiasm for subdivisions resulted in the institutionalizing of subdivision regulations in most metropolitan areas by the middle of the twentieth century.¹⁴⁴

Beyond the institutional, standardized, and bureaucratic influences on subdivision lay-outs, the aesthetic qualities of the curving streets were a major component of planned and designed landscapes. Curvilinear streets could conform to the natural terrain of a site and allow homes to take advantage of hills, ravines, and creeks. Such is the case in Sedgewood Circle where at one point, a street splits into one lane in each direction, one above the other on the side of a hill, minimizing the alteration of that hill and reinforcing a sense of naturalism. Streets were also laid out to accommodate man-made hills and lakes, as in The Cloisters where Cloister Drive creates a "P" shape around a man-made lake. Carmel Park incorporates natural and man-made landscape elements, including several ponds, lakes, and streams. The entire subdivision is insulated from the outside world by woods, and houses are situated on hills, on slopes, or in small secluded valleys. Just as architects sought to bring the outdoors in during this time, landscape architects also sought to incorporate the natural topography in the subdivision.

The use of curving streets produced subdivisions in which homes could be sited to attain maximum privacy or prominence, and have pleasant vistas of natural or naturalistic woods,

sweeping lawns, or water features. The park-like atmosphere also fostered the ultimate goal of the subdivision, which was to house families in a peaceful county setting, with as few urban references as possible.

Nationally, as in Charlotte, most of the homes in these Modernist subdivisions were Colonial Revival in style, however, a few homeowners did commission Modernist designs. Odell designed Charlotte's first Modernist house, the Kenneth Shupp house on Sharon View Road, in 1947.¹⁴⁵ His residential work was reserved for his friends and some of his largest commercial clients, and he sought to keep the general public from knowing of these designs.¹⁴⁶ Thus, information about specific homes and their locations is scarce.¹⁴⁷ He designed at least one home still extant in the Cloisters subdivision.¹⁴⁸ He also designed the Cannon residence on Edgehill Road and the Spencer Bell Home on Providence Road, both of which have been demolished.

One Modernist home of particular note is the house Jack Boyte designed in the mid-1950s for the Neiman family. This house is an outstanding example of Modernist residential architecture, but fascinatingly, it is remarkably unaltered, in a time period when the destruction of many Modernist buildings is rampant. The house is located on Providence Road, sited on a wooded slope. Boyte had designed a similar house next to the Neimans a few years before and after seeing that one, Mrs. Neiman sought out Boyte. The earlier house has been demolished.

The Neiman House is loosely L-shaped with a very low hip roof, deep eaves, and wood and Roman brick siding. The interior retains original light fixtures, kitchen counters and cabinets, bathroom fixtures, square mahogany paneling, and a striking triangular, pink marble, fireplace. Boyte credits an inspiring parcel of land and open-minded clients for the beautiful results. Borrowing a little from Wright, he created a simple, clean home, whose crisp lines are softened by the use of natural materials, and planters indoors and out. Thanks to the long ownership of Mrs. Neiman, only the floor covering in the kitchen had been changed until the house was sold in 1997. Thanks to the present owners' love of the house, only a few wallpapers (namely the pink butterfly paper) will be removed.

Like the Neiman family, those who could afford to commission an architect and purchase the materials needed for a high-style Modernist home could also afford to choose where they lived. They preferred exclusive new subdivisions, such as the Cloisters, and established but fashionable neighborhoods, such as Myers Park and Eastover. Ironically, it is exactly this choice by the original owners to build in fashionable areas which are the root of current threats to Modernist homes in Charlotte. Because the locations of many of Charlotte's best Modernist homes are retaining their appeal and exclusiveness, the land under the houses has become, in many cases, more valuable than the building. This is coupled with the fact that today, as in the post-war years, most homeowners do not want a Modernist home. The end result is that many Modernist homes have been demolished to make way for new homes with dormers, Flemish bond, and fanlights. Such a fate will be a real possibility for all the high-end Modernist homes surveyed in this project when the current owners vacate the house.

For the most part, homes which have been demolished were located in older neighborhoods where they were constructed as in-fill. The following homes, most of which were featured in *Southern Architect*, are just a few of the many that have been removed: the Cannon House, c.

1954, 801 S. Edgehill Road, replaced by three houses; the Spencer Bell House, 6121 Providence Road, replaced by apartments; a home on Cassamia Place, designed by Jack O. Boyte, c. 1952, replaced by a neo-traditional home; the Carpenter House, c. 1954, 2708 Sedgewood Circle, replaced by a neo-traditional home; and the Efird House, c. 1953, also on Sedgewood Circle and also replaced by a more traditional home. These are only a few of the Modernist homes recently lost. Several other homes, such as A.G. Odell's Jackson-Wright House on Hempstead Place in Eastover, have been drastically remodeled.

Several reasons have been given for Charlotte's lack of interest in residential Modernism – a pattern that prevailed throughout the state. In the immediate post-war years, the Federal Housing Administration was the major financier for many subdivisions and housing developments, and as such, the FHA wanted developers to engage in low-risk projects. This translated into the use of Colonial Revival and other historically influenced styles. In addition, traditional architecture was easier and less expensive to construct.¹⁴⁹ It has also been noted that the overall atmosphere in Charlotte was fairly conservative and traditional, despite claims of New-South-ism.¹⁵⁰ In writing about the development of American postwar housing, one author has stated, "As long as they [buyers] weren't presented with a residence that was shockingly *avant garde*, what they were after was not any particular style, but a super-modern, fully functioning, single-family house with ample outdoor space and all the mechanical and electrical conveniences the post-war world had to offer."¹⁵¹

As previously stated, many of these Modernist homes are located in high-end subdivisions, most of which are to be found in the south and southeast sections of the city. The Cloisters, Sedgewood Circle, Mountain Brook, and Carmel Park exhibit the highest concentrations of Modernist homes, but even in these small neighborhoods, Modernist homes are far out numbered by more traditional styles. Though most subdivisions have experienced few if any tear-downs, Sedgewood Circle has lost several examples, including the Efird and Carpenter Houses. The plan of Sedgewood Circle is also being compromised by the introduction of culde-sacs extending off the original streets to accommodate neo-traditional development. Other surveyed subdivisions such as Montclaire and Lansdowne never had many high-style Modernist homes. Modernist influenced buildings in these subdivisions remain desirable because they were not and are not particularly *avant garde*, the land they occupy has not become overly valuable, and their locations are not considered exclusive.

