Old and new forms have been incorporated in the design of the new Science Building at Pan American University in Edinburg. A strong bridge with the architectural heritage of the region has been created. Open colonnaded corridors shade out the hot Rio Grande Valley sun, and buildings cluster around inviting plazas.

Another example of early Texas architecture is the Hayden House in Big Spring. Built in 1901, of red Pecos sandstone, the structure displays Victorian tendencies adapted to West Texas climate conditions.

Texas has joined the rest of the nation in the unprecedented growth of community colleges. Twelve new campuses have opened since 1965 and three additional ones are under construction or funded. Enrollment has more than doubled in this span. TA takes a look at some of these institutions in both metropolitan and small communities.
Pan American Science Building

EDINBURG

KENNETH BENTSEN ASSOCIATES,
HOUSTON

ARCHITECTS
TEXAS

HONOR AWARD

TEXAS ARCHITECTURE 1970

STRUCTURAL ENGINEER:
WALTER P. MOORE & ASSOCIATES

MECHANICAL - ELECTRICAL ENGINEER:
BOVAY ENGINEERS, INC.

CONTRACTOR:
MARCHANT BROTHERS

SEPTEMBER, 1971
**PROBLEM**

Design a college science building on a relatively new campus located in the southwestern United States. Control the severe sun and heat and provide a flexible interior for frequent laboratory modification. Relate to existing architecture but establish a strong design direction for new structures.

**SOLUTION**

A central laboratory core is surrounded by peripheral open corridors that shades out the hot sun. Interior walls are non-load bearing, finished ceilings are eliminated, and utility access is available at floor and ceiling. Fixed elements are located outside the laboratory core so that maximum flexibility is achieved.

**MATERIALS**

Structure is concrete, exterior walls are brick, partitions are concrete block, floors are concrete.
The new Science Building was the first structure of seven new academic buildings to be completed in the expansion program at Pan American University in Edinburg. The program required that aside from satisfying critical space shortages, the principal goal of the new structures was to establish a direction for the total environment of the campus which would blend into the subtropical area.

A mile-long pedestrian connector forms the major circulation pattern for the campus in addition to supplying mechanical service to the various buildings. The campus expands either horizontally and vertically depending upon growth or changing needs and clusters the various facilities around this main traffic artery.

The Science Building is designed as a central laboratory core surrounded by peripheral open corridors. Interior walls are non-load bearing, and finished ceilings are eliminated allowing easy access to utilities for frequent laboratory modifications. Fixed elements are located outside the laboratory core so that maximum flexibility is achieved.
TEXAS COMMUNITY COLLEGES

Texas community colleges have experienced a 100% increase in enrollment during the past 5 years.

- One out of every four college students in Texas is enrolled in a public two-year community college.
- In Texas public two-year colleges there are more than nine-million square feet of enclosed space in 600 buildings valued at 115 million dollars on 44 separate campuses.
- Although providing facilities in these colleges is primarily a local responsibility, projections by the Coordinating Board indicate that by 1975 an additional 5,600,000 gross square feet of enclosed space will be required to accommodate increased enrollments at these two-year campuses.
- Two of the fastest growing newly-created junior college districts within the state include Tarrant County which first began accepting students in 1967, and now boasts an enrollment of over 11,000 on two campuses; and the Dallas County Junior College System which opened its innovative downtown campus, El Centro, in 1966 with 4,028 students and now has 16,666 enrolled on three campuses. Although the greatest rate of growth has been experienced by the campuses in metropolitan areas, several new campuses have also been created in some of the more sparsely populated regions of the state making higher education more accessible geographically to an increasing number of youth who still reside outside the 22 metropolitan areas of the state.

Certain criteria have been established by the Coordinating Board in order to help a community predetermine the economic and educational feasibility of creating a junior college district. These criteria serve as a guide in helping gauge how many students could be expected to attend the institution and to foresee what additional financial burden would be placed on each local taxpayer within the proposed district to make the institution educationally and economically viable. Other factors in screening any newly proposed district include existing institutions within commuting range and the tax evaluation of the county or area proposing the creation of such a district.

Public two-year community colleges are by far the fastest growing segment of higher education in the nation as well as in Texas. Nationally, during the past 10 years these new colleges have been established at the rate of from 35 to 50 per year and during the past few years at the rate of one per week.

