Florida's MID-CENTURY MODERN

ARCHITECTURE (1945-1975)

UF | UNIVERSITY of FLORIDA

Florida's MID-CENTURY MODERN ARCHITECTURE (1945-1975)

A survey of the modern structures, architects, and design trends of the Sunshine State.

Cover Photo Credit | Bacardi Building Jewel Box Detail, Morris Hylton III

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Dickinson Hall, University of Florida
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SPONSORS

Florida's Mid-century Modern Architecture (1945-1975) study with *50 Flagship Structures* was undertaken by the University of Florida's Historic Preservation Program, College of Design, Construction and Planning, with support from the Florida Department of State's Division of Historical Resources through its Small Matching Grant program (FY2018).

The University of Florida is one of the first institutions of higher learning in the United States to introduce historic preservation studies, with coursework first offered in 1957. Today, the program is dedicated to preparing the next generation of leaders to safeguard historical, architectural, and cultural resources across Florida, the United States, and globally. Focus areas include digital technology, sites of the recent past and modernism, resiliency, and underrepresented communities.

The Center for World Heritage Research and Stewardship at the University of Florida operates two, place-based learning programs, Preservation Institute Nantucket (PIN) and Preservation Institute St. Augustine (PISA), and the Envision Heritage initiative, dedicated to exploring the role of digital technology in conserving heritage.

Academic degrees include PhD, Master of Historic Preservation, and Certificate of Historic Preservation.

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Tupperware World Headquarters
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EXECUTIVE SUMMARY

In the decades that followed the Second World War, Florida became an incubator for innovative and often experimental modern architecture. Much of the vast state was sparsely populated and developed at the close of the war in 1945. Fueled by what was then unprecedented growth, Florida served as an architectural *tabula rasa* that progressive minded designers – homegrown, transplants, and outliers – began to transform.

From the Panhandle to the Keys, mid-century architects adapted early principles of modernism to the state's diverse geographic, climatic, and socio-cultural contexts. These principles included, among others, a departure from traditional building types and forms, functionally derived plans, integration of the arts and design disciplines, and use of manufactured and prefabricated materials and technologies. The resultant buildings and public spaces were not aesthetically coherent. Rather, the built environment of mid-twentieth century Florida offered an array of modern architectural expressions that embodied the optimism and progress that have come to define that era.

The state's mid-century modern architecture is now reaching an age when many of these resources should be assessed and their significance evaluated for meeting the criteria for listing on the National Register of Historic Places and/or designation as local landmarks.

Florida's Mid-century Modern Architecture (1945-1975) is an attempt to compile a statewide inventory of significant modernist buildings, architects, and manufacturers and to better understand the temporal context and prevailing architectural trends. Completed in 12 months, the study was undertaken by the University of Florida Historic Preservation Program with support from the Florida Department of State's Division of Historical Resources (FY2018 Small Matching Grant Program) and in consultation with many

CONSULTING ORGANIZATIONS AND AGENCIES

- American Institute of Architects
- Center for Architecture Sarasota
- Cultural Landscape Foundation
- Dade County Heritage Trust
- DOCOMOMO
- Florida Trust for Historic Preservation
- Gainesville Modern
- ICOMOS
- National Park Service
- National Trust for Historic Preservation
- Nils M. Schweizer Fellows/ Central Florida Modern
- Sarasota Architectural Foundation
- Tampa Preservation, Inc.
- Traditional Building Magazine
- University of Miami School of Architecture

state and national experts, private organizations, and government agencies.

The focus of the study was identifying buildings that meet Criterion C for listing on the National Register of Historic Places. This criterion applies to "properties significant for their physical design or construction, including such elements as architecture, landscape architecture, engineering, and artwork." To be eligible under Criterion C, a property must meet at least one of the following requirements:

- Embody the distinctive characteristics of a type, period, or method of construction.
- Represent the work of a master.
- Possess high artistic values.
- Represent a significant and distinguishable entity whose components may lack individual distinction.[1]

Many of the identified buildings and sites, however, also meet one or more of the other criteria for significance:

- Criterion A: That are associated with events that have made a significant contribution to the broad patterns of our history.
- Criterion B: That are associated with the lives of significant persons in our past.

The subsequent lists of mid-century modern buildings, architects, and material manufacturers are not comprehensive, but serve as a baseline that can be expanded and refined over time. The research and products of this project are meant to assist in local, regional, and statewide efforts to identify and document Florida's mid-century modern architectural resources, evaluate architectural and historical significance, and generate Florida Master Site File submissions, local designations and/or nominations to the National Register of Historic Places.

The results of the study includes:

- Inventory and database of 581 properties organized by type (134 Commercial-Corporate, 73 Spiritual, 58 Government, 54 Recreational-Tourism, 186 Residential, and 76 Educational).
- Database of 473 architects with short biographical summaries for 369 architects practicing in the state during the study period.
- Database and list of some 1,000 advertisements representing approximately 300 different companies and manufacturers of building materials and systems.
- *50 Flagship Structures* – organized by type, a list and summary of 50 properties that should be further researched, documented, and considered for landmark designation (9 Commercial-Corporate, 6 Spiritual, 10 Government, 8 Recreational-Tourism, 10 Residential, and 7 Educational).
- Recommendations and a framework for documenting and evaluating the architectural and historical significance of Florida's mid-century modern buildings and sites.

473

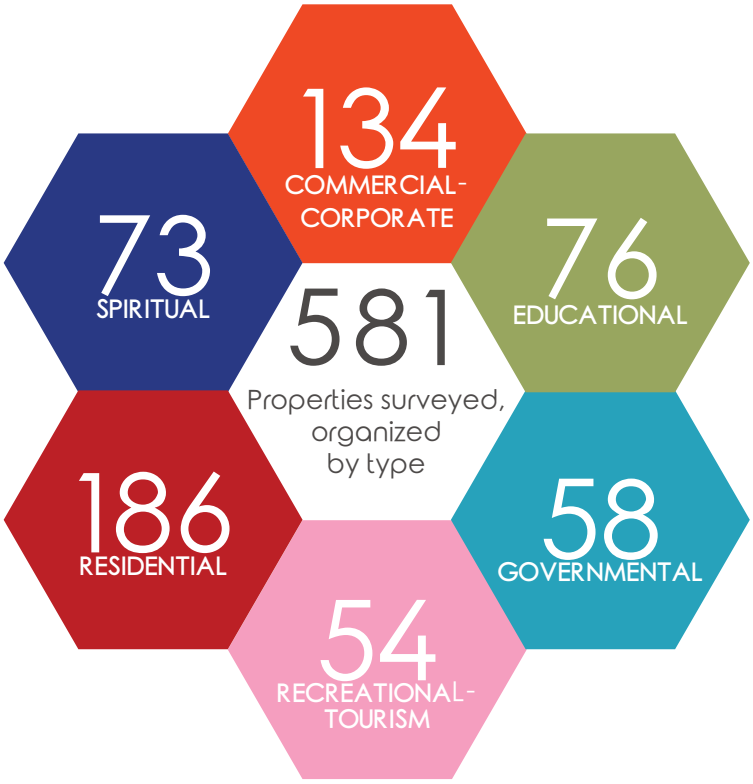
Architects listed with short biographical summaries.

1,002

Advertisements listed and placed in a database representing approximately

300

Different companies and manufacturers of building materials and systems



50

FLAGSHIP STRUCTURES

Significant properties that represent the character and scope of mid-century modern design in Florida.

9	7	10	8	10	6
COMMERCIAL-CORPORATE	EDUCATIONAL	GOVERNMENTAL	RECREATIONAL-TOURISM	RESIDENTIAL	SPIRITUAL

Sanford Civic Center
Photo Credit | Paul Privette

SYNOPSIS OF METHODOLOGY

Florida's Mid-century Modern Architecture (1945-1975) study employed a multifaceted approach to collect and analyze data. Information about the study was shared throughout the state via email, social media, and at in-person presentations including:

- American Institute of Architects National Conference – Historic Resources Committee Brunch, Orlando, April 27, 2017.
- Sarasota MOD Weekend – Tim Siebert Legacy Event, Sarasota, November 11, 2017.
- Gainesville Mid-century Resource Survey, Gainesville, October 18, 2018.
- Sarasota Architectural Foundation Alfred Hitchcock Lecture, March 29, 2018.
- Florida Trust for Historic Preservation Annual Conference, *11 to Save* event, Jacksonville, May 18, 2018.

The study was also featured nationally through the online blog of The Cultural Landscape Foundation at https://tclf.org/finding-floridas-flagship-50.

The following is a summary of the methodology and methods for developing the final products for this project. The data gathered during these simultaneous research activities informed one another to generate a cross-referenced collection of materials. For example, the names of architects and firms that designed the buildings selected for the Inventory were then included on the architects database.

Mid-century Modern Architecture Inventory

The inventory of architecturally significant mid-century modern properties was compiled using a variety of methods, outlined below.

- Online survey distributed via email and social media to historic preservationists, architects, architectural historians, and other experts.
- Consultations with representatives from municipalities and counties.
- Cultural resource surveys and other existing studies shared by representatives from municipalities and counties.
- Buildings that received an American Institute of Architects or Florida Association of Architects award or recognition between 1945-1975.
- Properties identified through archival research including those that appeared in *Florida Architect* magazine advertisements.
- A review of the nearly 43,000 resources dating from 1945-1980 listed on the Florida Master Site File database.

MID-CENTURY MODERN ARCHITECTURE

This inventory focused on buildings and sites that fulfilled Criterion C of the National Register of Historic Places (significant for design). Vernacular structures or buildings significant for their social or cultural history were not examined for this study.

The criteria for selecting buildings and sites included only extant structures with a high level of integrity and that were:

- Representative of a building type (Commercial-Corporate, Spiritual, Governmental, Recreational-Tourism, Residential, and Educational);
- Representative of a design movement;
- Representative of a new use of modern materials and/or systems;
- Representative of a geographic region (North and Panhandle, Central, South West, and South East) and/or major city (refer to page 12 and 13);
- Representative of the work of a master architect, both regional and national firms;
- Outliers, or designs that do not fit within a specific category, but that made a large impact on later works and/or led to changes in design and the use of building materials in the state.

MID-CENTURY MODERN ARCHITECTS

Architects practicing in Florida during the mid-century period were identified through:

- Online survey distributed via email and social media to historic preservationists, architects, architectural historians, and other experts.
- Officers of the Florida Chapter of the American Institute of Architects between 1945-1975.

The criteria for selecting architects included:

- Leader in creating designs that addressed the unique regional environments and climates of Florida (both pre- and post-air conditioning).
- Leader in developing and/or utilizing new materials and/or construction techniques.
- Leader in the Florida Chapter of the American Institute of Architects (held an office between 1945-1975).
- Noted for producing award-winning designs with immediate and/or long-term impact in architecture.
- Noted for creating a distinctive body of work in the state.
- Primary office or firm headquarters located in Florida.

BUILDING MATERIALS, COMPANIES, AND MANUFACTURERS

The list of building materials, companies, and manufacturers/ distributors of building materials were identified through the advertisements of *Florida Architect* magazine (1945-1975). The selection criteria included:

- Indicative of wider patterns and trends in building throughout the region or state.
- Material defined a distinctive form and/or period in Florida design and construction.
- Groundbreaking material that forwarded the science of design and construction.
- Planning trends and/or theories that impacted the environmental history of the state.
- Expression of materials indicative of a distinctive Florida context.

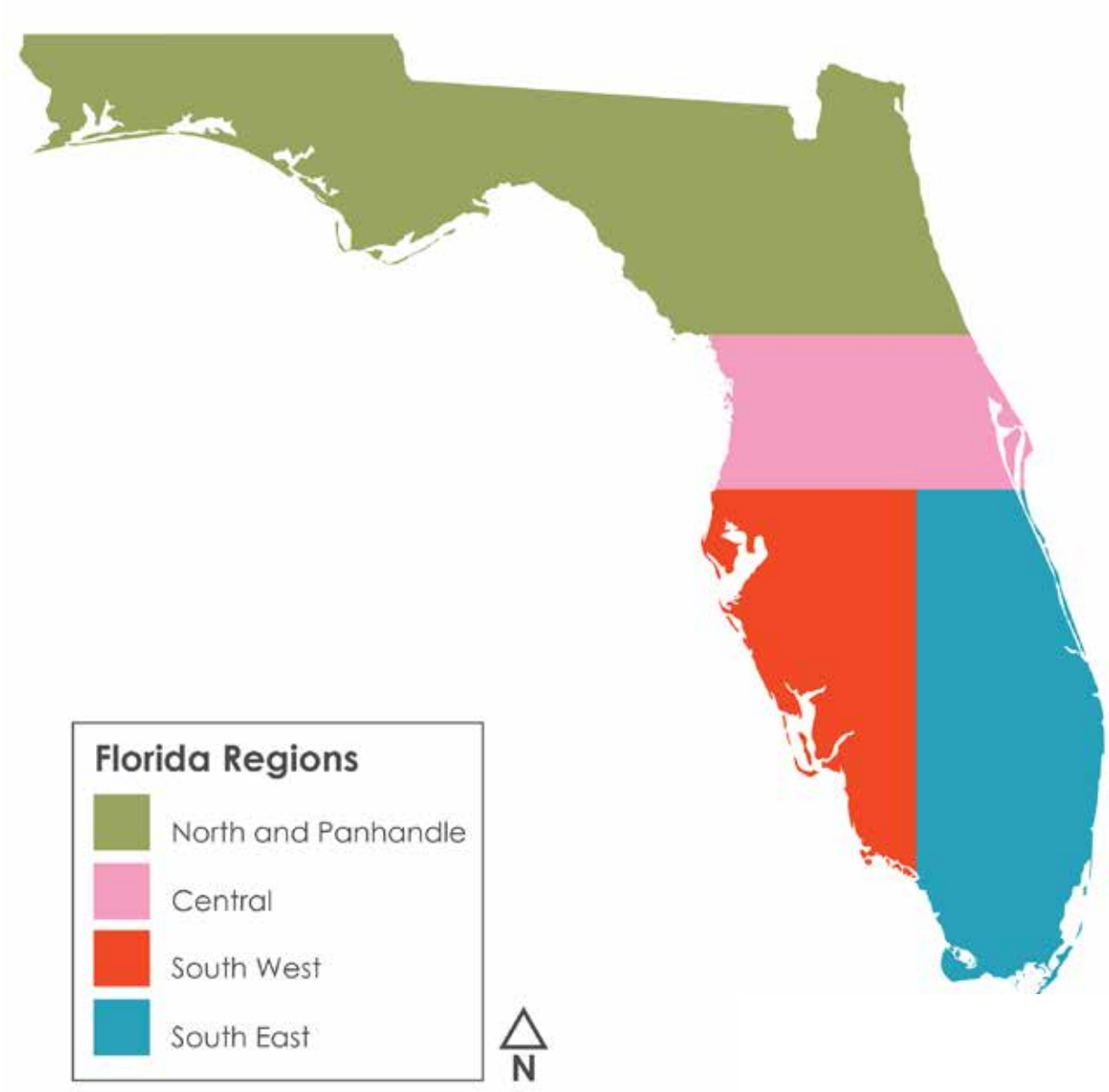
50 FLAGSHIP STRUCTURES

The *50 Flagship Structures* is a shortlist of architecturally significant buildings that define the range of modern design in mid-twentieth century Florida. These well- and lesser-known buildings were chosen based on the following criteria:

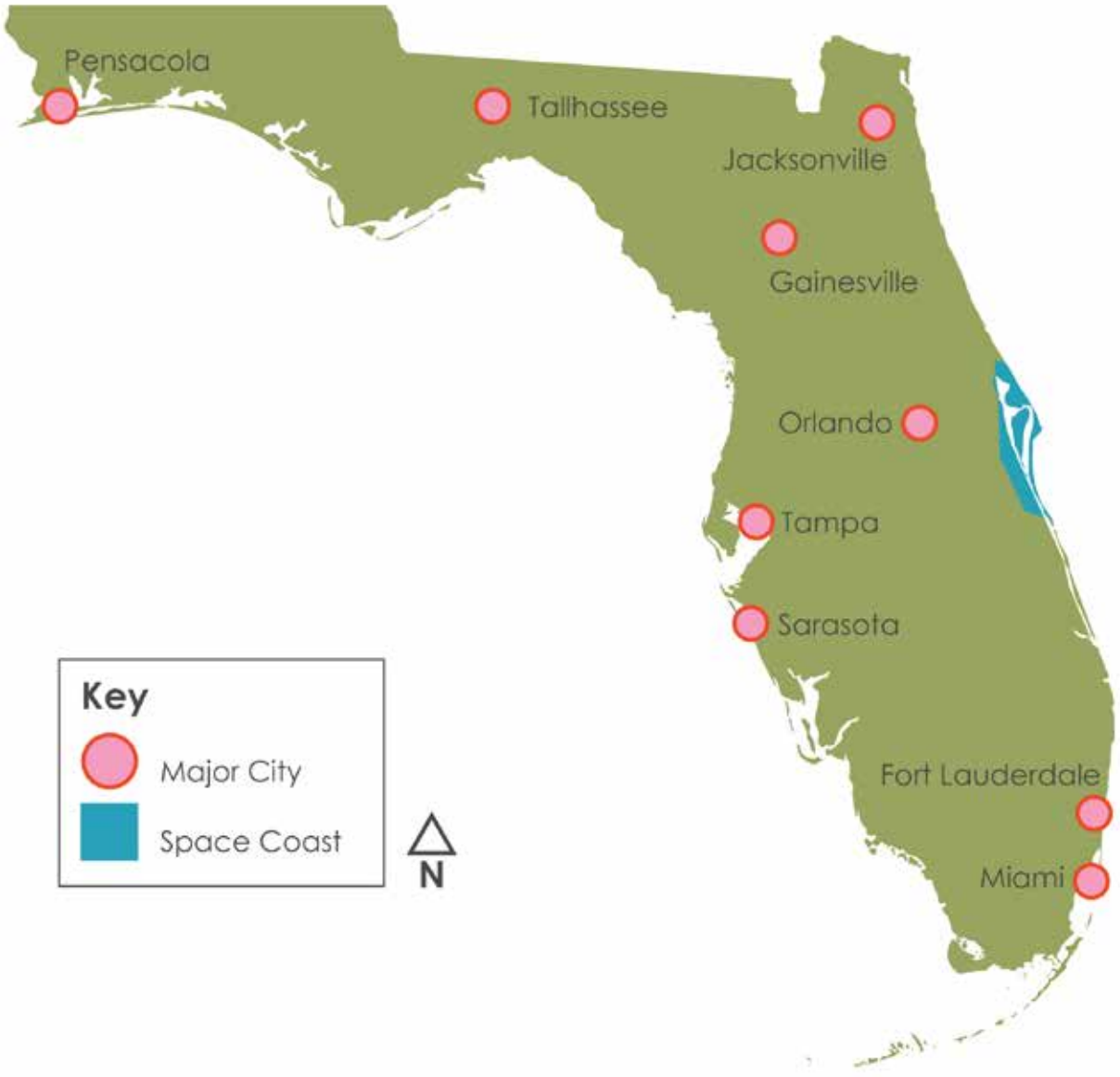
- Must be an architect-designed work.
- Retains architectural and design integrity.
- Building and site exhibit characteristics that define a distinct adaptation of modernism.
- Groundbreaking utilization of materials to forward the science of design and construction.
- Design is an outstanding representative of larger cultural or design context that impacted buildings at mid-century, such as tourism, education, or housing.
- "Outlier" or inventive sites significant for size, scale, materials, planning, and function, representing alternative, progressive, or exuberant approaches to design.

Goldman House
Photo Credit | Paul Privette

FLORIDA REGIONS



MAJOR CITIES



The American Century was launched
and Florida was the launch pad.

T.D. Allman
Finding Florida (2013)

Florida MID-CENTURY MODERN

Architectural Context Statement

THE BUILT ENVIRONMENT OF FLORIDA AT MID-CENTURY (1945-1975)

The built environment of Florida dramatically changed in the decades that followed the Second World War. After years of stagnation caused by economic depression and conflict, the sparsely populated and largely undeveloped state experienced unprecedented growth. Florida was one of the fastest growing states during this period. The economy evolved from one based mainly on agricultural and the extraction of natural resources to one driven by land development to accommodate new businesses and industries and attract increasingly more residents and visitors. As described by scholar T.D. Allman in his book *Finding Florida*:

> *Aside from timber or phosphate Florida had little to sell for money, but what if its millions of acres of empty, unproductive and waterlogged land could be turned into a commodity?*

Between 1940 and 1980, the population of Florida increased by nearly eight million people.[2] This substantial increase can be attributed to a number of factors. The state, for example, became an important training ground for the military during World War II. Bases like Camp Blanding near Starke, Florida, trained tens of thousands of soldiers, some of which, upon returning, chose to relocate.[3] As described by historians Nick Wynne and Richard Moorhead,

> *Many of those who came to the state looking for work or who were stationed here in the military stayed or returned, and in 1950, the permanent population of the state was recorded at 2.8 million, up from the 1.9 million recorded in 1940.*[4]

Interstate migration, however, was the largest contributor to Florida's postwar expansion. The state's population grew four times faster than the national average between 1950 and 1958. Gains in residents aged 17 to 45 was 46 times greater. Many of the new residents were also people choosing to retire to the state. The number of residents 65 years or older increased by 93.1% as compared to 23.4% nationally.[5] A rise in birth rates also added to the population swell. What became known as the postwar "Baby Boom" impacted Florida with a 98.4% growth in school-aged children between 1950 and 1958.[6]

In 1949, when Cape Canaveral was chosen as the test site for missiles and the nation's burgeoning space program, Brevard County became the fastest growing county in the country.[7] According to William Barnaby Faherty in

Aerial view of the 36th Street interchange on I-95, Miami, Florida. 1970s. Courtesy of State Archives of Florida, Florida Memory.

