

KANSAS PRESERVATION PLAN

STUDY UNIT ON

A TIME OF CONTRASTS: PROGRESS, PROSPERITY,
AND THE GREAT DEPRESSION, 1900-1940

A Study Guide

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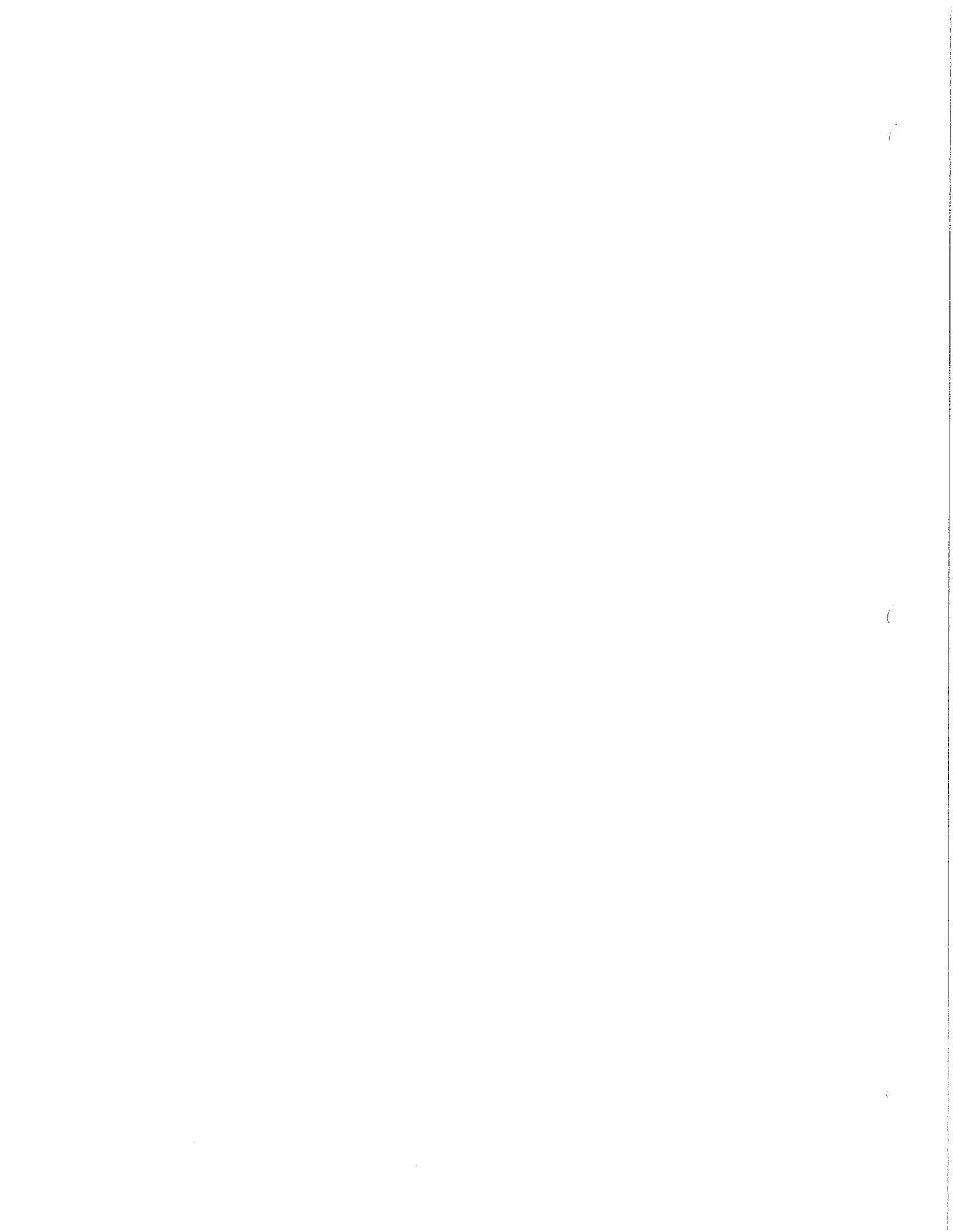
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A TIME OF CONTRASTS: PROGRESS, PROSPERITY, AND THE GREAT DEPRESSION, 1900-1940

A Study Guide

I. Introduction: The Built World Around Us: Understanding What We See

"What of architectural beauty I now see, I know has gradually grown from within outward, out of the necessities and character of the indweller, who is the only builder."--Henry David Thoreau

To most Americans, architecture is almost a subliminal art form. We are constantly aware of it, but do not see it. We are constantly affected by architecture, whether we choose to be or not. We live in it, work in it, get well in it, relax in it, do business in it, and on occasion do battle from it. We are in constant contact either with the built environment of structures or the landscape. Unfortunately, many people are unaware of the many influences, changes, and effects of our built or reconstructed world.

Have you ever driven down a city or small-town street, or through the rural areas of Kansas and remarked, "Look at that building. Isn't that something?" It is "something," and how it got that way, particularly in the twentieth century, is the theme of this study guide. To preserve the architecture of the first forty years of the twentieth century we must learn to see through it, to analyze its form, function, and style. The effects of a country and state caught in rapid change from rural classical America to a modern, mobile, industrialized, technical society not only changed its built environment but also had profound social, cultural, and political influences.

The structures and man-made landscape that remain from any period in our history are the physical evidence of that period that we can apply to our senses--we can walk through it, feel it, smell it, and identify with it. As Alan Gowans, author of The Comfortable House has written, "architecture is both a creation and a memoir of its times," and the time period with which we are concerned created what he calls the "comfortable house." Those remaining artifacts reflect what we were, what we wanted to be, or what we put up with. The period of contrasts is a time still familiar to a great number of citizens, and perhaps that makes its preservation more difficult to understand. The impact of architecture and building on American life is not less in the twentieth century than it was in the eighteenth or nineteenth, but there is still no major emphasis for preserving this era.

Eugene George, in the Kansas Quarterly, wrote that the individual "is born in a place which existed before him." We learn about a place, its streets, its open spaces, and our memories are contained there. But in our adult time these places change. Parking lots replace once-built areas, open spaces become filled, and the character of a place changes. But behind the new facades, the false fronts, and the paneling the original fabric sometimes remains. David Kyvig and Myron Marty's Nearby History provides an excellent treatment of the methodology and attitude necessary to "see through" these facades to deal with our neighborhood or state history. Their chapter on architecture is must reading for anyone preparing to confront the complexity of the twentieth-century builder or architect.

Throughout this study guide, the term architecture is used to describe all building whether it be accomplished by a professional licensed architect, a builder, neighborhood carpenter, or otherwise. The discussion will be directed toward the changes, influences, and trends of architecture within a historical context. Because of the complexity of the period only an overview can be presented. The study is not in a chronology since topical interests and stages of development are important for the twentieth century.

American architect Ralph Adams Cram wrote in 1936, "I count those years between 1880 and 1900 as the most remarkable in American architectural history, for in so brief a space of time it was given a wholly new direction." That direction continued until at least World War II.

The influence of function is perhaps the most important aspect of a structure. The ideas that shaped it and the adaptation that occurred resulted in a material culture which "is what the folks have made with what they know." Eugene George saw historic buildings as forming a link "between the individual and the efforts of previous generations," enabling us to see the needs of the people and how the buildings served them.

Questions and Considerations

As the twentieth century is studied, it is important to remember the many influences of the period. From a time of wealth, war, renewed prosperity, a golden age of agriculture, and vast technological and material developments, it changed to a time of economic and psychological depression, the dust bowl, and the New Deal in the 1930s.

As attitudes and political influences changed, the culture changed, and so did the architecture. Builders became specialized; house and business building plans became readily available. Form and style also were influenced by traditions handed down from previous generations. Trends and fads became more prominent in the period and the "good home life" became a reachable end for all income levels. Builders and architects still clung to classical styles while trying to insert into the mainstream new visions or adaptations of those styles.

We often build for immediate use, and that is particularly true of this time period. Many of the descriptive terminologies for the period were assigned much later. Art Deco was used by a later generation to identify what was, in the late 1920s and early 1930s, called "modern" or even "radical" style architecture. How the new styles fit in and worked for society has deep implications. Why did builders and architects think some features were worth paying for and others were not? What was available to Kansans during this period? What did Kansas know of the new styles and how long did it take the new technology and materials to reach the state?

II. Historical Perspective

The 1890s

When the nineteenth century ended and the twentieth century began, time did not stop and regear. Nothing changed but the calendar. The influences of the last decade continued well into the twentieth century. It is important to remember those "Gay 90s" very briefly. First; the period was somewhat like the moon, very bright and cheery if you were on one side but cold and bitter if on the other. Also referred to as the "Gilded Age" the period left a definite mark on the architecture in the early twentieth century. Lewis Mumford, writing of the Brown Decades (1865-1895), said that after the Civil War not only were there primary differences in structures attributable to the industrial-mechanical areas, and many changes in society, but also that the period "even looked different."

In the United States churches were overcrowded; the population was multiplying; divorce was rare; families were large; the working classes continued to work, at least until the Depression of 1893; and society for all appearances seemed to stand still. The architecture seemed to be the image of a confident success. Robert Asbury noted that the rising class of industrialists had "so recently emerged from the primitive conditions imposed by the new frontiers that they felt compelled to purchase the manners and dress of aristocracy in order to proclaim their new social status." The Victorian era produced a new attitude toward architecture making it appropriate to choose from any style. But things began to change. Amidst the changes of the 1893 depression, the farmers' revolt, and the rise of Populism followed closely by Progressivism, the debates of Social Darwinism, the approaching fear of totalitarianism in the world, and a nation ready to sacrifice its isolationism and creditability at the same time in the Spanish-American War, social demands began to change.

The economy too was changing and heading for disaster. Rampant consolidation in the nation's industries in the late 1880s, the tremendous increase in steel production, railroad building, oil field development, and labor difficulties, and a rampant individualism led to the breakdown of the economy, causing indebtedness, high prices, and depression in 1893. The country was still able, however, to build the White City in Chicago for the Columbian Exposition, an outing of extravagance that affected architecture for at least the next forty years.

Kansas mirrored the political turmoil of the nation. The railroads which brought people and material to the state also led many Kansans into the protest movements of the Grangers, the Farmers Alliance, and other organizations combating the unfair practices of large industry. By 1892 Kansas was the leading Populist state; the Populists had elected a governor, four congressmen, and had control of the state legislature. A return to prosperity following the panic of 1893 enabled most Americans and Kansans to enjoy stability, and the Populism of the early 1890s waned. Kansas suffered some setbacks, however. The state dropped in national population standing from nineteenth to twenty-second with an increase of only about 40,000 persons in ten years. Many Kansans departed during the decade with the opening of the Cherokee Strip in 1893 and the hard times of the depression, leaving many houses to sit vacant on the Kansas landscape.

By 1893 Kansas had completed its county structure with 105 organized and in place, but government land was still available for homesteading or direct acquisition. The total influence of the national socio-economic-political revolution on the Kansas built environment would be hard to assess. Prosperity returned, crops were generally good, and Populism departed along with the hard times of 1893-1895. Kansans were receptive to the new politics of reform and heavily supported Theodore Roosevelt. People returned to planting their gardens and their fields and built their houses in the manner of the late-Victorian period. They still put in their parlors, the stoves in the middle of the room, and they continued to use and build some soddies.

The Kansas landscape that changed dramatically from 1865 to 1900 was on the verge of even more drastic changes in the first fifteen years of the new century. "Many of those structures are still with us today . . . but too often go unrecognized and unappreciated," according to the study guide on The Period of Rural/Agricultural Dominance (1865-1900). That study unit discussed many of the changes in the state and the position of architecture in the 1890s. Suffice it to say that the effect of Kansas climate differentials from the wet, cooler eastern third of the state to the dryer, windier, and hotter western portion affected the architecture that was built in the 1890s. This was in spite of an increase of factory-produced building materials and the transportation to disperse them throughout the state. Building was becoming a specialized industry, and the ethnic influences on architecture were decreasing.

Leland M. Roth, in his Concise History of American Architecture, concluded that the rapid technological and cultural pace of the 1890s quickened and intensified a need for more security through association with the historical past of the people, contributing to retention of the traditional styles of their backgrounds. But in those turbulent years in which "American society emerged," and during the decades thereafter from about 1900 to 1935, there flowered "a traditional architecture" he described as creative eclecticism that "is still unsurpassed in the use of fine building materials."

Kansas and the Nation, 1900-1940

"Kansas has been the testing-ground for every experiment in morals, politics, and social life. Nothing has been venerable or revered merely because it exists or has endured."--John J. Ingalls.

Most Americans have a general concept of economic and social conditions in the 1920s and 1930s but perhaps have less knowledge of the pre-World War I (WWI) period. The continuing "Gilded Age" prior to WWI is important in understanding the next forty years. The emotional Populist movement for support of the downtrodden led naturally into the Progressive movement around the turn of the century and lasted until about 1916. The hoped for regulation of the railroads and other businesses sought by the Populists found a home in Kansas during the Teddy Roosevelt Progressive period. Railroad building and consolidation were still occurring in Kansas throughout the 1890s and early 1900s.

Kansans had departed the 1880s having survived the grasshoppers, the vagaries of the cattle trade, and the hardships of pioneering and then faced the hard days of the mid-1890s to recover. Robert W. Richmond, in Kansas, A

Land of Contrasts, writes that as the nineteenth century came to a close the "frontier was gone. . . . The crudeness was disappearing and a new day was coming." The Kansas participation in the Spanish-American War and the Philippine Insurrection contributed to this advancement, as had the political reforms. Troops returned from new lands with the experience of meeting people from, and traveling in, other sections of the United States. They had new hopes and ideas for themselves and their home state. By now the telephone was becoming common, and accepted, in most major Kansas communities; electric fans were being used in Santa Fe railroad cars; and basketball was ready to hit the court. Kansas was indeed entering into the twentieth century.

The first fourteen years or so of the new century has often been called the "Golden Age of Agriculture" and that applies as well to Kansas. Kansas rises 3,000 feet in elevation in 400 miles, which accounts for major differences in humidity, rainfall, and temperatures. Grazing and corn raising were major activities in the eastern part of the state, with the Flint Hills' rich pasturelands in the central and the dryer wheat farming and cattle areas in the west.

The indigenous building materials varied with the changing geography; wood in eastern Kansas, stone in central and western Kansas, and sod and combined building materials in the west. These materials were prevalent at the turn of the century. If Kansas has a truly vernacular architecture it is the native limestone used for homes, schools, churches, commercial and public buildings, and fenceposts. At the turn of the century the gasoline engine had not yet replaced the windmill although it was beginning to supplement wind power. Dry farming, irrigation (which actually began in the 1880s), and some scientific farming were beginning to change the landscape.

The good times for the farmer prior to WWI resulted in much of the available land being plowed for cultivation. At the turn of the century Kansas still had more than two million acres available for settlement. In 1909, for instance, people filed for more than 1,900 acres of public land in northwestern Kansas. The Kansas National Forest Reserve, established in 1906 in the sandhills southwest of Garden City, ultimately included nearly 302,000 acres. When this preserve was abandoned in 1915, the land, except for 3,000 acres, was made available for homestead entry.

The years of good agricultural production contributed to a land boom that received additional impetus after WWI and did not peak until the 1920s. However, as Lewis Mumford noted regarding the changing landscape, land-hungry is one thing, love of the soil is another. For the pioneer the land had existed to be acquired and devoured, to be gutted out for a profit. The idea of planned landscaping and conservation grew under the leadership of such persons as Frederick Law Olmstead and Gifford Pinchot, but did not become successfully rooted. "Shiftless agriculture and an unstable rural life . . . worked against the slow improvements that must be made in a cultivated landscape." The method of tilling the soil that contributed to its blowing away in the mid-1930s had begun.

World War I created new demands for agricultural products as Kansas newspaper headlines read "Win the War with Wheat." The land boom increased real estate values and farm mortgages. By 1924 Kansas farmers were indebted to \$535 million, a fact that caused a small statewide depression prior to 1929. In spite of the latter fact, Kansas farm people reportedly had a higher

standard of living than farmers elsewhere.

Populism had brought to Kansas the "need to be civilized" and spearheaded the reform movement that became popular during the Progressive period. Kansas needed new laws on mortgages, labor, schools, corporations, taxation, and transportation. The state did pass laws regulating labor and industry, banks, legal interest rates, warehouses, and farm elevators. The state installed the Australian ballot, and in 1913 it extended suffrage to women beyond the earlier rights that applied only to municipal elections. Laws prescribed child labor regulations and working hours. Social change and reform was now being legislated by federal and state governments. A "boss busting" mentality also saw a move away from extravagance in life-styles, including architecture.

The threat of WWI was the major concern by 1916 and Kansas was steadfastly isolationist. But wartime brought renewed vigor to the economy and the demand for crops saw the daily turning of virgin sod into plowed fields. A coal shortage brought about by labor difficulties caused problems for the state, but the economic growth of the period stimulated farm ownership as opposed to tenant farming. Kansas removed itself from isolation and plunged into the war effort with increased wheat planting, donations of surplus grain to the world, and people organizing canning clubs and planting vegetable gardens in their backyards. What little construction there was between 1917 and 1919 basically occurred on the military reservations at Forts Riley and Leavenworth; Camp Funston was under construction in 1917. Society changed as well. German-American families had a difficult time with night riders singling them out for harassment.

Nationally, the population of the United States had consistently been moving to the urban areas. At the turn of the century barely ten to fifteen percent lived in cities; by 1900 half did, and in the 1920s nearly fifty-seven percent of the population lived in urban areas. In Kansas the move was slower. Kansas had a population of one million by the mid-1880s, but it took until 1940 to reach another million, with the decline of rural population beginning about 1890 when nineteen percent lived in urban areas. This percentage increased to thirty percent in 1910 and almost forty percent by 1930. The rise of the cities, beginning about 1910, created problems and also contributed to a changing look in the built environment of towns and cities. Increases in numbers meant more demand for police, fire, and public health protection--and their department buildings. Traffic control, traffic patterns, and adequate parking would also become a worry.

The makeup of the population began to change as did where they lived. Assimilation and acculturation were more complete after the turn of the century, and the Kansas ethnic groups had less influence on architecture after that. Rapid developments in industry, mechanization, and transportation were the major influences in eliminating much of the "old world" effect. In 1900 only seventy-one Mexican-Americans were listed in the Kansas census, but by 1920 that population had increased dramatically to nearly 14,000. Although most Mexican-Americans were recruited by the railroads, many worked in the sugar beet fields and packing plants, spreading their ethnic population from Topeka to southwestern Kansas. However, they had little, if any, effect on the architecture of dwellings as they utilized existing houses. Ulysses, Kansas, however, does have a county garage built by the Works Progress Administration (WPA) that was done by a local Mexican-American builder. The

exterior has some features of Spanish revival and the interior offices are definitely of that style. Kansas never had a large foreign-born population, but the largest ethnic group in Kansas, the Germans, had a definite influence in the nineteenth and early twentieth centuries with the stone work so predominant in the state. That influence was discussed in the study guide on agricultural impact.

After WWI, America turned its back on many inventive aspects and became more materialistic. Richmond has written that, "Kansas entered the Roaring Twenties with a kind of wonderment and it would be a while before they figured out which way they were going." The Twenties, known variously as the "Jazz Age," the "aspirin age," the "lawless decade," or the "era of wonderful nonsense," also was one of religious crusades and radical intolerance. By 1923 the Ku Klux Klan in Kansas had about 60,000 members (in 1924 the mayor of Emporia was a Klansman), and with similar groups they made known their anti-Jewish-Catholic-Reds feelings.

At the same time, under the newly developed neon lights (1923), Kansans were experiencing major developments. The automobile business was booming. Wheat was a billion dollar crop for Kansas, making it the nation's number one producer at the beginning of the decade. The state ranked second in meat-packing and third in oil production. New oil fields were being developed in Kansas to supply the gasoline and oil for the cars and tractors and the state's wealth was the highest in history. From 1919 to 1931 Kansas was second in the United States in overall oil production. Kansas' growing brick, stucco, plaster, and cement industries were enlarging to meet the demand for such building materials. Prices were climbing as cars, telephones, radios, and other conveniences changed both the landscape and inner space of homes.

The needs of industry and of housing for the workers made critical demands on cities for sewage plants, water systems, and more adequate parks. Cities above 40,000 population were told by the state to create boulevards, and Governor Henry Allen (1919-1923) led a bill through the legislature authorizing state loans for farm purchases. Governor Allen's search for an answer to coal field labor problems from 1919 through 1920 was the creation of an Industrial Relations Court. On the second legislative attempt the court was authorized. With Democrat Jonathan Davis' (1923-1925) election, progressive reforms continued with laws regulating pay and working conditions for women and pension plans for public employees.

Even with this apparent modern growth, only a small percentage of farm homes and a larger but not yet impressive number of city homes had the modern conveniences of running water, sewage disposal, central heating plants, or electricity although most commercial buildings did. The problems of pollution grew and in 1916 Kansas State University's Experimental Engineering Station recommended, reluctantly, that the most inoffensive and least expensive way to handle the increasing sewage problem was to discharge it into streams and rivers.