Texas has shared in this growth as shown by the following table:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of 2 year public colleges in Texas</td>
<td>32</td>
<td>34</td>
<td>39</td>
<td>41</td>
<td>42</td>
<td>44</td>
</tr>
<tr>
<td>Enrollment</td>
<td>52,462</td>
<td>62,289</td>
<td>75,842</td>
<td>86,913</td>
<td>96,524</td>
<td>108,284</td>
</tr>
</tbody>
</table>

Twelve new campuses have been created in Texas between 1965 and 1970 during which time enrollment more than doubled. At present, three additional new campuses are funded or under construction.

This growth in community colleges reflects the post war baby boom. These young people have now reached college age and are seeking entrance on campuses in increasing numbers. However, this influx is predicted to drop by 1980 notwithstanding the fact that the current rate of those eligible and most likely to attend college in the 18 to 24 age group is currently 30% and increasing.

By William J. Martin, Director of Facilities Planning, Coordinating Board, Texas College and University System

"We are confronted with the explosive growth of the community college—a truly unique American educational effort. It is a development of this era as revolutionary as was the land grant college for the 19th Century". Robert H. Finch, Secretary, U. S. Department of Health Education and Welfare.

"The community college has proven its great worth to American society and should remain two-year institutions and not expect to become four-year or graduate institutions. Between 230 and 280 new two-year colleges need to be constructed by 1980", The Carnegie Commission on Higher Education.

SEPTEMBER, 1971

Background Photo: El Centro College, Dallas, Enslie Oglesby architect, See Sept. 1968 "Texas Architect" lor additional coverage.
Eastfield and Mountain View are recently completed satellite campuses within the Dallas County Junior College System. Four additional campuses are in various stages of planning in Dallas to accommodate 50,000 students expected to be enrolled in the district by 1980. Being relatively new on the educational scene, community two-year colleges are free from traditions which characterize other more established segments of higher education and therefore can be expected to spawn new and innovative approaches to learning which call for innovative architectural solutions.

**EASTFIELD COLLEGE**

HARWOOD K. SMITH & PARTNERS/ERNEST J. KUMP ASSOCIATES, ASSOCIATED ARCHITECTS

The 244-acre site is very flat, with little native vegetation or topographic features. The plan is a compact arrangement of several building complexes, ranging from one to three stories, and organized around a series of highly developed courts, sometimes referred to as educational village.
The response to new educational ideas at the Mountain View campus resulted in 345,000 square feet of floor space with bridges spanning a scenic ravine linking continuous clusters of air-conditioned pedestrian malls, offices, dining facilities, a two-level 10,000-volume library, a 500-seat performance hall-auditorium, plus a variety of instructional spaces under one roof.

The Mountain View campus, opened in 1971 with 2400 students, was designed to accommodate 5000 community students initially and 10,000 ultimately.

A skillful example of site planning, Mountain View was designed to keep artificial cuts in the ravine to a minimum and to capitalize on this visually interesting aspect of the site. A series of small lakes was created along the creek which flows through the campus.

MOUNTAINVIEW COLLEGE
OMNIPLAN HARRELL & HAMILTON/CHAN & RADER, ASSOCIATED ARCHITECTS
TARRANT COUNTY JUNIOR COLLEGE DISTRICT

South Campus:
Loop 20 in South Fort Worth, 158 acres, 17 buildings, 374,233 gross sq. ft. valued at $18 million, opened September 1967 with 4,211 students, Fall 1970 enrollment 6,446. Construction time, 13 months.

Northeast Campus:
Approximately 160 acres, 14 buildings, 317,821 gross sq. ft. valued at $3,500,000, opened Fall 1968 with 3,415 students, Fall 1970 enrollment 4,930. Construction time, approximately 16 months.

Planning Stages —
Northwest Campus — 193 acres, expected completion date middle 1970's.

All branch campuses are designed to accommodate 5,000 full time equivalent students maximum.

SOUTH CAMPUS
PARKER - CROSTON ASSOCIATES, ARCHITECTS

NORTHEAST CAMPUS
AL KOMATSU, ARCHITECT
Clarendon Junior College located in the Texas Panhandle was established in 1927 and in 1968 moved into an all new campus consisting of six buildings including two dormitories totalling 85,600 gross sq. ft. Combined buildings are valued at over 1½ million dollars. Clarendon College, one of 42 publicly supported junior college districts in Texas, enrolled 410 students in 1970.
McLennan Community College opened with 858 students in September 1966 in temporary quarters, moved to a new campus in January 1969, and now boasts an enrollment of over 2200.

The decision to locate this new campus on a beautiful tree-studded 150-acre site adjacent to Cameron Park and overlooking the scenic Bosque River created an ideal and conveniently located learning environment from the outset.