Florida's Space Coast, from 1950 to 1960:

> *Brevard soared from 23,653 to 111,435 individuals, an incredible increase of 371 percent, almost five times as high as the state's average and 19 times higher than the national average for counties.*[8]

The influx of new people continued throughout the 1960s and into the 1970s. From 1965 to 1970, migration accounted for two-thirds of the state's population growth. By 1975, there were 7,400 new arrivals each week accounting for 90% of growth. Along with economic opportunity and a relatively low cost of living, new residents chose Florida for its climate and geography. One journalist writing about Sarasota captured the appeal of many of Florida's coastal communities:

> *Sarasota greets the newcomer, with its fine climate, its colorful tropical flowers, lush foliage and its beaches and sunshine. All of this city's advantages are here for your enjoyment… Sarasota is geared to a charming and comfortable pitch. A lovely place in which to vacation, to visit, or settle.*[9]

Migration and visitation to the state were facilitated by the construction of Interstates 95 along the east coast and 75 to the west. Authorized by the Federal Highway Act of 1956, Interstates 95 and 75 connected Florida to the Midwest and East Coast, respectively. I-95 was constructed over a 16-year period beginning in 1960 and linked Jacksonville in the north to Miami in the south. Opened in 1963, the first segment of Interstate 75 extended from Georgia south to Lake City and Gainesville. The highway was then extended, terminating in Tampa by 1969. (A later extension to Naples and then west to Miami was planned in the late 1960s and completed by 1990.)

During the mid-twentieth century, Florida, which had been attracting visitors since the late-nineteenth century, became a major tourist destination. A 1951 *Tampa Bay Times* article described the upswing in tourism:

> *Florida is enjoying its biggest and most profitable tourist season, more people having come here for health, recreation and happiness than ever before. Tourism, Florida's greatest single source of income, once was a seasonal business, limited largely to Winter months. But it has rapidly become a year-round business. During the past two Summers tourism in Florida has increased by an estimated 60 per cent.*[10]

The opening of Walt Disney World outside of Orlando in 1971 fortified Florida's position as one of the most visited states in the country.

Florida's tremendous growth during the postwar era was also made possible by the advent of air conditioning. Early attempts at air conditioning were made

in the 1850s by Florida's Dr. John Gorrie. He discovered a process for creating "artificial" ice and cold air when the pipes froze in a steam compressor running during a warm evening. Yet, more than a century passed before air conditioning found a common use in architecture, based upon a modern system created by Willis Haviland Carrier. First implemented in commercial structures, such as theaters, air conditioning in the form of window units began to appear in Florida homes in the 1950s and proved instrumental in the state's development, particularly the southern region. *The Atlantic* article, "Keepin' It Cool: How the Air Conditioner Made Modern America," describes the significance of air conditioning in the development of the American Southeast and Southwest:

> *Many of the central changes in our society since World War II would not have been possible were air conditioning not keeping our homes and workplaces cool. Florida, Southern California, Texas, Arizona, Georgia, and New Mexico all experienced above-average growth during the latter half of the 20th century—hard to imagine without air conditioning. In fact, the Sunbelt's share of the nation's populations exploded from 28 percent in 1950 to 40 percent in 2000.* [11]

View of tourists in the streets at Disney World - Orlando, Florida. 1971. Courtesy of State Archives of Florida, Florida Memory.

By 1975, Florida had 152 people per square mile – the highest density of any of the southeastern states. The national recession and, in particular, its impact on construction abated, at least temporarily, this rate of expansion. However, by then, Florida boasted the top five areas for population growth in the United States – Fort Myers, Fort Lauderdale, Sarasota, Hollywood, Orlando, and Tampa-St. Petersburg.[12] These municipalities and surrounding regions were evaluated as part of a study published in *The Florida Geographer* in 1970. The study assessed and characterized nine areas:

> *Gainesville and Tallahassee are dominated by university and government functions; Tampa-St. Petersburg, Orlando, West Palm Beach, and Fort Lauderdale-Hollywood contain sizeable retirement populations and are dependent upon tourism; Miami is characterized by a large Cuban population and a dependence on tourism and manufacturing; and the economies of Jacksonville and Pensacola are vitally affected by manufacturing industries and nearby military installations.*[13]

These and other Florida cities were transformed and encircled by new suburbs that expanded exponentially.

A 1959 research project undertaken by Dr. John N. Webb, a University of Florida Professor of Economics, described the situation:

> *Recent trends in population growth indicate an increased flow of new residents into small counties in the shadow of the state's big metropolitan areas… Population is backing up as the concentration of people gets heavy in the cities.*[14]

The study indicated that the population growth was due in part to a desire for "space" by people moving from crowded areas in the North. Miami and the area south of Tampa and St. Petersburg were identified as the fastest developing. Much of this expansion was suburban.

Also in 1959, William L.C. Wheaton, Director of the Institute of Urban Studies at the University of Pennsylvania, characterized the American suburb as "the dominant characteristic of our civilization" and that these new communities would absorb "the full impact of our huge population growth." He went on to state that suburbia:

> *…has become a symbol of middle-class status. It has become a way of life which best expressed our materialistic ideals, our frontier love of open space, and our new concern with leisure and the good life.*[15]

Urban centers across Florida were also redeveloped during the mid-century era as a proliferation of new government, civic, and commercial buildings replaced existing ones. Some of these structures were built as part of urban renewal projects. Urban renewal was a federally-sponsored program of financial cooperation with municipal governments to eradicate slums and blighted areas.[16] The program began in 1950 with states more fully participating by 1954. A Supreme Court decision overturned a Florida prohibition on urban renewal in 1960. The first two test cases were in Tampa.[17] This rapid transformation of Florida's built environment coincided with a significant shift in American architecture. Modernism became the predominant design approach.

Modernist architecture was first introduced to the United States through the Prairie and Organic Style buildings of Frank Lloyd Wright and the International Style work of Richard Neutra, among others. During World War II, European émigrés and modernists – many with an affiliation with the Bauhaus – took positions at architecture and design schools. Founder Walter Gropius, for example, joined the faculty of Harvard University's Graduate School of Design in 1938 after the Bauhaus's first Director of Architecture, Ludwig Mies van der Rohe, had taken over as head of the Illinois Institute of Technology the previous year. These appointments marked a turning point as architecture and design schools chose to teach a modernist approach over traditional methods. By the late 1940s and early 1950s, the first generation of American-trained modernists began to work in commercial practice. Florida provided seemingly unparalleled opportunities to experiment with these new design approaches.

In general, the nation's building stock grew markedly in the postwar years, but construction boomed in Florida. The state built at a more rapid rate than any other throughout the 1950s.[18] In Broward County for example, $55 million in new construction occurred between 1945 and 1952 including accommodations for more than 20,000 new people.[19] The construction boom was due in part to a severe housing shortage. By 1946, Florida

was considering "emergency measures" to provide shelter for an estimated 2.5 million families.[20] That same year, St. Petersburg relaxed building codes and permitting to allow the construction and temporary occupancy of detached garages while a family's house was being built.[21]

The pace of new construction was made possible in part by the use of prefabricated materials, many of which were transformed or developed as part of technology generated from the war effort. These materials and systems were often manufactured locally. Popular materials included breeze or screen blocks, laminated or engineered wood, pre-stressed concrete structural components, and so-called Ocala block (a concrete masonry unit made with crushed limestone from the Ocala region). Early in the mid-twentieth century, the lack of regulations allowed designers to experiment with these materials.

The architects who chose to relocate here, or train and remained in the state, encountered a blank slate. Building codes and regulations, for example, were not implemented in most Florida counties and municipalities until the mid- to late-1960s. The statewide Florida Building Code was officially adopted in 1974. Development along the state's shorelines, waterways, and lakesides were only loosely regulated prior to the environmental protection movement of the 1960s and 1970s. Canal dredging, fill disposal, and swamp draining provided developers with new tracts of land to develop. Suburban "canal" neighborhoods arose, promoting water access from every home, connecting to a series of waterways that led to larger bodies such as the Gulf of Mexico. Plans for the Gulf Intracoastal Waterway, a nine-foot-deep by 100-foot-wide improved water route extending from Carrabelle, Florida to Texas, began in 1939 although construction was not completed until 1967. The work stimulated a regional transportation infrastructure investment.

With the idea originating as early as Spanish colonial occupation, the Cross Florida Barge Canal project was officially launched in 1935 during the Great Depression. The canal was meant to connect and provide a direct route from the Atlantic to the Gulf Coast. Worked stopped in 1936 and resumed in 1942, albeit sporadically. In 1963, the project was re-invigorated with funding allocated by President John F. Kennedy and continued support from President Lyndon Johnson. The goals was to open the canal by the early 1970s. Protests led by Marjorie Harris Carr and other environmentalists helped permanently halt the project in January 1971.[22]

Opposition to the Cross Florida Barge Canal and other large infrastructure projects led to the creation of the Florida Department of Air and Water Pollution control in the 1960s and the Florida Department of Environmental Regulation in the mid-1970s. This focus on conserving Florida's environmental resources mirrored what was happening across the country. During this period, construction was stopped on many major works across the state, suddenly found in violation of new

Construction work on the Cross Florida Barge Canal. 1950s. Courtesy of State Archives of Florida, Florida Memory.

guidelines established to protect wildlife, water, and natural landscapes. One example is Rotonda West.

Rotonda West was representative of any number of southwest Florida housing developments built on drained swampland in the mid-twentieth century. Located along the northern boundary of Charlotte County, on the Cape Haze peninsula, Rotonda West was created in the shape of a giant scribed circle divided into pie-shaped segments. The Cavanagh Leasing Corporation developed the land in 1969 on a large ranching tract formerly owned by the Vanderbilt family and already cleared of timber. The community was expected to accommodate 70,000 people, with seven golf courses, a marina, and 32 miles of canals. The original plan was to connect the waterways to the Gulf of Mexico, but newly established environmental regulations prevented the completion. The developers, and homeowners, then found themselves stuck on dry land, with waterside properties that could not access the nearby Gulf.

The comprehensive integration of efficient building systems and design became a priority for Florida's architects in the middle of the twentieth century, especially as the country entered the 1970s and the energy crisis years. For decades, before the advent of air conditioning, architects had situated structures in ways that accommodated the weather and protected occupants from the intense tropical heat, particularly in the southern regions. Frequent, heavy rainstorms in the summer and occasional hurricanes with high winds added to the mix of climatic conditions. The orientation of windows and the overall shape of the structure mitigated these factors. But designing for modern Florida included more than the incorporation of deep roof overhangs and elevated floor plates. The creation of buildings that were responsive—both indoors and out—became the standard for conservation program design. Life-cycle cost analysis became a critical tool in determining the overall cost of a structure, including the expense of heating, cooling, and everyday operations.

Aerial view of Rotonda West.

Also in the 1970s, the state began to adopt building codes that encouraged higher insulation standards in buildings. The standard was measured by the "U" value, a thermal unit determining the rate at which heat passes through building surfaces. For example, a sheet of glass is less insulating than a four-inch-thick solid concrete wall, which passes more heat than a traditional wood frame with insulation. Central Florida architect Nils M. Schweizer became a leader in the state for energy conservation, discussing his approach in a two-part series of articles published in *The Florida Architect* in November 1975. Solar energy production also began to be incorporated into buildings in this era. The planned community of Sugarmill Woods, on the western coast, led the way by both utilizing solar energy and retaining a natural greenbelt between the houses.

Many of the building types prevalent in Florida's built environment today evolved or originated during the mid-twentieth century.

Commercial-Corporate

Mid-twentieth century Florida saw a significant rise of industry and growth

in commerce. In 1952, over 4,000 new businesses were created, outpacing the national average.[23] Many of these new businesses were outside of agricultural and other industries that had driven Florida's economy prior to the Second World War. In a March 1953 address, the president of Florida Light and Power Company reported the sales of goods manufactured in Florida exceeded, for the first time, those of agriculture and that the number of manufacturing firms doubled from 1944 to 1951 compared with 27% nationally.[24] Beginning in 1955 through 1961, employees in non-farm activities expanded more than one third, in contrast to only six percent in the entire United States. Personal income during that same period climbed 75 percent or twice as fast as the national total.[25] This expansion continued throughout the 1960s. In 1965 and 1966, Florida gained 660 new industrial and manufacturing plants and created 24,000 new jobs. According to a 1967 article titled "Florida's Business Soaring," The *Miami News* proclaimed: "Florida, leaving a trail of smashed economic barometers in its wake in reaching a business peak in 1966, is looking for more of the same this year."[26]

This surge in new businesses and industries necessitated the rethinking of existing building types and the creation of new ones. Since the early skyscrapers of Chicago such as the Rand McNally Building (1911), and New York City's Woolworth (1912) and Chrysler (1930) Buildings, the corporate office tower was viewed as a symbol of the company it housed. This branding through design continued after World War II when modernist architecture was used to project an image of progress and innovation. Prominent examples include Skidmore, Owings, and Merrill's Lever House (1952), and Mies van der Rohe and Philip Johnson's Seagrams Building (1958), both in New York City. Florida examples include the Bacardi Building (1963), in Miami and the Gulf Life (Riverplace) Tower (1967), in Jacksonville.

Beginning with the construction of AT&T's Bell Labs (1942) in New Jersey, the concept of a suburban campus for a corporate headquarters emerged. General Motors, General Electric, and General Life all built corporate campuses in the 1950s. Perhaps connecting industry, science, and nature, early campuses were referred to by a variety of names including industrial park, research park, and technology park.[27] The corporate campus seemed to indicate a higher purpose beyond business. The designs were often meant to encourage interaction and collaboration.[28] Florida examples include the Tupperware World Headquarters (1967), designed by Edward Durell Stone in Orlando, and the IBM Complex (1971), designed by Marcel Breuer in Boca Raton.

With the increased dependency on the automobile, the shopping center or strip mall also became popular during the post-World War II period. Florida's mild climate was particularly conducive to this type of retail building. Lincoln Road Mall in Miami Beach (1960), designed by Morris Lapidus, is perhaps the state's best example of the conversion of a street from automobile to pedestrian to create a type of outdoor mall with shops, restaurants, and amenities for leisure and recreation.

Educational

More public schools were built during the decades that followed the Second World War than any other time in Florida's history. A severe classroom shortage resulted from a surge in student enrollment as the first of the Baby Boom generation reached school age and families relocated from other states. The strain on public schools was

so pronounced that, in January 1958, the Program Committee of the Florida Educational Association urged revising the property tax law to help fund new facilities and more teachers. The Committee's remarks underscored the critical need:

> *…there are no alternatives. Florida's increasing enrollment is the direct result of Florida's population growth and if we fail to meet the educational needs of this growing population, Florida's growth and progress will stop dead in its tracks.*[29]

The situation was further exacerbated by aging school facilities neglected from decades of depression and war. The creation of suburbs in previously undeveloped areas also added to the need for new schools. Communities across the state responded in a variety of ways with some constructing temporary structures, utilizing prefabricated units, or even offering two school sessions in a day.

Though varied in their architectural expression, many of the state's mid-century schools employed new, often prefabricated materials and systems that helped create flexible, multipurpose buildings that could be adapted to changing pedagogies. This was the era of the combination cafeteria, gymnasium, and auditorium. The use of prefabricated components also allowed for efficient, lower cost construction. A 1953 *Time* magazine article summarized this approach to school design.

> *Both academically and architecturally, the keynote of the new U.S. school is freedom. In some ways, the building of a new school is nothing more than a process of elimination. The whole idea is to eliminate as many blocks and barriers as possible. Air must flow and light flood in; the building must be capable of shrinking or growing according to the tides of population, and it must be made for use at all hours of the day.*[30]

Capturing the sentiment of most school facility planners of the period, the article extolled the virtues of modernist design principles and removing "such traditional grimcracks as Greek columns, Georgian domes and Gothic towers".[31]

In Sarasota, between 1954 and 1960, nine new facilities radically transformed the city's educational environment of and offered a new precedent for school design across the state and nationally. These five buildings and four additions would collectively be branded the Sarasota Public School Program.[32] The program received national acclaim for promoting innovative architecture in support of progressive pedagogy and their modern designs were widely published in professional journals and popular magazines. The architects of the Sarasota schools experimented with national trends in educational facility planning. Many of them, for example, employed campus, finger, or cluster plans (or a combination thereof) with individual, one-story structures separated by central, exterior spaces and often connected by covered walkways. This approach, among other benefits, allowed for future expansion. The concept of flexibility also influenced classroom design. Among the more radical examples were the additions to Fruitville and Englewood Elementary Schools, both by Jack West. These new wings contained early examples of open plan classrooms with folding accordion

walls that allowed spaces to be expanded and combined to support a team-teaching pedagogy. The program in Sarasota was indicative of what was occurring statewide.

A modernist design approach was also chosen for the new buildings constructed at the University of Florida, replacing the red-brick and cast-and limestone of the 1920s Collegiate Gothic style campus. At the same time the University of Miami's campus masterplan was designed by architect Marion Manley in collaboration with Robert Law Reed. She was also responsible for one of the University's first postwar, modern classroom buildings. Brutalism also became a popular design style for college campuses in Florida beginning in the late 1960s and continuing into the 1970s. The 1960 Miami Dade North College (originally Community College) Campus, for example, was initially designed in a Brutalist style.

Governmental

During the mid-twentieth century, modernism was adopted as the most appropriate architectural expression for new government facilities. The federal government's General Service Administration (GSA), for example, required that all new buildings be designed in a modern style. The GSA "was established in 1949 to consolidate the government's immense building management and general procurement functions." The period from 1950 through 1970 was an era of tremendous growth for the federal government and the GSA oversaw the construction of well over a thousand structures including office buildings, courthouses, and post offices. The policy on modern design emerged in 1962 when President Kennedy's Ad Hoc Committee on Federal Office Space developed "Guiding Principles for Federal Architecture." The initiative called for:

> *…the dignity, enterprise, vigor, and stability of the American National Government. Major emphasis should be placed on the choice of designs that embody the finest contemporary American architectural thought.* [33]

The modernist buildings of the GSA were not concerned with the past, but looked forward. The architecture projected an image of progress and innovation as the nation rapidly developed and assumed a greater role on the global stage. Examples in Florida include the Federal Courthouses in Fort Lauderdale (1975) and Gainesville (1964) and the Winter Park Post Office (1965). Many of the buildings incorporated commissioned art work and included an outdoor public plaza or landscapes – both hallmarks of modern civic buildings from the mid-twentieth century.

The federal government influenced what was happening on the state and local level. In 1971, for example, Edward Durrell Stone – a nationally and internationally prominent architect – prepared a master plan for the construction of a new, modern capital complex in Tallahassee. The new capital, including a 22-floor executive office tower, were completed in 1977. Many new municipal and county buildings followed the state precedent, including Gainesville's City Hall (1966), Sanford's Civic Center (1958), and Jacksonville's Haydon Burns Library (1965), to name a few.

Recreational-Tourism

A 2003 publication *Southern Journeys: Tourism, History and Culture in the Modern South* argued that tourism was "one of the most powerful economic forces in the modern south."[34] Florida led the south in visitation in the 1950s, 1960s, and 1970s. The prosperity of the growing middle class

and advent of automobile culture helped propel the state's tourism at this time. Many of the pre-1971 Disney World tourist destinations focused on Florida's natural environment:

> *After World War II, the tourist industry quickly became Florida's biggest source of income. At first, the only thing for tourists to see was the natural beauty of Florida. The miles of white sandy beaches, the Everglades with its alligators, panthers and birds, the Florida Keys, with its coral reefs and sport fishing, and the forests of the national parks attracted many nature lovers. There were activities such as fishing, hiking, boating, and swimming taking place throughout the state, but above all, the visitors came to soak up the sun and relax.* [35]

The springs attractions, in particular, were popular at this time, including Silver Springs and Weeki Wachee. The visitors' centers for both sites were constructed in a modernist style.

Tourist destinations also included Florida State Parks. The state's park system was established by the Florida Legislature in 1935 and, according to historian and scholar David. J. Nelson, were meant "to create several roadside attractions in order to jump-start Florida's tourism trade."[36] Examples of mid-century modern park architecture includes the visitor centers at Cedar Key (1962) and Crystal River Preserve State Parks (1960s).

Underwater Aqua Theater, Weeki Wachee Spring. Courtesy of State Archives of Florida, Florida Memory.

The 1971 opening of Disney World's Magic Kingdom in Lake Buena Vista, outside of Orlando, ushered in a new era for Florida tourism. The unprecedented project and its impact on the region's growth afforded new opportunities for well-known architects like Los Angeles-based Welton Becket and California designer Donald Wexler, who designed the Contemporary Hotel (1971) for Walt Disney.