The Kansas agricultural economy in the mid-1920s was stable but the general national economy would not allow for prosperity. Kansas senator Arthur Capper led the fight in Washington to help farmers organize for better support. The improvements in farming in the mid-1920s were not sufficient to stabilize the overall farm income and even before 1929 Kansas farmers were experiencing financial difficulties. Farmers' woes were added to in the late

1920s by "progress" taxation for courthouses, schools, roads, and bridges. Governmental units were attempting to build to suit the new demands but the economy was not forgiving. Between 1920 and 1926 more than one hundred Kansas banks defaulted, partly because of poor agricultural profits, and mostly because of overextension of credit based on a rural economy.

In 1928 Governor Clyde Reed tried to help farmers fight the "unfair and unjust share of the transportation burden," imposed on them by the railroad freight rates and state taxes. According to Donald McCoy, in his Landon of Kansas, Reed had the support of rural Kansas based upon the farmers' fear of Topeka's "machine" politics. He was successful in obtaining some relief by reducing land taxes and the freight rates and by establishing the legislated Industrial Labor Relations Court.

Over-production accounted for many of the problems: the over-planting of wheat during WWI and the glut of oil to supply new automobiles that were getting harder and harder to purchase were primary concerns. Farm mechanization also contributed to the growing debt as Kansas farmers bought more than 24,000 combines in 1930 and 66,000 tractors that had to be paid for. Between 1920 and 1930 the number of farm trucks increased eight times. The latter created a demand for more roads, streets, filling stations, and other services. Other things changed as well. In 1925 a Kansas newspaperman wrote, "a few years ago when a man got tired of farming he came to town and bought a livery stable. Now he comes in and buys a filling station. . . .When a man's neighbors can't understand how he makes a living, they start the story that he bootlegs whiskey. . . ."

At the same time, Kansas was becoming more conscious of its educational and domestic affairs. School consolidation became accepted, rural schools were beginning to disappear, and domestic science and "modern kitchens" for both convenience and health were the "in" thing for the housewife. Farm life probably changed more than urban life. The mobility of the automobile, the entertainment and information from radios and movies, electric appliances, time-saving devices of all kinds, numerous popular living and style magazines, and new, more open and convenient dwellings were appearing. In the suburbs garages were being built, auto campgrounds were beginning to appear near city and town borders along limited access roads, and early versions of shopping centers were underway. Cars became more plentiful per household than bathtubs.

People began to realize that "they didn't care to put up with what had been comfortable for their parents or grandparents." According to Gowans, the new "comfortable house survived all invectives because it filled a real social need for which no effective alternative was offered," and he could have added, it still does. His version of the comfortable house was a structure stripped of highly ornate decoration, very functional but pleasant with open convenient spaces, containing plumbing, electricity, central heat--and affordable. These houses were light and airy as opposed to the darkness of the Victorian dwelling. Pre-cut and mail-order houses were marketed across the United States. The Aladdin Company, of Bay City, Michigan, in its 1919 promotion exclaimed, "Modern power-driven machines can do better work at lower cost than hand labor. Then every bit of work that can be done by machine should be so done."

Some architectural historians have called the period from 1900 to 1933 an aesthetic wasteland, one of attempting to rationalize building and technology. This does not mean that some of those technologies had not been around prior to 1900 but it does mean they were finally being utilized across the country. To have the availability of such materials is one thing, to reproduce at will across the land is another. People began the move to the suburbs, far enough away to escape the city life but close enough to have the conveniences of city living while avoiding higher taxes. Mass-produced suburban houses created an illusion of space, with large lots and yard space and combinations of country and city style houses creating a rural facade. But all this had to be paid for.

When the 1929 depression hit Kansas in full force, the only thing that saved any economy was the meat-packing industry. Meat consumption actually increased and new plants were built--until people had no money to buy the meat. By 1930-1932, Kansas was totally involved in the Great Depression and agriculture was an outright disaster, with the total worth in Kansas dropping from \$545 million in 1929 to \$204 million in 1932. It was cheaper to burn corn than coal, and a barrel of crude oil cost less than five gallons of purified drinking water. Conditions worsened in the mid-1930s when Mother Nature added to the calamity. Industry reached lowpoints and social institutions suffered. For all practical purposes, non-essential private building stopped except for industrial areas with government support and for the public programs of the New Deal.

William Allen White, writing his editorial "farewell" to the year 1931, said, "You went to hell, and ain't worth remembering. . . . You cramped prices, starved children, kept men idle, broke women's hearts, and did every dirty thing that a bad year could do." It would get worse. Kansas bank failures totalled 1,034 in 1930 and 867 in 1932 while taxes on farm land and products actually increased during 1931, most likely to pay for the spending and building binges of the pre-1929 days. Social services and education underwent shameful neglect, as did any home improvements. In the 1930s, Kansas was plagued with surpluses in agricultural products and oil in a national depression that created even more problems in banking, education, mining, and labor. Francis Schruben, writing of the decade, summarized the attitude: "For most Kansans, it seemed equally important to keep alive the traditions of individualism, and the attempts to do so in the face of solutions predicated on collective or Federal programs added to the political and economic conflict." In those years, Kansans became less individualistic and joined in attempts to recover from the depression.

Kansas' problems were not just economic depression and politics, but the drought and dust from 1935 to 1937 complicated both the hard times and visions of any hopes of recovery for the individual, particularly the farm family. The out-migration in the 1930s saw 103,000 people leave the state but actually saw a slight increase in the number of farms from 166,000 in 1930 to 174,000 in 1935. The wind and dust decreased that number to 156,000 by 1940, the lowest since the 1880s. Houses stood abandoned on the farmsteads and many of those structures, a large number already over fifty years old, disappeared from both the landscape and our architectural memories. There is no doubt that the results of these financial and natural calamities, and the forced changes in attitudes, outlooks, and hope would indeed affect the form of Kansas architecture during the period and for some time after, as they would the United States as a whole.

Matching Style, Form, and Function

After the turn of the century, progress toward a less formal way of life dictated new ways of building and redesign of interior spaces. There was less need for the formal dining rooms, entrance halls, and formal parlors. Interior changes also affected the exterior of dwellings. After WWI the combining of new individualism with the Arts and Crafts Movement resulted in the expression of new ideas that soon reached the building field. The Aladdin Catalog of 1919 expressed the attitude of many Americans when it proclaimed, "Integrity means moral soundness; it means honesty; it means freedom from corrupting influences or practices."

The best way to judge both dwellings and commercial structures during this period is to look for the social realities and economic reasons for the function of the building whether it be a commercial or a private dwelling. The symbolism, or the intent, of the structure must be considered. As Nearby History stated, once "one becomes sensitive to the interplay between function, structure, and symbolism, it is natural to turn one's attention to architectural styles and to learn to identify them."

Many of the "styles" from the 1900-1930 period had borrowed elements, but they were not necessarily eclectic as they were not always a combination of known styles in the same structure, or even neighborhood, which eclectic implies. Frank Lloyd Wright borrowed many ideas and symbols for his prairie house. These antecedents can be seen in early European and American houses. Along with symbolism and physical function, social dictates of "how a house should look" were also important. Upward mobility was already a consideration.

To define the most used terminologies of architectural "styles" is very difficult. There is more general agreement on the term "eclectic" than the others. Eclecticism, in fact, means making a choice of styles and forms. One might choose to use Georgian, or Victorian, or a combination of those styles in one structure, satisfying whims and creating new appearances.

The definition of vernacular architecture includes an "indigenous, characteristic structure" of a locality. The use of stone as a building material in Kansas is an example of an indigenous building material common to the area and this is one qualification for vernacular. These stone structures were built in a variety of styles and shapes; some took on new styles or eclectic approaches. Vernacular is usually identified with its builders or makers and can often be traced to an ethnic or geographic origin. One definition states that "vernacular structures are constructed according to traditionally accepted patterns and methods which are handed down from person to person without the influence of formal architectural design." The term is sometimes used to mean that no architect was used. It is a product of thought, constructed by people who knew what they wanted, and usually is done by either a family member, a builder, or local carpenter without benefit of either an architect or a professional builder's assistance. Usually, vernacular architecture utilizes both local materials and builders and is styled by whatever skills the builder may possess.

Folk architecture is another way to describe vernacular architecture. This architectural sub-definition is usually used to describe the material culture of an ethnic group, a settlement area, and most importantly, the

context and processes by which the structures were built. Folk architecture again depends upon locally available materials and changes made when the builder adapted a traditional structure to meet new environments or lands.

Style can also be varied, or mislabeled, because of the ornamentation attached to a structure. Art Deco, for instance; is often more identified with the "decor" of a structure, or the patterns of decorative art applied to the interior or exterior and on new building types, than the actual form of the building. The new ornamentation and curvilinear or rectilinear effects are unique to the period from 1920 to 1940. Art Deco usually has sharp geometric designs while the "moderne" or modern, has the curved corners, circles, and smooth lines. Glass blocks, relief forms, concrete and stucco, and tile were common materials used in these forms.

Developments of Twentieth-Century Kansas Architecture

As the twentieth century opened, subtle changes caused by both the Populists and the Progressives would affect architecture in general. As Gwendolyn Wright concluded in her book, Building the American Dream, the ". . . inequalities and sentimentality of the Victorians came under sharp attack. Feminists demanded radical changes in society's treatment of women; progressive reformers called for a more rational approach to government, education, and homemaking; sociologists and engineers inaugurated an appeal for 'scientific management' in all aspects of modern life; and architects and popular journalists decried the excesses of nineteenth-century home decorations, endorsing simpler lines and uncluttered spaces." Her conclusion that changing life-styles were evidenced in both the exterior and interior spaces of dwellings and, in effect, in other structures as well, should be kept in mind when studying the developing trends during this period.

In the immediate post-Civil War period, the unleashing of the country's industrial power created both progressive architects and an American architecture. As a result of the industrial revolution, inventive building styles developed alongside the eclectic and classical revival styles. By the time of Chicago's Columbian Exposition in 1893, cheaper mass-produced wood products, ready-made millwork and ornamentation and steel for structural framing were being used in the East and the Mississippi Valley.

The Exposition exposed midwesterners to the classic styles, creating revivals throughout the area. The farmers or small-town dwellers who had visited the fair, and also Chicago, gained knowledge of the new architectural forms which they modified as they wished. Other later architectural influences were the 1904 Louisiana Purchase Exposition in St. Louis, the 1915 California-Pacific Exposition in San Diego, and the more influential Panama-Pacific Exposition in San Francisco held the same year. The San Diego fair revived the Spanish colonial vernacular while the Pan-Pacific, as it was called, included bungalows, "beaux arts" decor, and even more innovative approaches. These exhibitions had major effects in the Plains states. The fairs also exposed the public to a planned community with wide streets, fountains, and parks.

The "search for order," as it is sometimes referred to in American architecture, began in the mid-1890s and influenced all our lives. The major difficulty was that most persons could not afford the architecturally "ordered" house or building until the 1910s, when the "comfortable" house, the

bungalow, and others became available to people of lower incomes. The "modernism" of the 1920s made a total break with the past and drew on the examples of the machine age--the automobile, airplane, ocean liner, and the creative business house--for designs. This new architecture was evidenced mostly in business buildings, railroad stations, and other commercial structures and eventually in houses. It must be remembered that even by the beginning of the 1920s, Kansas and other states in the West were in their "immediate post-frontier" stages and their housing retained older styles either as a choice of function or remembrance. Although dwellings were still considered sanctuaries and secure areas, they were less and less regarded as a lifetime abode. More people were buying, selling, and leaving their homes for new locations, or just different houses, than ever before.

The important styles that had an effect on Kansas and midwestern house and commercial architecture at the beginning of the twentieth century include the following: Spanish Colonial revival, 1915-1940; Colonial revival, 1870-1920; Renaissance revival, 1890-1920; Richardsonian Romanesque 1890-1910; Western stick, 1890-1920; Sullivaneseque, 1890-1920; Beaux Arts, 1890-1920; Neo-classicism, 1900-1920; bungalow 1890-1940; Prairie style 1900-1920; Art Deco 1925-1940; and Art Moderne, or early modern, 1930-1945. Of these styles, the more important to Kansas are the Spanish type revivals, primarily from the western states; the Richardsonian Romanesque, particularly in public buildings; some Beaux Arts, in decorative features only; minor neo-classic revivals; and the bungalow, Prairie style(s), and the Art Moderne structures. The earlier periods of these styles are often cumulatively referred to as "creative eclecticism" while the styles totally within the twentieth century are usually designated as part of the twentieth-century "pluralism," or other generalizations.

The Arts and Crafts Movement was tremendously important for Kansas' twentieth-century architecture. The movement included architects, designers, builders, housewives, reformers, poets, and writers, and their love for hand-tooled goods and simplified, wholesome designs for houses and furnishings. Gustav Stickley, a New York furniture manufacturer who published his furniture and house designs in his Craftsman magazine popularized the movement. Stickley's magazine included articles by architects and designers and supplied plans for both furniture and houses (including some houses of concrete) that were affordable to a large segment of the population.

Along with such publications as the Ladies' Home Journal that promoted model houses and furnished plans, the Craftsman quickly changed style patterns. The Ladies' Home Journal issue of April 1907, published plans that could be ordered for five dollars, for a \$5,000 fireproof house. The house was designed by Frank Lloyd Wright and was his third model house for the magazine. Prairie style houses became available to anyone who wished to follow, or change, the Wright form.

This period of change demonstrates the difficulty of affixing a particular stylistic terminology to many structures of the early twentieth century. Very few are truly in one style. In Kansas one could find Georgian Greek revival and Italianate features all combined on a typical I-house form. The Arts and Crafts Movement, which called for simplicity and respect for material craftsmanship, had particular appeal to Kansans, and with the close relationship of the Wright Prairie style and the bungalow, a new way of building began to appear on the Plains, combining the best of these worlds.

Kansas commercial buildings did not change style quickly, if at all, in the early twentieth century. The influences of the great Chicago School skyscrapers did not affect the Plains. The tallest structure in many Kansas towns and cities was usually the grain elevator. Except in the larger cities, office buildings in Kansas have not followed the path of steel frame construction to massive skyscrapers. Kansas retained the temple front Greek and Roman styles in its public buildings, banks, and institutional structures. False front facades on the main streets and one-story and two-story business buildings gave a commonality to the Kansas small-town main street and, to a certain degree, to the cities.

Early Twentieth-Century Kansas Architects

At the turn of the century there were at least twenty-six architects practicing in Kansas, mostly in urban areas. There were probably other trained architects who either were not listed in gazetteers and directories or who were not practicing. Kansas had some notable architects. The most prominent in the early twentieth century were Erasmus T. Carr (1825-1915), John G. Haskell (1832-1907), George P. Washburn (1846-1922), and Frank Squires (1877-1934), and ironically these men carried on the design traditions of the nineteenth century. Other architects and firms active in the early twentieth century included Seymour Davis, James C. Holland, and Thomas W. Williamson of Topeka; W. E. Hulse, and Mann and Company of Hutchinson; C. W. Squires of Emporia; W. W. Rose of Kansas City; and U. G. Charles of Wichita.

Erasmus T. Carr, Leavenworth, the state architect from 1879 to 1885, worked primarily in the nineteenth century but was an influence on later Kansas architects. He designed the early buildings at Emporia Normal School (Emporia State University), six county courthouses, and many schoolhouses and other buildings, both public and private. John G. Haskell, Lawrence, was the state architect in three different periods. He designed Rice and Boswell halls (which are no longer standing) at Washburn University, Topeka, portions of the State Capitol, Fraser Hall at the University of Kansas (which no longer stands), the Chase County Courthouse, many of the buildings at the state institutions, Haskell Indian Institute, and schools, banks, houses, and opera houses throughout the state. Although most of his work was done prior to the turn of the century, he was an important influence on construction in the state. George Washburn, Ottawa, designed thirteen Kansas courthouses (most of them prior to 1912), plus one each in Illinois and Oklahoma. He was at the peak of his career when Kansas was rapidly developing and his services were used throughout the state. Frank Squires of Topeka was noted for house designs, working throughout the state on residential planning before the turn of the century and into the late 1910s and early 1920s. He was also noted for using the latest in technology, including vapor vacuum heating systems, electricity, and smoke consuming boilers. He was consistently experimenting with new techniques.

In January 1915, the Topeka Daily Journal described the capital city as the "last word" in architecture. The differing styles in the city then, and those that would come, are examples of the many concurrent styles of architecture in Kansas. The newspaper commented that several architects in Topeka were specializing in schools (not surprising since many new school buildings were being built in the state). Topeka was noted for its "park avenue" along Topeka Boulevard with its pretentious homes. With the increasing use of the automobile, construction moved farther west, away from

the central part of the city and the noise and congestion of the cars on the street. Topeka's Westboro Addition is an excellent representation of an early planned community with curving lanes and cul-de-sacs, drives and terraces, and with architecture in various revival styles including Dutch, Georgian Colonial, and English Tudor.

The New Vernacular, Eclecticism, and Styles

Little has been done so far to identify and survey vernacular or folk architecture in Kansas, and many of the early examples are disappearing. Vernacular architecture is a form of the people. Carpenters, joiners, builders, and individual homeowners often designed their own homes in an eclectic or vernacular style. Vernacular is an unaffected form of architecture without "the pretense of a better class accent. It is the use of architectural style without being conscious of style."

The bungalow is a prime example of vernacular architecture. Although often initially designed by architects, it was changed and added to often, and no one particular style is ascribed to it. It literally took the building world by storm, was easy to construct, and met the new demands of a more open and free society. A Los Angeles builder ran advertisements in House Beautiful advertising "Bungalows direct from Bungalow land."

The American bungalow was not known in Kansas prior to 1900 but by 1910 thousands had been constructed by local builders with plans purchased from a variety of outlets. By the 1930s the bungalow had superseded practically every style in popularity. The bungalow contributed to eclectic design while at the same time being an American vernacular type.

Clay Lancaster's book, The American Bungalow, described the genealogy of the bungalow as originating in the English "Dak" houses, or posting bungalows, in India during the British occupation. The veranda, because of the climate and relatively informal life-style, was an essential element in its identification. Flexible interiors and a temple roof with multiple roof lines and dormers, often with the distinctive upward curvature of the roof ends were borrowed from Japanese architecture. Spanish influences were also included in many styles of the bungalow, incorporating open hallways, shared dining and living room space, and interior decor. The name itself is a derivation from the Indian Bengali noun "bangla," meaning a low house with galleries or porches all around.

The bungalow truly was a reflection of the society that produced it. Usually credited with being created in this country by Charles and Henry Greene of California, it is probably more correct to credit them with popularizing the basic design. Frank Lloyd Wright used many of the features found in the form. The popularity of the design is indicated by the many available mail-order plans and pre-cut houses available as bungalows. Sears and Roebuck featured many such plans and houses in the style. The company's popular Croydon model in 1927 was called a "bungalow cottage."

Kansas may have developed an adaptation to the bungalow that is still visible. The WPA Guide to Kansas made note of the fact that a sleeping porch was often added as a second story at the center of the roof, constructed so all four walls could have windows, allowing for evening and night breezes for comfortable sleeping or relaxing during hot, humid weather. This version is

the "airplane bungalow" found predominately in Kansas and on the Plains. Kansas may have been instrumental, through a builder's mind or some other influence, in popularizing this version.

The bungalow was affordable for many; rich and middle-class built them as well as the less affluent. Louis Sullivan's summer home was a bungalow, and many of Frank Lloyd Wright's houses, prairie style or not, were bungalows. Workingman's cottages and other "common" houses sold by mail order, and mail order plans all included the easy, eye-pleasing bungalow. The Ladies' Home Journal published many bungalow plans. Many builders borrowed and changed the bungalow style creating vernacular versions. Wright's published plan, as mentioned above, allowed easy copying and adaptation of the form. And, as Wright had done, many variations appeared. Sears and Roebuck and Aladdin both offered "prairie houses" or cottages, and the experimental engineering department of Kansas State University presented its version of the prairie house as the prime candidate for one of the best adapted farmhouses on the Plains.

With improved transportation and communication in Kansas in the twentieth century many new eclectic dwellings became popular. Borrowed from classical styles with some local adaptations, the new combinations of styles became so prevalent that they could be defined at least by shape or ornamentation as having their own style--a Kansas vernacular. The very common four-square, whose ancestry was in the Georgian mansion, came in various versions from a small workingman's cottage to large two and two-and-a-half story houses. The four-square and temple house styles were built all over Kansas, most of them before 1930. They usually were two stories, had raised foundations, a full front veranda, a low pyramidal roof with at least a front dormer, and four nearly equal size rooms inside. Side bay windows would break up the box look, and later this version was added to and extended to a rectangle for more interior space and room arrangement opportunities. The style, which is basically an eclectic version of several classic styles with some midwestern additions, like the porch and division of space, became so popular they still require someone to invent their own descriptive idiom.

The temple front house is an eclectic classic revival with a flat front, offset entrances, projected eaves, gable side roofs, and often Palladian windows on the front gable. The "homestead," as many are often called, was a designation attached to practically any vernacular form of the above. They are often designated as homestead temple houses.

The usage of such styles placed the professional architect in a peculiar situation. Architects were not used a great deal to design houses in Kansas prior to 1900. As in the rest of the country, they tended to concentrate on public and commercial structures. When people began to seek planning and design assistance, that assistance often came from specialized house builders, carpenters, mail order plans, word of mouth, visual copying, and from firms such as Garlinghouse in Topeka which had draftsmen/designers working for them. It was simple to obtain the plans and find a builder/carpenter to assist in construction or to walk down the street and copy the design from a house under construction. However, architects were not eliminated from the process and may have contributed more than is realized. Many leading architects and designers wrote for the Craftsman magazine and often Sears, Aladdin, and other mail order builders used architects to design their houses.