Though never the mainstream choice for building design, Modernism did make its mark on the state of North Carolina and on Charlotte. Remarkable Modernist designers found their way to the state, through Black Mountain College and North Carolina State University's School of Design. In Charlotte, A.G. Odell, J. Norman Pease, and Jack Boyte, and others such as Walter Bost and Murray Whisnaunt, led the movement. Widely popular for commercial and institutional buildings the style was never accepted popularly, especially for residential use. In the postwar era, Modernist buildings were rare even in their "heyday." As the sites these buildings occupy escalate in value, particularly those located downtown and in in-town neighborhoods, and because the style has only a small number of supporters, these uncommon buildings are becoming increasingly scarce.

Typology

These historical contexts came together in Charlotte's post-war years to foster the development of Modernist architecture in the city. Similarly, these contexts fostered the development of new building types and the alteration of established building types. The following discussion of the nomenclature for the building types recognized, documented, and researched in this survey is divided into five types: commercial, industrial, institutional, residential, and subdivisions.

Subsequent to the typology will be a definition of the Modernist style, created in an effort to establish Modernism concretely, as styles from earlier time periods have set definitions. Though this survey documented Modernist architecture, the types related in this typology may have any style applied to them. Some types are modern because of their use or form, such as the ranch house and truck terminal, but regardless of their modern type, they too, may be constructed in any style.

Type 1: Commercial

Description

Charlotte's surviving postwar commercial buildings cover a range of types most of which are directly related to their historic function. There are six basic function-related types: restaurant, motel, gas station, office, retail and service, and entertainment facilities. Within each of these types, several sub-types have been determined to further define the building's characteristics.

In general, c.1945 - c.1965 commercial buildings in Charlotte are constructed of modern materials such as steel, brick veneer, large expanses of glass, and concrete. With the exception of offices, commercial buildings are usually one-story tall and there tends to be a great deal of variety in their architectural expression. Those catering to passing motorists, such as drive-ins, tend to be exuberant and individualistic in their interpretations of Modernist themes while more refined, academic style buildings are typical for offices. The location of these buildings varies a great deal although the majority are found away from the center city along the major transportation corridors. The exception is offices, which are typically closer to downtown.

A. Restaurant

A restaurant is simply a building whose purpose is to house the production and sale of ready-toeat food. It is not a new or particularly modern type. The following sub-types were found to occur in the post-war period.

1. Eat-in: This is a traditional restaurant. The post-war type is freestanding rather than being

located in a building which serves other purposes, such as an office or hotel. The eat-in has one main entrance, spacious seating area, and kitchen space, usually located to the rear of the structure. The building has a large parking lot located to the front, side, or both, or is a shopping center out-parcel and is surrounded by parking areas. Surveyed types include the Knife and Fork (2531 Sharon Amity Road) and the Ole Smokehouse (1513 Montford Road). A specific

kind of the eat-in restaurant is the prefabricated diner. A National Register eligible example is Lil' Diner on Beatties Ford Road. The eat-in restaurant is so named based on current industry terms.

2. Walk-up: This type consists of a small building, often with three sides of windows, surrounded by parking. Usually, but not always, there is a small out-door seating area. Patrons must walk up to a service window to order and receive their food. They then either eat off the premises, in their cars, or in the outdoor seating area, if one exists. In rare instances, a canopy may shelter the seating area. There is no indoor seating. This name was derived from the way patrons approach the window to order and does not come from the industry or period literature. Surveyed examples include Zac's Hamburgers (4009 South Boulevard) and the Dairy Queen at 2732 Wilkinson Boulevard, which is National Register eligible.

3. Drive-in: This sub-type is particularly modern because of its car orientation. The drive-in consists of a small, boxy building used for preparing food, organizing it into orders, and pairing wait staff with orders to be delivered. Attached to the building is a long, narrow canopy that stretches away from the kitchen building and shelters the sidewalks used by wait staff. The canopy usually projects out from the front of the kitchen building, or out to the side. Patrons drive up to freestanding, permanent menu boxes located just under the canopy. Patrons either use an intercom system to place their orders, or wait staff come out to the cars to take orders. The food is brought out to the customers, waiting in their cars. The South 21 Drive-Ins on South Boulevard and Independence Boulevard are examples as is the BBQ King on Wilkinson Boulevard. The original, South 21 Drive-In No. 1 is eligible for National Register listing. The term drive-in is both the period and current way to denote this type of restaurant.

B. Motel

The motel is not a post-war invention, but the post-war form is the result of the continuation and evolution of an older type of building. The goal of the motel is to provide accommodations for both the person and his or her car. The term was coined in 1926 specifically to denote a place for lodging where the patron's car could be parked just outside his room. The motel is almost always accompanied by an eye-catching, street-side sign. Two types were documented in Charlotte.

1. Courtyard: This motel type is a building or complex of buildings, usually but not necessarily one-story, which embrace a courtyard. The buildings may form a "U," an "L," or even a nearly complete circle or square. In some cases, the building or buildings may not bend to form a traditional courtyard, but if it is not paralleled by another detached building or string of buildings, the complex should fall into the courtyard type. The courtyard may be mostly lawn, and may resemble a park, or it may be completely paved for parking. In the case of a grassy courtyard, parking will still be located directly adjacent to the rooms. The courtyard may also incorporate a swimming pool. The office is usually located at one end of the complex. Queen City Motel (4526 Wilkinson Boulevard), Romany Motor Court (5911 North Tryon Street), and the Casa Rancho (6001 North Tryon Street) are all surveyed courtyard motels. The term

courtyard is derived from the form of the building or complex and, so far as it is known, is not a period term.

2. Parallel: Again, usually one-story in height, the parallel motel is formed by two long narrow buildings, or string of buildings, which face one another with parking between. Usually, this type is utilized to make the most of a smaller lot, and generally, the narrow end, or gable ends of the buildings face the street. An office is usually located on the end of one of the buildings, closest to the street. A lawn area, sometimes with a swimming pool, may be located at the rear of the lot. A surveyed example would be the Oak Den (5104 Wilkinson Boulevard). The term parallel motel is derived from the form of the building or complex and, so far as it is known, is not a period term.

C. Gas Stations

Like the motel, the gas station is not a post-war invention. The purpose of the type is to facilitate the sale and dispensing of gasoline. In some cases, it may also accommodate automobile servicing. The following two types were derived from observations by the authors and the typology set forth in Jakle and Sculle's *The Gas Station in America* (1994).

1. Box: This type is a small rectangular or square box, generally incorporating plate glass windows, which provides shelter for sales and restrooms. During the post-war period, restrooms were designed with exterior entrances rather than through the sales space. Sometimes, one or more of the corners of the building are rounded, and in types executed in the Modernist style, windows often slant back and in to a low knee wall or bulkhead. To the rear or side of the box, one or more service bays may be additions or may be original construction. The remainder of the lot is paved and two to four gas pumps are located in front of the building. A good example of this type can be found at 5137 Central Avenue.