Residential

While the majority of the state's postwar houses were suburban and other ranch-style types offered by builders and developers, Florida served as a laboratory for architects to experiment with new modes of living, particularly in a warm climate. Abandoning more traditional, inward looking forms like the center-hall colonial, mid-twentieth century architects explored how to connect the residential interior with its surroundings. As described by John D. MacDonald in his 1954 *Dead Low Tide*:

> *…There is a way to live in Florida – a way of turning a house inside out, so there is no real transition between outdoors and indoors. Glass and vistas and the good breeze coming through. Tile and glass and plastic, so there is nothing to absorb the dampness…*

In Sarasota, between 1946 and 1952, Ralph Twitchell and Paul Rudolph designed a series of residences whose open floor plans and permeable and movable walls helped capture ocean breezes and promote cross ventilation in the absence of air conditioning. Many of the houses were raised off

Interior of Twitchell House on Siesta Key. Photo by Steinmetz, courtesy of State Archives of Florida.

the ground to combat dampness and occasional flooding. Twitchell and Rudolph also employed indigenous materials including cypress wood and regionally manufactured products such as cast concrete block from nearby Tampa and Ocala, Florida. These local materials were sometimes combined with new technologies, such as the Lamolithic concrete structure of the Revere Quality House (1948) and the so-called "cocoon" material, a type of vinyl used on the catenary roof structure of the Healy Guest House (1950). Rudolph distilled and offered five principles that described his and Twitchell's architectural approach: clarity of construction, maximum economy of means, simple overall volumes penetrating vertically and horizontally, clear geometry floating above the Florida landscape, and honesty in details and structural connections. [37]

This era also witnessed the construction of many multi-family apartment complexes like Birch Tower in Fort Lauderdale. These types of developments were made popular in part because of the advent of central air conditioning. Designed by architect Charles McKirahan, the 1960 tower and adjacent, low-rise apartment buildings took advantage of the latest technology. A 1960 Fort Lauderdale News article titled "Birch Towers 'Makes' Weather," claimed the "York's Three-Pipe induction system" provided "dial-your-weather convenience" for each of the buildings 75 residential units. Next to Boston's Statler Hilton Hotel, Birch Tower was only the second building in the country to use the system.[38]

Spiritual

As discussed in a 1962 Tampa Tribune article, a significant change occurred in the design of churches, synagogues, and other religious and spiritual buildings:

> *We have all been aware of the many modern and attractive church buildings that have appeared in the country's changing landscape. But it may not be generally known that they reflect a distinct break with traditional structures first made some 30 years ago. Since then, church design has engaged the talents of the world's most distinguished architects.*[39]

The article noted specifically changes in structural materials that allowed for more exuberant forms including the use of steel and reinforced concrete.

Architects specializing in the design of spiritual buildings separated into two principle camps: the symbolists and the functionalists. Symbolists began their design process by examining "the nature of the community," as well as the characteristics of "the encounter," and "the faith" to create a symbolic structure representing the congregation. Functionalists instead relied of making the "space fit the action contained in the space," examining the action of worship at the altar, or the need for processional areas and events, such as sacraments and baptisms. The beginnings of post-Modernism were seen in the south, with architects such as Morris Lapidus drawing heavily on historic precedent for his resort hotels along the beach.

Modernist Architects in Practice

The history of architects and architecture in Florida in the mid-twentieth century is marked by innovation, collaboration, and experimentation along with a significant shift in architectural design. Florida had always welcomed unusual and sometimes outrageous explorations in architecture, including the nineteenth-century fantastic railroad hotel resorts built by Henry Flagler and his rival Henry Plant, in modified Gothic Revival, Italianate, Romanesque, and Moorish styles. No one "style" dominated in the state in the twentieth century, which, early on, hosted buildings drawing on variations of the Mediterranean Revival, Art Deco, and a New England vernacular. In modernism, however, regional forms are evident. Florida's mid-century architects addressed climatic, geographic, and cultural concerns across the state, from the hilly pine forests of the north to the white sand beaches along the coast, to create distinctive designs unique to each area.

Many of the architects that established the mid-century modern character of Florida design arrived here from throughout the United States and internationally, bringing with them a more comprehensive worldview and perhaps a greater willingness to experiment in their craft. For example, Prentiss Huddleston and Paul Rudolph arrived from Alabama, Carl Abbott from Georgia, Irving Horsey and Victor Lundy from New York, Gene Leedy from West Virginia, Nils Schweizer from Maryland, Charles McKirahan from Oklahoma, and James B. Holliday from North Carolina. The state was also the beneficiary of the imported talents of Morris Lapidus and Igor Polevitzky of Russia. Native Floridians who practiced in the state included William Morgan and Robert Broward of Jacksonville, Ogden Houstoun from Miami, and Maurice Holley of West Palm Beach. The associated database of architects and the architects biographies (the basis for the survey) detail more of this information.

The greater part of this context has been compiled from a comprehensive reading of *The Florida Architect,* the monthly journal of the Florida Association of Architects (the FAA was renamed the Florida Association of the American Institute of Architects or FAAIA in late 1965). Th AIA named Florida Architect "one of the four best state architecture magazines in the country," in 1956, with a circulation of 3,000.[40] Luckily for researchers, in the late years of the 20th century, AIA Florida President S. Keith Bailey focused on "rescuing back issues," of the magazine "from a mechanical room with a leaking roof."[41] That effort resulted in a considerable archive of materials, now available online through the University of Florida.[42]

During the study period of 1945-1975, the journal reveals that architects in mid-

century Florida grappled with the realities of an increasingly complex industry. More stringent regulations on design and construction, as well as changes within their own profession, required a higher level of professionalism and leadership. At annual meetings of the Florida Association of Architects the participants frequently addressed new standards of practice, education, ethics, and the rise of larger firms as collaborative design institutions. Other topics of discussion included a challenge "to combat ugliness," recycling and renewal of structures, and efficiency as the nation faced an ongoing energy crisis.

1940s

In 1940, the Florida Association of Architects (FAA) officially became an affiliate of the American Institute of Architects, joining 13 other states associated with the nationwide professional organization. Many of Florida's mid-century architects served in the military during World War II. Ralph Twitchell, of Sarasota, closed his architectural and construction firms and re-enlisted in the Air Force (1942-1945). His colleague, Paul Rudolph, left Sarasota to attend the Harvard Graduate School of Design but paused his education after one year to enlist in the United States Naval Reserve (1942-1946). His experience with maintaining ships informed his design aesthetic and approach to industrial materials.[43]

Also in Sarasota, Victor Lundy was awarded a Purple Heart for his service with the U.S. Army from 1943-46. A collection of 158 of his wartime pencil sketches is now held at the U.S. Library of Congress, created when he was only 19 years old.[44] Experience on the war field was widespread for the young students and professionals who later led the state's design genesis in the 1950s. For example, nearly all of the architects that made their mark in the "Sarasota School" of design served during or immediately after the war, including Bert Brosmith (1946-1947), Mark Hampton (1943-1946), Philip Hanson Hiss III (1942-1946), William Rupp (1945-1946), Edward (Tim) Seibert (1945-1946), and Jack West (1944-1946). In 1944, the FAA cancelled all dues for architects in the military.

Kunio Mayekawa, the father of modern Japanese architecture (who also worked with Le Corbusier), synopsized the challenge facing architects after the war: "the optimism of the early twentieth century has been destroyed completely by two world wars, and people have been struck dumb with confusion...Today, it must be the task of the architect to assemble the broken pieces of brick and rebuild the human environment from no other motivation than real human need."[45] When the war effort ended, construction began in earnest and the architects went back to work. In 1945, the official magazine for the organization was established. In addition, three Florida chapters, North, Central, and South, were merged after the war ended. Two years later, the Florida Association of Architects changed its name to the Florida Association of the American Institute of Architects (FA/AIA) and held the first state convention in St. Petersburg. In 1947, the organization counted 181 members.[46]

The history of Florida architecture at mid-century is tied closely to the presence of a number of charismatic and ambitious land developers. Phil (Felix) Sadowski, for example, worked in the Florida Keys, moving to Florida from Detroit. He first constructed the Paradise Beach Hotel in Pensacola, started a few buildings in Miami and then "discovered" the keys in 1949. He purchased large tracts of land and built small houses that the average person could afford, eventually working with his son Chester and creating the Sadowski Building Company. His vision

included subdivisions (56 acres on Marathon Key), and motels (the 1951 Key Motel and Lounge with 125 motel and efficiency units).

1950s

These lines of focus are also seen in a sampling of the agenda items and topic themes of the FAA and AIA annual conventions, covered in *The Florida Architect* beginning in 1954. In July of that year, Paul Rudolph, of Sarasota, presented his remarks on the "Changing Philosophy of Architecture" during the national AIA convention in Boston. Rudolph spoke eloquently on the range of expression in modern architecture, urging "the creation of living, breathing, dynamic spaces of infinite variety, capable of helping man forget something of his troubles."[47] Like others in his field, he bemoaned the lack of imagination in vernacular architecture and the bland sequences of spaces on city "super-blocks." Fellow speaker and master modernist Eero Saarinen, FAIA, of Bloomfield Hills, Michigan, promoted the idea that "each age must create its own architecture out of its own technology and one which is expressive of the spirit of its own time."

In 1954, the main topic at the 40th Annual Convention was "unity," with an agenda to establish architects as primary leaders of the building industry through closer connections with allied professionals, such as general contractors and engineers, including the establishment of joint committees.[48] Also, in that year, the organization reformatted the *F.A.A. Bulletin* and reintroduced it as an official monthly professional journal called *The Florida Architect*. The FAA separated the state into three sections for chapter membership, North, South, and Central, with a separate Student Chapter for attendees at the University of Florida in order to accommodate a growing constituency.

In 1956, the American Institute of Architects recognized Marion I. Manley, of the Florida South chapter, as the first woman from Florida to be named an AIA Fellow.[49] The Florida Association instituted its design awards program that same year and selected eight designs in the state worthy of citation, split between Miami and Tampa. In Miami, the jury selected the DuPont Building, Bal Harbour Club (Alfred B. Parker), University of Miami Library (Watson and Deutschman), Biscayne Federal Savings and Loan (Weed, Russell, Johnson Associates), Jerome H. Weinkle Residence (Watson and Deutschman), and Dade County Medical Association (Robert M. Little). Tampa-area architects won awards for Palma Ceia Baptist Church Stained Glass (Meyers Associates), Chastain Residence (Mark Hampton), and Sears Roebuck Shopping Center (Weed, Russell, Johnson Associates).

In the mid-1950s, the State Board of Architecture determined to adopt the codes and registration requirements outlined by the National Council of Architectural Registration Boards, stating that licensed Florida architects must be citizens of the United States, at least 25 years of age, graduate from an approved curriculum in an accredited architectural school, and have a minimum of three years of diversified training in the offices of registered practicing architects. The 1954 F.A.A. convention also endorsed new acts within statewide planning and zoning boards, including Regulation of Building in Mapped Streets.

1960s

The U.S. National Aeronautics and Space Administration (NASA) was founded in 1958. Florida was selected as the site to support the Apollo lunar landing project, established on a 140,000 acre site on Merritt Island near Cape Canaveral

(now called the John F. Kennedy Space Center). In 1962, NASA commissioned the architectural consortium of URSAM from New York to begin design for the "Vertical Assembly Building," or VAB (now referred to as the Vehicle Assembly Building), called "The Largest Building in the Free World." The design team (formed for the development of this building specifically), included architect Max O. Urbahn, with structural engineers Roberts and Schaefer, mechanical and electrical engineers Seelye, Stevenson, Value and Knecht, and foundation specialists Moran, Proctor, Mueser and Rutledge. The structure was required to withstand hurricane-force winds from the coast and accommodate three or four rockets simultaneously, assembled in upright position ready for launch.[50] The building covers eight acres, measures 716 feet long and 518 feet wide. The "high-bay" is 525-feet tall and can accommodate four stations; the low-bay has eight stations and is only 210-feet tall. The steel-frame structure can withstand winds of up to 125 mph with an air-conditioning system equivalent to that needed by 3,000 houses within 130,000,000 cubic feet of space.[51]

In 1962, Governor Farris Bryant established the Florida World's Fair Authority and appointed Comer J. Kimball (Chairman of the First National Bank, Miami), to head the new corporation. Two architectural firms took the lead on the design of the Florida pavilion for the New York-based World's Fair. Pancoast, Ferendino, Grafton, Skeels and Burnham (with Edward G. Grafton as project manager), and Connell, Pierce, Garland and Friedman (with James Garland as project manager), developed a fair-ground type area on the 3.12 acre, waterfront site. Two circular pavilions framed the soaring "Citrus Tower," a steel, triangular truss topped by a gigantic fiberglass orange. The $5 million-project was expected to draw a good number of the expected 18-million visitors to the fair during its two year run of 1964-1965. The Citrus Tower was the "first structure completed and lighted on the Fair Grounds," and provided "the symbol for the State of Florida."[52]

In 1964, the organizing principle of the 50th-annual convention was "fellowship," leading to a statement of goals and purposes for the next year. These resolutions included an effort to build up the organization by establishing a study committee within the Florida Legislature to provide oversight for design and construction. An outreach campaign to "deepen and strengthen communication" between the eleven FAA Chapters, student chapters and the general public was addressed.[53] The FAIA President noted "considerable growth in the Mother Chapter, Florida Central," due to expansion of the population and associated building industries.[54] The chapter was reorganized that year to include Manatee, Sarasota, Charlotte, Lee, De Soto, Highlands, and Hardee counties. Also, during that year, the FAA resolved to coordinate and organize no less than the entire "construction industry," composed of allied groups including "mortgage bankers, insurance underwriters, design professions, general contractors, specialty contractors, heavy construction contractors, materials manufacturers and distributors, home builders, building and zoning officials, sanitation and health regulatory agencies," among others.[55]

An analysis of the profession for 1964 (published in late 1965), was undertaken to provide data on the financial health of the industry. The numbers also promote the importance of architects in the economy of the state. The study revealed that architects paid out $103.5 million in salaries, expenses and earnings towards $2.07 billion in construction contracts. The architects collectively generated

$725 million in economic terms, "since each dollar can be traced through at least seven transactions within the state," demonstrating the reach and collaborative nature of the profession. The questionnaire was answered by 374 firms in the state representing 3,723 employees, a 34% return rate of the 1,003 cards distributed. The survey found that the majority of architects and draftsmen were under the age of 50 (average age 40), two-thirds of the firms were sole proprietorships, and most firms operated as "general practices," rather than specializing in one type of design (residential, commercial, public). The average annual income for a registered architect was $12,020; engineers earned slightly less at $11,460, and secretaries and draftsmen were closely matched at $4,220 and $4,925, respectively.[56]

At the 1965 convention, Florida Governor Haydon Burns addressed the annual theme of "Quality," stating that "we can either be content with mediocrity or strive for quality...You can only attain success as an architect if you insist on quality. Very frankly, the competition between you and your colleages will allow you to settle for nothing less." In response, the FAA published an unusual challenge for the governor to "call a state-wide conference on beautification" including "mayors from every corner of our state." The architects hoped to stem the move towards economy in design which resulted in large swaths of land being developed with inexpensively constructed buildings. Nationally, road beautification programs focused on improving the portals into cities. But architect Fotis N. Karousatos declared in a published statement that "the ugliness of these cities and the ugliness of the environment are problems requiring just as much attention as our roads," and called upon every architect to act as a leader, hand-in-hand with investors, to improve the urban environment.[57] James Deen, AIA, incoming president of the FAA, brought with him an interest in historic preservation as well, leading the movement to preserve the Douglas Entrance Building in Coral Gables. In his remarks. Deen noted three qualities to aspire to for 1966, in both buildings and in the association: good function, good structure, and "not forgetting the third quality of beauty."[58]

1970s

In 1974, the theme for the 60th annual convention of the Florida Association of the American Institute of Architects (FAAIA), was a "Quest for Excellence," or "a search with inward and outward directions...a pursuit that is the purpose of our lives."[59] C. Randolph Wedding, the mayor of the City of St. Petersburg and also a registered architect, wrote a long missive on the obligation of architects to participate in city government. He asserted that "by and large, [architects] are needed--and needed now--to fill major roles in the lives of our communities. This is particularly true for us as Floridians."[60] Wedding asserted that "I truly believe that our time has come. Our talents are needed."[61]

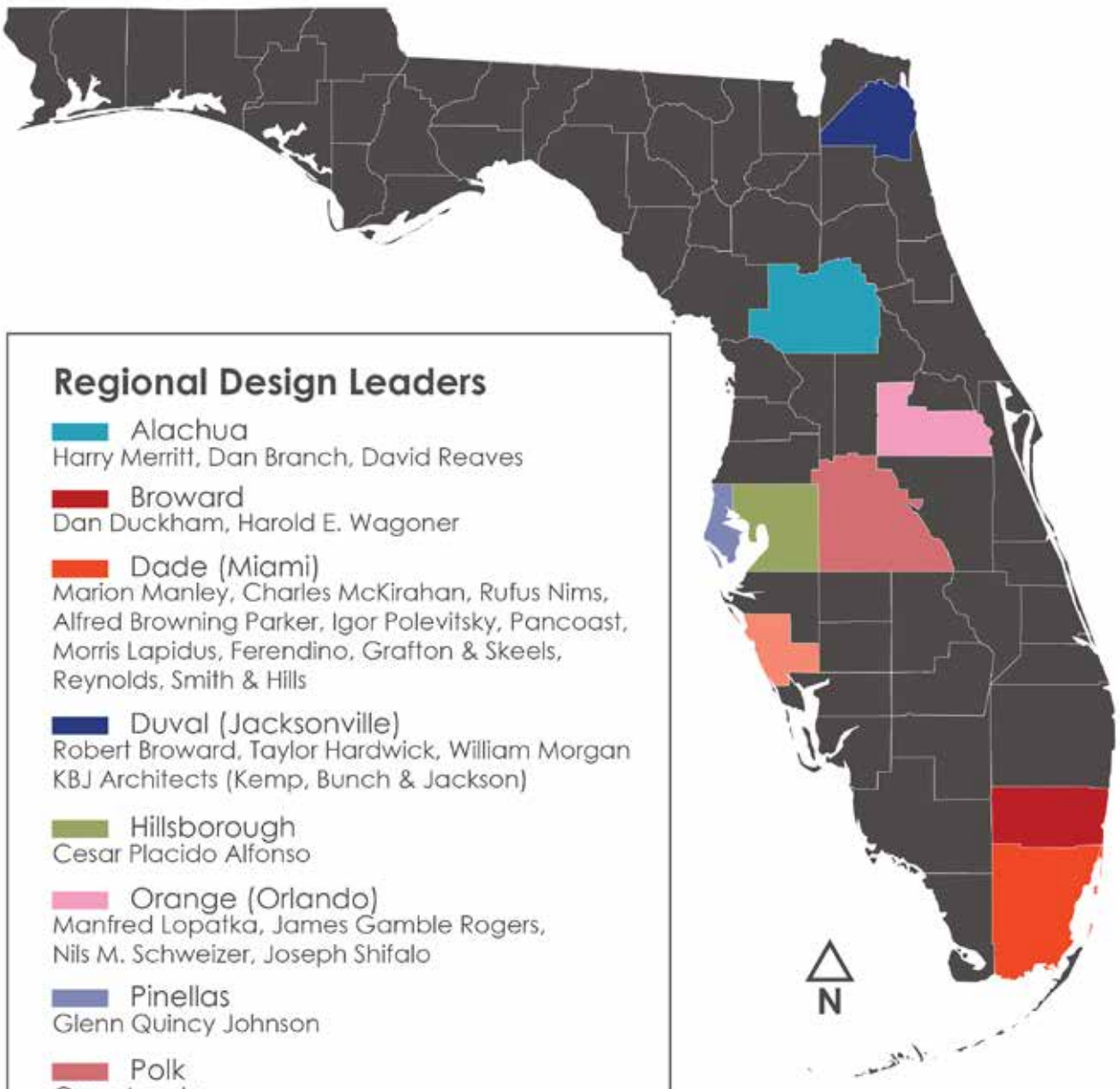
By 1975, the theme for the conference had changed course to "Impact," focusing on the forces shaping architectural practice. During the keynote speech, William W. Caudill, FAIA (of the large firm Caudill, Rowlett, Scott, Inc.), identified seven impact items "which will shape the five-year future of architectural practice," including government, recycling, consumerism, accountability, profession, process, and product. New regulations included a rise in "life-cycle" costing for government contracts which required architects to analyze the long-term expense of a product, demonstrating that more expensive, higher quality products might

cost less over the years. In October 1974, the National Bureau of Standards passed the Federal Fire Prevention and Control Act, and new government guidelines addressed flammability of interior materials and furnishings, further changing the field of products available for architectural use. Caudill emphasized that the rise of "building systems," relied less on craftsmen and more on "assemblers." The expense involved with new construction demanded more "recycling" and a greater interest in historic preservation. Lastly, the growing role of the computer in architecture was acknowledged, particularly in energy analysis as well as life-cycle costing.[62]

The idea of "modernism" in Florida was not limited to architectural design. Indeed, the period encompassed comprehensive lifestyle changes as well. Families looked to architects to accommodate an emphasis on indoor/ outdoor living, recreation spaces (the Rumpus Room made an appearance), at home entertainment areas, and more casual spaces for family gatherings. Windows became larger, eventually becoming a key feature of many spaces (commercial and residential), interior spaces opened up freely to one another (breaking the small room and hallway structure of previous eras). The architects chose to solve new problems with new forms, rather than rely on outdated patterns and traditional formats. The result was a true expression of the current time, not a revival or repurposing of the past. Even in the adoption of modernism, there remained a "desire among architects to portray a human warmth in their buildings...a human appreciation and relationship...considerably above and beyond merely providing structures which function and work well." R.J. Lyman, executive director of the Pre-stressed Concrete Institute, called this type of design "functioning with feeling," or "transforming a cold, mathematical machined type structure by giving it spaces and a chance to breathe."[63]

Overall, the architects and clients were moved by a positive view of the future and an embrace of new techniques and ideas. Throughout the period, the architects and patrons were inspired by the twin ideas of clarity and beauty, tangible in the structure, plan, and execution of the designs. The finished buildings displayed an "honesty" in design, defined by exposing the relevant parts of the structure and remaining allegiant to the nature of materials and use. The inside of the building often looked like the outside: the glass walls and steel framework made up both the façade and the living room. In many mid-century works, the character of the materials and the connections between the relevant parts of the structure are the only decoration. However, many designers did incorporate natural materials, such as stone, and colorful elements, such as mosaic tile, to add visual interest. The clients, of course, further personalized the buildings with furniture, art, and collections. The real key was taking the craftsmanship and care seen in previous eras of construction, and applying that same skill and eye for detail when building with industrial elements. The final creations have a grace and style that remains unique to this day.