Defining Trends

In a 1927 Kansas State Experimental Station Bulletin, H. E. Wichers, professor of agricultural architecture, wrote, "The old sod house of western Kansas [was] . . . unconsciously a part of [their] surroundings" and matched the "horizontal lines of the prairie with its low trees and shrubs" that forbade the use of vertical expressions. "The design calls to mind the old ranch house. It is compact and gives one the feeling of being able to withstand wind, heat, and also severe winters." This was written after the advent of Wright's prairie house, but which was the initial influence?

The necessity to find alternative building materials and ornamentation led to the "simple, yet magnificent buildings in the midwest" and to see them is to "stand in awe of the ingenuity and ability of our early craftsman." Were these craftsman following a trend or creating one? Eastern Kansas had few traces of formal architectural styles which followed national trends in the East until about the 1870s. Such ideas were repeated in western Kansas, but only to a point dependent upon building materials.

Architectural plan books were available generally in most areas of the United States, including Kansas, but how much they were used in the late nineteenth and early twentieth centuries in Kansas is extremely difficult to determine. Certainly in the twentieth century they were available and the tremendous influx of bungalows in the state is a reflection of the effect.

One of the most important influences was Kansas State University's Department of Experimental Engineering and its cooperative effort with the schools of architecture and agriculture in issuing a series of informative bulletins on architecture between 1914 and 1942. The bulletins included plans, conveniences, new developments, and renovation ideas. These bulletins, which were readily available, came from a source that enjoyed widespread respect and trust. As in other states where such institutions advised the rural population, the university was probably the leader in planning the renovation of old farmhouses to include new conveniences and new styles.

Some trends are obvious, and it is easy to understand why they were followed. The increased numbers of garages for cars, the demand for gas stations, suburban centers (early shopping centers), parks, shelters, and new materials can be traced directly from location to location. But these were reactions to influences other than pure architectural creativity.

Questions and Considerations

The determination of trends is one of the most important factors to consider in the twentieth century. The Kansas bibliography for the period is primarily political or agricultural; too little attention has been paid to the architectural history of the state.

A competent study of trends, developments, and changes on the Kansas scene should be prefaced by documented studies of different types of buildings in distinct periods of time and in various locations throughout the state. These results should in turn be compared with any national development of those structures, when they appeared and where, and their basic functions. If

changes occurred in Kansas, were they ethnically influenced, dictated by the climate and geography, or the result of a lack of skills or materials to build them?

The careers of outstanding Kansas architects urgently need historical and technical study while examples of their work remain standing. What and who influenced these architects? What did they study and read? Are their libraries still intact or can information as to their interests still be located? Where were they educated? Did the 1893 World's Fair, the Pan-Pacific Exposition, and other such expositions have an influence? What did Kansas newspapers say about those expositions and the more local ones held in Omaha in 1898 and St. Louis in 1904? How many Kansans attended the fairs? Did Hollywood's fantasies affect the state? Was the influence in Kansas, as indicated by the bungalow, primarily from the West Coast, or is that misleading? Did the movie sets influence style and design?

Are examples of the Kansas vernacular styles being surveyed and saved? In less than thirty years Kansas quickly progressed from a frontier state to a leading builder of airplanes. This dynamism must have had more than a passing effect on the architecture, the builder, and the carpenter--and, most importantly, the people themselves. Did Kansans worry about keeping up with the rest of the country?

The changes in society during the pre-World War II period certainly lessened the state's isolation, and the depression and recovery period detracted from strong individualism. Were Kansans influenced more by function, style, or beauty? Could steel construction be as effective as stone? Did Kansans then adapt more easily to trends even though they may have had a strong desire to preserve something from their past in the built environment?

What did Kansas lose when more than 103,000 persons left the state during the depression? What effect on building did this migration have? What loss of structures have we suffered because of the Great Depression and the dust bowl? What changes came about because of governmental and stronger national input? It would be interesting to see how many houses were sold during the depression or just abandoned to be torn down or to rot away. What of those migrants who may have returned to the state and their effect on the built environment?

These considerations should be kept in mind while reading the remainder of the study. Finally, was Kansas so far removed from the industrial wealth of the East, and the West, that it did not reflect architectural change as a symbol of a culture? Or, did Kansans still steadfastly retain the true spirit of the pioneer and individual and build or buy only what suited their individual tastes or what they could afford?

III. The Kansas Character and the Built Environment, 1900-1940

A Changing Culture; Technology, Standardization, Adaptation

People, houses, and buildings existed together in relation to the technology available, the landscape, and the social climate of their times. From 1890 to 1930, more houses were "created" and constructed than at any time in the nation's history, and that was also true in Kansas. Construction of commercial, retail, and institutional structures increased nationally but not as rapidly in Kansas. In the state the dwelling was the focus of construction activity. The rapid changes in technology and architectural creativity, the rise of the "comfortable house," and specialized builders all caused a profusion of styles. Architecture was becoming democratic--houses were becoming more affordable and individualized while commercial structures were being defined in accord with function and simplicity of construction.

Perhaps the most radical change in American architecture occurred between 1915 and 1940. Pluralities existed in style but within was a desire for visual delight utilizing the new aluminum, stainless steel, glass blocks, and synthetics such as formica that would make it a "shiny" period of living. The Aladdin Company in 1919 denoted the time as the "passing of the pantry" and a time of conveniences. Plumbing, built-in gas and oil stoves, electricity, central heating, all combined with the new pre-cut and easily available millwork, made styling of one's house much easier to obtain.

While to a certain extent buildings proclaimed one's status, the house, in particular, remained a retreat, compartmentalized within but much less formal. Commercial buildings remained functional. The 1920s witnessed the most rapid economic changes, affecting both technology and ability to purchase. It was a unique decade. In Kansas, while some farmers were buying more and more tractors and trucks, many still used steam threshers; while the aircraft manufacturing companies of Beech and Cessna were being established and aircraft passenger service was beginning in the state, changing both the land and air-scape, small towns desperately needed sewage and water systems; while everyone watched cities become electrified and "planned," rural areas and farmers were still not able to take full advantage of the scientific developments.

The "public amenities" of the times were storm sewers, paved sidewalks, snow removal, street lighting, food delivery, mass transit, and public safety departments. In buildings the amenities were running water, waste disposal, a kitchen sink, a laundry, a complete bath, lighting, central heating, a refrigerator, and easier housekeeping because of new wall and floor coverings. These amenities required changes in the exterior and interior designs of new structures and wide-ranging remodeling of old buildings. Technology also began to revolutionize the countryside with parkways, parks, recreation areas, electric poles, signboards, and roads to connect the towns and villages to each other in a way never imagined, but in Kansas these were gradual changes.

Transportation developments, such as more railroads, highways, and over the road trucking companies, as well as mail order companies, increased the availability of ready-made products. Companies such as Gordon and Van Tine's could supply all the interior fixtures, millwork, and even ready-made rooms for the consumer. Despite the increase of the rural roads in Kansas and the

delivery service of the rural mail route, this did not mean that all could take advantage of them.

The Rise of Affordable and Pleasing Styles

The major accomplishment of the previous "brown decades" had been to apply the machine to all phases of architecture, creating after the turn of the century a new form of expression, a metaphor of the times. In eastern Kansas pretentious structures continued to be built bearing all the clutter of the Old World but reproduced by modern machine. At the same time, new forms were being created within the Plains context. Case studies in specified locations in Kansas might show that the central and western part of the state adapted the new more quickly than the more stable and populated eastern third.

The Ladies' Home Journal, with a nationwide circulation, was the largest supplier of mail order plans, and by the late 1910s and early 1920s Plains states residents were major subscribers. The magazine featured three of Frank Lloyd Wright's prairie style homes, especially appealing to Kansans, and the plans were borrowed freely by any builder who could make them work with, of course, his own adaptation dependent upon skills and materials. House Beautiful, Better Homes and Gardens, and others had, as early as the late 1890s, made house plans available, but by the 1920s such plans had become a major inclusion in the publications. Both architects and clients wrote in the magazines, sharing their interests. Few of the publications or mail-order houses, however, offered ideas or plans for commercial or retail buildings.

Generally, the new houses had more open interior plans, with patios, no or smaller front porches, and departed from local vernacular influences. Major mail-order house companies, however, did develop some of their own particular forms. Aladdin had a basic set style pattern, as opposed to Sears whose houses were borrowed from practically any acceptable style. This is the reason that Sears' houses are nearly impossible to identify by style or form. Aladdin's catalogs are a mini-history of house building in the early twentieth century. The company claimed to use no architects in its designs, and the houses were priced from \$5,000 for a villa to an average of about \$2,300 for a "cottage" or bungalow. A garage cost \$95. In 1919 Aladdin promoted the quality of its materials offering to "pay a dollar for a (each) knot" found in its lumber. Possibly more Aladdin houses than those of other mail order firms might be found in Kansas, but it is impossible to determine for certain. Aladdin advertisements appeared in many Kansas publications and its catalogs were readily available here. In 1924 Aladdin sold 3,600 houses in the United States. Among the many companies selling plans by mail was the Topeka based firm of L. F. Garlinghouse, which started its plan division in 1932.

Specialized supply houses by the hundreds placed advertisements in all types of publications, often directing them toward the rural market. Newspapers throughout the state carried advertisements for their catalogs, and the various magazines and newspapers of Capper Publications in Topeka and other agricultural related publications almost always carried such promotions. Pattern books of every nature were available, and today they are one of the best sources to indicate the styles available, the schematics of the structures if not complete plans, and assembly instructions. The pattern books also list the types of materials to be used and the method of finishing.

Although many companies existed, Sears may be one of the better examples. Sears (which also sold barns) not only offered pre-cut houses, but it was the only company to offer financing (six percent for five years) of the entire package including lot purchase, landscaping, and, hopefully, its own furniture designed specifically for each model. As mentioned, Sears borrowed freely from the most acceptable styles, including one or two that are direct Wright prairie style houses. Most of the houses were one or two-story bungalow or traditional eclectic, but stylish neoclassic houses from Georgian to American Colonial to distinct European styles were also offered. The top of the line was the "Honor built" house that used the finest materials and millwork. The simplest house, the workingman's cottage, could be constructed in eight hours. The average house usually arrived at the nearest rail location in two boxcars complete with cabinets, plumbing fixtures, and anything else one wished to buy. By 1928 Sears, which had begun the house program in 1908, had more than one hundred different models available.

Sears and other mail-order houses boomed after WWI with the national shortages in building materials, tools, and available labor. Kansas experienced the same shortages but realized a growth in agriculture and industry. It was natural for the state to take advantage of the prefabricated construction. By the 1920s there were more than 450 different models ready to assemble. By 1925 Sears had sold 30,000 homes nationally, by 1930, 50,000, and by 1940 nearly 100,000 had been sold. After the 1929 stock market crash Sears increased its home loans, included labor costs in the mortgage, and began to directly supervise the construction and the hiring of labor.

A Sears house in Harper, Kansas, was used in the company's catalog (1921-1925) to promote the building of industrial communities for farmers who needed houses for farm hands and inexpensive new homes that could be built next to new industries. Remembering the political, social, and industrial climate of Kansas during that period, it is easy to understand why such houses did so well. People who bought the homes became living advertisements for the company. William Gregg of Abbyville, who built his Sears house in 1913 for \$558, was quoted in the catalog, "Someone is here every Sunday looking at it." There were many stories concerning pre-cut houses, such as the retired couple who assembled the house themselves, to another fascinating tale of a house put together backwards!

Sears houses ranged in price from a 1917 five-room cottage for \$248 to \$900 depending on amenities, to a \$2,500 large house such as was built in Wichita sometime between 1911 and 1921. Sears records are not available to pinpoint all the houses built in Kansas and their common styles make them difficult to locate. A bill of sale, the location of a Sears stamp on the material, or eyewitness accounts are the best methods to document the Sears origin of a house. The Sears and Roebuck Archives in Chicago has some information organized by state.

The Walnut Pump Station of Cities Service Gas and Oil Company at Gordon, Kansas, south of Augusta, purchased five of the Sears homes in 1917 for station workers. Other Kansas locations where Sears homes are known to have been built are Abbyville, Bazine, Belle Plaine, Burrton, Claflin, Concordia, Coldwater, Garden City, Great Bend, Harper, Hutchinson, Lawrence, Lincoln, Lost Springs, Manhattan, Modoc, Moscow, Peabody, Pratt, Rolla, Salina, Sawyer, Sedgwick, Solomon, Thayer, Valley Center, Waldo, Wallace, Wamego, Wichita, and Wilmore. Most of these homes were in rural areas and

small towns, and most were built between 1908 and 1922. Other towns or counties that may have had Sears homes but for which information cannot be fully substantiated include Arkansas City, Bellefont (Spearville), Burdick, Cairo, Kansas City, Kingman County, Lanopes, Russell, Smith Center, Topeka, Vermillion, and Whitewater. With this number of Sears houses located on the basis of very sparse records, it is probable that many more were built.

Commercial and Public Structures

Kansans were content to retain most of the commercial building styles in use at the turn of the century for some time to come. From the end of WWI to 1940, Kansas cities, like the rest of the United States, copied multi-story apartments, hotels, hospitals, and commercial structures to round out the change from eclectic features to functional necessity. In Kansas, however, banks generally remained Greek temples, city libraries were fronted with classic porticos, and some hotels, and later motels, appeared as medieval wayside inns.

There were identifiable basic commercial styles used in the state, the use of which can still help to identify the type of structure. The one-story, freestanding "shop" with a pitched roof, often with a facade or "false front" intersecting the front dormer, is very common in small Kansas towns. These were usually either the first commercial buildings in town or were added later after "blocks" had been constructed. Kansas, as with other Plains and midwestern states, often had "blocks" of attached (sharing a common side-wall) buildings two or three in breadth. These are still visible today even in large cities where some of the older business sections remain relatively intact. The storefronts of many, however, have been changed from the original appearance.

The most usable descriptions of commercial styles applicable to Kansas are found in Richard Longstreth's study, The Building of Main Street. A Guide to American Commercial Architecture. In this 1987 work Longstreth categorized the various styles into "block units" of construction denoting them as rectangular or square blocks of stories built on top of each other with each different story becoming a "zone." Longstreth, a former Kansas State University professor, studied several buildings in Kansas and found these generalizations applied in the state very well. Included in his study are structures in the towns of Agra, Blue Rapids, Coffeyville, Holton, Independence, Junction City, Phillipsburg, Ramona, St. Francis, Severy, and Westwood Hills. These buildings were constructed from the early 1900s through the early 1940s. Included were retail stores, office buildings, city buildings, school buildings, movie theaters, and general purpose commercial structures.

Longstreth describes the one-story commercial "block" building as a rectangular structure with a raised false facade that could be very plain or fancy depending upon the existing city street style or the size of the town. By the 1920s these facades were ornamented with art deco and later with moderne additions. By the late 1930s these buildings, and others as well, were renovated in other ways when parking became a necessity for the store owner; many utilized space at the rear or sides of their buildings for that purpose. This caused more attention to be paid to the appearance of the rear and/or sides of the structure.

The most common Kansas commercial building was a two-part commercial block, which was a two-story rectangular building, one matching block on top of the other. This form was popular for office buildings, banks, hotels, theaters, and retail outlets that often had living or storage space on the second level.

Each of the stories, or blocks, of a building could be a separate "zone" by virtue of a different window placement or ornamentation. Most of these commercial blocks are what Longstreth terms a stacked vertical block of up to five stories high with separate horizontal divisions. Later, when it became common to use large window glass, some were built with an "enframed window wall" at the street level. These fronts had a lower level almost totally of glass.

Another common commercial building in Kansas was the "central block" with wings. These structures usually were two to four stories with a projecting center entrance flanked by wing units at least half as wide as the center section. There were also "arcaded" blocks of evenly spaced buildings set off by round-arched entrances across very wide facades. These and other designs and combinations of them were the basic commercial buildings in Kansas from 1900 to 1940. Many changed in appearance with new facades as public taste changed, but many are still on the streets of small towns and cities alike. They remain as sentinels to the perfection of functional use in a structure and deserve to be surveyed and studied not only for their use but also their durability and longevity.

At the beginning of the twentieth century, Kansas towns had for the most part experienced their greatest period of commercial and business construction prior to World War II (WW II). For the first ten years of the 1900s the commercial construction that was done generally used the traditional styles. Important commercial buildings of the 1910s, 1920s, and 1930s included the large brick hotels such as Topeka's Jayhawk, Lawrence's Eldridge, and Wichita's Lassen, as well as the art deco movie palaces in Salina, Hutchinson, Independence, Emporia, and elsewhere. For the most part utilization of new styles for commercial architecture in Kansas was slowed by a lack of necessity to build new except for new industry, and then was stymied further by the Great Depression. The economy did not recover in time to allow much construction prior to World War II. When the war began, most private and commercial building stopped. The primary exceptions in Kansas were the buildings constructed by the Works Progress Administration (WPA), Public Works Administration (PWA), and Civilian Conservation Corps (CCC).

The only major construction of commercial buildings was in the cities where new structures were needed for expanding governments, educational and cultural facilities, and for new industries. Even then it is difficult to locate any major changes in style or form from the late nineteenth century. Kansas counties did build fifty-nine new courthouses between 1900 and 1940. Of these, eleven were "new" styles utilizing art deco and moderne designs; the remainder were classical and Romanesque.

Libraries played an important role in Kansas' architectural history. Perhaps one of the most overlooked effects on cultural architecture in Kansas, particularly in small towns, was that provided by the appearance of Carnegie libraries. Many persons looked upon these structures as the "high style"

building of their town at the time they were built, and many of these libraries are still regarded as such in small towns. For many towns and cities, the Carnegie was their first library. Four Kansas colleges received their first library buildings from the Carnegie Corporation.

Most churches in the state during the pre-depression period continued to follow the classic Gibsonian Gothic form or that dictated by the denomination. The most popular floor plan for Protestant churches was the "Akron Plan," which utilized wing additions on the sides to house kitchens, schoolrooms, and parlors.

Schools in Kansas were replaced about as often as courthouses prior to 1930. The High School Tax Law of 1905 authorized counties to levy taxes for schools, and the High School Law of 1915 enabled united support of centrally located schools (consolidated). These laws paved the way for major construction of new school buildings, but their style remained a two or three-story box, often of brick, much like the late nineteenth-century buildings. Some large city schools retained an American Gothic format, perhaps Topeka's Collegiate Gothic high school is the best example. In contrast, Kansas City constructed a new eclectic Romanesque high school. Both schools, however, shared state-of-the-art floor plans, indicating that while the exterior design might remain traditional, decorating and planning interior space in large educational facilities was more modern. For further contrast, a study conducted in 1929 by the Kansas School Code Commission contained photographs and listings of the sod schoolhouses still being used in the state.

Hotel accommodations in Kansas increased dramatically during the early twentieth century. The Eldridge House in Lawrence, designed by Charles Shepard and Alben Wiser, the Lassen Hotel in Wichita, designed by the firm of Richards, McCarty, and Bulford, and the El Bisonte Hotel in Hutchinson (no longer standing), designed by Louis Curtiss, are or were fine examples of the larger hotel structures. The variety of accommodations increased in the state as tourist courts and early "motels" began to appear in the 1920s. Many of these resembled one-room cottages with parking between each unit, often built in the California court style.

In many towns and cities, hotels were often located near the railroad station. The new traveling public, particularly women, did not relish those locations and the newer large hotels were often too expensive. For these reasons and the increased use of the automobile for traveling, the motel built near the highway quickly began to replace the hotel.

The changes in commercial building that occurred in neighboring Kansas City, Missouri, with its mini-skyscrapers and newly designed commercial houses, are seen to a lesser extent in buildings such as the Eldridge Hotel in Lawrence, the Huron Building in Kansas City, and the Santa Fe Building in Topeka. Kansans may have been well satisfied with things as they were. The state's high winds may have been a deterrent to some builders who may have felt that too tall a building would not last even with the structural steel skeleton. New commercial building was done in the state, but it usually followed the most functional form and used the existing styles as a pattern. The Federal Writers' Project Guide to the Sunflower State, written between 1935 and 1939, summarized current approaches when it described Emporia's "new" business district architecture as "bland utilitarian facade." The Guide also points out, however, that while some cities, like Atchison, retained

traditional styles in housing, their public and commercial architecture was considered "contemporary." What exactly was meant by "contemporary" is uncertain. The term may include merely new facades covering old buildings, as well as new commercial buildings in the city that were of "modern" designs.

Planned Communities

The influence of the Columbian Exposition led to the birth of the "City Beautiful" urban planning. Some planning is evident in Kansas prior to 1930 but principally in cities like Topeka, Wichita, and Kansas City. According to Nearby History, the cycles of the cultural landscape proceed through a construction cycle, followed by abandonment, conversion, abandonment, demolition, and then new construction. Kansas may have remained in the conversion cycle longer than other areas, adapting buildings without the first "abandonment" stage. In the state's rural areas the cycle took longer and often ended with abandonment and no new immediate construction. In Kansas some opera houses were converted to movie houses, corner filling stations were created by merely placing a gas pump in front of the local blacksmith shop, garage, or other business, and other similar adaptations occurred. Even with the increase in movie theaters, trademark architecture, pop architecture, and new materials, Kansas was slow in developing totally new buildings for these facilities. Therefore, no "planning" was necessary.