2. Box with canopy: This type is the box as described above, but with a canopy extending out over the gas pumps to shelter employees, patrons and cars from the weather. The canopy may not be attached to the building, or it may be an extension of the box's roof. Canopies can be small and rather non-descript, or they can dominate the facade and set the style of the building, as in the use of the sweeping, triangular canopy found on some "66" stations. Various versions of the box with canopy were documented including the Central 66, at 4731 Central Avenue, which is eligible for the National Register.

D. Office

Office buildings, like many other types discussed in this section are not a post-war phenomenon, but during this period, they moved into the suburban landscape, and were no longer limited to downtown locations. Thus, the office building divides into three sub-types. These sub-types reflect the variety of locations in which offices may be found, but are not limited to that location. These terms are recognized architectural terms used in reference to a building's height.

1. High-rise: This type is similar to a traditional downtown commercial building, and as such, its most important features are its small or non-existent setback and vertical orientation. When executed in the Modernist style, this verticality may be emphasized with vertical planes and/or no capitol, or it may be dominated by horizontal planes. This type is more than five stories high. In the post-war period, it was generally constructed downtown (NCNB Building, 200 South Tryon; Wachovia Building, 129 West Trade), but may be found further away, particularly along major transportation corridors (Ervin Building, 4037 Independence Boulevard). Both the Wachovia Building and the Home Federal Building (139 S. Tryon St.) are eligible to the National Register.

2. Mid-rise: As the name implies, this building is lower than the high-rise. It has a horizontal orientation and is wider than it is high. When done in the Modernist style, this horizontal character is often emphasized by ribbon windows and banding, though occasionally, vertical members may be applied. Often the entrance is located off-center. The mid-rise is most commonly two or three-stories high, but may be as much as five-stories. It is usually found in suburban areas, generally not far from downtown, but can and does occur downtown or in further-flung suburbs. Examples eligible for listing the National Register include a dentist and office building at 1200 The Plaza, the J.N. Pease Associates Building at 2919-2925 Independence Boulevard, a potential district of office buildings on East Morehead Street, the Pure Oil Building also located on East Morehead, the Walter Hook Building on West 4th Street, and the American Commercial Bank at the intersection of West Morehead Street and Freedom Drive, is also National Register eligible.

3. Low-rise: In the simplest of terms, this type of building is a one-story box, with either the short or long end used for the entrance. Often symmetrical, its horizontality is usually emphasized with deep eaves or a wide fascia. This type is most often found on shopping center out parcels or along suburban transportation corridors, though it can be found anywhere. The most common uses of this type are as branch offices for banks or insurance companies, or as offices for veterinarians, accountants, or doctors and dentists. First Citizens Bank and Trust branch office (3055 Freedom Drive) is a good example.

E. Retail and Service

A broad type of building, retail and service encompasses two basic types. Retail buildings may be found any where in a city, but during the post-war period, new retail buildings were confined almost exclusively to suburban locales with plenty of parking. One type is the well-known, stillutilized shopping center. The second type is equally known and used, but is less defined. This is the detached type. **1. Shopping Center:** The shopping center is a well defined type. It is one-story, though early versions were sometimes two, and it is either oriented parallel to a major road, or it curves or bends to embrace the parking area. In either layout, the parking area is substantial and is prominently located in front of the building. The building is divided into smaller shops each with their own storefronts, which are sometimes stylistically individualized. A sheltered walkway is almost always incorporated into the front facade so that shoppers can stay out of the weather as they move from store to store. The shopping center often houses one or more large "anchor" stores, usually a grocery or department store. The anchor is set apart from the rest of the center by its substantial width, taking up the space of several storefronts, and often by its height which is increased by a second story or tall parapet. Examples include Hutchison (2016-2050 North Graham Street) and Park Road (4100 Park Road) Shopping Centers. The term, shopping center, has been used to describe this type of building since the survey period.

2. Detached: The detached type of retail building is a free-standing building which houses retail and service activities. It is often an out-parcel in a shopping center, but equally often is sited on its own lot along a transportation corridor. It may also be found on the edge of a downtown, though it is almost never embedded in downtown. The detached type must be further divided into three more types, defined below. Detached is a term created by the authors based on the type's location relative to other buildings. Super-, middle-, and small-mart were all created by the authors as a way to combine the term "mart" which, beginning in the study period, was and is applied to suburban retail outlets, with a term to reflect the size of the building.

a. Detached super-mart: This is a large, one-story building with a wide-open interior retail space. It is often used as a grocery store or automobile dealership, but almost never used for service purposes. The detached super-mart is usually rectangular with the entrance on the narrow end of the building. It can be found along transportation corridors and in the largest shopping center, it may occupy an out-parcel. A large parking lot accompanies the building. The Park-n-Shop located at the corner of North Tryon Street and Sugar Creek Road is eligible to the National Register.

b. Detached middle-mart: This is similar to the detached super-mart, but on a smaller scale. The middle-mart may be located on a transportation corridor, on a shopping center out-parcel, or occasionally on the edge of downtown. This type may house a hardware store, auto repair shop, or other retail or service activities. Like the super-mart, it is almost always rectangular, though the main entrance may be on the long or short side of the structure. Good examples of the detached middle-mart are the Firestone buildings at 4305 Park Road and 530 South Tryon Street.

c. Detached small-mart: The detached small-mart is the smallest of the detached retail-service types. As its name indicates, it is a small building, but like its larger relatives, may be located on its own lot, or on a shopping center out-parcel. When this type has its own lot, it has parking in front of the building, but the lot is considerably smaller than those at the super- or middle-mart. One of the most common uses occupying this type is dry cleaning services and convenience stores. Examples of the small-mart include Holiday Cleaners (4201 Park Road) and the Lil General Store (1616 North Graham Street).

F. Entertainment Facilities

Post-war entertainment options were similar to those before the war, but two types in particular are specific to post-war architecture. The terms are recognized terms for these types.

1. Movie Theater: The post-war theater is similar to its predecessors in that it consists of a box office, lobby, marquee, and the theater space itself. However, the post-war theater is a multiplex, generally housing two or more screens, and it is often located along a suburban transportation corridor, in a shopping center parking lot as an out-parcel, or as part of a shopping center. The screening room has only floor seating, and the screen surround lacks articulation. The post-war theater almost always has a flat roof. Drive-in movie theaters had their hey-day in the post-war period. Drive-ins consist of a large, often sloped, parking area, projection building, which usually includes a food service area, and the large screen. No drive-ins were surveyed. Surveyed theater examples include the Capri (3500 Independence Boulevard) and Park Terrace (4289 Park Road).