REGIONAL DESIGN LEADERS



Regional Design Leaders

Alachua
Harry Merritt, Dan Branch, David Reaves

Broward
Dan Duckham, Harold E. Wagoner

Dade (Miami)
Marion Manley, Charles McKirahan, Rufus Nims, Alfred Browning Parker, Igor Polevitsky, Pancoast, Morris Lapidus, Ferendino, Grafton & Skeels, Reynolds, Smith & Hills

Duval (Jacksonville)
Robert Broward, Taylor Hardwick, William Morgan
KBJ Architects (Kemp, Bunch & Jackson)

Hillsborough
Cesar Placido Alfonso

Orange (Orlando)
Manfred Lopatka, James Gamble Rogers, Nils M. Schweizer, Joseph Shifalo

Pinellas
Glenn Quincy Johnson

Polk
Gene Leedy

Sarasota
Victor Lundy, William Rupp, Edward "Tim" Seibert, Ralph Twitchell, Jack West, Mark Hampton, Paul Rudolph, Jack West, Carl Abbott

Tupperware World Headquarters
Photo Credit | Paul Privette

Architectural Expressions, Forms, and Materials

Modernism is a general term used to describe a broad design movement of the twentieth century with many variations. Though multivalent in architectural expression, modern buildings frequently share in common a focus on functionalism and aesthetic principles and forms that rejected historical precedent and styles. However, given the myriad of materials used and wide range of characteristics, many scholars and others struggle with describing the buildings of the recent past and avoid defining modernism in stylistic terms. There are, however, a number of trends that can be identified and categorized according to shared architectural features.

For more information on mid-century modern architectural trends refer to *Modern Architecture Since 1900*, 3rd Edition (London: Phaidon, 1996), by William J. R. Curtis and *American Architecture Since 1780: A Guide to the Styles*, 4th Edition (Cambridge Massachusetts and London: MIT Press, 1996) by Marcus Whiffen.[64]

Annie Pfeiffer Chapel, Frank Lloyd Wright
Florida Southern College, Lakeland. Florida

Organic Architecture

- Sympathetic and well-integrated with natural context
- Visual and physical connection to exterior
- Use of natural materials
- Organic shapes
- Unified design with repeating elements and details

Photo Credit
Artie White / CC BY-NC 2.0

Spring House Interior, Frank Lloyd Wright
Tallahassee. Florida

University Gallery and College of Architecture and Fine Arts
University of Florida, Gainesville, Florida

Formalism (also referred to as Neo-Formalism or New Formalism)

- Monumental in scale
- Incorporates classical or traditional elements like colonnades
- Strict symmetry
- Use of more traditional materials like stone or fabricated materials with rich surfaces
- Formal plazas and/or landscapes and landscape elements

Bacardi Tower, Enrique Gutierrez
Miami, Florida

International Style

- Emphasis of volume over mass
- Rectilinear, Simple Geometry
- Use of lightweight, mass-produced and industrial materials
- Lack of ornamentation
- Repetitive modular forms
- Flat, smooth surfaces
- Cantilevered building extensions

Photo Credit
Paul Privette

Sanford Civic Center, John A. Burton, IV
Sanford, Florida

Neo-Expressionism

- Sweeping, curved rooflines and wall surfaces
- Minimal or non-existent use of symmetrical or geometric forms
- Faceted, concave, or convex surfaces
- Arched or vaulted spaces

Orlando Public Library, John Johansen
Orlando, Florida

Brutalism

- Weighty massiveness
- Rough-surfaced, exposed concrete walls
- Broad, expansive wall surfaces
- Repeating elements
- Deeply recessed windows

Nokomis Beach Pavilion, Jack West
Nokomis, Sarasota, Florida
Photo Credit | National Park Service

Sarasota School of Architecture (regional movement with outliers throughout the state)

- Clarity of construction
- Maximum economy of means
- Simple overall volumes penetrating vertically and horizontally
- Clear geometry
- Honesty in details and structural connections [65]

Aztec Motel
Miami Beach, Florida
Photo Credit | State Archives of Florida, Florida Memory

Miami Modern (MiMo)

As described by Eric P. Nash, and Randall Robinson, Jr., Miami Modern or MiMo "refers to the architecture that flourished in South Florida from 1945 until the late 1960s." It is not a single style, but a "confluence" that includes Latin-inspired subtropical modernism, organic architecture, and Formalism or Neo-Formalism. [66] Characteristics might include:

- Acute angles
- Assymetry
- Brise-soleils
- Concrete block and stucco
- Concrete canopies
- Cutouts
- Decorative railings
- Louvres and metal grilles
- Murals
- Tropical and bold colors

Goldman House
Photo Credit | Paul Privette

Cedar Key State Park Visitor Center
Photo Credit | Paul Privette

Mid-century Modern ARCHITECTURAL THEMES

Many postwar designers explored a number of issues that would shape the mid-century modern architecture of Florida and elsewhere, resulting in divergent aesthetic results and forms. These themes include, among others:

ENVIRONMENTAL ADAPTATION

Many architects working in Florida during the post-World War II era were adapting the principles of the International Style and early modernism to the distinct climatic and geographical regions across the state. Buildings, especially pre-air conditioning and during the 1970s energy crisis, were often oriented and given features to help control sunlight and capture breezes. Deep overhangs and sunshades helped modulate Florida's strong, subtropical daylight while features like operable window walls and breeze block encouraged air flow and helped cool interiors. The visual and physical connection to the natural environment was also important. Taking advantage of the state's moderate temperatures throughout most of the year, many buildings included and opened onto outdoors spaces.

Weil-Cassisi House
1964, Harrry Merritt
Gainesville, Florida

The 1964 Weil-Cassisi House was designed by architect and University of Florida professor Harry Merritt. Constructed of regional materials including Ocala block and locally-sourced wood, the house is sited to take advantage of the surrounding landscape including a large live oak tree that the shades the front. Large spans of glass and clerestory windows bring natural light into the house and visually connect interior and exterior. Operable transom windows helped promote passive ventilation.

Weil-Cassisi Residence, Harry Merritt Papers, Special and Area Studies Collections, George A. Smathers Libraries, University of Florida, Gainesville, Florida.

SPATIAL, FORMAL, AND MATERIAL EXPERIMENTATION

An overall spirit of experimentation pervaded the mid-century architecture of Florida as designers explored new approaches to defining space and creating forms. From the single family house to schools to churches, long-standing building types were re-imagined and given new formal expressions. New materials were also employed. These materials were largely manufactured, including prefabricated structural and other building components made in Florida and elsewhere.

Healey Guest or "Cocoon" House
1950, Paul Rudolph
Sarasota, Florida

For this modestly scaled residence, Paul Rudolph used steel cables spanning between parallel walls to create a concave, catenary roof. Flexible insulation panels were laid over the cables and the entire roof surface was sprayed with a vinyl compound referred to as "Cocoon." Rudolph discovered the material while working with the United States Navy during the Second World War. Cocoon was used to encase and mothball ships and ship parts. The innovative roof created a unique form and interior space.

State Archives of Florida/Steinmetz

TECHNOLOGICAL INNOVATION

The mid-century modern architects of Florida embraced and helped advance new building technologies. Developments in the science and engineering of concrete, for example, meant that precast and prestressed structural components became more widely used to lower construction costs and shorten schedules. Developments in wood lamination during and after the Second World War led to the increased use of plywood and engineered structural beams and components. Similar advancements occurred with aluminum, glass, concrete masonry units, and curtain wall systems – a non-structural exterior wall.

The most exploratory modernist architects drew heavily from industrial and engineering examples. In 1954, Edmund R. Purves, FAIA, executive director of the national AIA, implied that architects were too slow to innovate, as compared to "our friends in the engineering field," that have "exercised imagination, foresight, and often artistic talent in the design of bridges, in the laying out of railroad lines and roads, and driving tunnels and buildings dam." Yet, despite the lag, he asserted that architects of the age "outstripped" other countries in moving away from design precedents of the past. "No longer do we study and follow," he wrote, "[now] we study and lead." Despite an effort towards innovation during the decade of the 1950s, the national AIA recognized only two Florida buildings of the era with national design awards: William P. Harvard's 1953 Bandstand and Park Pavilion in St. Petersburg and Victor Lundy's 1958 Tourist Center at Silver Springs.

The advent of the atomic and space ages also influenced architecture in the 1950s and 1960s. At a lecture at the University of Florida in 1962, Philip N. Youtz, Dean of the School of Architecture and Design at the University of Michigan, reflected on the impact of science on the built environment:

> *Part of the designer's cultural heritage from which he draws his inspiration is this science civilization with its rapid expansion of knowledge, its new technology, its development of power industry, and its discovery of atomic energy.* [67]

He went on to say that the architect's job is to give form and beauty to the emerging scientific order by promoting a closer alliance between science and art.

Venice-Nokomis Presbyterian Church

1954, Victor Lundy

Venice, Florida

With a series of churches designed in the 1950s and 1960s, architect Victor Lundy began to experiment with laminated wood structures to create what *Architectural Forum* described as "rhythmic, sculptural and highly directional roofs."[68] For example, the 1956 Bee Ridge Presbyterian Church employed a series of laminated wood cross braces that extended from the floor to create a distinct and soaring roof.

EVOLUTION OF POSTWAR LIFESTYLES

Modernist architects evolved building types to accommodate changing patterns in where and how American's lived, studied, worked, and played. With most relocating from other parts of the country, Floridians from this period seemed willing to abandon a more traditional and perhaps formal lifestyle in favor of a more casual existence, often in the state's growing suburbs. This cultural shift was reflected in the architecture, such as the open plan of many of the era's modern residences. Changes in educational pedagogy and the workplace also brought about changes in schools and offices.

Lincoln Road Mall
1960, Morris Lapidus
Miami Beach, Florida

An early example of an open-air, pedestrian shopping destination, Lincoln Road Mall reflects the shifting attitudes toward retail and leisure during the post-World War II era. Architect Morris Lapidus integrated park-like and landscape features to support recreational and other activities among stores and restaurants.

Courtesy of State Archives of Florida, Florida Memory.

URBAN RE-INVENTION

Modernist principles also helped transform the urban environment. Jacksonville, Miami, Tampa, and Florida's other major cities as well as many of the state's smaller municipalities experienced large-scale redevelopment. Most mid-century government and civic buildings and public spaces were modern in design and frequently reimagined more traditional types and forms.

Alachua County and Gainesville Government Buildings

1958-1978, Various Architects

Gainesville, Florida

Five new government buildings were constructed in Gainesville, Florida between 1958 and 1978. Housing city, county, and federal functions, these buildings were designed in modern styles ranging from a variation of the International Style (Alachua County Courthouse, 1958 and 1962) to Brutalist (Federal Courthouse and Post Office, 1965, and Gainesville City Hall and Library, 1969). These new structures were surrounded by public plazas. Collectively, these buildings and the open spaces that connected them established a new civic center. The re-envisioning of the city's civic core with modern buildings and spaces aligned with the forward thinking attitudes of the era.

Gainesville Public Library in Alachua County, Florida.

INTEGRATION OF ART

The integration of fine and applied arts with architecture originated with the Bauhaus and other early modern design movements in Europe between the World Wars. This concept of uniting arts and architecture continued into the mid-twentieth century in Florida and elsewhere.

Wesley Manor Retirement Village

(Westminster Woods at Julington Creek Retirement Center)

1964, Jacksonville Area (St. John's County)

A retirement community, Wesley Manor Retirement Village was designed in 1964 by mid-century modern architect Robert "Bob" Broward. The architect commissioned a number of artists from the period to create murals and other art installations throughout the complex. These artists included Memphis Wood, Charles Brown, Anne Williams, and Roy Craven, among others.

Photo Credit | Morris Hylton III

Wesley Manor Retirement Village
Photo Credit | Morris Hylton III

Documenting Florida's MID-CENTURY MODERN ARCHITECTURE

Dickinson Hall, University of Florida
Photo Credit | Paul Privette

Documentation Framework

Identification, documentation, and assessment of significance and integrity are key steps in formally recognizing Florida's mid-century modern architecture through inclusion on the National Register of Historic Places or listing as local landmarks. This study and the resulting products are meant to help inform efforts to recognize the many building types and structures erected in the state during the post-World War II era (1945-1975). The following methodology is based in part on the National Park Service Cultural Resource Management Guideline (NPS-28).

STEP 1: IDENTIFICATION

STEP 2: DOCUMENTARY RESEARCH

STEP 3: FIELD INVESTIGATION

STEP 4: STATEMENT OF SIGNIFICANCE

STEP 5: REPORTING

STEP 1: IDENTIFICATION

- Contact historic preservation staff at local, county, and state governments and confirm and examine any previous cultural resource surveys or information that might have included buildings and sites constructed during the mid-century period.
- Refer to the database and list of buildings and sites from your region identified by this survey.
- Refer to the short biographies of architects practicing at mid-century in your region identified by this survey and contact the local and/or regional chapter of the American Institute of Architects.
- Undertake a windshield survey

Products: List of potentially significant mid-century modern buildings and sites.
List of local and regional architects.
List of references and sources.

STEP 2: DOCUMENTARY RESEARCH

- Consult publications on the history and development of the municipality, county, and or region.
- Undertake research at local historical societies and other potential sources for local history including newspapers.
- Examine local and county government records including building permits for identified buildings.
- Identify and interview individuals with knowledge of the area, period, and its postwar buildings and history.
- Consult local and state archives including, but not limited to:

  -University of Florida Architecture Archives, George A. Smathers Libraries

  -University of Miami Archival Collections, Paul Buisson Architecture Library.
- Where possible, obtain copies of original drawings and/or photographs.
- Identify and describe character defining features of each building.

Products: Brief summaries of significant buildings and their character defining features.
Short biographies of architects with list of buildings.
Copies of drawings, photographs, and other materials.

STEP 3: FIELD INVESTIGATION

- Define exact location and boundaries of site.
- Generate descriptive data of property.
- Photograph building and context.
- Assess and determine condition and level of integrity of character defining features.

According to the National Park Service, historic integrity is the "authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existing during the property's prehistoric or historic period." Historic integrity is comprised of seven qualities that should be part of the assessment:

-Location	-Materials	-Feeling
-Design	-Workmanship	-Association
-Setting		

Product: Assessment of existing conditions and summary of integrity.

STEP 4: STATEMENT OF SIGNIFICANCE

- Review and utilize the historic context statement provided in this study that includes "information about historic trends" that defined the post-World War II era (1945-1975) in Florida.
- Identify the building type and architectural trend that best describes the building's "style."
- Provide information on the architect and determine the impact of their work – local, state, or national level.
- Define the period of significance.
- Evaluate significance based on National Register criterion C – that embodies "the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent significant and distinguishable entity whose components may lack individual distinction."

Product: Statement of significance including period of significance and level (local, state, or national).

STEP 5: REPORTING

- Prepare Florida Master Site File form for each building identified and assessed.
- Submit form to Florida Division of Historical Resources and share with local municipality and county representatives.

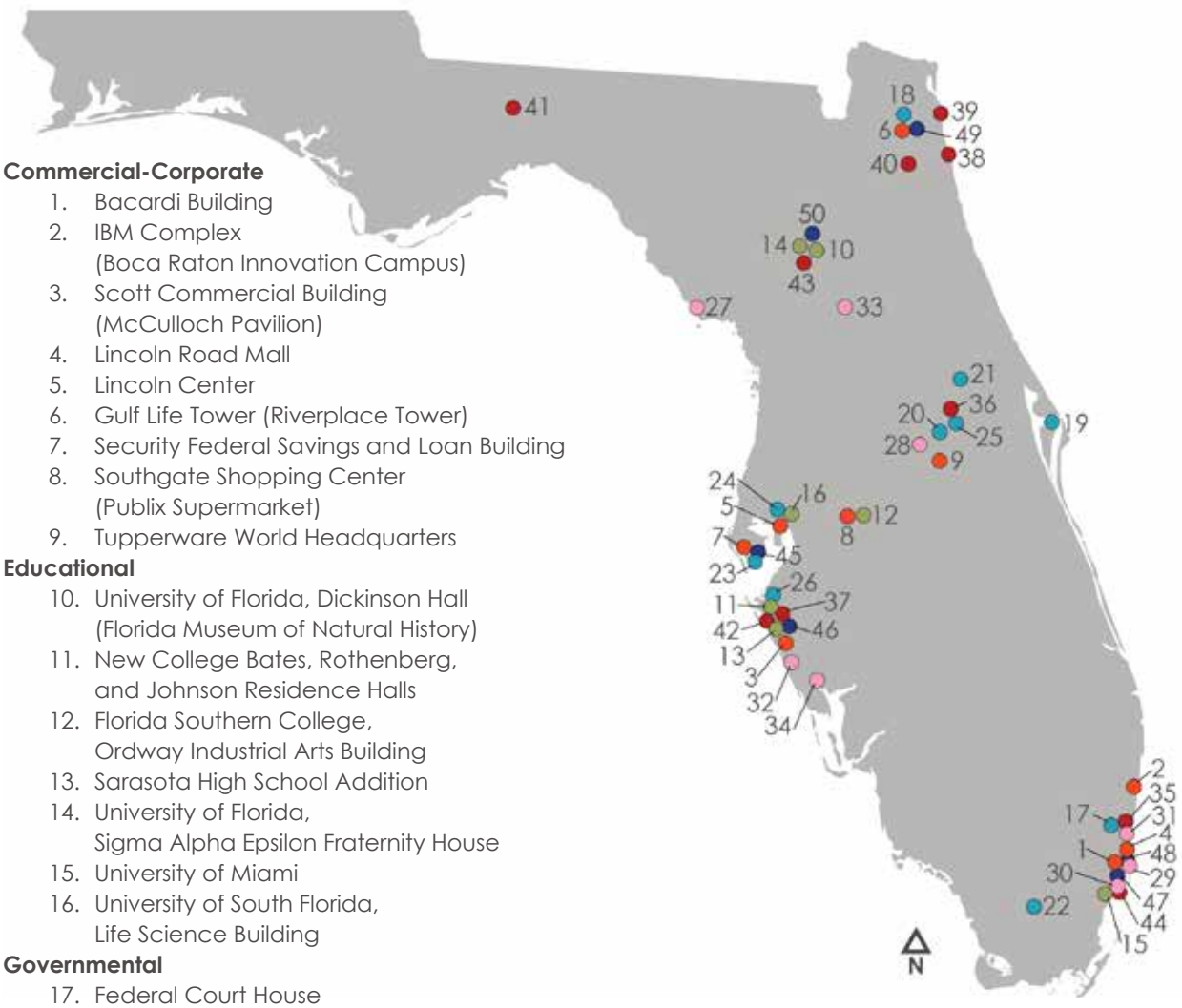
Product: Florida Master Site File forms and other survey and documentation products.

https://dos.myflorida.com/historical/preservation/master-site-file/documents-forms/

University Lutheran Church
Photo Credit | Paul Privette

Fifty FLAGSHIP STRUCTURES

Significant properties that represent the character and scope of mid-century modern architecture in Florida.