The grid system was the most prevalent town plat in Kansas, and most towns were laid out prior to much building. After the initial "planning," however, most Kansas towns and cities developed and evolved pragmatically. Additions and subdivisions were platted and developed as the need or perceived need arose. Most cities did not engage in comprehensive planning until forced by necessity to do so in the late 1930s. The larger towns that evolved into cities slowly changed from their rural dominated form to an increasingly man-made one. These cities did not plan space for new elegant squares, monuments, parks, and new roads. They tended to spread out along a railroad or highway, usually with a western orientation.

Aesthetic concerns came much later to most cities and towns in the form of required parks, open spaces, and general beautification and parking. These strictures were rarely legislated or regulated and defined by ordinance until the mid-twentieth century. Kansas cities "just grew." Many small Kansas towns experienced a spread that sometimes caused "abandonment" in the business district when highways were delineated and improved at the edges of the towns. That trend would be repeated from the 1950s through the present with the development of the large suburban shopping centers near highways and freeways. These highway "strips" are obvious in most town and cities in the state. Some of them date from the late 1920s and early 1930s although evidence of those original "strips" is rapidly disappearing.

There were some planned areas within cities. Topeka's Westboro and Kansas City's Westheight Manor are excellent examples as is Emporia's Berkeley Hills section. The Emporia development was singled out by the WPA Guide as a planned community of modern English and Dutch Colonial houses on landscaped curved streets in a "restricted" neighborhood. Great Bend also had a restricted, planned residential addition in the 1930s. The restrictions usually pertained to lot size, cost of construction, landscaping, and, as will be seen, "controls" on who could live in the planned area. Kansas planning, however, was primarily residential.

There were some planned industrial cities in Kansas but not at the level of cities like Gary, Indiana, which according to some historians was the first twentieth-century planned industrial town. The continued growth of the meat-packing industry in Kansas City, Garden City, Topeka, and Emporia contributed to industrialization that included housing for workers. These cities were not, with the exception of Kansas City, originally planned or thought of as industrial centers. Commercial buildings in most Kansas cities and towns were in place long before major industries forced changes that created industrial areas adjacent to the towns. The oil and gas industries, centered in such locations as El Dorado and Hugoton, did have planned residential areas. Gordon, Kansas, with its Sears pre-cut houses for workers near an oil line pumping station is one example of a planned workers' community. Kansas experienced a significant increase in its industrial work force after 1934; 228,000 Kansans were employed by industry by 1937. There had been increases during WWI when farmers had ventured into the cities to work in war related industries but this kind of growth was more significant in WWII, particularly in suburban Kansas City, Topeka, and Wichita.

Street improvements in Kansas towns were more evident than were planned communities. Throughout the period traffic control devices, electric power poles, new sidewalks, drains, sewers, street paving, and new and more parking for the influx of automobiles changed the look of the towns and cities. The public building programs of the WPA constructed new sidewalks, curbs, drains, and sewer systems throughout the state from 1935 to 1940, changing the look of many streets. Structures were no longer built without taking into consideration electrical and sewer hookups and the accessibility to streets and parking.

Many parks, swimming pools, auditoriums, and other such facilities were built in Kansas before 1930, but the bulk of new building occurred during the public works programs of the New Deal. Buildings completed prior to the depression included the new eclectic classical Memorial Auditorium in Coffeyville (1925). An outstanding facility in the same location built in 1909 was a natatorium complete with swimming pool, dance floor, gym, mineral springs, medicinal baths, and an outdoor pool. Both of these facilities are now gone.

Because of the lack of secondary sources available for researching and documenting these changes, surveys and local research will have to be done on Kansas town and city commercial construction and styles and on planned communities. Windshield surveys of business sections in conjunction with analysis of town plats and directories, building permits, newspapers, photographs, and oral histories can assist in documenting changes to cities between 1900 and 1940.

The Federal Writers' Project Guide is very useful to identify new construction and styles. All the major cities of Kansas are included in the Guide with architectural descriptions of both old and new structures. Many smaller towns are also included in the descriptive tours. This study made considerable use of the Guide for both commercial and dwelling developments. As an example, it is relatively easy to recognize the apparent building craze for movie houses and tourist courts that must have occurred in the late 1920s and throughout the 1930s in towns and cities of every size. The Guide also indicates "colored only" facilities, including swimming pools and theaters. Compilations of recreational and cultural facilities are also given.

The Changing Landscape

From the mid-1920s through the 1930s America grappled "with a world in which play was becoming equal, if not yet superior, to work." Herbert Hoover commented, "this civilization is not going to depend so much on what we do when we work as what we do in our time off." Even the steadfast, hardworking Kansas farmer and farm wife began to take advantage of household conveniences and power equipment that decreased their working hours. City workers, for the most part, found not only more time on their hands but also ventured out into the countryside to tour and look for the "country home" site they longed for. The new leisure time and the search for a more easy and recreational life-style (that actually increased in certain areas during the Great Depression) had a tremendous impact on building, changing both the landscape and visual character of our cities and roadways.

The technology that created more leisure time changed the type of buildings being built. Machine sheds were constructed on farms; new silos used power lift equipment and were built taller; and garages were built everywhere. More leisure time provided the opportunity for travel and recreation. Planned parks, lakes, roadside campgrounds, and tourist courts lined the roadside. Streets could no longer serve as playgrounds for children because of the ever-increasing numbers of vehicles. Cities were pressured to build more suitable play and general recreation areas. Gasoline stations were placed on many street corners and at the junctions of highways and rural roads. Many had unique styles of architecture that often identified their products and trademarks. Over-the-road bus companies flourished and their stations became larger and more indicative of their business. In the 1920s and 1930s bus terminals were styled in art deco, flying bridge, and other modernistic styles influenced by aircraft and the super streamliner designs used by the Union Pacific and other railroad lines.

The new leisure and the automobile contributed to the promotion of the concept of traveling to shop. Early "strips" developed at the edge of towns. The Country Club Plaza in Kansas City, Missouri, which was started in 1927 and generally is considered the first shopping center in the world, was developed as a result of this propensity to "drive" around. The influence of the architecture of the Plaza shortly became visible in many of the larger towns throughout the state as businesses copied segments of the Spanish revival style. Small shopping areas such as Westboro Plaza in Topeka imitated the Plaza, as did individual retail structures. The Guide to the Sunflower State specifically mentioned Arkansas City's modern shops that were created by adding "tile facades" to older buildings of native limestone.

Swimming pools, auditoriums, movie theaters, restaurants, athletic fields, and commercial outlets competed for space in towns and cities that were not prepared for such changes. Cities and towns began to spread beyond city limits, and farmland became included in town expansion. Planning for these necessities greatly influenced the new landscape of the cities, towns, and the countryside.

Kansas adapted well to different building styles and fit in with the rest of the country in social change. While the storm cave, windmill, Grange hall, and grain elevator continued to be common elements of the vernacular landscape of the state, demands for new building types in the rural areas

added new elements to old familiar scenes. Many new buildings had to be built to house new enterprises based on the new technologies and conveniences.

One of the greatest changes from 1900 to 1940 in Kansas' built environment was in the landscape. It reflected new architectural design and land-use patterns. Kansans began using tile, stucco, and similar earth materials to construct their vernacular buildings. The machine sheds that appeared throughout the state were generally designed in the old rectangular fashion, with a lean-to and salt box type roof. Most blended into the Kansas landscape.

Ryvig and Marty's Nearby History and John B. Jackson's Discovering the Vernacular Landscape are excellent works which study the changing landscape and the need to preserve the typical vernacularisms that reflected local or regional methods of landscaping, tillage, and farmstead and field location patterns. These representations of a way of life are disappearing from the twentieth-century landscape more quickly than the built environment.

Examination of the landscape requires study of the whole and its various parts at the same time. Study of the whole entails identification of relationships between buildings and other man-made structures and the open spaces; study of the parts of the landscape requires analysis of the changes in specific buildings, patterns of the soil, adjustments in the environment because of conservation, and additions to the landscape. The new residents who came to Kansas from eastern wooded states could not re-create their past environment but they could do bits and pieces of it in their yards, parks, cemeteries, institutional grounds, roadways, and around and through their fields. The landscape is too often thought of only as rural open spaces, overlooking the importance of the changing space of the cities and towns.

Economic cycles and state and federal laws affected the landscape as much as the built environment. When Kansas wheat bins overflowed at the end of WWI, more and larger commercial grain elevators and metal home storage bins were built. During the drought on the Plains in the early 1930s more farm ponds and reservoirs were built with state and federal aid laws and the relief programs of the depression than at any previous time.

Because of a lack of natural water resources and a need for water conservation and flood control, a plan to establish a system of Kansas parks and lakes was first proposed in 1923. The creation of the Fish and Game Department in 1925 sparked new interest in water use. The usage of parks and lakes increased more than ten times from 1916 to 1936. These facts demonstrate the high level of use and enjoyment of such multiple-use facilities. These natural recreation areas provided a relief from the hard times of depression and dust.

From 1914 to 1930 more irrigation systems and reservoirs to supply water for irrigation and to provide flood control were built in the state than during any other period. By 1920 Kansas had 95,000 acres under irrigation, changing the landscape appearance from brown to green and dividing it with ditches and canals. In 1929, to promote increased building of farm ponds, the state reduced taxes on farmlands whose owners constructed ponds. The relief programs of the Work Projects Administration (WPA), renamed the Works Progress Administration after July 1, 1939, the Civilian Conservation Corps (CCC), and the Kansas Emergency Relief Committee (KERC), contributed greatly to the

changes made to the Kansas landscape. The Kansas Emergency Relief Committee built twenty-seven lakes and more than three thousand ponds with state funds. The WPA, in its first two years in Kansas, constructed an additional fifteen lakes and two hundred fifty-six ponds. These radically changed the look of Kansas. Many new bridges were constructed as well.

Other gradual changes were those relating to the production of cattle not just as a market crop, but as an industry in itself. The nutritious Flint Hills bluestem grass, said to be the only grass in the nation upon which cattle can fatten without supplements, had kept Kansas in the beef industry. Gradually, with the expansion of the cattle industry and new transportation facilities, beef production became more widespread. The building of massive feedlots in and outside of the Flint Hills to take advantage of open spaces added that feature to the landscape.

The new nineteenth-century discipline of landscape architecture also affected the landscape. It became more prominent in the twentieth century because of the federal programs associated with the New Deal. Landscape architecture as a profession had become prominent in the eastern United States in the late nineteenth century. Planners such as Frederick Law Olmstead popularized the overall concept although he and many of his colleagues were not "trained" as landscape architects because no academic program existed. Olmstead is credited with the origin of landscape architecture as a professional activity. The early landscape architects designed formal gardens, city parks, and grounds of institutions, but the changing patriotic and democratic interpretation of architecture led to a relationship between the landscape and buildings. Landscaping became a part of building environs in the planning stage. Frank Lloyd Wright and others were proponents of this technique.

At the turn of the century the garden was becoming an art form, at least with more pretentious dwellings and commercial buildings. For the new land hungry urbanized society of the late 1910s to 1929, "no garden and, for that matter, no baseball diamond could substitute for forest and field." City dwellers tried to bring the forest and wilds to their yards, parks, roadways, cemeteries, and public building areas. They converted almost any open area into mini-parks. Many of the parks included elaborate waterfalls, fountains, and classical hanging gardens. Even Stickley, in his Craftsman magazine, promoted the exterior grounds design and sold garden plans. The landscape architect, because of these demands, became more important.

Many landscape architects were self-taught architects, designers, and horticulturists. One, Horace W. S. Cleveland, had an early direct influence on Kansas. He learned the craft in Chicago and often sought the advice of Olmstead. He followed the natural landscape and used deciduous trees and plants in formal geometric and informal curvilinear methods to both augment and distract from the natural terrain. Even though he did most of his work before the turn of the century, his projects in Kansas were an influence on architects and builders in the state.

Cleveland may well have been the first and only person exclusively identified as a landscape architect in the state prior to the turn of the century. He worked on the Junction City Highland Cemetery in the 1870s, conceived the plans for the state capitol grounds in 1871, designed the National Military Home grounds in Leavenworth between 1884-1885, and offered

advice to others involved in such planning. He also did some residential work. He attempted to create, as did architects of buildings, both visual and functional use of space.

Landscape architecture received professional recognition during the New Deal when probably ninety percent of the landscape architects were government employees. The construction of many WPA parks and recreation projects in Kansas often included the services of landscape architects, and major projects such as the realignment of the Arkansas River through downtown Wichita required a landscape architect to completely style and replant the new river banks. In Sedgwick County in 1935 a landscape architect was added to the local WPA staff with the express assignment to beautify the farmscape, country roads, farmyards, and specifically the "farm-to-market roads" which were a major priority of WPA roadwork. The CCC worked on many state and local parks and lakes and often utilized landscape architects.

The landscape was not just changing but often disappearing under these projects. The removal of miles of old hedge-rows and the planting of new windbreaks and shelterbelts and the building of fences, terraces, and waterways greatly altered the landscape. Some efforts to preserve the vernacular landscape of Kansas occurred during the 1930s but were not effective.

Shelterbelts planted to assist in preventing wind erosion and damage during the dust bowl of the 1930s and new scientific farming methods that changed the contours of the fields had the most impact on the landscape. Several studies of the shelterbelt projects have been completed including one study of Kansas' belts. The studies are important in determining the way the landscape looked before these adjustments and in determining the major changes effected because of their use.

Designed to hold the soil and reduce wind problems, the planting of both indigenous and new varieties of trees was accomplished as part of national programs during the Great Depression. Although the major federal government plantings in Kansas did not occur until 1938-1940, many trees had been planted by the KERC and local entities prior to that time. How to escape the effects of the severe drought and the devastation caused by the winds was a prime local concern. Water management was related to the shelterbelts since many supporters doubted if there was enough water to keep the trees alive.

While the many difficulties caused by the depression and the poor farm crops deterred the increase of house building in the rural areas, many highways and secondary roads were being built in Kansas. The legislature first addressed the necessity of roads in 1911 with a statewide program for rural areas. The old Populist demands for better and more roads to market were finally being acknowledged. The Kansas Highway Commission was formed in 1917 to give direction and determine priorities of road building. A constitutional amendment approved in 1928 allowed the state to be directly involved in road building and that further advanced the construction. Conflicts occurred between the farmer who wanted more and better country roads for market, (part of the reason for the later WPA priority of market roads) while the car manufacturers and oil companies wanted more cross state hard-surfaced roads to facilitate use of their products.

By 1937 Kansas had built an amazing 133,000 miles of new roads with 9,000 of those being improved highways. Along with the roads came the services necessary for the private and commercial traveler.

The increasingly important aircraft building and air transportation industries in the state caused another change in the landscape. By 1939 state and WPA construction had built forty-three commercial, thirty-five private or small municipal, and two military airports.

The continued increase in Kansas oil and natural gas production, alternating between good and bad times depending upon automobile and industrial use, contributed to a changing landscape. The El Dorado oil field became a large industrial complex by 1915 and created the need for additional housing and a larger refinery. Prior to the 1929 depression, Kansas oil fields generally were on the increase and new derricks, storage tanks, and refineries dotted the central and southwestern Kansas skyline. Mining remained rather stable during the period, causing little change on the landscape with the exception of increased strip mining in southeastern Kansas. The natural gas industry continued to grow in the Hugoton area and by 1935 major new fields were developed with the necessary structures to service them.

IV. The Kansas Farm and Farmstead, 1900-1940

Introduction

The farm, farmstead, and the rural landscape experienced more change than any other facet of the Kansas built environment between 1900 and 1940. Major achievements in technology, mechanization, and mobility changed the appearance of farm buildings. Many farm homes changed more than their city counterparts during this time period. Added to on all sides, and even on top with additional stories, the old farmhouse from the nineteenth century has long endured within a new casing. Additional windows, doors, inlets for water and electricity, new siding, more frequent painting, and a desire to be more conscious of landscaping the farmyard contributed to the present-day difficulty of "seeing through" to find the original. This was not just a pragmatic approach on the part of the farmer but was also supported and encouraged by Kansas State University publications, pattern books, and popular magazines.

In its series on modernizing the farm home, Kansas State presented drawings of the basic farm home styles and then supplied new versions with additions. Modernization of the farm home was the top priority. The style of new farm homes differed little from the old, or new city versions, with the exception of the prairie style concept.

It was 1919 before Kansas State University considered the farm implement shed an important part of the farmscape, and it was after 1940 that the university's bulletins included the barns and other outbuildings. Evidently the existing outbuildings were deemed to be satisfactory regardless of the increasing number of new tractors and other equipment being used. Perhaps the attitude was similar to that regarding the true unadorned functionalism of the grain elevator and silo--nothing else better had come along with the possible exception of new materials to use in their construction. In 1936, however, the WPA did construct experimental pit silos at Fort Hays State College.

New gravel and hard surface roads caused changes in the farmstead layout to provide greater access to the roadway both from field and farm home. The appearance of the farm from the road also became important and plans for redesigning were offered by Kansas State University, Capper publications, and magazines such as House Beautiful and Good Housekeeping.

The interior of the farm home changed drastically to make room for new electric lighting and equipment, water supply systems, central heating, and new floor and wall coverings. As a Kansas State publication proclaimed in 1917, "it is evident that the electric range has come to stay" and that on the farm, "running hot and cold water is commonly regarded as the crying need of the farm home" as well as the city dwelling.

While the woman's place on the farm was viewed as considerably more important to daily overall operations than that of the average city wife from a business standpoint, the changes for farm women were more drastic than those for their city counterparts. More attention was paid to ease of house cleaning, cooking, and general household management, freeing the farm wife for even more outside work on the farmstead. The introduction of Rural Free Delivery and its expansion into more and more rural areas by the late 1910s and 1920s assisted in removing the isolation of the rural wife and her family.

The Pre-Depression Kansas Farm

Because the Kansas rural areas were so dramatically affected by the economics and weather, as outlined in the historic overview of Kansas, the following sections combine the entire period from 1900 to 1940 to better demonstrate the total context of prosperity, outside influences, depression, and dust bowl on the rural landscape. Although the farm section is divided into two parts, pre and post-depression, some overlap will by necessity occur.

The rapid changes on the farm between 1900 and 1920 are attributable to the new mechanization available. The effect on the farm home is evident in the bulletins of the Engineering Experimental Station at Kansas State University which were written by members of the architectural faculty, including professor of agricultural architecture, H. E. Wichers. The bulletins were issued regularly beginning in 1916 and continued through 1929 when they stopped, probably because of the depression, and then resumed in the mid-1930s. The topics included water supply for the farm home, sewage disposal, plumbing, illumination (electric, arc, and oil), the farmhouse "improved," electric cooking appliances, water heating, design of the Kansas farmhouse, use of electricity, the bungalow as a farmhouse, plans for new homes, and, after the depression, farm lighting, modernizing the farmhouse, and information on a variety of new conveniences. The renovation instructions were detailed, estimated costs were furnished, and do-it-yourself plans for the use of electricity, plumbing, and new heating devices were included. The "word" from the state agricultural school had to be gospel to many a farm family. The bibliographies in the bulletins provided new sources of information aimed directly at the rural community. Pictured in the bulletins were the homes and outbuildings of Kansas farmers who had used the information for renovation or modernization.

The farmstead also was being changed constantly and would undergo even more rapid configuration changes during the Great Depression and recovery programs of the New Deal. Irrigation, which was not new to Kansas in the twentieth century, increased rapidly during the period from 1908 to 1914 and affected both the landscape and crop production. Fencing became steadily more important, particularly in central and western Kansas. Increasing quantities of barbed wire and metal posts were used. Rangeland was being fenced, much of it for the first time; this also included the illegal fencing of some of the remaining public land. All of this created new patterns on the landscape. Farm buildings were being modified to house new equipment if possible and to meet new public demands for safety and health. The clean milk movement of the 1920s affected dairy barns in the state, and new construction saw more substantial and warmer barns for dairy cattle. Storage of grain on the homeplace for future marketing became more of a practice, and farm storage bins and elevators became more prominent on the horizon.

Gasoline powered equipment significantly influenced the changing appearance of the rural landscape. While mechanized equipment made more changes in the farming methods than in architecture, the machine affected the landscape by providing the means to break more and more ground for row crops, changing farm lanes and paths, and requiring buildings for storage. Along with the advent of the tractor and other equipment came the farm truck that could not maneuver the mud roads as easily as the horse, and the demand grew for gravel and paved roads between the farm and marketplace. The farmer could now provide his own transport on his time schedule. Provision also had to be

made for the storage of fuel on the farm, and gasoline barrels and pumps became new fixtures in the farmyard.

Horses still provided much of the power for Kansas farmers until WWII, but they steadily decreased in importance as the major motive source. By 1915 Kansas farmers had 2,493 tractors in use; by 1918, 5,415; and by 1920 more than 14,000. The biggest increase occurred between 1920 and 1924 when an additional 11,000 were purchased, bringing the state total to more than 25,000. By 1937, in spite of the poor economy and the dust bowl, Kansas had more than 95,000 tractors. The other major development was the combine which slowly replaced the old steam-tractor powered thresher. By 1920 there were 1,500 of the new machines in Kansas and by 1930 more than 21,000. The latter figure doubled by 1940. While it took 106 man-hours to produce 100 bushels of wheat in 1914, that figure was cut in half by 1921, and by 1945 the same chore consumed only thirty-four hours. These facts may not have affected the landscape directly, but mechanization released the farmer from many hours formerly used in production for other ventures, including leisure time.