2. Bowling Alley: Post-war bowling alleys were usually large metal or brick buildings housing a shoe rental counter, restaurant or snack bar, and sunken alley space with benches, score keeper tables, and ball return. Park Lanes (1700 Montford Drive) and Coliseum Lanes (2801 Independence Boulevard) are surveyed examples.

Significance

The c.1945 - c.1965 commercial buildings of Charlotte are significant because they

reflect several important trends. The first of these is economics. Following the end of World War II, the U.S. economy boomed with an onslaught of construction projects some of which received support from Federal programs. This boom is evident in the large number of commercial structures surveyed. A second trend was suburbanization. The location of the commercial buildings surveyed is an important indicator both of the emergence of heavily traveled automobile corridors lined by service-oriented businesses as well as the expansion of retail facilities accompanying residential development in suburban areas around the city center. A third trend indicated by the stock of commercial buildings, is the preference for Modernism. A large number of the Modernist resources surveyed were of the commercial type. This type also displayed some of the finer examples of the style, offices in particular, as well as some of the most unusual and unique (Minit Carwash on South Boulevard for example).

Registration Requirements

To qualify for listing on the National Register of Historic Places, a commercial building covered under this survey and report must have been constructed during the post-World War II period between circa 1945 and circa.1965. The resource must retain sufficient architectural features to identify its original function and the activities surrounding that function. Factors such as integrity of design, materials, workmanship, setting and association will be of particular importance to those properties significant for their historic function. Properties significant because of their architecture should be outstanding, intact representatives of either their

particular type or the Modernist style. In some cases, groups of commercial buildings, such as the offices located on the 1300 Block of East Morehead Street, may be eligible for listing on the Register as districts. Thus, their integrity of setting, location, design, feeling, and association are important.

Type 2: Industrial

Description

Post-World War II industrial buildings in Charlotte fall into two types related to their historic function: trucking and manufacturing/distribution. Within the trucking type, two sub-types have been identified. There are no significant variations warranting subtypes within the manufacturing/distribution category.

Industrial buildings built between roughly 1945 and 1965 are most often sheathed in brick veneer, although some examples exhibit the use of concrete and large expanses of glass. Industrial buildings are typically one-story tall although occasionally, the main (front) office will be two stories, as in the Overnite Building on North Graham Street. Stylistic detail is found almost exclusively on the main office blocks while the areas dedicated to warehousing or production exhibit little architectural expression. Industrial buildings were surveyed along the transportation corridors throughout the suburban areas of the city, but are concentrated in the north and northwestern sections of Charlotte along such corridors as North Graham Street and Rozzelle's Ferry Road.

A. Trucking

As Charlotte maintained her railroad connections, expanded and improved her highway system, and produced increasing quantities of exportable products, the local trucking industry grew. Two types of trucking complexes were documented in Charlotte. They are named and described based on accepted type names used within the industry.

1. Terminal: The trucking terminal consists of one main office building, usually two-stories in height. To either the rear or side of the main building, a long, narrow shed extends. This is the actual truck dock to which transfer trucks back up for loading and unloading. Some dock areas are completely open with columns supporting the roof, while some have full walls with openings to accommodate the transfer truck's trailer. In this case, the opening can usually be closed with an overhead or sliding door. The terminal is located along a major transportation corridor, such as a large street, like North Graham Street, or at the entrance to an interstate. Car parking is located to the side or front, with transfer truck parking to the rear. Often a grassy lawn is located between the main street and the front office. A good example is the Overnite

terminal (5204 North Graham Street). Another example, Akers Motor Lines, on I-85 Service Road is eligible for listing on the National Register.

2. Hub: The hub is exactly like the terminal, but the end of the dock opposite the office is used to connect the complex to a railroad facilitating the movement of goods between trucks and the railway. The Alison-Erwin complex at 2920 North Tryon Street is a surveyed example of a hub.

B. Manufacturing/Distribution

Post-war manufacturing and distribution complexes moved from the city center and spread out on inexpensive land, along with residential and business operations. These industrial complexes are similar in lay-out to trucking terminals. The site consists of a lawn between the front office and the highway. The office is often brick and is one or two-stories high. Behind the main office, or occasionally to the side, is the factory or warehouse space. This area is usually large and one-story in height with little or no architectural style. Parking areas are located to the side and/or rear of the building. In the case of distribution centers, a truck dock will usually be located on the side or rear of the warehouse space. Western Electric (2833 North Tryon Street) is an example that is National Register eligible.

Significance

Industrial buildings constructed circa 1945 - 1965 in Charlotte are significant

because they exemplify the changes occurring in the economy of the city. Moving away from textile manufacturing, Charlotte became the home to more diverse and more technical manufacturing endeavors with companies such as Celanese and Western Electric (North Tryon Street). The completion of Interstate 85 in 1962, as well as the completion of Interstate 77 in the 1970s, enabled two transportation industries, trucking and distribution, to grow. Resources related to the trucking industry are of particular note because they represent the dramatic expansion of trucking in Charlotte; a trend evident throughout the country. The truck-related resources surveyed tend to be located near Interstate 85 along streets such as North Graham Street. In fact, most of the industrial resources surveyed are located in the north and northwestern sections of the city although there are examples from other areas such as the American Envelope Company on South Boulevard.

Registration Requirements

To qualify for listing on the National Register of Historic Places, an industrial building covered under this survey and report must have been constructed during the post-World War II period between circa 1945 and circa1965. The resource must retain sufficient architectural features to identify its original function and the activities surrounding that function. Factors such as integrity of design, materials, workmanship, setting and association will be of particular importance to those properties significant for their historic function. Properties significant because of their architecture should be outstanding, intact representatives of either their particular type or the Modernist style.

Type 3: Institutional

Description

There are three types of Post-World War II institutional buildings in Charlotte: educational, religious, and civic. Overall, institutional buildings exhibit the greatest number of high-style or academic examples among the four primary property types. The form of institutional buildings varies with the creativity of their designers although there are some commonalities within the separate types discussed below. Furthermore, as the buildings vary in form and architectural expression, their construction materials also vary but materials such as concrete, steel, brick veneer, enamel panels, and large expanses of glass are commonly featured. The location of institutional buildings, especially educational and religious facilities, tends to be near residential areas. While often found in suburban areas, churches and schools were also surveyed and observed in older residential sections near the center city. Civic buildings are usually located in or quite near the center city with the exception of public works facilities such as the Franklin Water Works on Brookshire Boulevard.