Commercial-Corporate

1. Bacardi Building
2. IBM Complex (Boca Raton Innovation Campus)
3. Scott Commercial Building (McCulloch Pavilion)
4. Lincoln Road Mall
5. Lincoln Center
6. Gulf Life Tower (Riverplace Tower)
7. Security Federal Savings and Loan Building
8. Southgate Shopping Center (Publix Supermarket)
9. Tupperware World Headquarters

Educational

10. University of Florida, Dickinson Hall (Florida Museum of Natural History)
11. New College Bates, Rothenberg, and Johnson Residence Halls
12. Florida Southern College, Ordway Industrial Arts Building
13. Sarasota High School Addition
14. University of Florida, Sigma Alpha Epsilon Fraternity House
15. University of Miami
16. University of South Florida, Life Science Building

Governmental

17. Federal Court House
18. Haydon Burns Library (Jessie Ball Dupont Center)
19. Kennedy Space Center, NASA Vehicle Assembly Building
20. Orlando Public Library
21. Sanford Civic Center
22. Shark Valley Observatory Tower
23. Pinellas County, St. Petersburg Judicial Building
24. Tampa International Airport
25. Winter Park Post Office
26. Van Wezel Performing Arts Hall

Recreational-Tourism

27. Cedar Key State Park Visitor Center
28. Disney's Contemporary Resort
29. Fontainebleau Hotel
30. Miami Marine Stadium
31. Pier 66 Hotel
32. Sanderling Beach Club
33. Silver Springs State Park Visitor Center
34. Warm Mineral Springs Motel

Residential

35. Birch Tower
36. Goldman House (Sig & Marilyn)
37. Hiss Studio (Philip)
38. Milam Beach House
39. Morgan House (William)
40. Wesley Manor Retirement Village
41. Spring House
42. Umbrella House
43. Weil-Cassisi House
44. Woodsong (Al Parker Residence)

Spiritual

45. Grace Lutheran Church
46. St. Paul's Lutheran Church Sanctuary and Fellowship Hall
47. Gumenick Chapel (Sophie and Nathan) at site of Temple Israel (1922)
48. Temple Menorah
49. Unitarian Universalist Church
50. University Lutheran Church

Tupperware World Headquarters
Photo Credit | Paul Privette

COMMERCIAL-CORPORATE

Bacardi Building

Year: 1963, 1973
Architect: Enrique Gutierrez, Ignacio Carrera-Justiz
Location: Miami

National Register of Historic Places
Nominated in 2018

The Bacardi Building Plaza Tower and Annex are an amalgamation of modernist architectural forms and the exuberant colors of the Caribbean, a blend of Bacardi's corporate origins and culture. The Tower was designed by Cuban architect Enrique Guiterrez, of SACMAG International (Puerto Rico), in 1963 in honor of the 100th anniversary of the company. Guiterrez had previously worked with Mies van der Rohe at Bacardi headquarters in Mexico City. The eight-story glass, curtain-wall building is supported by four reinforced concrete vertical columns in white veined marble on the east and west facades. The columns support cantilevered trusses with cables connected to the north and south end walls. A free-standing glass pedestal serves as the entryway. A secondary service core tower outside of the main building houses the elevator and connects to an underground parking garage. The end walls are decorated with 28,000 hand-painted, blue-toned tiles arranged by Brazilian artist Francisco Bernard, representing the stylized shapes of plants and animals. The 1973 Annex, or Jewel Box, was designed by Ignacio Carrera-Justiz. The two-story modernist cube is raised 47-feet off the ground by a pedestal, with each floor cantilevered 28-feet from the core. The glass, curtain-wall mosaics tell the story of how rum is made, based on an original painting by German artist Johannes Dietz. The plaza served as Bacardi headquarters until 2009, when the company moved to Coral Gables. The building is now occupied by the National Young Arts Foundation. The complex is included on the AIA Florida Architecture: 100 Years 100 Places list.

Photo Credit | State Archives of Florida, Florida Memory.

Gulf Life Tower (Riverplace Tower)

Year: 1967
Architect: Welton Becket & Associates, and Kemp, Bunch & Jackson, assoc. architects
Location: Jacksonville

The 1967 Gulf Life Tower, now known as Riverplace Tower, is located on the South Bank of the St. Johns River in Jacksonville. National firm Welton Becket & Associates (also the designer of the Contemporary Hotel at Walt Disney World in Orlando) worked with local firm Kemp, Bunch & Jackson to supervise construction of the 432-foot-tall tower. When completed, the tower was the tallest, precast, post-tensioned concrete structure in the world and the tallest structure in the state of Florida. The precast segments were shipped from Atlanta by rail and truck and assembled on site. The 542,000-square foot structure was built by Jacksonville's oldest general construction contractor, The Auchter Company. The innovative post-tensioned framework supported the floor system leaving the interior column free. The concept intended to portray "levels of activity" in the building rather than present it as a singular mass against the horizon. Solar grey glass behind the concrete frame provided glare protection and contrast. The building is glossy white (achieved with a mixture of white quartz sand and white cement) and is set on a dark green terrazzo podium with an inset, glass-enclosed lobby. The tower was one component of the $25-million Gulf Life Center, developed on 12 landscaped acres including a hotel and parking garage. A sky bridge attached the garage to the tower at podium level. Becket wrote that the Gulf Tower stood as "a model of interplay between architectural design, structural engineering and the very latest construction techniques." In 2004, the building was recognized as one of the "Seven Precast Concrete Wonders" of the U.S. by the Pre-cast/Pre-stressed Concrete Institution in honor of the organization's 50th anniversary.

IBM Complex (Boca Raton Innovation Campus)

Year: 1970
Architect: Marcel Breuer, Thomas Gatje
Location: Boca Raton

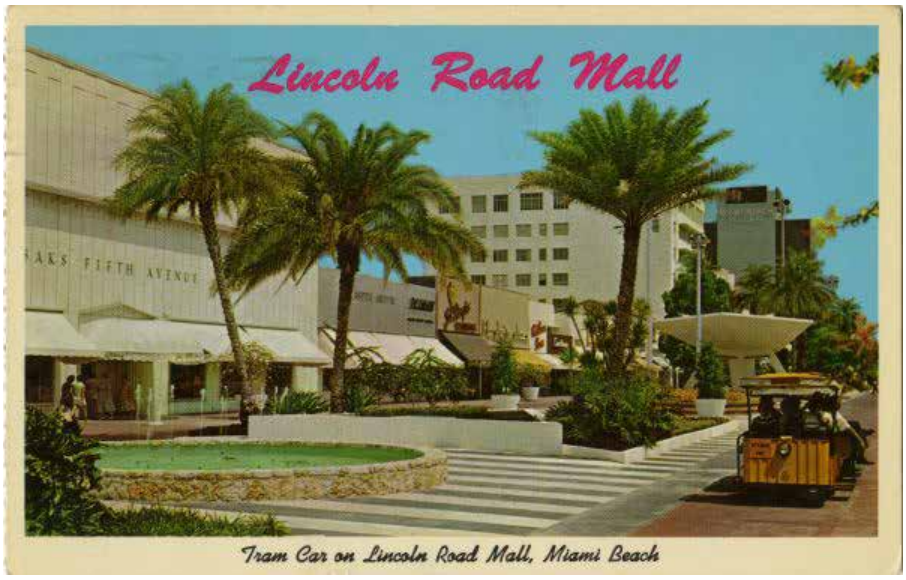
In 1970, IBM completed their office and industrial development in Boca Raton, the first commercial company to build a headquarters in the region. Architects Marcel Breuer, a Bauhaus-trained designer, and Robert F. Gatje created dual structures and accessory buildings incorporating 1.7 million-square feet of space. The complex is a sister project of the IBM France Research Center at La Gaude (1962), incorporating similar design elements but doubled in size. Boca Raton features two X-shaped buildings (rather than the one building in France) surrounding a central pool, with matching entry roundabouts fitting into the arms of the X. The building is in the Brutalist form (a term not in common use at the time of construction), and are characteristic of Breuer's work. The paired main buildings are composed of bright, white concrete with a rhythmic series of board-formed, poured concrete "tree-columns" supporting the bulk of the elevated structure. A "folded concrete" façade provides raceways for mechanical services within the exterior walls, providing for more flexible interior spaces. The windows are shaded by projecting overhangs to create a sense of depth. The building was sold by IBM and is now referred to as the Boca Raton Innovation Campus or BRIC. The complex is the birth place of early IBM personal computers, created under the supervision of engineer Philip Don Estridge. Breuer is known internationally for his ground-breaking work in furniture design and his "plastic" use of concrete to create monumental structures.

Zylstra, Sape A., "Lincoln Center, 5401 West Kennedy Boulevard, Tampa, FL," 2010. Florida Studies Center Gallery. Image 1033.

Lincoln Center

Year: 1975
Architect: Neuhaus + Taylor
Location: Tampa

Designed at the height of the 1970s-era energy crisis, Lincoln Center is an early example of a "mirror-wrap" building featuring an exterior envelope composed entirely of insulating glass. Architecture firm Neuhaus + Taylor, headquartered in Texas, designed the 217,663 square-foot building in 1975 in the Westshore neighborhood for Lincoln Properties of Tampa. The principals of the firm were Julius Victor Neuhaus, III, and Harwood Taylor. The structural system of the building is composed of lightweight steel frames. Two long, thin rectangular boxes are shifted off center and sit on either side of an intermediary, smaller rectangular-shaped space. The architects utilized Pittsburg Plate Glass Co. (PPG) Solarban 550-8 Twindow insulating glass as the skin, known for its reflectivity, shading coefficient, and thermal insulation qualities that resulted in lower operating costs and increased energy efficiency (also seen in two similar projects in Atlanta, Georgia, by the same firm). The material was chosen for economy but also for beauty. In an architectural advertisement for PPG, the architect described the Tampa building as "the epitome of esthetic expression of the times." The façade is further distinguished by the rectilinear configuration of the glass to create a graph-paper pattern, each piece creating an individual reflection of the surrounding environment.



Lincoln Road Mall

Year: 1960
Architect: Morris Lapidus
Location: Miami Beach

National Register of Historic Places
Listed in 2011

The 1960 Lincoln Road Mall is a pedestrian-only outdoor shopping area running 3,040 feet along Lincoln Road, from Washington Avenue on the east to Alton Road on the west. According to the Historic American Landscapes Survey (HALS), this is the first pedestrian mall in Florida and possibly the second oldest extant pedestrian mall in the United States. Carl Fisher first developed the area in 1914, to create a premiere main street shopping area for the emerging Miami Beach population. Fisher had previously developed the Lincoln Highway from New York to San Francisco. The street went into decline in the 1950s as shoppers began frequenting suburban malls. Local merchants commissioned the planning firm of Harland Bartholomew and Associates to revive the commercial district. They closed the street to automobile traffic and hired architect Morris Lapidus to create an eight-block long pedestrian esplanade in a modernist style.

The mall incorporates older, historic structures including the Miami Beach Community Church (1921), and the Colony Theatre (1934). Lapidus, known for his designs of elaborate Miami Beach resort hotels such as the Fontainebleau (1954) and Eden Roc (1956), included features such as tropical gardens, fountains, shade shelters, and amphitheaters. Theatrical designer Abe Feder illuminated the landscape. The overall design exhibits defining characteristics of the Miami Modern (MiMo) style. The mall declined again in the 1980s and was revived by architect Ben Wood, consulting with Lapidus and landscape architect Martha Schwartz. In 2008, the Swiss architectural firm of Herzog & de Meuron completed the architecturally distinctive 1111 Lincoln Road parking garage at the western end of the pedestrian mall, a vibrant modernist addition that continues the forward design thinking at the continually evolving site.

Scott Commercial Building (McCulloch Pavilion)

Year: 1960
Architect: William Rupp and Joseph Farrell
Location: Sarasota

National Register of Historic Places
Listed in 2016

The Scott Commercial Building was built in 1960, commissioned by Clarence Scott as a show-room for the Barkus Furniture Company. Architects William Rupp and Joseph Farrell designed the visually striking structure, working with builder W. Ray Mathis. Rupp began his career in the offices of Paul Rudolph. This design is a rare commercial example of the Sarasota School of Architecture and represents the use of modernist high-style principles at a smaller suburban scale. The most distinctive architectural feature of the building is the deep-overhang created by exposed precast concrete rafters. The cantilever extends far past the façade line to create both shade for pedestrians and a rhythmic pattern above the surrounding sidewalk. The low-slung, one-story building emphasizes horizontality with windows across most of the façade and clerestory windows continuing the glass to the ceiling. The building originally had hanging fluorescent light fixtures and no central HVAC. At the rear of the building, adjacent to the parking lot, a concrete slab is elevated on precast-beams to create an entry-way pavilion. The structure was restored in 2014 by Sarasota architect Guy Peterson. The building is now called the McCulloch Pavilion and hosts the Center for Architecture Sarasota, the American Institute of Architects' local chapter office and the University of Florida's CityLab.

Security Federal Savings and Loan Building

Year: 1961
Architect: W.A. Sarmiento
Location: St. Petersburg

The Security Federal Savings and Loan Building was designed by Wenceslaus A. (W.A.) Sarmiento and William. F. Cann for the Bank Building & Equipment Corporation of America. The building is a series of dramatically modern, contrasting geometric shapes highlighted by a prominent corner location. These features are characteristic of Sarmiento's eye-catching designs for banks and offices throughout the country. Here, a seven-story circular office wing is elevated above a glass lobby, with alternating horizontal bands of ribbon windows and poured concrete gradually increasing in diameter, similar to a seashell in shape. The building bears a strong resemblance to the Frank Lloyd Wright-designed Guggenheim Museum in New York City, opened in 1959. The circular wing is attached to an eight-story, rectangular slab (containing elevators, stairways, plumbing, and HVAC), and anchored with a secondary, square annex, both faced with variegated brown and beige masonry, set in thin, horizontal courses. The building cost $900,000 to complete and originally featured the name of the bank in large letters at the top of the rectangular wing. A circular staircase at the entry level of the cone-shaped structure leads to a second-floor lobby and executive office. A "skyline room," on the sixth floor hosted an employee lounge and dining area. The top floor crown disguises the air-conditioning system and storage. The structure is an important example of a branch bank building utilizing a striking architectural design to attract patrons, generate confidence in the institution, and project a modern corporate identity.

Southgate Shopping Center/Publix Supermarket

Year: 1957
Architect: Donovan Dean & Associates and Charles N. Agree
Location: Lakeland

Built in 1957, the Southgate Shopping Center was the first shopping center of Lakeland and one of the earliest modern shopping strips in Florida. George Jenkins, the founder of Publix, commissioned the center on the theory that a grocery store anchoring a shopping area would attract more business than a stand-alone structure. Lakeland architect Donovan Dean, Sr., worked with architect Charles N. Agree of Michigan to create the distinctive new shopping model at the edge of the suburbs. The mall's primary architectural detail is a three-legged soaring parabolic arch showcasing the name of the center above a boomerang roof. The arch is 70-feet tall and created from 67 tons of steel. An opening in the façade, under the arch, leads to a courtyard with more storefronts. The Atomic-era signage became an instant landmark and drew the attention of car-bound shoppers on the adjacent roads. The original $1-million center featured 16 stores along an 850-foot long facade, including a department store, hardware store, Woolworth's, a "beauteria," and a flagship Publix grocery store. The Ledger, a local newspaper, proclaimed that "The great crowd of visitors certain to go there will find the best in American merchandising enterprise." The center included an expansive parking lot for 700 cars, also a new idea for the time. The construction of the center spurred further development in nearby suburban areas. The building was famously featured in the 1990s Tim Burton film "Edward Scissorhands."

Tupperware World Headquarters

Year: 1969
Architect: Edward Durell Stone
Location: Kissimmee

Tupperware World Headquarters is located slightly south of Orlando in Kissimmee, Florida. In 1951, Earl Tupper purchased an enormous tract of swamp and pastureland beyond the suburban reach of growing Orlando, with plans for a corporate campus. Tupper introduced Tupperware (a line of plastic home products including trademark food containers with air-tight lids) to the public in 1948. The 1,700-acre site hosts a main building designed by Edward Durell Stone. Stone was a prolific, internationally renowned architect and pioneer of New Formalism, a more decorative form of modernism. Stone designed the original campus to embrace the Florida landscape with a subtle manipulation of forms reaching out towards the horizon. The cantilevered over-hangs visually connect the building to the landscape and respond to the climate by providing ample shade from the sun and shelter from the rain. As a pilgrimage site for Tupperware's international salesforce and the annual employee Jubilee, the suburban location incorporated campus-wide amenities needed for a destination headquarters. Meandering gardens, monuments to achievement and ample spaces for gathering comprise the campus environment. Stone's composition of elegant, white, square structures are linked at their corners and organized around a central garden. The tiered form of the building creates a low, deeply shaded structure that floats along the Florida landscape. The Tupperware Forecourt Fountain, also known as the Dandelion Fountain, is the focus of the central courtyard. This modernist fountain, featuring 211 radially arranged stalks, is the award-winning work of artist Robert Woodward of Australia. Installed in 1969, the sculpture became an icon for the Tupperware brand worldwide and is one of the only full-functioning Woodward fountain designs still in use today. The headquarters hosts the only Tupperware store in the world as well as a museum devoted to the history of the company and its ground-breaking products.

Dickinson Hall
Photo Credit | Paul Privette

EDUCATIONAL

Florida Southern College
Industrial Arts Building (Lucius Pond Ordway Building)

Architect: Frank Lloyd Wright
Year: 1952
Location: Lakeland

National Register of Historic Places
Listed in 2012

The Florida Southern College campus in Lakeland maintains the largest collection of Frank Lloyd Wright-designed buildings on a single site in the world. This area, now known as the Florida Southern Architectural District or the "Child of the Sun Campus," was built between 1937 and 1958 as a premiere educational institution for the Methodist Church. The college campus consists of thirteen buildings constructed under Wright's master plan, nine of which are designed by Wright himself. The Tampa Tribune declared it "the world's most ultra modern college campus" at its unveiling. Wright referred to the building style as "organic architecture," with an "outdoor-garden character intended to be an expression of Florida at its best." The Industrial Arts building is a striking structure, tucked away from the Annie Pfeiffer Chapel (1941) and the intersecting shading esplanades. The Ordway Building demonstrates characteristics also seen at Wright's home and studio "Taliesin West" in Scottsdale (1937), such as a strong, angular roofline rising above the wall at one side to create a clerestory roof, and the presence of geometric shapes as a repeating element throughout the structure. The lofty space created inside resembles an architect's open studio. Only one story high, the steel and concrete building is composed of custom-mixed concrete blocks (coquina shells, sand, and Portland cement), and is rectilinear in plan, serving an enclosed courtyard on the east and a U-shaped court on the west. The walls on the outer perimeter of the building slope inwards; some of these walls are glass from the ground to the roof-line, protected from the glare by overhangs. On the northern side of the structure, there is a squat, circular tower supporting a ribbon of clerestory windows. The building was restored in 2011.

New College
Bates, Rothenberg, and Johnson Residence Halls (Pei Halls)

Architect: I.M. Pei with Bert Brosmith
Year: 1965
Location: Sarasota

The Bates, Rothenberg & Johnson Residence Halls, known as the Pei Halls, at the New College of Florida are the only designs by I.M. Pei in the state and are a rare example of Brutalism from this era in Sarasota. Pei, an internationally-renowned architect, arrived in the U.S. in 1935 from China. He studied architecture at the Massachusetts Institute of Technology and the Harvard Graduate School of Design. The New College appointed Pei as the architect for the new $15-million campus in 1963. Sarasota architect, Bert Brosmith, served as the local consultant for Pei's New York-headquartered firm. In Florida, Pei imported his individual approach of the Brutalist style to give aesthetic form to the new school. He created a heavy concrete frame for his buildings (in contrast to the transparency and lightness of the Sarasota School architects), designing the dorms in tight clusters of geometrically arranged groups. Built in 1965, the Pei Halls are composed of three courts or pavilions designed for student living, each centered around a lightly landscaped "Palm Court" (planted with rows of tall palms) focusing traffic flow in an effort to bring students together. Small ponds with fountains in the courtyard have been replaced by gardens. In total, the courts can accommodate 250 students in the spacious rooms, with each room having its own private bathroom. Balconies with sliding glass doors brought in light and air--and rain according to student residents. Financial problems caused Pei to resign from the New College project in 1967. The buildings were renovated in 2014.

Sarasota High School Addition

Architect: Paul Rudolph
Year: 1960
Location: Sarasota

Paul Rudolph's last major commission in Sarasota was a modernist addition to the Collegiate Gothic-style Sarasota High School (1926). The new building, constructed with no air conditioning, incorporated innovative techniques for climate control within the modernist idiom. The completion of the high school addition was overseen by Bert Brosmith, who managed Rudolph's Florida office after he left to become Chairman of Yale University's Department of Architecture. The building and covered walkway structures are rendered in concrete slabs and columns painted a bright white. One walkway connects to the older school building and a second walkway ascends the stairs from the parking area to the main entry. The design, which included a classroom wing and auditorium, incorporated means of passively cooling the spaces and controlling daylight, such as aluminum sliding-glass window walls and transoms that opened onto a central corridor between the classrooms. The corridors, which were open air at either end, contain openings that allowed hot air to rise and exit through the roof monitors (now sealed). A series of massive concrete sunshades were mounted vertically from the cantilevered roof overhang--suspended a few feet in front of the classroom window walls--to create a visually-arresting facade while protecting the interior from solar gain. Collectively, these design attributes represented what Architectural Review described as "a closely worked-out approach to the 'micro-climatology' of the building." Large open spaces, shaded by the overhang and high ceiling of the full-height entry area, encouraged social interactions and gathering outdoors. The materials and tectonics of the Sarasota High School addition foreshadowed Rudolph's transition from transparent, light-framed structures to what would come to be referred to as the Brutalist style. The building was recently renovated and fully fitted with air conditioning while restoring the original appearance of the structure.