The changing patterns of the landscape are also important in any study of the rural built environment. Studies today often examine the "vernacular landscape," that which is indigenous to a specific area and includes both the natural and man-made patterns of the land. A recent study on the subject is John B. Jackson's Discovering the Vernacular Landscape. Ironically the changes in mechanization that caused many discarded pieces of horse-drawn equipment to be deposited in unused fields and farmyards have contributed in a small way to our present rural "vernacular landscape."

As early as the 1910s some Kansas cities and towns had developed electrical power stations and systems, but the rural areas were a different story. A study conducted by Kansas State University in 1929 indicated that by 1924 only 900 farms were receiving electricity from transmission lines. Many, however, used both wind and oil power generation. Wet-cell storage batteries charged by windmills were the standard form of electrical power for the Kansas farm well into the late 1930s and some remained until after WWII.

A 1925 study by the Kansas Committee on the Relation of Electricity to Agriculture concluded that illumination was the greatest priority for the farm family and that the kitchen was seen as the major user. Low on the list of perceived uses was electricity to operate water systems, while high on the list were poultry brooders and "suction cleaning devices." The total range of uses of electricity on the farm was not yet understood, and the thirty-three items selected for study by the committee helped promote the use of this energy source. The depression, however, ended major private and public utility ventures into providing power for rural areas.

In 1930 a study showed that more than 10,000 farms were receiving power from central electrical stations, but considering the number of farms in the state, this was a very low percentage. By 1939-1940 only about twenty percent of Kansas' 163,000 farms were using electricity as a primary source of power. Both Kansas State University and the University of Kansas, rural and farm cooperatives, and other agricultural and scientific groups conducted studies of the use of electricity on the farm. They found that the energy source was most needed and requested for use in the kitchen, the laundry, to operate meat

grinders and fans, to charge batteries, and to light the farm outbuildings. The use of electricity to perform general farm labor chores was not yet common.

When federally funded loans became available in 1937 in Kansas from the Rural Electrification Administration, progress toward reaching the more rural areas of the state with centrally supplied electricity quickly began. The first completed REA line in the state was powered for the first time on April 1, 1938, under the direction of the Brown-Atchison County Cooperative with the power station located in Horton. As part of the WPA programs, several counties and towns received direct assistance in erecting power lines. Unfortunately, WWII interrupted the development of rural power.

Even though Kansas was underpowered, there was sufficient effect from the new power to change many a farmer's life-style, living space, and operations. For city dwellers, the same changes occurred, and by 1940 electricity for them was a matter of fact. The electric power pole and highlines became part of the Kansas landscape and city streets.

The Farm Dwelling

"The house plan that is needed by the farm owner cannot be found. It must be built."--Kansas State Experimental Station, 1917.

In 1927 one Kansas State University bulletin quoted John Ruskin, who wrote that "when we build, let us think we build forever. . . . Let it be such work as our descendants will thank us for. . . . and that men will say as they look upon the labor. . . of them, See! This our fathers did for us."

Both statements apply to the Kansas farmhouse. No one plan seemed to ever suit the farmers' needs, but Kansans generally hoped that their houses would remain as a legacy to those who came after--at least in the pre-depression period. In Kansas more attention was given to the farm dwelling than to outbuildings, which is consistent also with the lack of attention given to new commercial building architecture. Attempts to devise new ideas and styles for the farmhouse prior to 1929 did occur in the state, but modernization of the old house was not overlooked. In the mid-1930s, during the drought and depression, attention turned almost totally to renovation of the existing structure. There was no money to build new.

The turn-of-the-century farmhouse in Kansas was nearly the same as urban structures except for the porches, which in rural areas often extended around two or more sides and were narrower in width than the city version. In that time period farmers tended to use the porch as a "living" area less than their city cousins. The farm dwelling might be unadorned as compared to the city house but it followed the familiar styles of the I-house, ell house, four-square, temple front, and various versions of each. The farmhouse was built to last and as the family grew, so did the structure with lean-to or saddlebag additions and full wings indiscriminately attached. This method of expansion makes it difficult today to identify the date and style of many farm homes.

Guidance was offered by Kansas State University, which because of its major influence will be used here as a primary source of available information for the period, by newspapers such as Arthur Capper's publications, and by some pattern books, touting architectural design for farm homes in Kansas.

While this may seem inconsistent with the new "building and planner" decades, professors and writers felt that to arrive at the perfect or suitable farmhouse, the architect and engineer needed to be involved to plan for the weather changes, ease of operation, and the new conveniences now available in rural areas. As farming became more "scientific," the housing for the farmer and his family too was looked at in "scientific," best management terms. There may have been more direct input and influence by architects through such assistance publications in rural areas than anywhere else between the late 1910s and 1920s.

Kansas State University's agricultural architects saw the house "as a home" that was "more than a refuge and a workshop and a playhouse and a comfortable place to eat and sleep and rest." It should meet the further requirements for privacy, for hospitality, for sociality, and for beauty in the home. According to them, only the architect could plan this suitable dwelling. The real test of an architect "as an artist, in handling domestic work, is to obtain beauty, as a quality quite incidental to utility, and with very little additional expense for materials and labor. He must do this by designing in harmony with what Nature, and probably man, has already done for the building site." Along with these statements were thirty-seven sample floor plans and either photographs or drawings of the houses with full descriptions of the advantages of each. Considerable space in these articles was devoted to the "sociality" and "hospitality" of the farmhouse and how well it fit into the existing landscape.

The bulletins considered every facet of the internal living space, including where to place the hired hand's room and how to place the kitchen to enable the wife to have a view of the roads and farmyard but still be out of the way of dust from the road. The bulletins offered complete plans for placement of the house and outbuildings in the farmyard, keyed to whether the farm was located on the north, south, east, or west side of a road, the effect the prevailing seasonal winds would have on the placement, and to providing the best available view. These bulletins are one of the best examples of available assistance directed to the total life-style of the farm family.

The Kansas farmer was told that the prairie style house and bungalow were perfect styles for new farm homes. Probably influenced by these suggestions, the Salina Journal in 1920 announced that "this is the year of the passing of the sod house in Kansas. In years of figuring and worrying to make both ends meet the farmer of western Kansas was content to live in a soddy but now prosperity is here and the sod house has passed with the poverty of former years." The economic climate and good times of the farmer no doubt influenced the approach to new houses. In 1917 the average cost of a new farmhouse was between \$700 and \$900, but by 1929 the houses offered cost between \$7,000 and \$18,000.

In 1917 Kansas State issued drawings and plans for a "prairie house" it considered one of the best new designs. It was an "Americanized bungalow, well adapted to the Kansas prairies and as truly a part of the soil as the sod houses of the pioneers." However, "the prairie house need not be a bungalow, nor yet one that is designed along bungalow lines. . . . It is a design for a country home to be built on a typical rolling prairie. . . . It is a study, just completed by one of the Chicago architects who have been able to escape the fetters of tradition, to feel the prairie's spirit and to interpret it in house designs which are distinctive as works of art." The drawing presented

was of a very modern structure of two stories, rectangular, with side wings for porch and a carport-work area. This particular style was built in Kansas well into the 1950s.

While the experts fully supported the bungalow and prairie styles in the 1910s and 1920s, H.E. Wichers, in a 1929 Kansas State bulletin article entitled "Designs for Kansas Farm Homes," announced that "the bungalow type has been done to death; especially in our small towns." He offered thirty-nine new plans for consideration. Regardless of what he said, most of them had many features of the bungalow, several were Spanish Revival and Colonial cottage styles, and many had the distinctive prairie house look.

The exterior of the farm house also changed with the addition of new conveniences. Inlets for electricity and plumbing, new weather protected entrances, and weatherproofing affected not only size but also appearance.

Those conveniences that made the greatest change to the farmhouse were related to running water. In 1921 one professor wrote that "the degree of civilization of a nation may be determined by the quantity of hot water it uses." John Daniels Walters, professor of architecture and drawing at Kansas State, added that as opposed to the past, "no one argues now . . . that one or two baths a month ought to be sufficient for a healthy person." W. A. Etherton wrote that running water is regarded as the "crying need of the farm home." Plans suggested for introducing plumbing into the house were replete with actual photographs and drawings of how the old farmhouse could be adapted to modern running water and plumbing, including sewage disposal.

Adaptations included a system to use the present pitcher pump attached to a holding tank with the pump handle activating the faucet flow. By the mid-1930s electrification was as common in the designs as plumbing with just as elaborate and innovative plans provided for conversion of existing systems or the addition of new electrification.

The conveniences saved space and made changes in interior work areas. In the past the kitchen required large areas for pumps, sinks, ice chests, and areas for storing water in the winter; the new plumbing and electrical appliances did not require as much space. Entrance ways were changed as newer and more efficient heating systems were introduced and the space required for wood or coal burning standing stoves was eliminated, as was the need for more than one chimney. But the chimney that disappeared from the roof line was replaced by vent pipes for the plumbing.

Assistance bulletins also attacked the problems of filth and disease on the farmstead. They suggested plans for protection from foul air and insects and how to properly dispose of sewage. Window screens were "now common" on most houses, and the porch was considered as healthy a place to use as a room. Protection from intruders was not meant to keep out unwanted people as there was no longer a need to protect against "marauding bands of robbers," but instead, villains in the guise of mosquitoes, flies, dogs, and cats were a problem.

Specific distinctions were made between the city and farm needs. While the kitchenette was becoming popular in the city, farmhouses still had to have space in the kitchen for a long table to feed the farm hands and threshing crews used on the farm. The farm family ate all three daily meals there. The

dining room, if the house had one, would never replace the kitchen as the mainstay of the farm home. The farm kitchen was the meeting place for all members of the family; it was workshop, business office, eating establishment, and was designed specifically for that purpose. The woman of the farmhouse presided there, performing her many chores of the kitchen as well as being assistant manager of the farm. This multiple usage was demonstrated in Kansas State's suggestion that the farm wife have easy access and visual contact with the farmyard from the kitchen. The convenience of the kitchen was a vital necessity.

While the city and farm home both had kitchens, the roles of the city women versus farm women and the roles of city kitchens versus country kitchens demanded different designs. As Kansas State University advised, the man of the city left his house "in the morning and returns in the evening. He may seldom see the kitchen. He has no business there and possibly nothing more than a financial interest in the kitchen so long as it serves its intended purpose. The woman of the [city] house is engaged much of the time in the living room and parlors . . . [and] has only supervisory duties in the service quarters." Based primarily on the role of the woman of the house and the use of the kitchen, Kansas State University rightly concluded that "the average house that is well adapted to city living is wholly inadequate for a farm life and its problems."

If the perfect farmhouse plan was yet to be built, there were plenty of builders trying. But, as one architect stated, "a thousand good plans and designs of farmhouses will not suffice the need of owners for architectural assistance of this kind." He concluded that less than one-tenth of the prepared plans would really be adequate. By 1927 Kansas State University was evidently concerned about the plethora of plans and information for its bulletin on "The Design of the Kansas Home" stated that "there are so many magazines, so many commercial organizations as well as architects, that are placing before the public every conceivable form of information on small homes, that it would appear inadvisable for the Department of Architecture . . . to place before the people of Kansas additional suggestive plans." The university proceeded to do so, however, and would later issue details for extensive renovation--its answer to the cost problems in building a new house.

The Farm Outbuildings

The new or improved farmhouse and the farmstead received most of the attention during the pre-depression period, but the outbuildings did receive some attention in 1919 when a Kansas State bulletin addressed the issue of building new implement houses. Farmers evidently questioned the advisability of constructing implement sheds as it was assumed that most farm equipment would become obsolete before the weather would make it unusable. Farmers were aware of the quick changes in mechanization and foresaw that the costs of implement housing were not justified if the available equipment was quickly changing. The university engineers warned from 1919 on, however, that such changes might be slower than before so the need for protection of the new machines was essential.

Barns in Kansas varied as greatly in style and form as they did anywhere in the United States. Many Kansas outbuildings and barns were eclectic versions of styles influenced by the ethnic and geographic background of the farmer's family. Kansas climate, topography, and crop areas dictated what

type of structure was built. Barns changed little before 1940, whether new or old, except for new materials and construction techniques.

In the eastern portion of the state farmers had to provide for corn cribs either in the barn or as separate structures, and the cribs took on many different shapes. In the Flint Hills area hay storage was important, and large barns appeared on the landscape. In the southeast, dairy barns were more predominant, and in the west the barn had to combine storage and space for feed, cattle shelter, and storage for farm machinery if farmers preferred not to build the separate machine shed.

Many Kansas barns had gambrel, vaulted, or gable roofs. In eastern Kansas there were many byre barns. There were many localized additions and adaptations for entrances, lean-to additions, and hay and storage doors. Kansas also had some round and polygonal barns built between the 1880s and the 1920s. A few good publications that can assist in identifying barn and outbuilding designs are included in the bibliography. One recent study of Kansas barns is Greg Schultz's 1983 architectural master's thesis. It contains detailed drawings to identify the style of barns predominant in central Kansas and the cultural changes affecting their styles. Because of the many "layers" of styles and influences that shaped barns, Schultz concluded that practically all barns should be considered vernacular structures. His study concentrated on the changes in barns in the early twentieth century, demonstrating that the major adjustment was the increase in size, the number of additions made to existing structures, and the enlargement and rearrangement of the entrances caused by the new machinery. The study also included treatment of the general farmyard layout used in the central part of the state.

There is little difference in the style and use of farm outbuildings in the pre and post-depression periods. Lack of money hampered both repairs to existing buildings and new construction, and general disrepair drastically affected the look of the farmstead. By the late 1930s with some recovery from the depression apparent but not from the drought, new construction and renovation were undertaken on some farms, primarily to add implement sheds and to adapt the outbuildings for increased usage of electrification and piped-in water. Some steel construction of implement sheds and other structures began to appear in Kansas prior to WWII and formed concrete was widely used in silos and smaller farm sheds and barns.

The barns, sheds, and silos on Kansas farms are in great danger of being lost. Very costly to repair and renovate, many have been left to continue their deterioration. If the farmer had to make a choice between upgrading the house or the barn, it would be the house. New and cheaper materials and building methods for barns, such as corrugated metal and pole barns, have had a negative effect on the construction and repair of frame barn buildings. Changing methods in farming have also affected the types of farm outbuildings that were built. The old barns of Kansas still dominant the farmscape, but surveys must be conducted in the near future to record their varying styles, photograph the exterior and interior construction detail, and gather information to understand their original and changing use, or these magnificent Kansas structures and their history will disappear forever.

V. Depression, Dust, Recovery: The Changing Face of Kansas

Introduction

Now I lay me down to snore,
Tons of dirt in every pore.
If another day I do not see,
There'll be no need to bury me.

The Great Depression, the dust bowl, and government recovery programs changed the look of the Kansas landscape and built environment. While state government struggled to keep financially stable, family after family faced total disaster. Kansas needed programs for the needy, the aged, and the blind; it needed schools, roads, social and cultural institutions, and new buildings. In the face of the economic depression none of these seemed possible. In the spring of 1930 more than three million men and women nationwide were out of work and by 1932 another twelve million joined them. The drought dried up the country from the East Coast throughout the Great Plains. Hays recorded a total deficiency of rainfall for the worst drought years of 1931-1936 of thirty-four inches, a two year supply of normal rainfall.

More than 227,000 people left the state as a result of the drought and hard times. The number of farms decreased by 9,000, and of the total remaining more than 10,000 were new tenant farms. Morton County lost forty-seven percent of its population while Grant lost thirty-seven percent, Stanton thirty-three percent, Stevens thirty-one percent, and other western and central Kansas counties reported significant decreases in population. In 1938 more than 5,000 so called "exodusters" (not to be confused with the black migration from the South in the 1880s) left southwestern Kansas.

Assistance was desperately needed and it was provided by Franklin D. Roosevelt's New Deal. Never before in United States history had the government acted so directly on the individual. Many individualistic Kansans depended almost totally on either direct or subsidized federal or state support, and some independence was gone forever. The New Deal created a "cohesive, integrated society" in which "land patterns would promote a wholesome combination of work, play and education." As Phoebe Cutler related in her book The Public Landscape of the New Deal, the government merged with artist, craftsman, and conservationist in a common purpose. Cutler felt that a "powerful yearning for the past and for stability and order fueled the tremendous productivity of those poignant years" as a common effort among many ad hoc groups and organizations established a "stratum of solid, lasting, and appealing construction on the land" and built the "artifacts of hard times."

Much of the landscape and many buildings were destroyed during this period. Farmsteads became vacant, grain elevators became empty, and fields were left untilled and blew away. Kansas' regional architecture began to disappear under the influence of outside planning. Bank buildings became stores and restaurants or were torn down to leave vacant lots. The same was true of other structures, for as one business failed, another moved in, succeeded, or failed, leaving the building or what was left to its own demise. The total effects of the period on the built environment may never be fully known. As the WPA in Kansas constructed new schools and planted shelterbelts, it also demolished old buildings and tore out existing hedge-rows.

On the other side, many small towns, rural areas, and some cities accomplished much and acquired buildings, parks, lakes, sewer systems, water supplies, recreational facilities, new schools (and hot lunches), and many other innovations not obtainable without the New Deal. As Cutler concludes, "Few would wish the return of this hard-pressed era, but one can pine for more of its romantic concoctions on the land."

There were many more changes and developments between 1930 and 1940 than can be mentioned in any detail in this study guide. Surveys of the land, farmscape, farmstead, rural towns, and cities, with specific emphasis on the depression period and the New Deal influences, will both answer and create questions about what major results and changes occurred. The national history of this period has been studied and written, and analysis after analysis has been offered, but little has been done to study the local impact of the 1930s public programs in Kansas. There are primary sources available, some of which have already been mentioned. These are also noted in the bibliography. These will have to be utilized to determine the extent of the federal and state recovery programs and the effect of drought and depression on Kansas' built environment.

Many of the changes to the landscape would eventually have occurred, but the depression and dust certainly hastened "advancement"--if it can be called that. New farming methods to protect the landscape were already overdue, and the calamity of the drought brought forth solutions that may have taken years to achieve at the individual or local level.

The Kansas Farm in Depression and Drought

The Federal Writer's Guide stated that no other part of the country that received as much rain as Kansas had as many clear sunny days. But the rainfall deserted the state and the sunny days were too many. The Plains states witnessed one of the most tragic and revealing chapters in their environmental history, "one with increasing relevance to mankind's future." Woody Guthrie was inspired to write:

It fell across over our city like a curtain
of black rolled down,
We thought it was our judgement, we thought
it was our doom.

Not only did the dust bowl affect the economy, it affected attitudes toward change and progress, and altered many Kansans' proud individualistic ideals to that of group oriented, cooperative social and governmental participation.

Kansas had enjoyed boom agricultural years just prior to the Great Depression. In 1927 Finney County planted 69,000 acres of wheat and in 1931 more than 222,000 acres. Untilled land was turned over for more wheat planting in southwestern Kansas with little attention paid to soil conservation. By 1929 the wheat glut on the market had driven the price down, and evermore reckless farming practices were used to plant more and more land to wheat. The drought forced prices back up (if you could grow it in the dust) but devastated the Kansas cattle markets. This combination of crop prices, the general depression, and the double dose of calamity caused by the six-year drought had major effects on the farmscape and rural towns. By the

mid-1930s the total farm value of agricultural products in Kansas was only sixty-three percent of what it had been in the 1920s.

The drought began in earnest in 1932 and continued through 1938. Throughout the Plains states, 179 major dust storms occurred in 1933. In Kansas, thirty-eight storms occurred in 1933; forty in 1935; sixty-eight in 1936; and seventy-two in 1937. A total of 315 dust storms ravaged the state during the drought, spreading Kansas topsoil over cities, towns, and adjoining states. The worst storms in Kansas hit on March 15, 1935, known as "Black Friday," and on "Black Sunday," April 14, 1935.

The storms completely shut down towns. Giant dust clouds reached several hundred feet above the ground. People struggled to get home through the swirling, stinging, choking dust. Static electricity caused by the wind and dirt shorted out car ignitions; cattle suffocated; lights could not penetrate the darkness; and some people began to wear dust masks or cover their faces with a variety of cloth protections. Travelers were often stranded by drifted roads and low visibility. Picture-frame wires gave way under the weight of dust in the houses. Regional high school basketball tournaments at Garden City and Hays were cancelled since the dust inside the gymnasiums made it impossible to see from one end of the court to the other, even with the lights on. One newspaper editor commented that prairie dogs were digging their burrows ten feet in the air. Morton and surrounding counties in southwestern Kansas became virtual deserts with shifting sand dunes. William Allen White called it the greatest show since Pompeii was buried in ash.

In 1934 soil conservation became a major priority. Agriculturalists had known, even before the dust bowl, what should be done, but to carry the programs through was another matter. Listing of fields to roughen the top soil, planting crosswind, and use of cover crops were methods that had already been suggested. The lister used a double mold-board to create a corduroy effect crosswise to the wind. This method was only temporary, however, and later contour plowing and terracing became a more permanent solution.