A. Educational

Schools constitute a very old public building type, but a distinctively modern form does emerge in the post-war years. Post-war schools are usually one-story, but may be two or three-stories. They are often divided into several buildings separating administrative activities, the cafeteria, gym, auditorium, library, and classrooms. Landscaped plazas and/or covered walkways link the buildings. As with much suburban residential design, the campus spreads over a large parcel of land, incorporating woods, streams, and other natural landscape features. The buildings are horizontally oriented and have large expanses of glass. They nearly always feature a flat roof. Examples eligible to the National Register include Chantilly Elementary, Double Oaks Elementary, and Garinger High School.

B. Religious

Similar to schools, churches, synagogues and other houses of worship are among the oldest types of buildings. However, the use of new forms and the Modernist style created a recognizable, modern type. Sanctuaries of the post-war period are typically two or three stories in height for dramatic effect and to allow space for a small balcony and/or organ pipes. A great deal of Modernist expression was usually found at the sanctuary in the form of large expanses of glass or swooping, stepped or otherwise highly articulated roof forms. A traditional hold-

over, the sanctuary roof, even when not a traditional gable, usually provided for a gable-end entry. The form of religious properties is of particular note as the property usually included both a central sanctuary or worship space with attached appendages serving functions such as fellowship hall and classroom space for Sunday School or weekday church schools. These appendages usually resembled educational facilities described above, being two or three stories with flat roofs, brick veneer or material complementary to sanctuary, lots of windows, and occasionally, enameled panels. An example with an outstanding surviving interior is St. Mark's Lutheran Church on Queens Road; it is eligible to the National Register. Westminster Presbyterian Church at the corner of Colville Road and Randolph Road is also National Register eligible.

C. Civic

Civic properties are particularly difficult to describe because of their design varies significantly with their function. Serving public uses ranging from event facilities such as the Charlotte Coliseum and Ovens Auditorium (Independence Blvd.) to public works such as the Franklin Water Works (Brookshire Blvd.), the only consistent design feature is a recognizable effort to create a memorable public "landmark." Civic properties also tend to be large and typically express their function in their design, the Coliseum being the ultimate example. Like religious properties, this type also tends to express good-quality, high-style Modernist design. The Charlotte Coliseum and Ovens Auditorium, the Franklin Water Works, the YMCA Building on East Morehead Street, and the Charlotte Union Bus Station (418 W. Trade) are eligible for the National Register. Civic was chosen by the authors as a term to refer to a variety of public buildings.

Significance

Charlotte's post-World War II (c.1945-c.1965) institutional buildings are significant

for different reasons depending on the specific resource type. For example, the schools surveyed in Charlotte are significant because they exemplify the trend for suburban schools at the time. The large number of schools dating from the post-war period indicates the explosive suburban expansion and associated baby boom. Finally, educational facilities are significant because of the multi-building, campus plan (a feature new to grade schools during the period) as well as their expression of Modernist architecture. Religious properties also developed a new post-war form that included structures or wings attached to the well-known sanctuary for use as education and fellowship facilities. Religious and civic properties are usually significant for their expression of Modernist architecture; being some of the finest examples of this style observed during this survey.

Registration Requirements

To qualify for listing on the National Register of Historic Places, an institutional building covered under this survey and report must have been constructed during the post-World War II period between circa 1945 and circa 1965. Many institutional buildings are individually significant, typically because of their architecture. To qualify individually, an institutional

building should be largely intact and be an outstanding example of its form or style. Integrity of materials, workmanship, and design is crucial. Other resources, such as buildings on college campuses, may be eligible as part of a district. For these resources, the connection with neighboring buildings and their surroundings should be considered. The integrity of location, setting, feeling, and association will be particularly important. Buildings with modest alterations, particularly interior alterations, are considered as contributing elements in a district if the overall historic character of the building remains evident.

Type 4: Residential

Description

There are two basic types of Post-World War II residential buildings in Charlotte: apartments and single family. While examples of Modernist residences are relatively rare, those that do exist often exhibit outstanding architecture. Similar to institutional buildings, the form of the houses varies according to the creativity of their designers. Almost all Modernist residences are one-story at the front facade although many use the topography to have two or even three levels evident on the rear facade. This feature is usually designed to take the greatest advantage of woodlands or other natural elements at the rear of the property. Materials primarily include brick veneer, large expanses of glass, and vertical wood siding although concrete and stone are often used as accents. Almost all of the Modernist residences surveyed were located in a subdivision.

A. Apartments

The apartment is a well-defined building type. During the post-war period, it can be found throughout the city, from the edge of downtown to out-lying suburbs. The apartment is a building which houses more than two housing units under the same roof. A group of apartment buildings constitute a complex, though in the case of the superblock type, defined below, the term "complex" is superceded in favor of the more specific term, "superblock."

1. Tower: The tower is a vertically oriented apartment building, which is at least four-stories high. It may be located downtown, but is generally found in older, established single family neighborhoods and was constructed as in-fill or on the site(s) of demolished homes. Sometimes the tower occurs in suburban areas further from the central city. Often, though not always, the tower is actually divided into condominiums rather than technical apartments. Also, oddly, the tower is most commonly the type used for high-end, luxury apartments and low-income, public housing. The tower may be rectangular in plan, or its footprint may be irregular. Often, each unit has an exterior balcony. Parking areas are located around the building and many times, the building is actually raised up on columns or stilts, creating parking beneath the building. National Register eligible examples include Queens Terrace at 1300 Queens Road and Kimberlee Apartments adjacent to Park Road Shopping Center. Tower is a commonly accepted term used to describe a tall apartment building.

2. Courtyard: The courtyard type is often a complex of two or more apartment buildings. The buildings, or building, are horizontally oriented and surround a courtyard, which may incorporate all or one of the following: a parking lot, swimming pool, or lawn. Usually the courtyard apartment is two to three-stories high, but can be as many as four-stories. Examples include the Ambassador (4438-4432 Central Avenue) and the Phil-Mor (1125 East Morehead Street). Courtyard was a term created by the authors based on the relationship of the building or complex to a central outdoor space.

3. Superblock: The superblock is a complex of many apartment buildings. Each building is nearly uniform in plan. Buildings are often nearly uniform in exterior appearance, with only three or four minimally distinctive treatments applied. Structures are arranged so that tenants share large, park-like lawns. Automobiles are restricted to certain parking areas which are not necessarily right beside the buildings. In the superblock neighborhood, maintaining common pedestrian areas takes precedence over providing parking close to the buildings. Buildings are almost always under two-stories in height. A superblock neighborhood can be found in any part of a city, with the exception of downtown. Examples eligible to the National Register include Selwyn Village and Cotswold Homes. The term superblock has been accepted by many architectural historians and is discussed on pages 266-269 of Leland Roth's *A Concise History of American Architecture*.