Photo Credit | Paul Privette

University of Florida
Dickinson Hall (Former Florida Museum of Natural History)

Architect: William Morgan
Year: 1970
Location: Gainesville

The 1970 Museum of Natural History at the University of Florida (now called Dickinson Hall) is one of the most fully developed examples of architect William Morgan's experiments with earth-sheltered structures and demonstrates his inspired blend of modernism and Native American building forms. Morgan designed a number of buildings that were covered in part or entirely with the surrounding ground (the 1975 Dune House in Atlantic Beach). This style grew in popularity during the energy crisis of the 1970s, as a method of providing energy conservation savings through the creation of a stable interior climate. From the streetside, the minimalist L-shaped corner structure appears to be one story. The angled facade is composed entirely of packed earth planted with low greenery, capped by an angled roof. There are no openings other than the projecting entrance pavilion. The entryway leads to interior spaces but also opens directly onto the top level of a large courtyard space open on two sides. The concrete building, which has multiple stories under the street level of the steeply-sloped site, was heavily influenced by Native American stepped-pyramid temples and mound structures. Morgan had a background in archeology and incorporated references to that tradition with a mounded facade at the street and layered levels, decorative concrete water spouts, and a series of terraces accommodating the natural topography of the site facing an interior courtyard. The raw concrete is articulated with a coffered slab ceiling, grooved columns, and decorative vertical siding patterns at regular intervals. Alterations include the replacement of the corrugated concrete roof with standing-seam metal. In 1998, the public functions of the museum moved to another structure; the building was then retrofitted for research and collection activities exclusively.

University of Florida
Sigma Alpha Epsilon Fraternity House

Architect: Gene Leedy, FAIA
Year: 1964
Location: Gainesville

The SAE Fraternity House highlights the use of long-span, pre-stressed concrete beams to create the framework for a large educational/residential structure. Architect Gene Leedy was a founder of the Sarasota School of Architecture in the early 1950s and created a number of pioneering buildings utilizing this modern structural material, particularly the "double-tee," form. Leedy was a member of the SAE Fraternity while a student in the architecture school at the University of Florida. The three-story building has a series of openings running the length of the structure rather than a single front door, allowing for free entry and exit. SAE departed from the university tradition of converting a large, vintage residential structure to a fraternity house and instead opted for all-new construction that was custom-designed to better fulfill the needs of the occupants. The complex is composed of two separate buildings (a "quiet" wing and an "active" wing), facing a series of landscaped terraces and courtyards. The quiet wing contains student living suites clustered around a central library and chapter meeting room. The active wing contains a large, open, double-height recreation room with a fireplace, snack area, kitchen and utilities. Covered bridges connect the wings on each floor. The use of concrete columns and double tee-beams as the framework for the structure enabled Leedy to create a series of cantilevered balconies by extending the length of the beams past the wall line. The architect successfully hybridized UF's Collegiate Gothic style and Modernism by using red brick panels and glass between the unfinished concrete beams. The building was completed by Guy Cleveland Construction Co., of Gainesville and John Wood & Associates of Winter Haven, contractors. The SAE building was recognized with an Award of Merit from the Concrete Institute of Chicago.

University of Miami
Historic Administration Building

Architect: Marion Manley
Year: 1947
Location: Coral Gables

The University of Miami Administration Building was one of five original structures designed by Marion Manley, notable as an early effort in the recycling of used building materials for new construction. Manley was the second woman architect registered to practice in the state and the 13th female member of the AIA (1926). She graduated from the University of Illinois and moved to Miami in 1917, where she practiced for almost 50 years. She worked with Phineas E. Paist, (supervising architect for the Coral Gables Corporation), among others, before starting her own firm. Manley was known for her creative use of standard building materials, and believed that the materials used for a particular project should be both in harmony with the architectural motif of the structure and suitable to the local climate. At the university, she designed an administration building, cafeteria, and three science buildings in preparation for the 1947-48 academic year. Many of the structures were fabricated of old army encampment buildings obtained from the federal works administration and equipped from war surplus materials obtained from the war assets administration. The federal government paid for dismantling the buildings, transporting the material to the new locations and re-erecting them there, a value of approximately $350,000 to the university. Each structure was redesigned by Manley to conform to the general aesthetics of the other, permanent buildings on the university's new campus. The buildings were remodeled into offices, studios, and classrooms in 1983. Manley also contributed to the design of the masterplan for the campus with Robert Law Weed and designed the Ring Theater (1953) on campus.

Photo Credit | Mark G. Hampton Papers, Special and Area Studies Collections
George A. Smathers Libraries, University of Florida, Gainesville, Florida

University of South Florida
Life Science Building

Architect: Mark Hampton, FAIA
Year: 1961
Location: Tampa

The Life Science Building is a modernist structure that represented the organizational mission of a new university in a forward-looking design intended to accommodate atomic-age studies. Mark Hampton, a native of Tampa, opened his office there in 1952 after a brief stint with architects Ralph Twitchell and Paul Rudolph in Sarasota. The primary six buildings of the new university were erected concurrently and designed by five different architects, including Hampton. The structures are unified aesthetically by common materials, such as concrete, brick, and decorative sunscreens. Hampton completed both a Chemistry/Science Building for the school (featuring a bas-relief by artist Joe Testa-Secca, who also designed a mural for the Winter Park Post Office), and was then commissioned to build a second structure for biological studies, working with the Board of Control architect Forrest M. Kelley, Jr., and engineer Fred E. Clayton. The Life Science Building is composed of two perpendicular wings connected by a corridor. Student laboratories occupied one wing and the second held offices, classrooms, and gathering areas. The building is two stories tall and utilizes exposed brick and concrete slabs as construction materials. The upper floor cantilevers beyond the wall perimeter of the lower floor to create shade and shadow, while the upper facade is divided into a series of alternating, projecting blocks of solid, brick-faced wall surfaces and grids of windows to illuminate the classrooms. Hampton said "the architecture must be an expression of what the school administration is trying to do educationally." The building won a state architectural honor award. Hampton is known for his notable exploration of modern design in all forms and his tenacious attention to detail, with an oeuvre that included residential, commercial, religious, and educational structures.

Winter Park Post Office
Photo Credit | Paul Privette

GOVERNMENTAL

Federal Court House

Architect: William Morgan
Year: 1975
Location: Ft. Lauderdale

Built over four years from 1975 to 1979, the $17 million Federal Court House was one of the first structures to be completed under the Living Buildings Program in Florida, a federal scheme in the 1970s to complete new facilities. Brutalist in style, the concrete five-story courthouse is an L-shaped plan consisting of administrative spaces facing an interior courtyard that opens up to the corner intersection on E Broward Boulevard. On the two-acre site, the Courthouse provides approximately 270,000-square feet of space for federal facilities. Architect William Morgan, known for creating building forms inspired by Mayan and Pre-Columbian architecture, used a similar language for the Courthouse. On the exterior elevations, the exposed, textured, concrete structure takes the shape of an inverted stepped pyramid, allowing each floor of the building to have a terrace as it steps towards the interior courtyard. A high, concrete coffered/waffle ceiling supported on tall concrete columns provides for an open monumental semi-open space accessible by the public on the southeastern end. A water feature visually connects the building to the street. The design received a federal architecture design award from the Government Services Administration. New safety standards for federal buildings, along with prolonged maintenance issues, have initiated discussions about possible renovations or replacement of the structure.

Haydon Burns Library (Jessie Ball Dupont Center)

Architect: Taylor Hardwick
Year: 1965
Location: Jacksonville

The Haydon Burns Library, now renovated and in use as the Jesse Ball Dupont Center, demonstrates the prolific use of art as a purely decorative element on an otherwise Miesian-inspired modernist structure. Located in the heart of downtown Jacksonville, the building served as the main library in downtown for forty years. Architect Taylor Hardwick of Hardwick and Lee dedicated five years to designing and overseeing construction of the new 126,000-square foot library, which occupies a good portion of a city block. The colorful interiors and exterior tilework were an attempt by Hardwick to create "a bright spot in a drab urban environment" and attract patrons to the building. The building is supported by concrete columns and floorplates. Glass-curtain walls are open at the ground level to permit pedestrians a full-view of the interior; the second floor support a series of angled concrete fins to cut glare and prevent solar gain. Hardwick designed this building in a high-modern style but with dramatic splashes of color: on the first floor, at street level and in the lobby interior. Local artist Ann Williams created the vivid elevator and stair tower mural. A "puppet theater" on the second floor in the Children's Area is remembered fondly by residents. The library cost $3.7 million to build and was one of the busiest libraries in Jacksonville until the need for a newer, updated library was deemed necessary in 2000. The Haydon Burns Library closed in 2005 and fell into a complex change of ownership and suffered from deferred maintenance. The Jesse Ball Dupont Fund purchased the building in 2013 from its previous owner and established the Center in 2015. The Center largely maintains Hardwick's original design aesthetic and engaged in an enormous renovation and restoration of the abandoned structure.

Kennedy Space Center
NASA Vehicle Assembly Building

Architect: Urbahn-Robert-Seelye-Moran
Year: 1966
Location: Cape Canaveral

The Vehicle Assembly Building is the largest NASA facility at the Kennedy Space Center at Cape Canaveral, is one of the largest buildings in the world by volume, and is the largest single-story building in the world. Originally named the "Vertical Assembly Building," the structure was the tallest building in Florida until 1974. The monumentality of the building was necessary to accommodate production of the Saturn V rocket during the Apollo program. The construction of the Space Center began in 1961 and the foundation for the Vehicle Assembly Building was laid in August 1963. Over 4,000 pile foundations were drilled during construction. The VAB is a cuboid 525-feet tall by 716-feet long and 518-feet wide. Except for the installed mechanism that is needed for aeronautical purposes, the structure is primarily open on the interior and requires 10,000 tons of air-conditioning. The enormity of the structure produces an indoor microclimate which sometimes leads to cloud formations near the ceiling. The upper portion of this steel and concrete structure is the high bay and the rest the lower bay. Four vertical doors are each 456-feet high (the tallest in the world), on the east and west sides of the building for the entry and exit of spacecrafts. The building was designed by the civil engineering team of Morrison-Knudsen headed by Max Urbahn and was built to withstand adverse climatic conditions in this coastal area. However, a few hurricanes in the 2000s damaged the building's exterior. After serving NASA for several decades, the VAB is currently closed and is undergoing renovations in preparation for use in the future Space Launch System.

Orlando Public Library

Architect: John Johansen
Year: 1966
Location: Orlando

The Orlando Public Library is one of the most prominent and well-represented examples of the Brutalist style of modernism in the state. In the mid-1960s, the city of Orlando experienced unprecedented growth and required a new central library to replace an older downtown facility. The community hired internationally noted modernist architect John Johansen to design a premiere structure. The new Orlando Public Library, opened in 1966, was the first library designed by Johansen, one of the "Harvard Five," an innovative group of Connecticut-based architects. The poured-in-place concrete structure measures 60,000-square feet, and presents an assertive, solid face to the street, features commonly referred to as characteristic of Brutalism. Johansen designed the corrugated concrete facade to express the different functions of the interior building program: reading rooms, elevator shafts/stairways, stacks, etc. He said that the library was a "composition in monolithic concrete...an accretion of forms, as colonies of shelled animals assemble or grow together. It suggests the continuing process of growth, a most valid concept and expression." In 1988, Orlando-area firm Schweizer & Associates (led by Nils Schweizer) completed a 230,000-square-foot addition in a style similar to the existing building. At the grand opening, L. Duane Stark, design architect at Schweizer, observed "the building projects the image of a well-studied piece of life-scale sculpture, and few who see it remain unmoved." The enormous structure, which now fills an entire city block, has since undergone a series of interior rehabilitations, while keeping the original style of both buildings intact.

Pinellas County, St. Petersburg Judicial Building

Architect: Glenn Quincy Johnson
Year: 1968
Location: St. Petersburg

Located in downtown St. Petersburg, the Pinellas County Judicial Building, also known as the St. Petersburg Judicial Building, is one of the few Brutalist buildings in the city and incorporated innovative materials and construction techniques. Architect Glenn Quincy Johnson designed the structure in 1968 (with a 1976 addition). A Chicago native, Johnson moved to St. Petersburg in 1952 and joined industrial designer George Ely. Their partnership (1952-1955) resulted in St. Petersburg's famous "Bird Cage Houses," airy and light structures custom-designed for the Florida climate. Johnson was the president of Anderson Johnson Henry Parrish when he designed the Pinellas Judicial Building. This structure took on a more robust form to project strength and solidarity. Multiple vertical elements lend height to the structure. The Brutalist-style building is composed of concrete columns and floor plates, with an exterior of corrugated concrete panels.

Vertically-oriented ribbons of windows capped with rectangular projections (a modernist reference to classical columns) illuminate the interior rooms. Wide stairways provide access to the elevated plaza level, highlighted by a projected arcade that provides shade at the pedestrian level. The "rainbow" arches were created in hard building foam and then fitted with concrete panels to lighten the weight of the overall form. The $5.3 million facility sparked a wave of downtown renewal and planned development at Bayfront Plaza.

Sanford Civic Center

Architect: John A. Burton, IV
Year: 1958
Location: Sanford

The Sanford Civic Center demonstrates a civic use of glued-laminated wood beams (known as Glu-Lam) to create wide, open-span spaces, an engineering innovation in materials at mid-century. The building was praised by the press as the "most modern structure of its kind in the country and as the most versatile," and featured on the front page of "Southern Building Magazine." The center featured a fully air-conditioned interior and a 12x15-foot movie screen. The youth recreation area was housed in a long wing extending away from the auditorium. The auditorium is roofed with a series of six Glu-Lam beams, anchored at one end at the top of the large stage and extending in a wide arc above the public spaces, reaching to the ground on the far end. The dramatically open space is enclosed with fixed glass windows on either side of the arc. The wood-paneled roofing was placed directly on the beams and then surfaced. A honey-combed aluminum screen was designed to prevent sun glare through the huge, fixed glass windows on the east and west facades of the structure. The original construction included 1.8 acres of building and covered walkways, constructed at an economical $11.71 per-square-foot for a total of $279,000. Carroll Daniel Construction Co., was the general contractor, working with Sanford-area architect John A. Burton. The project was part of a larger effort to upgrade public facilities in Sanford, including a street lighting system, new fire station, and a swimming pool. Burton also designed the nearby Seminole County Courthouse, completed in 1972. The building has been altered from its original appearance, such as the covering of the large windows, but the changes are reversible.

Shark Valley Observatory Tower

Architect: Hubert Bebb and Edward M. Ghezzi
Year: 1964
Location: Everglades National Park

The Shark Valley Observation Tower is a prominent example of Park Service Modern, an architectural style that provided a contemporary image for the national parks, utilized efficient methods of construction, and benefitted from the functional advantages offered by modernist design theories, such as few added decorative elements. The Tower was part of a comprehensive National Park Service program called "Mission 66," an effort to upgrade and modernize visitor facilities throughout the country. At the Everglades, a number of new structures were also completed in preparation for the 20th anniversary of the park, when more than one-million people were expected to visit. A fully paved road, visitor center, interpretive facilities, new ranger station, and the tower were built in concert during this period. The 55-foot tall poured-concrete tower by Hubert Bebb is a modernist interpretation of the vernacular forms of fire towers and oil rigs (the site was once used for oil drilling). The structure overlooks Shark Valley, a lush sawgrass and hammocks area of the Everglades known for frequent visits by wildlife, and is accessed via a 14-mile long scenic loop. The road, originally designed as a one-way route with parking areas for wildlife observation, is now closed to private motor vehicles. A concrete ramp supported by slim columns gracefully follows a wide curve en route to the observation post at the top, providing more views of the landscape. The ramp was noted as an early attempt to create "accessible" facilities for visitors in wheelchairs. Restrooms are provided in the tower's base. The National Park Service commissioned Bebb (who studied with Frank Lloyd Wright) to design a similarly dramatic, concrete observation tower at Clingman's Dome, the highest point in the Great Smoky Mountains.

Tampa International Airport

Architect: Reynolds, Smith & Hill with Hillsborough County Aviation Authority
Year: 1971
Location: Tampa

The Tampa International Airport introduced a number of technological innovations that are still in use today. In the 1960s, the Hillsborough County Aviation Authority chose to conduct a study of designs to find the best modern solution to overcrowding at the old airport. The authorities decided to build new and selected a concept developed by consultant Leigh Fisher Associates, which split the airport into land-side and air-side sections in a design that resembled the spokes of a wheel. To transport passengers to the far-flug terminals, an Automated People Mover system was implemented. The APM, developed by the Transportation Systems Division of Westinghouse, was the first significant airport application of this type of transit technology. Each shuttle could carry 100-standing passengers in air-conditioned comfort. Orlando International Airport later implemented a similar design. As of 2013, there were 46 airports in the world using the system. Jacksonville-based architectural firm Reynolds, Smith & Hill, led by Ivan Smith oversaw the construction of the $80 million, all-concrete, Brutalist style building with four distinct facades, each three-stories high with full glass curtain walls to provide views of the runways. The Tampa Airport was also the first in the nation to use an automated baggage system. Joseph A. Maxwell & Associates designed the terminal interiors, using graphic colors and wide swaths of carpeting in contrast to the honey-brown concrete and extensive bands of tinted glass. Florida sculptor Roy Butler created dozens of beautiful metal sea birds "flying" through the open spaces. The airport opened for the first flight on April 15, 1971 (they closed the old terminal and opened the new one overnight). Currently, about 20 million passengers per year travel through the airport. There have been a number of larger renovations to the facility but the overall structure retains its architectural integrity.

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Van Wezel Performing Arts Hall

Architect: William Wesley Peters/Taliesin Associated Architects
Year: 1969
Location: Sarasota

The 1969 Van Wezel Performing Arts Hall is a colorful representative of the organic style of Taliesin Associated Architects, the firm Frank Lloyd Wright founded to carry on after his death. The Van Wezel Foundation (Lewis and Eugenia Van Wezel) donated $400,000 for construction of the $2.5 million building. The eye-catching 1,778-seat auditorium is situated near the Sarasota Bay, rendered in a triple-toned lavender scheme with deep blue-upholstered seats. Architect William Wesley Peters (son-in-law of Wright) based the design on natural forms, stating that "we wanted it to relate to the native seashell but didn't attempt to imitate the shell." Wright's widow Olgivanna inspired the distinctive color choice with a shell she had found in the Sea of Japan. The colors were tested in the Arizona sun (at Taliesin West) before being used in the bright climate of Sarasota. The concrete, folded plate-roof resembles other Wright-designs, and layers over the auditorium space. The "fly-gallery" loft and stage are housed in an attached projection. The interior is more like a roofed amphitheater, with no balcony and no aisles. The east side lobby served as the main entrance while the Grand Foyer and waterfront terrace provided meeting spaces. The original building was conceived as part of a larger project to convert the entire area into a Sarasota Civic Center correlated into an overall design concept. The plan was for new buildings to replace standing structures and connect all with covered walkways and gardens. In 2000, Taliesin Associated Architects completed an expansion based on Peters' plan. Despite criticism of the form and color as the "Lavender Elephant," Peters maintained that the building "fulfills the principles discerned by Mr. Wright," and was "among the best work we've done" at Taliesin. There is a current debate whether to retain or replace the unusual building.

Photo Credit | Paul Privette

Winter Park Post Office

Architect: Joseph Shifalo, Shifalo & Williams
Year: 1965
Location: Winter Park

The Winter Park Post Office represents a mid-century movement to improve critical government facilities and is a premiere example of the use of art in federal buildings, which supported the creation of many unique works in the community. The $250,000 post office contained 23,000-square feet and replaced a much smaller, older building nearby. Contractor George Hill & Company of Memphis built the structure based on a design provided by the government and executed by local architect Joseph Shifalo. The building is a simple modernist rectangular pavilion, elevated on a slight rise, with a columned entry leading to the glass-walled interior areas. Shifalo changed the one-story building from a standard-issue government project to a custom-design to better fit into this prominent community, known for its museums and cultural events. Shifalo specified a more expensive brick for the facing and sought artists to create works for display on the facade. Two sides of the building are covered by a stone mural with pieces of marble hand-set in abstract patterns, designed by Tampa-based artist Joe Testa-Secca. The two large murals (each 12-feet high, measuring 53-feet and 37-feet long) required eight men working three weeks to complete. Testa-Secca had previously won the best in show award at the Winter Park Sidewalk Art Festival. He also completed murals for the University of South Florida and a similar work for the Robert W. Saunders Library in Hillsborough County. A second art installation was executed by local artist Walt Dittmer, Jr., who created a series of brise soleils (sun shades) composed of crushed Busch Beer cans. Dittmer, a local metal and steel supplier, led a statewide effort to recycle reusable materials, a new effort in the 1960s. His trademark "crushed can screen" was featured nationally and replicated on a number of structures.

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Cedar Key State Park Visitor Center
Photo Credit | Paul Privette

RECREATIONAL-TOURISM

Photo Credit | Paul Privette

Cedar Key State Park Visitor Center

Date: 1962
Architect: Charles F. Kuhn
Location: Cedar Key

Opened as a branch of the Florida State Museum at the University of Florida in Gainesville, this structure (originally called the St. Clair Whitman Cedar Key Historical Museum), was the result of a multi-year effort of residents on the small island of Cedar Key. In 1959, the state park system approved construction of the museum on 10-acres of land donated by owners of the Cedar Key Shores subdivision at the north end of the island. The museum follows an archetype established by the National Park Service during the Mission 66 program to develop tourist-centered interpretive facilities across the country. The modernist building contrasted starkly against the backdrop of the 19th-century fishing village of Cedar Key (once called the Venice of America), an intentional effort intended to draw attention to the site. Architect/engineer Charles Kuhl of Tallahassee created a rectangular-shaped pavilion of Ocala block with white pillars at the entrance. The patio areas were originally enclosed with concrete screen block, referred to as "concrete lacework," in local newspapers. Visitors were welcomed with air conditioning and a "Danish Modern" style lobby. The one-story structure, the first museum in Levy County, featured floor-to-ceiling windows but was nevertheless developed to withstand hurricane force winds. Dedicated in February 1962 as part of the commemoration of the Civil War in Florida, the museum's original collection of dioramas and exhibits remains intact.