The 1934 Taylor Grazing Act prohibited further homesteading by dedicating all remaining eligible land to controlled grazing. The law pulled 11.3 million acres from agricultural production nationwide. At the same time, plans for a transcontinental windbreak to extend from Abilene, Texas, through central and western Kansas to the Canadian border were implemented and work began.

Terracing of the land and planting of shelterbelts were recommended to limit the wind pressure and hold the land in place. The WPA developed an experimental agricultural station for Kansas State University on an athletic field in Cimarron to develop new methods of conservation for Kansas.

By 1935 more than nine million Kansas acres had been scraped and gouged by the wind and drastic measures were required. In 1935 and 1937 the Kansas legislature passed mandatory laws for soil conservation with the provision that if farmers did not follow the recommended procedures, the state would do the work for them and add the cost to their tax bills. To combat the lack of moisture, organized efforts were initiated to increase irrigation and provide water. Governor Alfred Landon in 1934 and 1935 persuaded his oil producing friends to supply their oil field pumps for irrigation, and tank trucks were

obtained to haul water to devastated areas. In the first years of the depression, the Kansas Emergency Relief Committee dug more than seven hundred wells.

Later efforts by the WPA and CCC contributed both to the recovery of the land and the changing of the landscape's appearance. The initial shelterbelt program in Kansas, beginning about 1938 and continuing through 1940, saw more than 1,500 miles with 5.5 million trees and other major plantings in twenty-nine southwestern Kansas counties. Before the planting ended, most Kansas counties received some shelterbelts or windbreaks. State and county lakes and parks became a major priority of the New Deal. By the end of the 1930s Kansas state park acreage had doubled and the number of parks had increased by thirty percent. Many of these new parks included lakes for water storage as well as for recreational use. These projects will be discussed further in the section on government building.

The Kansas farm dwelling was also affected. In 1934 Kansas State University issued a new bulletin promoting the renovation of the existing farm dwelling instead of building new. Few farmers, or anyone else, could afford to build new houses. The average cost to modernize, beautify, and add on to the standard farmhouse was estimated at \$2,500. The plans are remarkable in detail. Photographs and plans for one and two-story square houses, two-story rectangles, rectangles with wings, two-story ell houses, and bungalows were included. Five or six different methods for additions and renovation were included for each. Plans for modern plumbing, electricity, heating, and sewage disposal were included, as was the important consideration of placement and construction of the garage.

By "flipping" the pages of drawings in the bulletins, one can visualize the house changing to a modern look. The plans stressed the need for low cost housing and were designed to utilize what was available in the old structure while bringing it into the new "modern" look of farm architecture. Also suggested were experimentations with rammed earth, steel, concrete block, and poured cement buildings. Finally, in 1940-1941, the assistance plans also included new and more modern approaches to barns and outbuildings, with particular attention paid to withstanding wind and storms.

What did all this mean to the rural built environment? The calamities of the 1930s changed the landscape forever. Old farmhouses disappeared because of abandonment or renovation. The farmstead layout and landscape changed with the addition of shelterbelts, windbreaks, terraces, and the placement of new outbuildings, new wells and irrigation systems, new lakes and ponds, and contouring of the land. Field patterns changed not only because of new tillage methods but also from the implementation of irrigation. A new vernacular landscape had been created.

Rural towns and communities reeled under the new auditoriums, schools, swimming pools, roads, community halls, and recreation areas built under the auspices of the WPA. These changes and additions to the rural area in general changed the farmscape as well as the small towns with new or renovated structures that were immediately noticeable.

To determine the total effect of assistance, surveys should be made using the Kansas State University bulletins, the federal agency reports from the period and other source documents to determine how many structures were

either changed or built new under federal and state auspices. Field patterns and the farm layout can be examined by comparing old photographs to the existing landscape, and archeological surveys of the land might reveal where those major changes occurred. Old farmsteads are relatively easy to spot with plantings, trees, and lanes indicating where houses once stood.

The patterns of the shelterbelts and windbreaks will be obvious, but plotting of the layout prior to those plantings should be included for documentation. The entire rural landscape, including structures, would have to be included in such a study to determine the overall effect. During the mid-1930s the United States Soil Conservation Service and the Soil Reconnaissance Service aerial mapped much of the midwest. Those photographs and United States Geographic Survey topographic maps would be necessary for any such surveys that would be conducted. Such surveys will have to be done quickly before more changes occur and original remnants disappear.

The Dwellings

The bungalow remained the favorite form as it was still undergoing changes, was different, and for those with any money, was affordable. The bungalow term was applied to practically any single family dwelling with "the look."

In 1927 Kansas State University issued plans for both city and rural house designs that reflected an attempt to return to some of the more classic and traditional styles. Included were Colonial cottages, Colonials, Dutch and English styles, Spanish revivals, and the "prairie style." The Spanish and prairie houses were promoted as good types for western Kansas. The bulletin offered different styles for differing terrain indicating which houses were best for flat sites, flat hilltops, hillsides, or areas with heavy foliage. But in the mid-1930s attention was re-directed to low-cost housing with a "simplicity of design" that did not mean "cheap ugliness." The plans for renovating the farmhouse, mentioned earlier, were revitalized.

Reducing the size of the dwelling was one major cost-cutting factor recommended, and with more and more Kansans using modern plumbing, some electricity, and central heating, this could be accomplished while still providing adequate living space. Plans for twenty-eight of these houses were issued by Kansas State in 1939, all designed to cost less than \$3,000. Each of the plans amazingly included an architect's fee. Most of the plans resembled the one or one-and-a-half story square house of the 1880s. This reversion to older, more functional forms was not unusual during the period and was dictated by economics. For example, in 1933 when housing was needed for a CCC camp near Dodge City, local soddy experts were located to build sod houses for the crews as no other affordable building materials were available.

The number of new houses constructed during the 1930s was limited. According to national statistics, only limited new residential housing, with the exception of planned workers' communities in government funded industrial areas, was built before late 1935 or early 1936. Many renovations were made to houses, and some owners tried to emulate the new modern styles with additions. The suggestions made by Kansas State University both for renovating older houses and for building the new low-cost structures may be a source to determining the type of houses built in Kansas during the period. By 1936 more new housing was underway and most of these were prairie or

bungalow cottage styles. There was also a return to some of the more classical styles in the larger cities: Governor Alfred Landon's 1937 Georgian Colonial in Topeka is an example.

Depression Era Commercial and Public Building

The main street of the Kansas town remained the center of commerce until the mid-1930s, holding on to the standard linear layout with most buildings remaining one and two-story construction. The automobile had begun to force the movement of businesses to the outskirts by the early 1920s, and by the end of the depression it was commonplace even in Kansas to witness this movement. New businesses could not always adapt old buildings, and with limited space for inner city expansion, they had to move to the outskirts of town to build. Parking space became a premium and only the edge of town might provide the space.

Shopping centers had been developed in California in the 1920s and 1930s to serve the public's increased use of the automobile. Californians quickly realized that by placing groups of stores in one area with joint use of the parking more and more customers would be drawn to these areas. During the 1930s Kansas towns began to lose their linear look; what had been adjacent farmland in the 1920s became suburban retail centers by 1940.

The individual appearances of offices, banks, hotels, and theaters are as important as their collective appearance. The 1930s saw art deco hide some of the older buildings. Abstract patterns began to replace the square and framed zones of the business house. Business structures and their locations became more specialized. The manufacturing of various kinds of ornaments, metal and aluminum sheeting, neon signs, and advertising trademark signs helped change the way buildings looked. The enframed window wall became more prominent. The layout of commercial buildings also changed as parking lots became spaces enclosed by buildings, particularly at auto service centers.

New signs replaced old marquees and signs painted on old buildings, and many commercial building owners began to concentrate on the "streamlined" look of the 1930s, placing facades on the buildings with swept wing appearances, round portholes and windows, and a variety of art deco and moderne representations. Retail merchants began to utilize rear land space, if available, for parking and became concerned about their buildings' rear appearances.

Most of the public, educational, cultural, and institutional building during the period was conducted by or through federally funded programs and will be treated separately in the study guide. Some construction without federal funds occurred just prior to and during the depression that should be mentioned. Kansas State University had completed some major construction on its campus for women's dorms and classrooms. These buildings followed the existing style of the campus, which led Frank Lloyd Wright during a visit to the campus in the mid-1950s, to brand it "General Grant Gothic."

Other structures of interest built without federal funds include a swimming pool in Beloit, completed in 1933 totally with local funds--a point of pride to the local citizenry. The Reno County Courthouse, which was begun prior to the crash in 1929, was an outstanding example of modern style built without federal government influence or assistance. New high schools in

Russell and Wichita were described as modern, with Wichita's singled out as a perfect example of "decorative architecture." Wichita North High School, completed in 1929, was described as "prairie style" with polychromatic and terra cotta ornamentation.

The modern style Washington County Courthouse was completed in 1933 without federal funds. The new Wabaunsee County (1931) and Haskell County (1937) courthouses were also modern in style. In Leavenworth, the new (1934) administration building of St. Mary's College was of modern design. The new Wichita city airport, begun in 1935 with city funding but completed by the WPA, was "ultramodern" in appearance with a streamlined moderne motif. El Dorado's municipal waterworks (1938), built with limited federal funding, was described as having a "modernistic front."

The new look was certainly apparent in state and local projects. If more money had been readily available, it can be conjectured that such styles would easily have transferred throughout commercial districts.

Experimental Architecture and Building

Although more experimentation with building materials occurred after 1945, some was done in Kansas before 1940. Experimentation resulted from the inability to acquire expensive stone and wood during the depression years and a search for more durable, easier to use materials. Cement companies and mail order plan suppliers had promoted the use of concrete from at least the 1920s on in Kansas. With a major supply of both cement and plaster products in the state, it was a natural material to consider. In 1937 the Great Bend Tribune praised that city's new modern style city building as the "most outstanding example of architectural concrete west of the Mississippi." The building sported a domed concrete roof.

By 1925 Kansas State University, the University of Kansas, private builders, and Craftsman and House Beautiful magazines had publicized plans for concrete houses. Some concrete houses were built in Kansas all through the period, as well as concrete barns, sheds, and silos. On some of the structures builders used cement plaster over brick. Poured concrete was often covered with stucco to hide the rather cold appearance of concrete.

Other types of experimentation took place, and research should be done to determine the extent of such efforts. One excellent example is the factory-built steel frame houses constructed in a "restricted" residential area in Great Bend in September, 1937. The houses, supplied by American Cottage Company of New York, were factory-produced, modular, steel framed and supported houses. Great Bend was chosen as the western marketing location for these new mass-produced structures. The steel framework, which was advertised as insulated, came in sections that were factory welded and riveted. There were floor units, exterior wall units, ceiling units, roof units, and partitions that could be bolted in any interior arrangement as long as the exterior wall locations and overall floor space were not changed.

The promotional literature stated that any type of wall or outside sheeting could be applied, including cement, stucco, and wood. The company told how easy it was to attach plywood to the interior sections by just "riveting them in place." The houses could be assembled in one day and within three weeks could be totally finished. The Fair Haven Addition was to be

built only of these units. The builder placed an entire advertising section in the Great Bend newspaper for the opening. Restrictions were placed on the development pertaining to lot size, required landscaping, and exterior finishes. The restrictions also stated that "no race or nationality other than of pure Caucasian blood shall use or occupy any dwelling on the premises except as servants or employees."

In 1940 and 1941 Kansas State University published a study devoted to the use of rammed earth as a building medium for dwellings and small buildings. Using a compactor, the earth was rammed solid into either individual bricks or wall sections. The exterior of the earth structures could be covered with either concrete or stucco. The university built several trial buildings on campus. Determining what ultimately became of the project, and how many were actually built, would be an interesting study.

Diners, Theaters, and Tourist Camps

Gas stations, motels, railroad stations, diners, and roadside restaurants can be considered as a separate genre. As free-standing elements they were different from the standard two-part commercial block style building, the stacked vertical block, or two-part vertical blocks that were so common in Kansas towns and cities.

The "diner" as a concept is not new in American history. In the 1880s and 1890s night lunch wagons were moved about the streets of large cities dispensing short order meals, cold sandwiches, and coffee. They were moved from location to location as crowds and events dictated, and often by day they were parked in front of, or near, favorite industrial or commercial locations. The lack of available property and money to build costly restaurants in downtown areas and the appeal to the workingman were important to their growth. Wherever a crowd could gather is where they would be located.

The White House Cafes, built primarily in the 1890s, were well known. They were sixteen feet long, six or seven feet wide, and usually had only stools for customer seating. Pulled by horse power (some were later motor powered), they moved about as demand required but often their favorite locations would become permanent. As society became more mobile, there was less need to move the diners. Some owners removed the diners' wheels, closed the spaces below the building with skirts, and left them in one place. Richard Gutman and Elliott Kaufman's book, The American Diner, is an excellent treatment of the development of this American phenomena.

The reason many diners had the "railroad car" look is simple. Many of the early lunch wagons were adapted from old trolley cars, and by the early 1910s and 1920s abandoned railroad cars and railroad diners had been permanently located to serve the public. In 1925 the Patrick Tierney and Sons Company began mass-producing the stationary units (featuring an inside rest room) and by the late 1920s the more gracious diners not only had rest rooms but also dining booths suitable for the female trade.

Throughout the heyday of the diner from about 1933 to 1947, it reflected both public taste and need. Its style and form changed along with architectural themes. Many became "shiny" with stainless steel, polished mirrors, tile and tough plastics. They often were sited along the roadside to serve an automobile oriented public. By the mid-1930s they resembled the

older versions in size only, often using art deco and moderne features, as well as some outlandish "pop" outlines. One way to distinguish the diner from other smaller restaurants is that the diner is usually longer than wide, is of unitary construction, and always has a service counter. Some diner purists insist that the true diner must be movable.

With the coming of the Great Depression the early versions of the diner decreased in size but increased in number. More correctly called "dinettes," this smaller less streamlined version is often confused with the true diner. These one-man operations might be rectangular, square, or have the familiar elongated look of the diner, but could be constructed of cement block, wood frame, or metal, and were usually not unitary construction.

In 1938, Valentine Manufacturing Company in Wichita began to produce prefabricated diners and/or dinettes with a skin of porcelain enamel, in two colors, and with small flying buttresses at each corner. Although it is not known for certain how many were produced (the company's records were lost in a fire), they numbered in the thousands. The company had an active business through the 1940s and produced a few as late as the early 1960s when it went into bankruptcy. Two of the units known to exist and to be still operating are located in Wichita and Richmond, Kansas. Other units might be located with some surveying. In later years the Valentine Company produced prefabricated liquor stores and other roadside buildings. In addition to the Valentine Company, the Ablah Company of Wichita produced a few diners before WWII, and the first White Castle (1921) was built in Wichita.

In the late 1940s there was a resurgence of the diner, or dinette, as returning WWII veterans entered the business. One new concept (or, was it a return to the old?) was the traveling or mobile dinette that visited various industries and businesses on a regular time schedule. These motor mounted sandwich and snack shops are still with us today.

Over the years, as the American Diner relates, many diners were resurfaced and added to so much that the original form cannot be seen. Kansas had many diners, or so-called "diners," during the 1930s. Many advertisements, references, and some photographs have been located. How many diners are left in the state is difficult to assess because of the changes to the original structures. A true diner or dinette that would meet criteria for identification based on the above would be a rare find today. It is noteworthy how so popular a service structure as the diner could all but disappear from view.

The old movie theater "palaces" have disappeared almost as completely as the diner but for different reasons. Although Kansas has not had a "picture palace" listed in the many books on movie houses in America, the state certainly had elaborate structures even if they did not quite compare with those in Chicago, New York, Los Angeles, or other large cities. Begun as simple theaters to view silent movies, then the "talkies," the movie theater became a palace, as one architect said, to keep the public entertained while waiting. Adapted from the grand theaters and opera houses of Europe, American movie houses became the "playground for many architects" who probably used the Beaux Arts style in these structures more than any other form. Lavish, garish, overpowering, and often better than the film, these structures were often the most elaborate building many Kansans would ever see.

Many movie theaters had taken over old opera houses, vaudeville theaters, stores, lodge halls, and whatever else would suffice. As the medium increased in popularity, new buildings were designed to properly exhibit the movies. In Kansas many a small town had its movie house (but not a palace) to provide a break from hard work and later the depression. The Federal Writer's Guide lists "picture show" buildings throughout the state. The number is remarkable. Large and middle-sized cities, however, wanted a version of the true movie palace, and Topeka, Wichita, Hutchinson, Salina, Independence, Emporia, and Kansas City, Kansas, all built them.

The movie house became much more functional, particularly during the depression, when it was more popular than at any time in our history. In towns of every size the profile of the "theater" style fronts, often with a marquee, and the usual elongated rectangular form reveal the fact that at one time the structure was probably a movie house.

There were four major architects of movie palaces: Thomas W. Lamb, John Ebersson, C.W. and George Rapp, and Bollor Brothers. None of them were from Kansas, but their work influenced theaters in Kansas as they all designed movie houses in Kansas City, Missouri. Ebersson decorated the Orpheum Theater in Wichita. There are many studies of these palaces and other movie theaters that discuss the influences and offer fine pictorial histories. Ave Pildas' Movie Palaces and David Naylor's American Picture Palaces, the Architecture of Fantasy are both good references. As with the diners, however, many of the older theaters have been covered over, reconstructed, or have just disappeared, becoming stores, antique shops, bowling alleys, churches, and a variety of other retail or commercial uses. Many palaces and theaters became too costly to maintain and deteriorated over the years, making their restoration today very costly. Many, such as Topeka's Grand Theater, have been torn down; but some, like Wichita's Orpheum Theater and Hutchinson's Fox are being rehabilitated for other uses. Others like Emporia's Granada and Salina's Fox remain in limbo. These centers of entertainment for millions of Americans from all walks of life are giving way to the multi-screened "boxes," and the smaller box in the living room.

A survey of small-town and city movie houses will by necessity have to be done very soon or they will be gone. Many of these structures would be eligible for a State or National Register nomination if their integrity remains, but preservationists often reserve their efforts for the "palaces" or larger theaters. Because of their use and contribution to American culture, it would be most appropriate if a small-town movie house could be saved. It would also be interesting to determine when the "drive-in" movie facilities first appeared in the state. The first drive-ins were in the East (the first was in New Jersey in the late 1920s) but when the first Kansas drive-in opened has not been determined.

Even though the diner and the movie palace have all but disappeared, the Americans' love affair with the automobile that created the tourist, and in turn the tourist court, has not changed. During the worst years of the depression, from 1931 to 1940, when the movie houses were experiencing their largest attendance, the traffic on the highways caused by the touring public increased steadily in the United States. Those who could afford a car and had some money for gasoline took to the roads to tour and escape. Beginning in the late 1910s and increasing ever since, thousands of middle-class travelers

stayed each night in a different location. Today the accommodations and amenities are luxurious compared with those of the 1920s.

Even in hard times camping was one affordable means of getting away. Beginning in the 1920s small Kansas towns developed municipal campgrounds near city limits for these travelers. The early auto campers adapted tents or could buy ready-made covers to turn their cars into a tented "room." But there were many inconveniences to this arrangement. Tourists also created a demand for roadside food stands, gasoline stations, roadside parks, and sanitary facilities.

In the mid-1920s the "pay camp" became popular for the car "tenter" and for those desiring the conveniences of a cabin. Those conveniences, however, did not include bathrooms. The early cabin camps used practically every style of construction. These included small one-room flatroofed "workingman's cottages," steep-roofed chalet styles, and many innovative designs such as the Indian "Teepee" Village near Lawrence, constructed as individual units in the shape of tepees. Many used the bungalow form in construction with the California bungalow court as the layout, but others were classical and even medieval in style. Many followed local vernacular or regional styles so the tourist could experience the local flavor. The early camps usually had one-room cabins with adequate parking between cabins (often covered) or in the large lots adjoining the facility.

An early chain of tourist camps known as the "Follow the Swallow Tourist Camps, Incorporated," was based in Salina in the 1930s, but little has been located concerning the company's history or coverage. In the Guide to the Sunflower State it is obvious how important these services were as all of the eighteen cities having separate descriptive chapters were identified as having "adequate tourist camps and facilities," as were many of the smaller towns.

Many of these structures, which really defy any generalization as to their architecture, are still apparent throughout the state. Remains of some of the early tourist camps can still be seen. Some are still in use and may not be as hard to recognize as some other commercial structures after renovations. Others have been adapted for apartments, stores, or other businesses. Again, this answer to an American demand is a vital part of the history of the state's built environment and deserves more attention than is normally given. References to these facilities can be found in local newspapers, telephone books, and other advertising outlets.

Trademark, Franchise, and "Pop" Architecture

These terms are all used in reference to those types of design used to readily indicate or support a structure's function by its appearance. Also called "programmatic" architecture, it is usually found in the service industries that deal with a mobile public--the filling station, diner, sales centers, and any product that could be "formed" and represented as part of the building. The gasoline station is a good example as even today many can be identified by their trademarked signs, shape of the building, or their color designs. Such buildings can be regarded as the logo of the company that owns or leases them. One historian has said the first expression of such popular architecture was the Statue of Liberty.