B. Single Family

The single family residential unit is divided here into three basic types, the ranch house, the split level, and the contemporary house. Other housing types continued to be used throughout the post-war years, many of which lent themselves to the application of the Colonial Revival style. However, for the purposes of this typology, only the three types which reach a pinnacle of popularity during the post-war years are discussed.

1. Ranch House

The ranch house is an accepted term used to describe the long, low, informal homes which began to dominate American residential construction in the post-war years. Promoted initially by Cliff May through *Sunset*magazine, the ranch was an immediate hit and continues to be built today. Any style may be applied to the ranch, though Colonial Revival and "California" are the most common. The California style developed solely for use on the ranch house and is characterized by the use of two natural materials on the exterior which emphasize its horizontality. Brick, often Roman brick, or stone is utilized to create a skirt around the home, usually coming up to the height of the window sills. Above the window sills is vertical wood siding, usually redwood. Shutters may or may not be found on ranch houses in the California style is

Modernist, and sometimes when the dominant style is Colonial Revival. The ranch house may be sub-divided into two basic types. Ranch is a widely accepted term to describe this type of house.

a. Rambler Ranch: This is *the* ranch house. It is long, with a facade that rambles across the width of the lot. Various projecting and receding planes on the facade further the rambling appearance. The rambler ranch is one-story high, has a very low pitch hip or gabled roof, and may or may not incorporate a cross gable. The facade usually contains of mix of ribbon windows and large picture windows, and integrates natural and horizontally oriented materials, such as wood, stone, and Roman brick. A wide, low chimney often rises up from near the center of the house. In rare cases, when the homebuilder's lot did not permit the rambler to be constructed parallel to the street, the home is oriented so that the narrower end of the home faces the street. The rambler almost always incorporates a garage, either prominently on one end of the house, or discretely in the basement. It is executed in California, Modernist, and Colonial Revival styles and may be found in any residential setting, though it is uncommon as in-fill in older neighborhoods. An example of this type is found at 501 Lansdowne Road. Rambler is a term found in several current, on-going post-war survey projects and is becoming accepted by architectural historians.

b. Rectangular Ranch: This is a smaller, more economical version of the rambler. The rectangular ranch is usually less "high-style" in character. It lacks the length and projecting and receding planes of the rambler. The facade usually has a large picture window on one side of the front door, with one or two short banks of ribbon windows on the other side of the door. Occasionally, picture windows will be located on both sides of the front door. The rectangular ranch often does not have an integrated garage, and when it does occur, it is often attached to the rear as opposed to the prominent location on the front of the house, as seen with the rambler. The rectangular ranch may be found anywhere, but is often the dominant house in middle or lower income subdivisions. It may be executed in Modernist, California, or Colonial Revival styles, though the style is usually weakly articulated. An example exhibiting mild Modernist influences may be found at 1536 Emerywood Drive. Rectangular ranch is a term created by the authors based on the footprint of the type.

2. Split Level

The split-level house may, occasionally, fall into the Contemporary type as a Gable Front Contemporary, but generally is a type unto itself. It is a three-level house which is usually about the same height as a standard two-story house. To one side of a centrally located door, the rooms are on the same level as the entrance and are used as the dining room, kitchen and living room. On the other side of the entrance are two levels, one several steps above the entry level, one several steps below. The upper level houses bedrooms. The lower level contains casual living spaces, such as a den, game room, and/or playroom. A garage is usually included as part of the lower level. The split-level can be found anywhere, and was used by a variety of income levels. It is most commonly found in subdivisions, and is usually done in Modernist or Colonial Revival styles. It roof is usually gabled, but may be gambrel, hip, or in very rare examples, flat. An example with Colonial Revival details is located at 5242 Addison Drive, while a Modernist example can be found at 2128 Collingsdale Place. This is a commonly accepted term for this house type.

3. Contemporary

The contemporary house is a type of single family home that is exclusively high-style Modernist in style. The contemporary is generally a formal building, though its interior spaces are arranged in casual, open, post-war plans. The contemporary is marked by its low hip, low gable, or flat roof, or otherwise non-traditional roof, which often incorporates a clerestory. It may be linear, like the rambler ranch, but is often considerably more compact. The contemporary house is most often one-story in height, but may be as many as three or fourstories, however, these stories are usually arranged more as levels and situated into the natural landscape in such a way that the home still appears horizontal. Incorporation into the landscape is one of the most distinguishing traits of the contemporary house. Often, its structure is exposed or highlighted, and large windows, which may be confined to the rear of the home, bring the outdoors in. Patios or decks on the rear of the house are usually present. The line between the contemporary and other post-war types with the Modernist style applied is difficult to draw. The contemporary is divided into four sub-types, all of which exhibit the above described characteristics. Contemporary is a term used by Virginia and Lee McAlester's *A Field Guide to American Houses*, though here it is expanded and elaborated.

a. Shoebox: The shoebox is a contemporary sub-type, which is, essentially, a rectangular box. The type may be small, or it may only appear small, while in fact is two or more stories in height, with the other levels concealed in the landscape. The shoebox is generally clad in wood siding, which is often vertical, and has Asian influences. The shoebox has either a flat roof or a non-traditional roof, usually consisting of intersecting slopes which create a clerestory. The front facade often has no windows, or when windows are present, they are small, often narrow slits. Usually, the rear and/or sides of the type will have large expanses of glass. Examples eligible for National Register listing the Jones House on Knob Hill Court and the Cutter House on Country Ridge. Shoebox is a term derived from the overall shape of the type.

b. Gable Front: Though a common type of traditional home, the contemporary gable front house is particularly Modernist. It has a broad roof which usually has an off-center peak. A garage or carport is often incorporated on the end of the house, and is sheltered by an extension of the roof which descends to a low wall, or any of a variety of column or supports. The gable front may be one-story, or it may be a split-level. Generally, the living side of the house, located on one side of the front door, has a glass facade, or large picture window. Ribbon windows can

be found in the bedroom section of this building type. A good examples of this type are located at 2300 Cloister Drive and 2113 Stonewood Drive. The term gable front is derived from the orientation of the type's gable roof, and is commonly used in describing homes from earlier periods.

c. LV: The LV takes its name from its most common shapes. The LV is a one-story Modernist building which may, in some cases, be confused with the ranch. Its most common footprint is the shape of an L or V, though the angle of the home's bend is rarely as severe as the letter. The LV may also be constructed in a Y shape, though the wing which modifies it into a Y is usually very short. The LV is related to the ranch rambler because of its distinctively horizontal arrangement in the landscape, and by the fact that its exterior ornamentation usually incorporates natural materials, similar to the California style. The LV often spreads out on slopes or on the top of ridges. Its roof is flat or a very low pitched hip. An extremely well-preserved example, which is National Register eligible, is the Neiman House at 1930 Cassamia Place. Other National Register eligible examples include the Henning House (3521 Johnny Cake Ln.), the Hearn House (3517 Johnny Cake Ln.), and the Bluementhal House (3850 Sedgewood Circle). The term LV was created by the authors and based on the general footprint of the type.