Disney's Contemporary Resort

Date: 1971
Architect: Welton Becket/Welton Becket and Associates
Location: Orlando, Florida

Disney's Contemporary Resort (originally named the Tempo Bay Hotel) and the nearby Polynesian Village Resort were both designed by architect Welton Becket and opened on the same date in October 1971. Becket, headquartered in Los Angeles, maintained a long-term friendship with Walt Disney. The Contemporary Hotel has a distinctive A-Frame design of concrete with a steel-frame structural system. The end elevations are enclosed by multi-paned glass walls. The hotel rooms are stacked up against the long elevations, in a graduated series of horizontal steps, creating an enormous atrium named the Grand Canyon Concourse. The Monorail runs through the atrium, entering from tunnels on the short ends of the structure and connects to the nearby Magic Kingdom theme park. The atrium is also home to Disney artist Mary Blair's remarkable set of tile murals, placed on the walls around the central elevator shafts and composed of more than 18,000 hand-painted tiles. The 90-foot-tall murals—rendered in her distinctive colorful and geometric style—feature flowers, animals, and children telling the story of the Grand Canyon. The hotel utilized an innovative system of prefabrication for the rooms, designed by Palm Springs architect Donald Wexler. Each room was created off site, lifted into place by crane, and slid into the structural frame before being affixed permanently in place.

Fontainebleau Hotel

Date: 1954
Architect: Morris Lapidus
Location: Miami Beach

National Register of Historic Places
Listed in 2008

The Fontainebleau Hotel was considered the most luxurious hotel in Miami Beach at its opening and is one of the most prominent designs of Florida architect Morris Lapidus. The resort was developed by hotelier Ben Novak after demolition of the Harvey Firestone Mansion on "Millionaire's Row." Lapidus, a designer of richly flamboyant and cinematic spaces, is perhaps best known for his motto "Too Much is Never Enough." The arc-shaped plan curves towards the ocean and opens onto a series of outdoor spaces along the beach. The modern hotel's interiors are rendered in an elegant New Regency style which draws upon the influences of French Provincial and Italian Renaissance design. The 17,000-square-foot entrance lobby features a picturesque "Stairway to Nowhere," and a custom-designed floor with repeating black bow-tie tiled shapes. The architect and patron aimed for Old World Luxury, incorporating grand architectural details such as oversized chandeliers, glittering down-lit columns, and colorful photomurals. The polychromatic interiors feature twenty-seven colors including burnt orange and cobalt. The architectural establishment derided the structure as too controversial and radical to be included in standard publications of the time.

Miami Marine Stadium

Date: 1962
Architect: Hilario Candela/Pancoast, Ferendino, Skeel and Burnham
Location: Key Biscayne

National Register of Historic Places
Listed in 2018

The Commodore Ralph Middleton Munroe Miami Marine Stadium is an all-concrete venue perched on the waterside for performances, boat races, and exhibitions. Cuban-born architect Hilario Candela (of the firm Pancoast, Ferendino, Skeel and Burnham Architects), designed the stadium in 1963 to accommodate the audience for power-boat races in the bay and to attract tourists to the area with a dramatic architectural statement. A floating stage hosted performers for concerts and sunrise services. The building is constructed entirely of poured concrete and features a 6,500-seat grandstand measuring 326-feet long and 126-feet deep. Concrete was chosen as the primary material, over steel, to account for salt water weathering and deterioration. The roof is cantilevered 65-feet over the seating area and is composed of eight V-shaped, thin-shelled, reinforced-concrete folded plates. The architect was inspired by sailboats when touched by the breeze; the shapes resemble a "crinkled piece of origami." The stadium has an unparalleled view of the Miami skyline across Biscayne Bay and faces a dredged basin measuring 6,000 feet by 1,400 feet, created to mimic the shape of a Roman circus maximus. The heroic scale of the stadium was first posited as part of the Interama campaigns of 1951-1959 and 1960-1969 to promote Miami as a hemispheric center for interamerican, cultural, social and economic development.

Pier 66 Hotel

Date: 1964
Architect: Richard F. Humble
Location: Ft. Lauderdale

The Pier 66 Hotel tower was the first building in Ft. Lauderdale to exceed 15 stories and incorporated innovative design features to attract both tourists and locals. The land was developed by Phillips 66 Petroleum Company in 1957 with a fuel dock and marina adjacent to the Intercoastal Waterway in Ft. Lauderdale. A restaurant was added followed by a two-story hotel in 1959. In 1964, the 17-story tower opened featuring 250 rooms and a rooftop revolving restaurant called "Top of the Pier." Phillips Petroleum architect Richard F. Humble designed the tower and incorporated the theme of "66" throughout the design: the cocktail lounge/ restaurant revolved every 66 minutes, each wall of the tower has 66 windows, the glass-walled elevator takes 66 seconds to ascend from the lobby to the top floor, and in 1966 Humble added 66 Statue of Liberty-inspired starburst spikes as a crown on the structure. The building layout consists of three projecting balconies at each hotel room level. The two corner balconies are stacked vertically in alternating angles of 45 and 90-degree rotations, making the design look dynamic and "in motion" similar to the character of the revolving rooftop restaurant (now only open as a special-events space).

Sanderling Beach Club

Date: 1952-1958
Architect: Paul Rudolph
Location: Siesta Key, Sarasota

National Register of Historic Places
Listed in 1994

The Sanderling Beach Club was developed on 1.2 acres adjacent to the Gulf of Mexico by Elbridge S. Boyd of Atlanta, who successfully transformed Siesta Key from a sandy spit into a series of sophisticated resorts. Architect Paul Rudolph produced a number of master plan drawings which became the basis for construction at the Sanderling Club over the next decade. Rudolph, who studied under master modernist Walter Gropius, utilized economic materials such as concrete and plywood to create a series of signature arched forms that have been referred to as "Bauhaus-on-the-Beach." This is his first major commission after leaving the office of Ralph Twitchell and beginning his own firm. The property features five one-story cabana buildings identical in design, each 50-feet long and 25-feet deep, built between 1952 and 1958. Each cabana building contains five equal units distinguished by a vaulted roof. Each vault is formed of two lapped, glued sheets of ⅜-inch plywood, originally surfaced with a tar and gravel waterproof finish. The buildings provide deep overhangs for shading a 10-foot square outdoor space overlooking the waterside, and an awning window and door at the rear for cross-ventilation. In 1960, architect John Crowell created a two-story clubhouse with five Rudolph-style cabanas on the second level adjacent to an original patio. A two-story observation tower was demolished. Rudolph's work is considered a hallmark of the style now known as Sarasota Modern.

Warm Mineral Springs Motel

Date: 1958
Architect: Victor Lundy
Location: Warm Mineral Springs

National Register of Historic Places
Listed in 2013

Warm Mineral Springs Motel is located on South Tamiami Trail near the privately-owned Warm Mineral Springs sinkhole, the only warm water mineral spring in the state and often touted as the original "Fountain of Youth." Florida architect Victor Lundy designed the U-shaped motel in 1958 as a visually compelling entry for tourists, intended to divert traffic from the busy highway. The most significant feature of the building is a series of precast concrete 2-inch-thick hyperbolic paraboloids measuring 14'-5" square mounted on columns in two heights. The shell-and-stem form echoes the shape of trees. Lundy called it a "forest of architectural palms." The original sign for the motel, composed of three shells on columns, has been removed. Each motel unit has a ceiling composed of six concrete half shells. The eight-inch square columns support roofs of varying heights depending on the function and use of the spaces below. Lower ceiling columns are set in front of the entrance, bedroom and dining area while the higher ceiling columns demarcate the bathroom, sitting, and kitchenette areas. Clear plastic filled the gaps between the shells, to provide a nighttime view of the stars. There was no roofing on the shells, which were painted with polyvinyl acetate. The design incorporates innovative materials, such as sliding glass doors, "brickcrete" (locally made concrete brick), and air conditioning for each room. The building was a winner of the AIA National Award of Merit in 1958 (the only Florida design recognized that year).

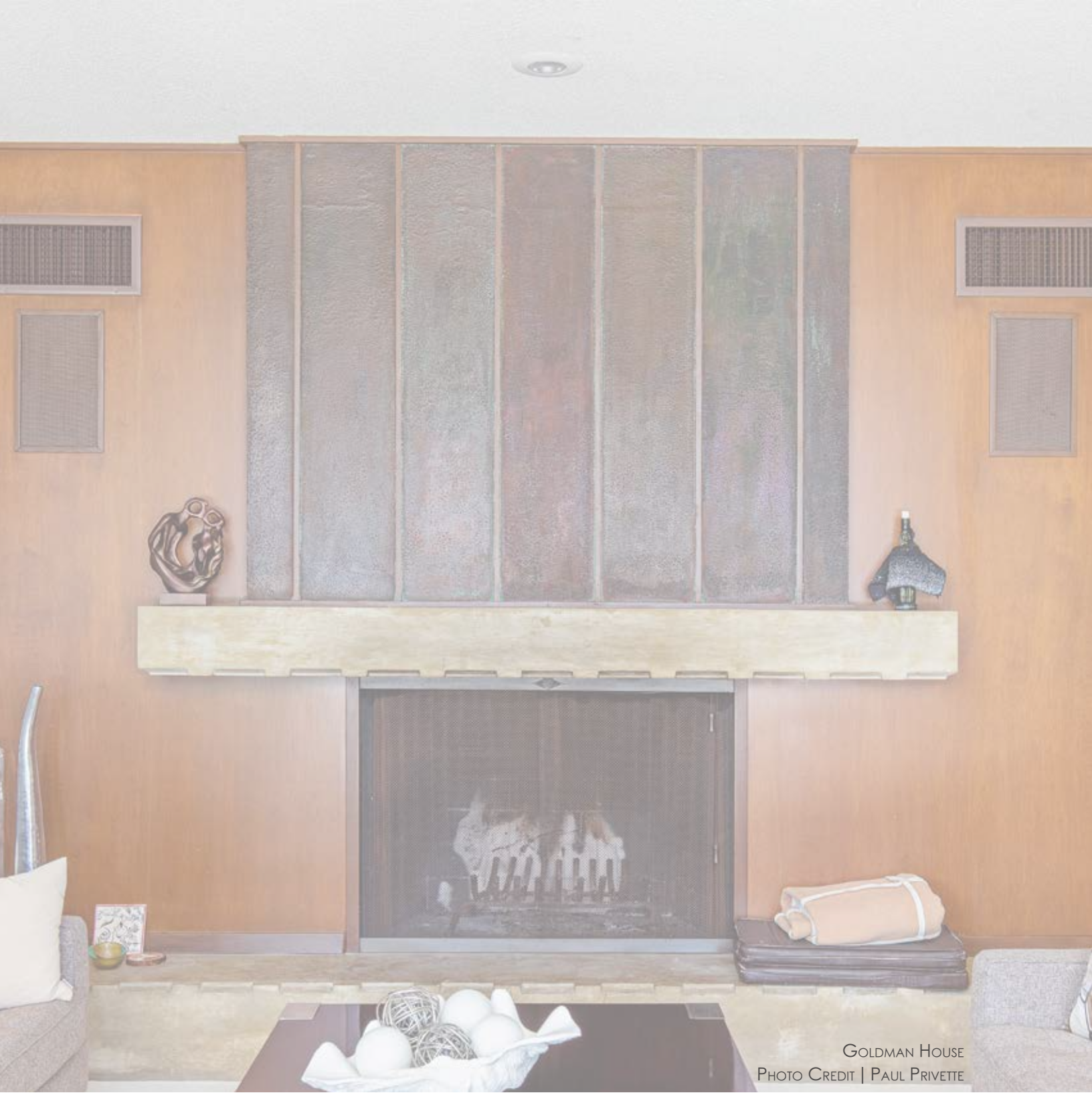
Silver Springs State Park Visitor Center

Date: 1956
Architect: Victor Lundy
Location: Silver Springs

In July 1955, the tourist buildings at Silver Springs (located six miles east of Ocala on State Road 40) burned to the ground. Ray, Davidson, and Ray, facility owners and operators, hired Victor Lundy to design all-new modernist buildings to support a heavily visited tourist destination which welcomed nearly 1.5 million people annually. The overall curved geometry of the building and interconnected covered walkways followed the shorelines of the spring. The steel structural bay system featured floating roof planes over clerestory windows for light and transparency. Floorings include terrazzo with zinc screeds, asphalt tile, and cork tile. Sash, storefront frames and skylight frames are aluminum. The two-story main building enclosed 56,000 square feet of floor space plus a promenade with a cantilevered overhang from 9 to 25 feet wide running the length of the structure. Shops occupied the ground floor with administrative offices above. The plans included a restaurant building incorporating a banquet room for 400 people, a dining room serving 250, and a coffee shop for 175 patrons in 27,500 square feet. The banquet room was the largest in the area. The complex also included Ross Allen's Reptile Institute, Tommy Bartlett's Deer Ranch, Carriage Cavalcade, and the Prince of Peace Memorial, as well as a curved dock hosting the Jungle Cruise which traveled the Silver River using glass-bottomed boats. John Rasmussen served as the primary general contractor. Lundy, a graduate of Harvard University School of Design, won a number of awards for the design, including an Award of Merit in 1959 from the American Institute of Architects, the highest award given by the AIA. He also received a Progressive Architecture Award Citation at the Third Annual Design Awards Program.

Photo Credit | Morris Hylton III

Photo Credit | Morris Hylton III



Goldman House
Photo Credit | Paul Privette

RESIDENTIAL

Birch Tower

Architect: Charles McKirahan
Year: 1960
Location: Ft. Lauderdale

Architect Charles McKirahan was a leader in the modernist movement in Ft. Lauderdale, creating a number of significant structures such as the Mai-Kai Restaurant, distinguished by a towering A-frame design and elaborate Polynesian theming. The 1960 Birch Tower similarly stands out, noted for its bright blue and white color scheme and asymmetrical geometries. The 18-story building is nearly 200-feet high, rectangular in shape with a U-shaped niche in the center. The structure highlights a number of features common to mid-century modern residential towers. The name of the building is dramatically staged on the central elevator tower, rendered in decorative font several stories in height. The letters are illuminated and backlit at night for effect. The balcony walls are decorated with a custom designed cast-concrete, lattice pattern. The pool is set next to the structure on an elevated patio, separated from the shuffleboard court by a concrete-block zig-zag walls. The units have polished terrazzo floors and views across the city. A swooping cantilevered, concrete overhang marks the main entry, supporting flagpoles at the far end of the boomerang. Decorative screen block is used throughout the complex, as well as naturalistic rock, set on the walls inside the foyer, on either side of a bridge leading to the elevator lobby.

Goldman House (Sig & Marilyn)

Architect: Nils M. Schweizer
Year: 1965
Location: Maitland

This home is one of the most prominent and best-preserved residential designs of architect Nils M. Schweizer, known as the "Dean of Orlando architecture." Siegmund and Marilyn Goldman commissioned Schweizer to design a family home for the couple and their two children in a residential suburb north of Orlando. The Goldmans operated S.I. Goldman, Co., one of the largest heating and cooling contractors in the region. The cost of $35,000 was kept within budget by the Goldmans acting as their own general contractor. The 3385-square foot house has walls of concrete block set on a poured concrete slab. Redwood is utilized for the columns on the rear façade, and wood is used throughout the building for cabinets and paneling. The home demonstrates a number of defining features characteristic of mid-century modern Florida residences, including an emphasis on horizontal planes, geometrically-defined spaces, and enormous windows with "transparent" corners created by butt-edge glazing. The high-contrast white stucco exterior contrasts brightly with the lush greenery growing from concrete planters framing the primary facade. Schweizer incorporated a number of custom features that repeated his trademark notched dentil pattern, including a wooden cornice line, cabinet pulls in the bathrooms, and a concrete mantle in the main room. Landscape architect Walt Freeman designed the amphitheatre-style swimming pool, moon gate, and garden area on the .30 acre lot. Schweizer worked as supervising architect with Frank Lloyd Wright at Florida Southern University and later designed the Mexican Pavilion at EPCOT as well as the Orlando Public Library Addition in the 1980s.

Photo Credit | Paul Privette

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Hiss Studio (Philip)

Architect: Edward "Tim" Seibert and Bert Brosmith/Carl Abbott
Year: 1953
Location: Sarasota

Tim Seibert graduated from the University of Florida architecture school and made his greatest impact in Sarasota, both working for Paul Rudolph and through his own office. His modernist works are graphically simple but impactful. Philip Hiss commissioned Seibert to design this 1953 building as a private studio annex to his family home nearby (which Hiss designed and built). The studio served as Hiss' real estate office for promoting a planned residential development in Lido Shores. The Paul Rudolph-designed Umbrella House, next door, was the first speculative residence in the project. The glass house is sealed from the environment despite being located near the beaches of the Gulf of Mexico, in order to create a stable environment for Hiss' rare book collection and artworks. The building is entirely air-conditioned, the first house in Sarasota to feature modern climate control. The original house was conceived as a glass box set on 14 exposed steel I-columns, lifted off the ground to protect from seasonal storms and flooding and provide views of the surrounding landscape. The column rows are centered under the building, with a six-foot overhang on both long sides. The library with cork flooring occupies most of the second floor, with oak shelving to accommodate Hiss' collection. The ground floor entry way is open to the second floor with a curving stairway composed of floating stairs rising along a single support. Glass and metal handrails provide transparency. In 1963, Hiss hired Sarasota architects Bert Brosmith and Carl Abbott for a large addition to the rear of the property (featuring floor-to-ceiling solid maple doors and an atrium garden), bringing the total square footage to 5,252 square feet of living area with four bedrooms and four baths.

Milam Beach House

Architect: Paul Rudolph
Year: 1962
Location: Ponte Vedra Beach

National Register of Historic Places
Listed in 2016

In the early 1960s, Arthur and Teresa Milam commissioned Sarasota architect Paul Rudolph to design their Ponte Vedra Beach home near Jacksonville. The house is visually distinguished by a an asymmetrical concrete-block frame composed of rectangles and squares on the seaside facade. The sculptural frame dissolves the borders of the building behind it and does not represent the organization of the interior spaces or program. The plan and sections of the building are unusual for a residence, with manipulations of ceiling height, floor level changes, and spatial proportions governing the relationship between the functional areas. The materials of the building (8x8x16-inch fair-faced concrete blocks) work in concert with the sandy site, but the orthogonal lines of the structure set it apart from nature, a characteristic enforced by the lack of operable windows on the eastern side. Instead, the structure was fully air conditioned and closed off from the landscape, except through views framed by the large panes of glass and uninterrupted by mullions or other divisions. The sunken living room is double-height and is the central space inside the home. Steps form benches along the sides of the space, to eliminate the need for moveable furnishings. This is the last house designed by Rudolph in Florida. The building is stylistically related to later works by Rudolph, including the 1967 Orange County Government Center in New York, and represents a transition between the beach houses of his earlier career and the concrete masses of his later works. Rudolph designed two annexes on either side of the building in the 1970s, housing a three-car garage and a guest studio.

Morgan House (William)

Architect: William Morgan
Year: 1973
Location: Atlantic Beach

William Morgan studied under Walter Gropius at the Graduate School of Design at Harvard and worked in Paul Rudolph's Cambridge office, but his most prominent commissions resulted from his own practice in his hometown of Jacksonville. He built a house for himself and his family on Atlantic Beach, near Jacksonville, that promotes the spatial complexity prominent in his residential designs. The 1,893-square foot structure features two triangular prisms facing each other; one slopes upward from the street and the other slopes upward from the beach to meet in the center. Rectangular windows fill the spaces where the size of the streetside prism exceeds the height and depth of the beachside form. The exterior is clad in weathered wood boards and the roofline extends to the ground on both sides (similar to an A-frame). Large, open interior spaces are created by the meeting of the two prisms, with high ceilings faced in knotty-pine wood paneling. Inside the rooms, the paneling is set at an angle to provide visual movement. There are three openings in the street facade, which is part of the roof, providing garage parking for two cars and a central entry door. The beach facade is perforated by three pairs of openings centered around a central entry stairway. The two sub-grade openings provide storage, and the four other openings in the "roof" function as balconies with large windows for light and air circulation within the living areas and bedrooms. Both sides of this home are earth-sheltered, with the ground built up along the walls. Morgan's near-fully subterranean home, the Dune House, is next door.