Some architects and architectural historians do not see "the strip" or this form of architecture as ugly but rather as a true expression of American culture in architectural form. J. J. C. Andrews' book, The Well Built Elephant, which is must reading for this kind of architecture, derives its title from the "Elephant" constructed in Margate, New Jersey, in 1881. It stands sixty-five feet tall, and at one time had a room in its belly that was used for a restaurant and other functions. This kind of architecture received publicity and attention from a successful effort in the 1970s to save the Great Long Island Duck (a sales building in the shape of a large duck on Long Island). An architect who assisted in saving the Great Duck was quoted by Andrews: "form follows fantasy, not function . . . and architecture that cannot offer fantasy fails man's need to dream."

The earliest companies to make large use of trademark architecture were Howard Johnson's, A and W Root Beer (often in the shape of a mug), and some gasoline companies in the 1920s. The "ice house" gasoline stations, at least one of which still remains in Kansas, and the Shell Oil Company "shell" shaped designs, are good examples. Another Kansas example was the Indian (Teepee) Village (already mentioned) north of Lawrence that had individual units in the shape of tepees as well as an office and lounge. The complex was designed by a Haskell Institute athletic director who used students to construct the facility. The office building, opened in 1930, remains intact today.

This architecture "just grew" with signs, usually neon, as large or often larger than the building itself. The buildings took the form of animals, milk cans, coffee pots, huge figures of men and women, hats, boots, airplanes, streamliner locomotives, hot dogs, hamburgers, oranges, apples, fish, malt cups, and brown derbies. In Kansas at one time or another there were root beer mugs, a hot dog, a tomato, and the thirty-two foot diameter, two-story, Big Apple restaurant in Wathena, all built in the 1930s.

Even though trademark architecture continues today in some fast-food chains and specialized businesses, the older buildings are scarce. How many actually existed in Kansas would be difficult to determine without searching practically every newspaper published during the period. Photograph collections and business journals might produce some evidence. An invitation to people who may remember such buildings to furnish details would be one way of acquiring information about where they were located and if they still exist. These architectural forms were a unique expression of commercial building. Surveys and studies of their use in Kansas would be well warranted. Ironically, corporations such as McDonald's have replaced original trademark architecture restaurants that by today's standards have historical value, with current trademark architecture.

VI. Federal Programs and Building In Kansas

The federally funded and assisted building and community services programs between 1930 and 1940 had a major impact on Kansas structures and the landscape. The programs of the federal government in the eastern United States were modest as compared to those in the Plains. Particular attention was directed to Kansas and her neighboring states because of the combination of depression and drought. The programs of the Kansas Emergency Relief Committee, the Work Projects Administration, the Public Works Administration, and the Civilian Conservation Corps were tremendously important to Kansas architecture and the landscape during this period. The new roads, public buildings, recreational facilities, and shelterbelts that resulted from these federal programs had a long lasting effect on the state's built environment.

The PWA was directed primarily at major long range federal and state construction programs that benefited the general public. For example, Wyandotte High School in Kansas City was a PWA funded project, as were the high schools in Goodland and Oberlin. The PWA projects usually cost more than \$50,000 and took several years to complete, while WPA projects were aimed at those that cost less and could be completed within a year or two. The cost guidelines indicated that WPA projects should cost less than \$50,000, but the recommended budget levels were not always followed as many Kansas WPA projects cost more than the recommended cut-off. Generally the PWA funded major public works projects that employed skilled workers while the WPA funded less extensive public works projects that in some cases employed unskilled workers.

The Federal Emergency Relief Commission, created in 1933, assisted Kansas with more than \$10 million for highway construction, but it could do little to assist the Kansas farmer or city dweller or provide the necessary funds for major construction. To assist the farmer prior to the creation of the Agriculture Adjustment Act, Governor Alf Landon requested that railroads reduce their freight rates to help the farmer's plight. Landon felt that the return of prosperity depended on the recovery of agricultural markets and the security of rural property. Because of his and other leaders' opinions regarding the importance of the rural community, many programs pointed in that direction.

Most of the credit for recovery is given to the federally funded programs; however, the Kansas Emergency Relief Committee performed admirably in the early years of the depression. Between October 1932, and October 1935 (the end of most of the KERC's direct funding of programs), the KERC purchased 521,000 head of cattle, canned 13 million cans of meat and had processed 25,000 hides and 430,000 sheep pelts to assist the agricultural economy. The WPA and KERC financed or supervised more than 15,500 miles of road and street improvements, built 1,515 bridges, improved 74 courthouses, constructed 7 school buildings and assisted in improving an additional 971 school buildings, assisted in the renovation of 326 public buildings, and built or improved a number of water and sewer systems. Some of these projects were combined with or completed by the WPA program.

Many of the programs begun by the KERC were completed by the federal agencies. The state did not have the funds to continue such expansive relief programs by itself. The KERC assumed a new role. The Jewell County Courthouse, constructed in 1935-1936, is a good example. County officials appealed to the KERC to seek state funds from the legislature to construct the

building under the auspices of the KERC. The KERC handled the legislative process for Jewell County, obtaining \$35,000 in funding that was passed to the county for use in obtaining a WPA grant to complete the construction. The WPA supplied \$125,000 to complete the courthouse. This procedure was normal for the KERC after 1931. The WPA normally funded eighty-five percent of the total costs. In effect, by 1935 the state relief group acted as the procurement officer for both state funds to be given to counties and for the federal monies.

Between 1935 and 1943 more than 8.5 million Americans worked 19 billion hours for a total of nearly \$9 billion in wages in these federal and state programs. Nationally, more than 650,000 miles of new "farm to market" roads and 40,000 new public buildings were constructed, 85,000 parks and playgrounds were built or improved, and thousands of other improvements and new buildings were added to the landscape of America and Kansas. All WPA contracts for work stipulated that no building could "take the place of work normally given to private commercial concerns" and WPA contracts normally used local builders and materials and local or regional personnel for its projects.

Phoebe Cutler, author of The Public Landscape of the New Deal, concluded that the New Deal did not innovate so much as it mass-produced. One example was relevant for Kansas: there "are sufficient numbers of handsome but vacant outhouses strewn across the land to indicate both the CCC and the WPA perhaps overproduced."

The construction of outdoor privies for Kansas farms, small towns, and some cities, was begun in 1934 by the WPA. The privy program was countywide and anyone who wanted such a modern facility, or at least a new and better one, need only apply to the local office of the WPA. Some of these outdoor facilities were constructed at rural schoolhouses and even at some small-town schools, but those were usually constructed under the school building program and not under the county projects. Until late 1939 most Kansas counties were still distributing the newly constructed outhouses.

Author's Note: For nearly fifteen years this writer had the "honor" of fully utilizing one of these structures. The privy on my home farm in Jackson County was constructed of tongue-and-groove one by fours, with the bottom plate bolted to a poured concrete foundation. The slanted roof was wood shingled with drip laps. Ventilators that were opened or closed by sliding boards were placed in each sidewall below the roofline. Although they did ventilate and perhaps provided some cooling in the summer, nothing in the privy assisted in warming it in the winter. This lack of convenience plus always being placed about four or five long strides too far from the back door were two of the major drawbacks to this system. The concrete foundation also included a concrete "stool" done as a monolithic pour. There was no "bench" in this modern unit. The stool seat was sanded and polished wood, and the cover was of equal quality. There was also a toilet paper holder. Whether or not it was standard equipment in all models is not known, but ours had a wire attached to the door that went through eye screws in the ceiling, then down to the stool cover, so when you opened the door the stool cover raised. The WPA initials were inscribed in the concrete for posterity. Unfortunately, my father sold this treasure some years ago to someone wishing a well-built tool shed.

The Federally Influenced Built Environment

Throughout this section of the study guide, references will be made to the architectural styles used in WPA projects in Kansas. It is equally important to acknowledge what disappeared from Kansas during this period. Many contracts for schools, city buildings, and landscaping included the removal of the old structure or destruction of the existing pattern of the landscape. When new public buildings or schools were built, the old structures were often demolished and usable material was salvaged for use in the new building. When new shelterbelts or windbreaks were planted by either the WPA or the CCC, the contracts called for the "pulling of the hedgerows" if they were in the same location. How many of the Kansas hedgerows, often used to designate property or field boundaries, disappeared during this period would be an interesting study. To assess the true change in architecture "rushed" onto the Kansas landscape and towns it would be necessary to locate photographs or descriptions of the style of those buildings that were demolished compared to the style of the new structures.

In the hurry to obtain and build WPA and CCC funded projects, the design and aesthetics of the structures were often neglected. Applicants feared the funding would end, so the work had to begin immediately to make certain it could be completed. This situation in itself may have created a "rushed vernacular," or eclecticism, that might not have occurred if more time had been available to concentrate on the design of the buildings. Because of this the federal building programs had distinctive characteristics.

Projects completed by local builders often included a contract for quarrying stone from local quarries. That helped retain local architectural influences. Normally the building designs were blocky and square without much ornamentation. Some frame rural schools were built and a number of city buildings were constructed of cement block, poured concrete, or steel. Many schools and city buildings were of brick. The additions to Finney County's poor farm at Garden City were adobe, and a CCC camp near Dodge City consisted of new sod houses.

Since the object of the WPA/PWA programs was to put local people back to work, the federal government normally used local builders and often did not furnish any specific plans. Some well-known architects worked for the WPA, but they are difficult to identify as the WPA records are often incomplete. The general WPA contract clause prohibiting competition with local trade and requiring utilization of local builders may explain the lack of plans or descriptions in many of the official WPA files. The WPA microfilm series for Kansas has the plans, drawings, and contracts for the years 1933-1934, but beyond that the files consist of three by five cards with only a description of the project to be done, where, and when, and rarely is any other information included. Locating the specifics would require searching the original files, and they do not always exist.

WPA records indicate that a building might be called a classic or modern style, but what was actually meant by this terminology is not certain. Modern or moderne was often applied to anything that did not match the existing architecture. Since "economy" of construction was the goal, lack of ornamentation meant "modern." Many WPA buildings were referred to as classical, but they were often vernacular or eclectic versions of the predominant local styles. Perhaps this was a correct approach for the WPA as

it was in some instances continuing the local and regional traditions by this type of design, or lack of design.

The WPA also influenced new styles by some of the truly modern and/or art deco that was built. (Art deco is an architectural historian's terminology for designs called "modern" at the time.) In Kansas this was an important influence for future construction; it might otherwise have taken years for other "unrushed" outside influences to have an effect on some Kansas towns. Washington County (1933) and Wabaunsee County (1931) both built new courthouses in the modern style. The Reno County Courthouse, which was under construction prior to the depression, may have been an important factor in breaking down old traditions. The new styles were exemplified in Lehigh, Marion County, when in 1935 the WPA built a combination gymnasium-auditorium in art-deco/moderne style and in Washington's City Hall. Other examples of the newer styles included Junction City's new WPA municipal auditorium (1937) and Russell's 1938 high school, both described as "notable prairie" style.

For the most part, however, the WPA's "description" of the new 1935 community hall built in Phillipsburg was the general guideline: the "design and structure. . . is of such simplicity and character that it will serve. . . for generations." Form, function, and regional warp of building were the formula used for the new buildings.

Three courthouses were constructed by the WPA, all of modern design: Ellis County (1940-1942); Jewell County (1937) described by the WPA as "modernistic;" and Kearny County (1939). However, many major renovations and additions were made to courthouses throughout the state. Because of the extent of some of the renovations, Edwards, Meade, Lane, Finney, Grant, Gray, and Hamilton counties had virtually new courthouses. The WPA records indicate these courthouses were painted and cleaned, had windows changed, had interior rooms rearranged, had entrances enlarged and changed, received new wings, had new steps constructed, and had the grounds landscaped. General modernization was performed on probably half of the courthouses in the state and most of the others received some lesser degree of renovation or cleaning.

Parks, Landscaping, Protection

New and renovated parks, landscaping, beautification, and protection from the devastating winds and drought were part of the general programs of the KERC, WPA and CCC in Kansas. Tourist parks, campgrounds, cabins, recreational facilities, and rest areas were built throughout the state.

Massive lodges and recreational buildings were constructed in natural areas of scenic beauty or in large existing federal or state parks throughout the United States. These structures, which have been described as "government rustic," were designed by staff of the National Park Service and were probably influenced by the lodges of the wealthy in the Adirondacks of Upper New York. Kansas did not receive any lodges of this type but did gain many new or renovated parks and recreational areas.

In 1936 the WPA spent more than \$300,000 for countywide landscaping in fourteen Kansas counties. The WPA even constructed a golf course in Reno County. The CCC transformed many areas devoid of landscaping into attractive picnic areas and very unlikely areas into parks and lakes. The Kansas Sappa Creek project near Oberlin was in a "downright inhospitable" setting. A

picturesque stone building, a lake, and a grove of trees were added to the stark landscape. In the 1950s the lake area was sold off and today the former lake bed is a wheat field held back by the original dam. A government marker still credits the WPA and CCC for the construction. The general landscape and protection for rural areas also included massive attempts to control grasshoppers, bindweed, and other noxious plants.

As has been noted, landscape architects received considerable attention from the WPA and CCC, and the federal programs gave a boost to their profession. The influence of European formal gardens became noticeable in everything from parks, yards, roadside camps, and picnic areas to town squares and malls. Many of the new gardens contained cascades, balconies, and hanging garden effects. The landscapers created an indigenous American style by blending traditional European garden styles with American, creating a "spatial symbol of American nationalistic pride." In many parks, cemeteries, and open city areas in Kansas the remains of some of these elaborate gardens can be seen. In 1935 landscaped formal gardens and parks, complete with statuary, fountains, waterfalls, and lily ponds, were constructed by the WPA in several locations. Also in that year in Sedgwick County a landscape architect was provided not only to beautify homes and community areas, but also school grounds, rural roads, and farmsteads. As has been noted, landscape architects also worked on landscaping the new route of the Arkansas River. The WPA and CCC worked extensively on highway landscaping. According to the Kansas Department of Transportation, the Kansas highway beautification program was one of the first in the United States.

Shelterbelts, windbreaks, and other general rural planting in Kansas have been studied and sources are recommended in the bibliography. In Kansas the shelterbelt planting did not begin in earnest until about 1938 although individual area windbreaks and many trees along rural roads were planted earlier. Some WPA and KERC records indicate not only how many trees were planted, but also what type and in what areas. In 1937 fifty-two Kansas counties were included in the national shelterbelt project to plant trees from Texas to the Canadian border. By 1940 an additional twenty-nine counties had been added to the shelterbelt list, most of them in central and southwestern Kansas. Windbreaks and general tree plantings were done, however, in most Kansas counties during the entire period but not on the scale of the national project.

Such plantings, and the removal of hedgerows as part of the program, changed the face of Kansas forever. The hedgerows were not considered adequate "windbreaks," having initially been used as fences and boundary markers. As the hedges were often in the most suitable location for the new windbreaks and shelterbelts, they were removed. Trees exist today in an orderly fashion where they had not been before 1930. Hedgerows that at one time marked the family farm's boundaries were torn out. Trees in the former woodlots and windbreaks indicate where farmsteads, traveled lanes, and roads were, and still mark the areas that were being protected from the wind. With the information that has been accumulated in recent years a definitive study could be undertaken to determine the actual extent of change to the vernacular landscape or to determine if a new vernacular landscape was created in the state.

From 1935 on, there was special attention paid to flood control projects. The program reached its peak in 1937 when any county with a stream,

creek, or river with flood potential received some aid in the form of new levees, dikes, rerouting of streams, and new bridges protected from possible flood. The WPA straightened the channel of the Arkansas River in Wichita (beginning about 1935) and landscaped the new river banks. New ditches were added to rural roads and many wells and cisterns were built as part of the effort to conserve water. The creation of new levees, rerouting of streams, construction of many new dams, and riprap additions to existing stream banks also changed the look of the landscape. Reservoirs, lakes, and ponds for water conservation all contributed to the changing water management in the state.

Community Services and Cultural Programs

While most of the building programs of the WPA were oriented toward community and public improvements, there were special community services that must be mentioned as they are indicative of the totality of government action affecting the citizens. This overall effort made it easier for Kansans to accept the government assistance, and they became more dependent upon outside resources and influences, in turn giving up some of their personal independence. Every county in the state received some or all of these services.

The greatest push for community services in Kansas was from 1936 on, but the services at varying levels were available from 1933 through 1940. The WPA provided funds for library cataloging, book binding, surveying of state and local records, indexing of city and town records, and a variety of related ventures. Funds were also available for special research projects such as one study devoted to determining the whereabouts of all students who had left Newton High School between 1930 and 1939. Most Americans are aware today of the excellent artists' and writers' projects from the murals in many public buildings and the publication of many guides and references such as the Guide to the Sunflower State used in this study. Reference has also been made to the photographs taken under the auspices of community services and of the aerial photo-mapping of Kansas by the Soil Conservation Service.

In addition to the artists' and writers' projects mentioned above, there were additional programs that coincided and contributed to the architecture and cultural aspirations of the federal building programs. Twenty-six of Kansas' new post offices built during the depression period received art works as part of the United State Treasury Department's Section of Painting and Sculpture (the Section operated from 1934 to 1943). Architecturally the buildings were usually either a restrained art deco or had Neo-Classical influences, and they were usually constructed of brick. This program was one example of the federal government bringing the art of the common man to the common man and woman. In many communities, this was the only art available for public consumption.

Section artwork utilized a number of different art forms. The majority of the works were oil color murals backed on canvas. Some of the post offices received exterior relief sculptures that decorated the entrances and front walls of the buildings, as on Salina's old post office (now a county museum).

Many other interesting programs existed as well. In most Kansas counties surveys of cornerstones were undertaken to locate and record their location and dates. Librarians and books were furnished to rural areas.

Garden management training was available in both rural and city areas. In 1937 the WPA provided a program to train women for employment. People were employed to provide recreational programs and train others in the organization of planned recreation and play. Music and theater teachers were hired and sent to most Kansas counties to promote the arts and present programs.

Sewing rooms were set up in schools, public buildings, and homes for women to repair and make new clothing for the needy. Looms were loaned to weave blankets, and pillow, mattress, and ticking factories were established. Lending "libraries" for toys were operated where parents could check out toys for their children, and workers were employed to repair old and make new toys. Baby sitting services were provided so parents could work, and hot lunch programs were initiated in the schools. Traveling dentists and nurses were available in county seats providing free care.

The WPA not only affected the built environment, it established a modernity in all phases of society, particularly in rural areas. The relationship between community services and the acceptance of new building styles, or at least breaking down the hopes of holding on to the old, may have been an important overall factor to the built environment. It would be interesting to study the development of these services, and their social and cultural effect on society in direct relationship to the acceptance and changes in the building styles. Studies of nineteenth century architecture and the environment often analyze the cultural influences on the styles. In depression and drought ridden Kansas, this cultural change came from the outside along with the new and changing built environment.

General Results of the Federal Programs

Every county and most communities received something from the WPA and the CCC. There are far too many specific programs to mention, but all counties received new roads, reconstruction of old roads, culverts, bridges, and general upkeep. Cities and towns received new sidewalks, gutters, landscaping, playgrounds, and parks, and many had electric street lights and traffic controls installed. The largest single effort directed at small towns was the construction of new streets and sidewalks. Many received new parks, benches, bandstands, gardens, and swimming pools, often with new bathhouses.

A large number of athletic fields and stadiums, gymnasiums, and auditoriums were built in the state during the existence of the WPA. Some of the new athletic fields had electric lighting. In 1938 Iola received a fair building, a community building, a stadium, and city landscaping. The new community center included not only an armory but also a riding hall! Horton in the same year received a livestock pavilion, an agricultural building, a community building, and an arts building, indicating that all may have been part of a totally new fairgrounds for the county. Washburn Rural High School in Topeka reportedly had a skating rink as part of its new school.

Many improvements were made to water and sewer systems; general septic tank construction occurred if sewers were impractical. In 1936 several towns throughout Kansas received assistance to construct new electrical lines or connect electrical lines to central power stations. New buildings to house these operations were often included in the projects.

The WPA program also extended to cultural and educational institutions. The Wichita Art Museum received an addition, and the state colleges at Pittsburg, Emporia, and Fort Hays received overall campus landscaping. The entire lake area in the central part of Emporia State's campus was landscaped including the construction of benches, shelters, and walkways. Emporia State's football stadium was renovated (actually rebuilt) and a new track, bleachers, and a football scoreboard were added. Pittsburg and Fort Hays State both received new stadiums. The federal programs also provided major renovations and new buildings at Forts Riley and Leavenworth. Fort Riley received many new buildings while many old buildings at Fort Leavenworth were either renovated or cleaned and repaired.

It made no difference how large or small a city, town, or county was, each received a proportionate share of the projects. Larger cities like Kansas City, Wichita, Hutchinson, and Topeka had more projects solely because of their size but do not appear to have received a larger percentage of improvements. Goodland received a new stadium, fairgrounds, and an airport in 1938. Sumner County received a park, countywide landscaping, two swimming pools, a school building, two city halls, a community building, extension of electrical lines, traffic lights, farm to market roads, and shelterbelts between 1935 and 1939. During the same period, Montgomery County received two swimming pools, a community building, an armory, an airport, two schools, three athletic fields with stadiums, an amphitheater, a city building, an auditorium/gymnasium, improvements to Riverside Park, and countywide landscaping. Wilson County had countywide landscaping, a gymnasium, three athletic fields, reservoirs, a lake, a new county poor farm, bandstands, a municipal garage, two water systems, and a new school. All these examples exclude community services and other projects such as general road and bridge building or repair. It is obvious that as Cutler has concluded, the "WPA attempted to eliminate the leisure gap by building not bandstands and belvederes [which they did do] but grandstands and athletic fields."