d. Formal: This contemporary type has an irregular lay-out like the LV, but it is less horizontal and usually noticeably more compact. Its exterior materials are less naturalistic than those found on other contemporary houses, thus lending itself to a more formal appearance. Tile and aluminum are common siding materials, and the type has a flat roof. Like other contemporary houses, the formal takes advantage of any natural landscape features. It may or may not use ribbon windows, and most use of windows and glass is reserved for the rear. A National Register eligible example is the Little House at 2301 Red Fox Trail. Formal is a term created by the authors, though Formalism is used to describe some Modernist work in Roth's *Concise History*. The term, as used in this typology, is a reference to the clean lines and the use of manmade materials, rather than natural, which give the type a less casual atmosphere.

Significance

The post-World War II (c.1945-c.1965) residential buildings in Charlotte are significant

because they represent the influence of national trends in the city. The abundance of ranch, split-level, and other nationally popular house types are indicative of Charlotte's connection with the ideals of suburban life that pervaded the United States during this period. The large quantity of these houses illustrates two important aspects of Charlotte's development: the large population growth during the post-war period and the building boom associated with this growth.

In addition to single-family dwellings, multi-family dwellings are also critical to the understanding of national influences. The superblock developments, for example, often represent the use of the Federal Housing Administration's 608 program to construct residential properties.

While all of the superblock developments and most other residential properties are significant as groups or neighborhoods, there are some examples of individually significant properties that exhibit high-style, Modernist design. Because Modernism was never widely accepted in Charlotte (or in most of the country) as an appropriate residential mode, houses exhibiting the style are quite rare. Those that do exist however, are often among the best examples of Modernist design. These residential examples are becoming even more significant because of the destruction of so many of those that once existed.

Registration Requirements

Most of the dwellings built between c.1945 and c.1965 in Charlotte are significant as components of a neighborhood rather than as individual structures. Therefore, the resources covered under this survey and report will qualify for listing as contributing elements within a district. As components of a neighborhood, the integrity of location, setting, feeling, and association is particularly important. Dwellings with modest alterations such as rear additions are considered contributing elements if the overall historic character of the building remains evident.

Some houses will be individually eligible Register as outstanding examples of their form and style. Integrity of materials, workmanship, and design is crucial in determining the individual eligibility of residences.

Type 5: Subdivisions

Description

There are two types of Post-World War II subdivisions in Charlotte: transitional and suburban. The plan of these developments tends to be focused on curving streets, although the degree of individualism in the design varies depending on type. Transitional neighborhoods, usually being developed earlier than suburban types tend to be more closely related to traditional grid-plan neighborhoods. Within the suburban type there are two sub-types. Overall, the subdivisions are made up of paved streets with or without concrete gutters and usually without sidewalks. Depending on type, there will be some attempt at creating a wooded, naturalistic setting with large house lots. The date of a subdivision's development is based on the plat date and the age of the individual homes.

A. Transitional

Transitional subdivisions are so named because of their intermediate status in age, location, and design. Transitional subdivisions were built from c.1935 to c.1955 and have the greatest number of the structures within them dating from the 1945-1950 period. The term was created by the authors.

These subdivisions are typically located between the nineteenth and early twentieth century neighborhoods near the center city and the suburban neighborhoods located at the fringe of the city at the time in which they were constructed. In terms of design, transitional subdivisions display variety in their street patterns as designers slowly drew away from traditional grids towards curvilinear suburban designs. Thus, surveyed examples such as Chantilly (which was platted well before the post-war period, but not built-out until the 1950s) exhibit a grid quite close to other early twentieth century Charlotte neighborhoods. Sedgefield, however, was platted in the 1940s and has several streets which curve broadly, yet still form a loose grid. The house lots in transitional subdivisions tend to be much smaller than those in suburban subdivisions place a high priority on using the available topography and natural features to best advantage in street layout and situation of residences. The housing stock tends to be dominated by brick veneered dwellings although wood siding is used; sometimes in combination with brick. Stylistically, the houses run the gamut of post-war architecture from Cape Cod, Minimal Tradition, Colonial Revival, and Modernist.

B. Suburban

Suburban subdivisions were typically platted in the 1950s and 1960s (although similar subdivisions were platted through the 1980s) and built out during the 1950s - 1970s with occasional resources from the 1980s and 1990s. The term "suburban" was created by the authors and is intended to connote both the peripheral location (when built) of these neighborhoods as well as give an indication of the typical plan and housing stock. The house lots tend to fairly large, with the largest lots being found in exclusive, naturalistic subdivisions. The names of the two sub-categories below were created by the authors in reference to the level of adherence to high-style, Modernist subdivision principles attained in the subdivision's design.

1. Standardized: Most of the subdivisions built between 1955 and 1965 are standardized subdivisions. In plan, they exhibit curving streets that usually do not curve in response to a natural or topographical feature. The curving streets do not usually create a circular, enclave type form, but are spread loosely over the land often creating several entrances into the subdivision and occasionally linking with neighboring subdivisions. In some cases, a curving street may have streets running parallel to it mimicking its curves. The streets themselves are wide with gutters and usually do not have sidewalks. The housing stock in standardized subdivisions may include any number of post-war styles depending upon the age of the development, but most often include ranch, split-level, and minimal traditional forms either with little stylistic detail or Colonial Revival detail. There are usually few resources exhibiting strong Modernist influences. While the relatively large house lots suggest an effort at a natural,

open setting, there is a lack of response to the natural (or even man-made) terrain in the siting of streets and houses. Montclaire and Lansdowne are surveyed examples.

2. Naturalistic: This type of subdivision was most often platted in the mid- to late-1950s. As the name suggests its plan/form focuses on creating a naturalistic setting. The streets are almost always curvilinear and often create a circular arrangement that is meant to suggest a secluded (and usually exclusive) enclave. While typically quite small, this type of subdivision, even when in its larger form, usually has only one or, at the most, two main entrances. Most of these neighborhoods exhibit wide, guttered streets without sidewalks. In the case of Carmel Park, however, the naturalism was furthered with narrow streets without gutters or sidewalks. Other naturalistic features include large house lots and houses that take advantage of the available topography in their architecture and/or setting. The housing stock of these subdivisions consists primarily of ranch, split-level, and Colonial Revival houses, but there tend to be more Modernist designs and design influence. The Cloisters and Carmel Park are examples eligible to the National Register.