Spring House (Clifton and George Lewis II House)

Architect: Frank Lloyd Wright
Year: 1954
Location: Tallahassee

National Register of Historic Places
Listed in 1979

The Spring House is the only residence designed by Frank Lloyd Wright in Florida. The Lewis's had "a lot of children and not much money." Wright designed an unconventional pod-shaped wedge house for their five-acre lot and tasked his representative in Florida, architect Nils Schweizer, to find a specialized contractor, as no local companies would build it. Schweizer worked with Ernest Daffin, of Jack Culpepper Contractor, to complete the structure. The two-bath, three-bedroom house was being erected at the same time as Wright and Schweizer were finishing buildings at Florida Southern College in Lakeland. The two-story home is designed as a hemicycle, a rare example of Wright's work in this style. The open interior plan of the house is characterized by concentric and intersecting circles. A circular utility tower on the west side houses the kitchen, baths, heating, plumbing, and ventilation. The walls of the first story and the tower are constructed of unpainted Ocala block with deeply raked horizontal joints set on a polished concrete slab tinted with red pigment. The east side, arced facade is a curtain wall of wood-framed, fixed, plate glass mirrored on the interior by the arc of a cantilevered balcony overlooking the open living area. Red cypress weather-board is used on the interior and exterior to distinguish the second floor. Transom windows at the bedroom level provide light and air with small, semi-circular windows in the masonry wall beneath. Clifton and George listed the house on the National Register of Historic Places in 1979. She later formed the Spring House Institute, Inc., to preserve and restore the structure.

Umbrella House

Architect: Paul Rudolph
Year: 1953
Location: Sarasota

Architectural patron Philip Hiss hired Paul Rudolph to design this speculative project on a lot next to his own studio (designed by Tim Seibert). Intended as a model for other single-family homes, the residence remains as a one-of-a-kind example of high-style Sarasota School modernism. At its opening, more than 2,500 people toured the property. The house is positioned and built to take advantage of the local climatic conditions of Lido Key, facing the Gulf of Mexico. Rudolph employed essential principles of modernism, inspired by architect Walter Gropius and the German Bauhaus school of design. There are two complimentary but independent components: a rectangular-shaped glass box set beneath a transverse rectangular canopy or "umbrella" that extends into the landscape. The 3000-square foot structural umbrella covers the length of the swimming pool and is anchored by a "gazebo" at the far end (a lowered roof supported by the umbrella's legs). The relatively small size of the house is increased exponentially by this visual enclosure of adjacent outdoor spaces. The umbrella is constructed of tightly spaced, narrow wood slats (Rudolph originally used tomato stakes) that permit air circulation but provide ample coverage. A large rectangular opening in this unique shading device mimics the shape of the pool beneath, allowing the sun to heat the water. The slats create a series of constantly moving shadows throughout the day. Indoors, the small house is artfully divided into a number of public and private spaces by the use of varied floor and ceiling elevations and movable screens. Bedrooms are on either end of the second floor, connected by short stairways and a bridge overlooking the double-height living area. Two sides of the house are almost entirely glass, The umbrella was destroyed in a hurricane in 1966 but recently restored using modern materials. The painted aluminum tubing that replaced the original wood columns meets current safety standards while maintaining the original intent of the design.

Weil-Cassisi House

Architect: Harry Merritt
Year: 1964
Location: Gainesville

National Register of Historic Places
Listed in 2015

The 1964 Weil-Cassisi House was designed by architect and University of Florida professor Harry Merritt. This modernist residence is a premiere example of Merritt's designs, demonstrating his extensive knowledge and accommodation of the local climate and landscape. The design of the house specifically accommodated an existing landmark oak tree to provide shade for the structure. The roof is composed of five asymmetrically-set wood beams that cantilever beyond the facade to form a protective overhang on both long sides of the rectangular-shaped house. The building is primarily glass, with areas of Ocala block and redwood. The line between the indoors and outdoors is blurred, particularly in the double-height living room contained within a three-sided box of glass curtain walls overlooking the site. A rear terrace stretches across the length of the house, accessible from all main living areas. A centrally-located kitchen retains original redwood cabinetry and a pass-through to the terrace at the rear. There are four bedrooms on the second floor, accessed by an enclosed stairway adjacent to the family room. The master bedroom overlooks the living room below, separated by folding, louvered shutters. Clerestory windows run along the exterior perimeter of each room. A brick wall around the perimeter of the suburban lot ensured privacy for the residents despite the extensive use of glass.

Wesley Manor Retirement Village (Center)

Architect: Robert Broward, FAIA and Robert A. Warner; Edward Daugherty, Landscape Architect
Year: 1964
Location: Jacksonville

Wesley Manor Retirement Village was developed by the Methodist Church as a new type of senior citizen complex, with no steps in the entire development and a proliferation of color and texture to provide visual interest. The 42-acre wooded tract contains apartments for 296 elderly occupants in 11 one-story buildings. The architects Robert Broward and Robert Warner, working with landscape architect Edward Daugherty, created a "village" atmosphere with a series of gabled and undulating roofs for each structure, clad in a variety of multi-colored heavy-weight asphalt shingles. The shingles are laid in alternating horizontal stripes of eight tones, such as red/russet, light green/dark green, dark blue/light blue, and brown/beige. Architect Robert Broward designed 514 properties over his 61-year professional career. He was a native of Jacksonville, but left to attend Georgia Tech architecture school. He later served as a fellow at Taliesin East in Wisconsin and Taliesin West in Arizona with Frank Lloyd Wright as well as a summer working on the construction of Florida Southern College in Lakeland. Broward was known for his in-depth analysis of a site before undertaking a project, including organic approaches with an eye towards client needs and budget. The design was cited by the FHA and rated among the best of its kind in the nation. Apartments were available for singles and couples and included three meals and most medical services. Amenities included a dining room, lounges, trading post, arts and crafts center, barber, beauty shop and post office. The Housing and Home Finance Agency named the project as recipient of an honor award in planning and design.

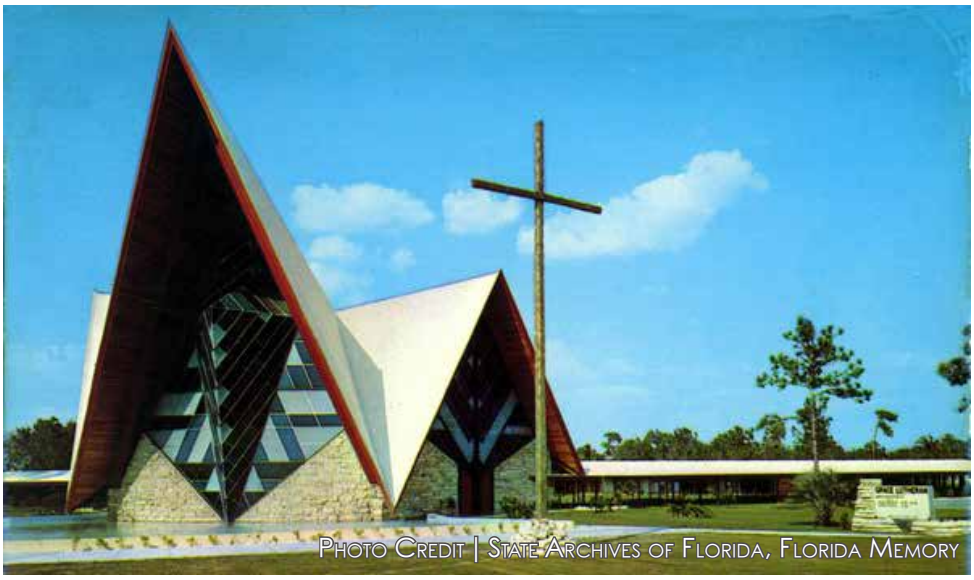
Woodsong (Alfred Browning Parker Residence)

Architect: Alfred Browning Parker
Year: 1968
Location: Coconut Grove

Woodsong exhibits outstanding characteristics employed by Miami architect Alfred Browning Parker, a prolific designer known for his eclectic, modernist residences, many featured as "Pace Setters" in *House Beautiful* magazine. Parker graduated from the University of Florida architecture program in 1939. His designs combine the organicism of Frank Lloyd Wright with Miami's tropical flair. The 3100-square foot house is composed of three asymmetrical pavilions connected by expansive patio areas and pools of water. Each pavilion has multiple floor and ceiling levels, delineating private and public spaces, in close relationship with the surrounding natural landscape. The structures as a whole present a profusion of natural shapes, colors, and textures. Parker mixed warm browns and cool whites throughout the buildings, with Honduran mahogany wood on the walls and ceilings and polished stone floors. The dark-stained wood boards covering the walls are set vertically to provide height and movement, contrasting with the long-horizontal boards (in a lighter stain) across the ceiling. The exterior walls are covered in the same wood, further blurring the lines between indoors and outdoors. The pavilions are all different in shape and purpose. The Living Room pavilion is extended with a two-story greenhouse, with glass walls and roof. A loft bedroom with bath overlooks the open space. The Dining Room pavilion has a large bedroom, sitting room and bath upstairs, and a third pavilion features a den and two bathrooms. The circular jacuzzi, set on an elevated patio, acts as a waterfall, circulating water in the adjacent 90-foot long lap pool which runs the length of the walkway. This is one of the six houses he designed for himself and his family over a span of 45 years.

University Lutheran Church
Photo Credit | Paul Privette

SPIRITUAL



Grace Lutheran Church

Architect: John Randal McDonald
Year: 1961
Location: St. Petersburg

The Grace Lutheran Church in St. Petersburg is one of the first and most significant projects by regional architect John Randal McDonald, known for his use of organic modernism. The building is also representative of the prow-roof form utilized in a number of prominent churches at midcentury. McDonald was born in Wisconsin and was inspired by Frank Lloyd Wright's proliferation of work in the Midwest. In the 1960s, McDonald moved his practice to Florida, and created a distinct fusion of tropical modern with organic influences. The Grace Lutheran mission was established as early as 1927 in St. Petersburg and sought to build a new structure to accommodate their growing congregation by the mid-1950s. McDonald designed an inspiring heightened roof by combining three steeply-sloped, intersecting A-frames. These massed roof prows were conceptualized to resemble hands in prayer, with the tallest A-frame measuring 74-feet high. The steel beams supporting the roof were encased in California redwood on the interior with wood panelling utilized for the ceilings. The projecting roof forms are filled with a curtain-wall of stained glass. The front facade features a prism-shaped glass sculpture which projects from the wall line. The base of the building is Bradenton stone, laid in uneven courses. The cost of construction of the building was $600,000 and the contractors were William Giles and James A. Knowles, Inc. Other structures such as a fellowship hall and offices were designed with the church building, but the church remains the most outstanding structure of the complex.

Gumenick Chapel (Sophie and Nathan) at site of Temple Israel (1922)

Architect: Kenneth Treister, FAIA
Year: 1969
Location: Miami

The Gumenick Chapel is a unique example of sculptural biomorphic modernism in Florida, featuring an unusual facade of rounded, asymmetrical shapes perforated by ovoid window openings. Architect Kenneth Treister designed the modernist Gumenick Chapel as an addition to the Temple Israel of Greater Miami, built in 1924 in a Moorish/Neo-Gothic style. Treister graduated from the University of Florida architecture program in 1953 and focused his work in Miami, where he was a lifelong resident. Nathan Gumenick (died 1996) was a major developer from Richmond, VA, who pioneered the construction of high-rise apartments on Miami Beach. He donated more than $1 million to the U.S. Holocaust Memorial Museum in Washington, D.C., and funded the design and construction of this chapel. The plaza was inspired by the cathedral plazas in Europe and incorporated NE 19th Street to achieve openness and provide a sense of continuity for the whole complex, from the temple to the parking area. In a Miami News interview, Rabbi Narot said that "The new chapel represents this thrust into the future of urban life." The chapel is created from ferro-cement, a system of reinforced mortar applied over a layer of metal mesh. There are two seating areas separated by a raised pulpit with pews to seat 275. The primary decorative features are hand-molded caverns of multi-colored stained glass windows beneath a 35-foot high ceiling. A chimney-like shaft over the ark brings sunlight down over the pulpit. The City of Miami Beautification Committee awarded Temple Israel the "Building Award of the Month" at the dedication of the chapel. Treister said that the chapel was designed as a sculptural environment for a single person or a congregation to become "one with God." He also designed the Holocaust Memorial at Miami Beach (1990) and more than fifty homes in Coconut Grove in the 1950s.

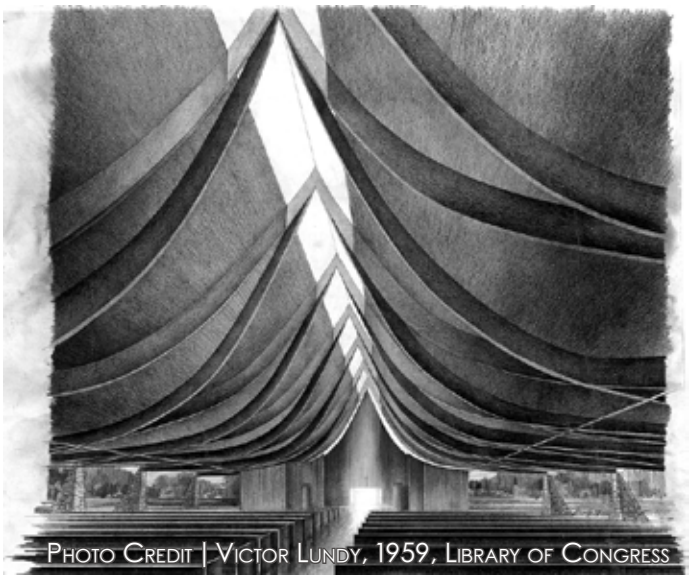


PHOTO CREDIT | VICTOR LUNDY, 1959, LIBRARY OF CONGRESS

St. Paul's Lutheran Church Sanctuary and Fellowship Hall

Architect: Victor Lundy
Year: 1959, 1968
Location: Sarasota

These St. Paul Lutheran Church buildings in Sarasota were designed by architect Victor Lundy, noted for his groundbreaking modernist designs throughout the state. The St. Paul Lutheran mission purchased land in Sarasota and commissioned Lundy in April 1958 as the architect for the succession of buildings. The church campus includes three buildings, the largest two designed by Lundy in 1959 and 1968. Both of these buildings feature curved, pointed roofs. Among the Sarasota School Architects, Lundy focused primarily on dramatic roof forms to distinguish his buildings. The Fellowship Hall (1959) features a sweeping roof created with glued, laminated (Glu-lam) timber beams, a building feature that became one of his trademarks. The use of Glu-lam beams, along with standardized wood decking as a roofing material, reduced the cost of construction while enabling the enclosure of large interior spaces. At the Fellowship Hall, the beams extend beyond the perimeter walls and are anchored on coquina-clad steel pillars. A secondary, outdoor space was created under the roofline by opening sliding glass doors in the sanctuary. The Fellowship Hall was also intended to serve as the chapel until an exclusive chapel or "sanctuary" could be completed. The building took eight months to finish and cost $110,000, completed with structural engineer Paul J. Jorgensen. In 1962, the mission built a school/education building in Lundy's architectural language but smaller in scale. The third and final building, the Sanctuary, was designed by Lundy in 1968 to serve as the main chapel. Though like the Hall in terms of form, the Sanctuary was made of exposed, poured concrete with slit openings instead of timber and glass. The roof of the Sanctuary has a knotty-pine wood-paneled, hanging ceiling supported by cables that hung from a large beam at the apex and anchored to concrete buttresses abutting the walls. The Education building aside, the Fellowship Hall and the Sanctuary mark an unusual grouping of two significant examples of Lundy's work on one site: building forms that create similar visual interest and approaches on the outside but different experiences in their respective interiors.

Temple Menorah

Architect: Gilbert Fein and Morris Lapidus
Year: 1951, 1963
Location: Miami

Morris Lapidus' design for the Temple Menorah incorporated his flair for spectacular eye-catching shapes that are distinctively Floridian with the more practical requirements of this congregation. Russian-born architect Lapidus was raised in the U.S., and made his greatest design contributions in Miami. For the Temple Menorah, Lapidus created an addition to the Gilbert Fein design of 1951, creating a succession of arches facing the street, each featuring a colorful window and terminating in a corner tower perforated with a series of circular openings, rendered in bright yellow on a field of white concrete (known as the "cheese grater"). The cheesehole cutouts are a character-defining feature in many Lapidus designs. The series of arches resemble designs by Walter Gropius and Philip Johnson, but are distinctively classical in their scale and spacing. A rectangular wing reaches from the other end of the tower, containing school rooms and offices, with vertical masonry louvers shading the facade. Lapidus is best known for his elaborately decorated resort hotels in Miami Beach, including the Fontainebleau and Eden Roc, and was a pioneer of the Miami Modern style, otherwise known as MiMo. In 2009, Temple Menorah was designated as a contributing building in the national North Shore Architectural District. The building was originally designed by Gilbert Fein as the North Shore Jewish Center in 1951 and expanded by Lapidus in 1963.


Photo Credit | Clarissa Carr


Photo Credit | Clarissa Carr

Unitarian Universalist Church

Architect: Robert Broward
Year: 1965
Location: Jacksonville

Robert Broward worked as a fellow with Frank Lloyd Wright at Taliesin (both East and West) beginning in 1948, and brought an eclectic mix of organicism and modernism when he returned to Jacksonville, his hometown, in 1956. Broward named the Unitarian Universalist Church as one of his favorite designs, emphasizing wood and natural materials with a profusion of light. The architect was a member of the congregation and commissioned the design in 1965. He camped out on the three-acre site to help him envision the building. His Ocala block and wood church design looked as if it was a part of nature but is also expressive of the time and place. The multi-level design emerges from the hill, permitting easy access to the building's sanctuary on the top floor. The sanctuary faces west and has full-height clear glass windows overlooking a lake and wetlands preserve. Glued, laminated (Glu-lam) wooden beams support the roof and a paneled knotty-pine ceiling. Structural rafters and curving outer walls extend past the facade to connect with the landscape beyond. In a news article, Broward said that "My goal is to celebrate life through the medium of architecture, which, to me, is the highest art form man can achieve."

University Lutheran Church

Architect: Albert Wynn Howell
Year: 1961
Location: Gainesville

The University Lutheran Church is a rare example of the "Polynesian" modern style utilized in a religious structure. The design also relied on the use of mid-century materials in the use of glued, laminated beams (Glu-lam) to support the high-ceilinged roof and provide a clear-span interior space for the congregants. Architect Albert Wynn Howell of Lakeland, Florida worked with Arnold & Wright, Inc., contractor, to construct the building. Howell studied at the University of Florida, and designed a number of churches in the state. The sanctuary measured 60-feet wide by 120-feet long, divided into two sections longitudinally by an aisle leading past pews towards the altar. The sanctuary is best defined by its roof and extended Glu-lam timber roof trusses that are expressed as "spines" through the skylight along the ridge of the roofline. The influence of "Polynesian" architecture is seen in the double-pitch of the roof, with a shallower roof pitch on the lower roof section and a steeper pitch on the upper part of the roof. The roof is clad with flat, red clay tiles. The area in between the roof truss members is infilled with three triangular stained glass windows, which allows for natural light to enter through the altar. The walls are composed of alternating bands of 8-inch high Ocala block and 4-inch high grey concrete block masonry. In 1971, Moore, May and Harrington designed the Campus Center building to the east of the sanctuary, attached by a covered walkway. The sanctuary was awarded a merit award by the FAA (Florida Association of Architects) in 1961, and the building appeared on the cover of The Florida Architect in March 1962.

Photo Credit | Paul Privette

Photo Credit | Paul Privette

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4. Ibid, 14.
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Cedar Key State Park Visitor Center
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Morris (Marty) Hylton III is Director of Historic Preservation and Associate Scholar at the University of Florida's College of Design, Construction and Planning where his research focuses on preserving post-World War II modern architecture and resources. He has lectured extensively on the issue of preserving modern heritage and has served as a consultant to the Advanced Studies in Urbanism conserving modern architecture program at the Swedish Royal Institute of Art. Marty helped create the World Monuments Fund's Modernism at Risk program and was curator of the *Modernism at Risk: Modern Solutions for Modern Landmarks* traveling exhibition and catalog exploring the role architects and designers play in saving endangered modern buildings. He also researched and curated *The Building Itself Teaches: Sarasota, Florida's Public School Program (1954-1960)*, an exhibition exploring the people, events, and architecture that shaped the nationally and internationally acclaimed modern educational facilities constructed in postwar Sarasota. Currently, Marty is collaborating with co-author Chris Madrid French on a book that documents the modern architecture of Florida at mid-century: *Florida Modern: Architectural Transformation of the Sunshine State at Mid-Century (1945-1975)*. He currently serves on the board of the Florida Trust for Historic Preservation where he co-chairs of the '11 to Save' endangered list and is the current President of Gainesville Modern.

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Christine Madrid French, architectural historian, was born and raised in Los Angeles. She graduated from the University of Utah in Architectural Studies and earned a master's degree in architectural history from the University of Virginia. She worked with the National Park Service as an historian in Washington, D.C., Virginia, Maryland and Utah. She is also a writer and photographer, with her work appearing in *U.S. News & World Report, Virginia Living, Modernism Magazine,* and *Landscape Architecture*. In 2000, she co-founded the Recent Past Preservation Network and served as the president for nine years. She then worked as the Director of the Modernism + Recent Past Program for the National Trust for Historic Preservation in San Francisco. Ms. French also served as Project Director for Preservation Capen, the landmark effort to save an 1885 house by cutting it in two and floating it across a lake to the grounds of the Albin Polasek Museum in Winter Park, Florida, for restoration as an event venue. Her fundraising efforts and grant applications have generated more than $2 million for historic preservation and museum projects nationwide. French is an Expert Member on the 20th-Century Heritage Committee for the International Council of Monuments and Sites (ICOMOS).

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