At least three facilities should be mentioned as examples of the times and how things have changed. A recreation facility at Lawrence, a swimming pool at Salina, and a new children's wing on the University of Kansas Medical Center were all constructed by the WPA as "colored" facilities. There were additional projects with this stipulation, but they are not always specifically identifiable.

The following compilation of WPA projects in Kansas includes the major construction of public use buildings and facilities in the state. The list cannot be considered definitive because of discrepancies in the WPA files, but at least this many different projects were completed. The list does not include general road and street projects, community services, or many of the landscaping and related programs. Included are those projects done with consistent frequency that directly affected Kansas' built environment.

School buildings on the list are only new construction; no additions or general cleaning and renovation are included in this tabulation. School construction does include vocational agricultural and industrial arts buildings which were quite popular. Auditoriums and gymnasiums are grouped as one entry, making it difficult to determine from the WPA records exactly what type of building was referred to. City halls often included jails, offices, firehouses, etc. "Other" city or county buildings were separate office buildings, shops, garages, or any other new government building. Athletic

fields usually included a stadium or bleachers, and those are not separated in designation. Swimming pools usually included a bathhouse. Airports were usually a new facility except that the WPA completed the Wichita Municipal Airport after it had been started with local funds. The other major airport constructed by the WPA was Topeka's Billard Airport. Landscaping indicates new city or countywide projects and does not include gardens, parks, etc., that were only redone or merely replanted. Sewers and water systems listed were newly developed and constructed. The listed lakes were new county lakes not part of a city or county park. Recreation areas were major new developments either in the city or county that contained multiple facilities.

The list covers the period from 1934 (the first year separate records were kept) to 1940. Some new projects were begun after 1940 but very few that would affect this list. By 1938 the programs were beginning to decrease, and the following three years saw only an attempt to finish those projects already started before the official end of the projects in 1942.

Airports	21
Athletic fields, stadiums	102
Auditorium/gymnasiums	63
City Halls	43
City or county parks	42
Community halls	28
County poor farms	5
Courthouses	3
City-county buildings	52
Hospitals	4
Lakes	18
Landscaping	25
Libraries	6
National Guard Armories	15
Recreation areas	14
Schoolhouses, buildings	129
Sewer systems	25
Swimming pools/bathhouses	39
Traffic light controls	4
Water systems	21

These programs had a profound and lasting effect on the state. Perhaps the greatest impact was felt in rural areas that would not have obtained some of the new structures or services in any other way. Surveys of these federal projects must be done not only to attempt to preserve the best examples, but also to identify the remains, how many are still in use, what changes have been made to them, and whether the styles affected and influenced future construction in the area. The parameters are easy to determine and information is available to assist in such surveying. With the majority of the buildings and landscaping either at or approaching fifty years old, it is necessary to study these changes on the Kansas landscape before they totally disappear.

VII. General Questions and Considerations

Throughout this study guide many questions, ideas, and considerations have been presented. They need not be reiterated here, but a rereading of Chapter I's Introduction is encouraged at this point. Suffice it to say that not all areas of interest have been covered. Everyone will have a special entity that will not be found here, but given the space requirements and the format of the study guide, such inclusion would have been impossible. Some of the omitted areas will be recognized in this chapter. Overall, however, the basic premises and methods suggested herein are applicable to the study of practically any area of Kansas architecture from 1900 to 1940.

There are some major considerations concerning the study of the recent past. First, far too many persons, including historians, regard the twentieth-century as too recent to warrant in-depth study. Nothing could be further from the truth, particularly in architecture. Many of the structures still exist in more or less original form for actual study: that advantage does not always exist for earlier periods. Secondly, the influences of cultural and social change may be easier to measure as there are still people who remember the changes, actions, and reactions that occurred during the first forty years of this century. As was mentioned, oral history is now an important source for the preservationist. Perhaps the disregard for this period stems from Lewis Mumford's observation that often "it is impossible to see one's own period in perspective." Even though these dates seem recent to us, "think history" as Nearby History admonishes, regardless of the time period. We must explore the past of subjects close at hand.

Kansas may not have an exemplary architectural history, but what it does have is important to all who lived, or continue to live, in the state. If the twentieth century architecture of Kansas is not unique, or has not made any major national contributions, perhaps that lack of uniqueness today is important. Is Kansas still representative of its twentieth century development in architecture? Other states and areas may have already lost much of their twentieth century built environment while Kansas still retains many representations of the period. The Kansas vernacular architecture and landscape both need study. There is no doubt that the architectural developments of the state are directly related to the quick changing social and cultural life-style of the state during the depression and dust bowl. Given the turmoil of their lives during these calamities, Kansans may have felt that they could do anything, or build anything, they wanted by the time the disasters were over.

One primary consideration in beginning any study or survey of Kansas architecture in the twentieth century is to be fully aware of this distinct relationship between people and their buildings. The specificity of the study, or any survey, is also important in Kansas. Studies of specific time periods in relation to specific styles in specific locations are all important in determining the effect of changes or lack of change to the state's built environment. What influenced the people in these specific areas is equally as important. Did Kansas State University's bulletins have much influence? Did the bibliographies they furnished cause people to read and study more about styles and forms?

In addition to studying those bulletins, and their photographs and plans, preparation for surveys and studies must also include examination of

the many available plan books, mail order catalogs, and the many advertisements distributed in the state. Through this method it may be possible to determine just how much effect there was from outside influences. Or, was there too much advice, as a Kansas State professor once speculated? The direction of influence, from the East or West, could also be determined by studying these sources in relation to their origination and use.

Kansas, as seen in the study guide, had a propensity to retain the classical styles on one hand, and on the other to build new modernistic structures. The mix of this architecture might be better understood when the outside influences are better measured and determined. Certainly the individualism of Kansans is an important issue in holding on to the older more traditional styles, but the depression and dust bowl tended to break this individualistic attitude. Surveys that could determine if the changes in architecture began at about the same time would be most important. The same type of study would also be useful to determine why Kansas retained so much of its original commercial building styles.

Not to be overshadowed because of the notoriety of the Great Depression and dust bowl is the Progressive period and the post-WWI influences. Did Progressivism affect Kansas building? On the surface it appears it did not, but additional examination might prove otherwise. Or was the influence peripheral and caused more by the new technological developments?

While many different types of architecture and the landscape have been mentioned as areas of study, some additional topics should be mentioned. First and foremost are surveys of particular forms of vernacular architecture and the vernacular landscape. Stone houses and buildings in the twentieth century, sod houses of the twentieth century, and the various forms of the bungalow and other styles of houses adapted to Kansas climate and life-styles are all worthy of study. Surveys of farm outbuildings constructed in the twentieth century would show if any major adaptations or changes occurred in addition to those mentioned. Archeology can be a useful tool in this process of study. Also, careful study of commercial buildings and town planning might address the question of why they did not change radically from the late nineteenth century.

Surveys and studies relating to the pre-cut and mail order plan houses would be extremely valuable. One way in which this might be done would be to advertise and publicize such a survey relying on general public input with follow-up surveys based on that information. The same method could be utilized in locating houses and farm buildings constructed directly as a result of the mail order plans or the bulletins issued by Kansas State University. With the assistance of agricultural groups and local preservation organizations and with general publicity the returns could provide useful data. The fact that these surveys will be concerned with a time period that many persons remember or identify with would be a factor in their participation.

Many other aspects of the Kansas built environment should be surveyed for twentieth-century construction: storm caves, windmills, elevators, garages, machine sheds, privies, ballparks and recreational facilities of all kinds, Grange halls, Masonic temples, Odd Fellows halls, theaters, movie houses, public and commercial buildings of all types, early business "strip" areas of towns and cities, institutional buildings, fairgrounds, filling

stations, diners, trademark and "pop" styles, churches (particularly those associated with new religious crusades or congregations of the twentieth century), and all changes to the landscape, including farming techniques, that have been mentioned in the text. All the buildings, landscaping, and other construction of the federal programs of the New Deal warrant individual and cumulative surveys and study. How many of these remain today is unknown. There might be a surprising number in Kansas.

Many of these buildings will be difficult to "see through" to the original structures or determine the exact date. Surveying the farmhouse will present a specific problem as will the survey of many early and mid-twentieth century commercial structures. Many of these have been covered over with new facades and additions and will be difficult to date. This problem will also be apparent in dating and identifying many buildings that might be assumed to have been built in the pre-1940 period but investigation will show that they were built after WWII. Kansas was not always as up to date as other sections of the country, and even some typical 1930s commercial and specifically roadside building architecture might have been constructed twenty or more years later than suspected or than found in other areas.

One way to avoid some of the pitfalls of surveying the twentieth century would be to study differing size communities in different sections of the state for the same type of new building or renovation. Towns like Russell that boomed even during the late depression years because of oil might produce much different results than a similar size town in a different area of the state. Topeka, as the capital city and the self-described "last word in architecture," should be surveyed for particular types and developments. Mid-sized centrally located towns such as Abilene, Salina, small towns in the dust bowl areas of the state, and southern and northern border counties should be compared in the survey.

There are many pressing questions concerning Kansas that need to be addressed. Some of these have already been presented. Why does Kansas, as do other midwestern states, retain so many old styles of commercial structures? Why are there no major skyscrapers or massive designed commercial buildings? Was the comfortable house, as discussed in the study guide, the primary concern of Kansas homeowners during this period? Why, even though many reasons are known for the popularity of the bungalow, did Kansans particularly like this new style and adopt it while overlooking many other developments in style and form? How strong was the mail order and pre-cut influence? How strong were the assistance programs discussed? If we are all consumers and architecture is a product, did the forces of supply and demand enter into the development of Kansas architecture in this period?

The assistance needed to do such studies will be dependent upon the general interest in studying such "recent" history. As mentioned, however, service and civic organizations, farm groups, high schools, 4-H and FFA, and anyone having an interest in their local communities might be willing to participate in such surveys. Surveys are being conducted by professional organizations and scholars interested in the twentieth century, but these will be limited by time, funds, and a continuing concentration on the nineteenth century. Perhaps the citizenry, local historical organizations, and those mentioned above will have to take up the cause to assist in preserving the twentieth century.

Surveys are being conducted by the Kansas State Historical Society's Historic Preservation Department through grant programs to cities and towns, but few are being conducted in rural areas concerning the landscape and farms or for vernacular architecture. This may be one of the more difficult areas in which to instill an interest, and it is an area that is losing more of its built environment than any other.

Acquiring funds for such surveys and study is difficult. State agencies can only provide assistance and local entities are also often restricted in the monies that can be supplied for these purposes. There are private foundations that do grant such funds and information on them can be located in specialized directories of granting agencies and private foundations. Businesses and industries should be asked to participate in funding surveys relating to the development of their architecture. The study of the twentieth century built environment in Kansas is in a beginning stage.

Perhaps the basic question is this: Is the best architecture that which meets the expectations of the land? Followed by the related questions: Did Kansas architecture do this? If so, how substantially? Did the Kansan look only at function in the twentieth century? In Kansas the intent of the builder and the person who would use that structure may have been the most important considerations. Without studying the progress of the built environment in these forty years we may never know the answers--if there are any. Or, as asked in the text, did Kansans just build what they could afford and use, without much thought at being stylish (even if they were), or modern? J. C. Heintzelman may have summed up the general attitude toward new architectural developments when, writing in 1957 about one hundred years of Kansas architecture, he asked a farmer what he thought of Buckminster Fuller's Dymaxion house constructed in Wichita in 1946. The farmer simply replied, "it will dent an awful lot in a hail storm." Heintzelman responded, "One hundred years later [in Kansas] the search for liveability continues."

IX. Bibliography

Mention has been made in the text concerning the lack of available primary architectural sources for this period of Kansas history; however, there are many secondary sources available that will provide the necessary background to proceed with research in most of the areas studied. It is urged that such sources be utilized for written studies and surveys even though there are few Kansas architectural studies in the twentieth century. Some of the primary materials will be mentioned here as a guide but not as a definitive bibliography. This bibliography concentrates on those sources used in preparation of the study.

Secondary materials used for study should be closely examined for publication dates to determine if the sources are current. Interpretations and available primary sources used for secondary publications change quickly and are important in assessing the publication's relevance. In this study guide, problems occurred because of differing interpretations based on generalizations instead of specific examples. General references to midwestern vernacular styles, social and cultural changes and influences, and other such incidents were not always found to be applicable to Kansas. Continuing research in the built environment is becoming more popular and current bibliographies should be consulted to determine the most recent and/or useful secondary material.

The Kansas State Archives, Manuscripts Department, Photograph Division, and Historical Library at the Kansas State Historical Society in Topeka have primary published and unpublished materials that should be consulted by anyone doing research on architecture and the landscape during this period. The Historic Preservation Department at the Society has an excellent general and reference library on architecture including many plan and technical books. The University of Kansas and Kansas State University, particularly in their architectural department libraries, have valuable resources. Because of the dates involved, newspapers and photographs are important sources and oral history should be fully utilized. The Kansas State Historical Society has a listing of newspapers available for research use, and many local libraries also have microfilm of local newspapers. While the photograph collections of the State Historical Society and the University of Kansas are important, local libraries and historical societies should also be checked for available materials.

The library at the Kansas State Historical Society has clipping files on many different subjects in this period in addition to countywide clippings for each county. Subjects included in the clippings are architecture, landscape (under Trees), drought, depression, the federal programs, and many others that will need to be explored. City and county atlases and histories are also important guides to the changes in both small and large cities. The property and ownership records in county courthouses and the official state land records in the Kansas State Archives may be used to date properties and are useful in surveying an area.

Microfilm of WPA and CCC files is available from the National Archives. The film is divided into two series: one is project files and the other is an index to the project files. The index identifies what projects were done, where, and when, and in some cases it provides information on funds expended and the designs or plans for the project. The project files, however, are the

most useful as they contain all the information for each project, including contracts and often partial blueprints. The microfilmed WPA project files for Kansas, 1934-1935, and the microfilmed index from 1935 to 1940 were used for this study. There are extensive published materials available on the Kansas Emergency Relief Committee.

Technical and plan books from the period as well as style books have been reproduced; however, there are not as many available for the early twentieth century as there are for the nineteenth century. This lack of a source for direct examples of plans is a disadvantage that requires additional research. Some of these reprints are included in this study's bibliography. Plan books will provide architectural drawings, construction information, and materials. Some of these reprint books are available for the early portion of this period from about 1900 to the late 1910s but not many are available for the later period. One reason is that contemporary plan books were not used as much. Specialized architectural studies on particular styles, however, do somewhat remedy this lack of information. Any study or survey of this period must include a search for these valuable sources.

Periodicals are especially important during this period. The Craftsman and other magazines must be consulted. Other popular publications that were in existence during the period that should be used include American Builder, Architectural Digest, Architectural Forum, Architectural Record, Better Homes and Gardens, House Beautiful, House and Garden, Ladies' Home Journal, and the Western Architect. These are but a few of the periodicals available. In Kansas, all Capper publications should be studied, including the Kansas Farmer, as well as other agricultural publications such as Country Gentleman. All popular publications with wide distribution in rural areas should be consulted as they not only included articles on architecture, house styles, and modern conveniences, but also included advertisements for builders, pre-cut suppliers, and mail order plans.

Information for Sears, Roebuck and Company, and Aladdin houses is difficult to locate. The Sears Archives in Chicago continues to compile information on Sears houses and appreciates any information that architectural surveys can supply to them.

The bibliography is organized to correspond to the chapters of the text. Many of the references were used throughout the study. To avoid repeating sources they are listed where they were first used, or when particular sources were specifically used only for one or two chapters, they may be listed at those points and not at first mention. The individual bulletins of Kansas State University are referred to separately in some chapters, while in the chapter on the farm and farmstead, the entire listing is again provided. Some general references, such as Nearby History, general architectural histories, and Kansas histories that were used throughout the study are only mentioned at first occurrence. It is suggested that in using the bibliography one check not only a chapter's listings but also the earlier chapter bibliographies. All types of publications are in alphabetical order by author or agency. Where necessary, if not mentioned in the text, annotation will be provided to identify the usefulness or concentration of the publication if not readily recognizable.

The bibliography is not definitive for this period but is given as a guide. The bibliographies included in most of the publications cited are

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IV. The Kansas Farm and Farmstead, 1900-1940.

Many newspaper accounts in the clipping files of the Kansas State Historical Society were used in this section, but they are not presented here individually. See the reference in the bibliographic introduction.

This chapter is one of the twentieth-century areas referred to where little secondary information is readily available.

Kansas State Agricultural College, Department of Experimental Engineering Bulletins. Because of the importance and usefulness of these bulletins produced by the Experimental Engineering Department, those used in this study are included here as one entry. Some have already been cited in other chapters. There are additional bulletins that should be consulted, but those listed below apply directly to the farm house or farmstead. For convenience, they are listed in chronological order, by author and identified by bulletin number and date.

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Walters, John Daniels. "The Water Supply of the Farmhouse," Number 4 (November, 1916).

Frazier, F.F. "Sewage Disposal for Country Homes," Number 5 (March, 1916).

Etherton, W. A. "Inexpensive Plumbing for Farm Kitchens," Number 6 (April, 1916).

----- "The Farmstead Improved," Number 7 (1917). This is a fascinating treatment on applying the modern technologies to the farm house and on additions that can "modernize" the look of the house and farmyard. The photographs are outstanding.

Potter, A. A. and S. L. Simmering. "Economical Use of Fuel in the Home," Number 8 (October, 1917).

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Wichers, H. E. "Present Status of Rural Electrification in Kansas, Central Station Service," Number 16 (July 1, 1925).

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Hinrichs, H. S. "The Use of Electricity on Kansas Farms," Number 21 (April 15, 1928). This study of farm family priorities for electrical applications and the contemporary use being made of electrical power is remarkable for the lack of foresight on the applications of electricity.

Wichers, H. E. "Designs for Kansas Farm Homes," Number 23 (November 1, 1929). Again, this is an outstanding presentation of what the farm house should be, complete with drawings and plans.

Logan, C. A. "Farm Lighting Systems," Number 30 (January 15, 1932).

Wichers, H. E. "Modernizing the Kansas Home," Number 32 (1934). This is perhaps the most interesting of the series. The bulletin was designed to present affordable additions and renovations for existing farm homes. This is referred to in the text as a way to see the house change by "flipping" the pages. Many of the plans presented are modern in look and are still with us today--even in newly constructed houses. An analysis of the application of these suggestions would be an interesting study.

Barger, E. L. "Tractor Fuels," Number 37 (May, 1939).

Wichers, H. E. "Low Cost Homes," Number 38 (September 1, 1939). This is obviously a follow-up to Number 32.

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V. Depression, Dust, Drought, Recovery: The Changing Face of Kansas

There are many primary and secondary sources available for this period that analyze the depression, dust bowl, and recovery operations of the New Deal. However, there are few studies of architecture beyond that of the government programs, pop or trademark architecture, and major trends. The common house, business, and general buildings have not been studied in detail. In Kansas the effect of the New Deal programs has not been properly assessed. Since this chapter and the following one on federal programs are closely related, some sources will overlap. The WPA files are listed in Chapter VI, and the KERC materials are included in Chapter V. Bibliographic research of the period from 1929 through 1940 would be a legitimate study in itself.

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VII. General Considerations

There are many bibliographic aids available for Kansas history, general architectural history, the New Deal, and other areas of interest. Helpful for newspaper research, although outdated, is the Kansas State Historical Society's History of Kansas Newspapers, 1916. The Society can also furnish specialized and county bibliographies. The Historic Preservation Department can provide assistance on architectural studies, plan books, technical guides, current listings of the Kansas and National Registers of Historic Places, and National Register nominations. There are also many reprinted supply house catalogs which have not been included individually in the bibliography, but many of these are available in public, college, and university libraries.

Publications of the U. S. and Kansas Departments of Agriculture and other state and federal agencies have valuable information. The Kansas State Archives has agricultural census as well as depression period records that are of assistance. There are organizations that may have beneficial materials including the various farm organizations, business and industrial companies, and organizations such as the American Farmland Trust in Washington, D.C., and the American Land Forum in Bethesda, Maryland.

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IX. Appendices

Public Involvement

The National Park Service, Department of the Interior, requests that each study unit receive public involvement and input. For this study unit, a preliminary outline was sent to thirty-five interested individuals, architectural historians, university history professors, and preservationists. A narrative explaining the overall format to be used and the reasons for some of the specific study items included in the outline was distributed with the outline.

Responses to the outline and narrative were used to adjust and refocus the approach, and to add or delete subjects in the outline. Because of this input, the inclusive years (1900-1940) were determined to be the proper chronological span. As the depression, dust bowl, and recovery programs of the New Deal could not readily be separated at any given point, and all were directly related to the pre-depression period influences and effects, the entire forty year period was included as one study. Even though this period witnessed many significant changes in Kansas and Kansas' architecture, the public input indicated that the risk of omitting some specific subjects because of the length was less of a problem than separating the forty years in two segments and not correctly following all the developments, trends, and changes throughout the time span involved.