Significance

The post-World War II (c.1945-c.1965) subdivisions in Charlotte are significant for their

representation of national trends. Similar to the residences themselves, the subdivision, both in its abundance and form are indicative of Charlotte's connection with post-war suburban ideals throughout the United States. Charlotte's large population growth and the associated building boom are important features of the city's development evidenced by subdivisions.

Registration Requirements

Most of the subdivisions built between c.1945 and c.1965 in Charlotte are significant as representative examples of trends common in Charlotte and the nation as a whole. Therefore, the subdivisions covered under this survey and report will qualify for listing as districts. The integrity of setting, feeling, association will be important in addition to the integrity of the overall design and materials. Subdivisions with modest alterations such as the addition of new streets liking the subdivision with neighboring subdivisions will be considered eligible.

Some subdivisions will be individually eligible Register as outstanding examples of their form and style. Integrity of materials, workmanship, and design is crucial in determining the individual eligibility of subdivisions.

Criteria Consideration G

Since many of the properties considered in this study have not yet achieved fifty years of age, it is necessary to address their potential eligibility to the National Register of Historic Places. Although the National Historic Preservation Act of 1966 set a fifty year age limit for eligible properties, it is possible to list properties younger than fifty years old if they can be shown to be of "exceptional importance." While a great many of the properties surveyed would not meet this high standard there are some important exceptions. In the case of properties eligible for their architecture or design, the growing body of "specific scholarly studies" enables us to provide the necessary context for evaluating exceptionally important works of architecture or design.

Of even greater importance to the stock of post-war resources in Charlotte is the rarity of examples surviving with integrity. The National Register allows "relatively young survivors" to be "viewed as exceptional and historic." This is especially useful for road-side resources such as shopping centers, motels, and gas stations where taste, road construction, and obsolescence work against the preservation of the building. Perhaps even more rare are Modernist residences, of which there were never large numbers, and which are being demolished at increasing rates. This demolition also compromises the integrity of neighborhoods, such as Sedgewood Circle where many Modernist houses have been removed, the lots subdivided, and large neo-traditional homes inserted.

Modernist Architecture Defined

As stated in the section examining the context of architecture, Modernism holds several principles, of which some or all were advocated by various architects such as Frank Lloyd Wright, Walter Gropius, and Mies van der Rohe. These tenets include an emphasis on function and utility, a concern with structure, the use of modern materials and technology, and interests in abstract beauty, sculptural form, and symbolism.

Through the use of these principles, the Modernist style draws heavily from the International style, Miesian concepts, and Wrightian ideas. As with any style, Modernism is applied in a broad range of strengths, from minimal touches such as the use of deep eaves or ribbon windows, to high-style in which the building exhibits most of the style's characteristics. The style is also commonly applied in a streamlined form resembling Art Moderne, or in a futuristic, Jetson-like style, often incorporating space motifs. This variation is most commonly applied to roadside commercial architecture, like gas stations or drive-in restaurants.

Occurrence

Modernism concepts applied to residential architecture occur most often in exclusive subdivisions and as in-fill construction in older, established, high-end neighborhoods. It can also be found on suburban homes outside of subdivisions. Modernism in its less high-style application is to be found on homes in suburban locations, usually in lower-end subdivisions, but rarely, or never, as in-fill in older in-town neighborhoods.

Modernism, with high levels of Miesian influence, may be used on commercial buildings in the traditional setting of downtown and mid-town commercial zones. These buildings usually house offices, and those located downtown conform to traditional set-backs and street orientation. In addition to these traditional locales, during the post-war years, commercial and industrial architecture spread out along the newly constructed, large, four-lane highways radiating out from cities, or encircling cities. These buildings will not only exhibit Modernist style, but they will also have a modern, car-accommodating form, and will rarely be more than two-stories high.

Identifying Features

Unlike Italianate or Queen Anne, Modernism is not a well-defined, commonly understood style. The following is a list of features to facilitate the identification of Modernist architecture. This list draws on previous attempts at defining the style, tenets of post-war Modernist architects, and the surveyors' observations as they have documented Charlotte's Modernism.

Roof: flat or low pitch hip; churches have large, sweeping forms

Walls: contrasting materials and textures, or smooth, blank walls; office buildings generally have an emphasis on the grid

Windows: "special" windows, such as ribbon, picture, or corner windows; usually a marked use of large expanses of glass on one section of the building, most often the rear, with small windows, if any, on other sections of the building

Landscape Integration: sliding glass doors, patios and outdoor living spaces, large expanses of glass, courtyards, horizontal orientation and integration of natural landscape features into design, use of natural materials

Form: horizontal with simple, clean lines, form following function, exposed structure, asymmetry, de-emphasis or lack of articulation at main entrance, and lack of ornamentation.

Conclusion

Post-war Charlotte, like the entire nation, was experiencing tremendous suburban expansion, alterations in urban planning policies, acceleration of car ownership, changes in ideas about architecture, and a population boom. After the conclusion of Word War II, Federal agencies such as the VA and FHA stepped into the realm of real estate development partly in an effort to house and reward returning servicemen. This involvement created unprecedented access to single family home ownership and developers were quick to produce low-density, homogeneous subdivisions on the outskirts of town in accordance with the FHA Underwriting Manual and ULI recommendations.

For these suburban developments to be successful, they had to be convenient to employment and services. The Federal Highway Act of 1944 pumped money into road projects, forced cities to begin planning, and, in Charlotte, created a pattern of radial transportation corridors to help the suburbanite move quickly from home to work, the grocery store, or school. With faster transportation routes, building types evolved to attract the attention of the speeding driver and accommodate the suburban necessity, the personal automobile.

Meanwhile, war had forced European Modernists to come to the United States, where they infiltrated and, with their American counterparts, overtook architecture schools. With post-war financial prosperity and the establishment in North Carolina of the School of Design and Black Mountain College, the state, and ultimately Charlotte, were exposed to the tenets of Modernism.

Thus, it was within these contexts that Charlotte's post-war architecture was constructed, some of it in the Modernist style, some of it in traditional styles but in modern forms. An examination of the historical background and an understanding of the complex societal changes of the post-war years are essential to any definition of Modernism and post-war typology. Community planning, transportation, and the field of architecture itself all contributed to the development of Modernism in Charlotte, a pattern mirrored across the state. Modernism was never the favorite style of most Charlotteans, but it is exemplary of the changes Charlotte was experiencing in the post-war years. Those changes occurred with a rapidity matched today by the speed with which these architectural examples are being lost.

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