The successful design of this campus is primarily due to the skillful manner in which the buildings were located on the heavily wooded site preserving and enhancing the natural beauty of the area.

Consisting of 11 contemporary buildings enclosing 220,200 GSF, the campus represents an investment of almost six million dollars.
The Bee County Junior College District was created in 1965 and two years later had an opening enrollment of 790 which reached 1122 in the fall of 1970. The 100-acre campus now consists of eight buildings containing 128,900 gross sq. ft. It is valued in excess of four million dollars.

View of Fine Arts Building — art, music, speech, drama, classrooms, offices, auditorium and stage.

BRAZOSPORT COMMUNITY COLLEGE, FREEPORT
CAUDILL ROWLETT SCOTT, ARCHITECTS

Phase I development is designed to accommodate 1100 full-time students in 213,300 gross square feet of building area. Architectural form reflects desires specified by the academic plan to maximize the possibility for association and exchanges between all students, faculty and staff. This resulted in a compact arrangement of related spaces under one roof interspersed periodically with landscaped courtyards. It effectively integrates the activities of students pursuing occupational courses and those engaged in transfer level course work avoiding the sometimes undesirable distinction which can result by physically placing these activities in separate buildings. Long range growth plans call for expansion in phases to accommodate an enrollment of 4500 by 1980.
"Texas: A World of Difference." There IS a world of difference in Texas. There are environmental opportunities—options no longer available in many other states. There's more inland water here than in any other state except Alaska—and most of it is clear and fresh. The air in most places is still crisp. The scenery is unparalleled. Historic resources abound. And the people have that friendliness, that determination and that independence difficult to define but easy to respect.

Indeed, Texas itself and its people are compelling reasons enough to adopt a determined protective attitude.

That's the reason for TEXAS: HANDLE WITH CARE.
Modern design is all-electric

for beauty, comfort, economy!

One of the newest additions to the Dallas skyline is the beautiful 18-story international headquarters building of the nation’s largest retail jeweler, the Zale Corporation. This magnificent new edifice rises up from a landscaped park complete with fountains, flowers and a meandering creek.

The building boasts 566,000 sq. ft, with parking space for 2,000 cars. It contains, among other things, an auditorium seating 850 people, meeting rooms, barber shop, employees retail shop, board rooms, cafeteria and executive dining room.

All-electric features include air conditioning, strip heating, landscape lighting, and an all-electric kitchen. Additional features of interest include an automated window-washing system and a vertical conveyor belt system which automatically "trips out" mail on the desired floor.

At present, the Zale Corporation is occupying approximately half of the building, with the other half leased commercially.

For more information on how an all-electric operation can benefit you, contact your nearest Electric Utility.

Electric Utility Companies of Texas
P.O. BOX 350006 • DALLAS, TEXAS 75235

A group of investor-owned taxpaying electric utility companies of Texas providing dependable, economical electric power.
Around the turn of the century, the halfway point of the Texas-Pacific Railroad line between Ft. Worth and El Paso was considered to be Big Spring. Here resided Mr. Joseph Potton, the master mechanic for that 560-mile stretch of track. The west end of that then small and reckless “cowtown” was where Joseph Potton decided to build a house in 1901.

The north corner lot which faced east on Gregg Street was selected as the site for this house of red Pecos sandstone. The building’s original plans still exist, although they do not represent the configuration of the interior spaces as they were finally built. Mr. Potton did not live in the house until 1912 having rented it out after its completion. He lived there only two years, at which time his daughter and son-in-law, Mr. and Mrs. Henry R. Hayden, and their three children moved into the house.

The two Hayden daughters remember that their father was quite protective of his family, as reflected by the presence of a wire fence which remains around the property today. The yard and the front porch were always a haven for the neighborhood children in the hot West Texas summertime and the porch, whose roof was supported by cast iron columns, was also the scene of family gatherings in the evenings. The family would often retreat to the screened porch at the rear of the house when the heat was too intense indoors. This, however, was a rare occurrence, since the twelve foot ceilings and the thick exterior walls kept the temperature pleasant most of the time.

The front pediment contains a Palladian window above which is placed the date of construction of the house. Above the date is a medallion of galvanized tin, on which is stamped the Star of Texas. Other pediments were similarly but less flamboyantly treated, but all were adorned with a pattern of shingles which resemble fish scales. Above the red stone walls rises the typically
steep Victorian roof planes with their hips and gables (grill work and tracery included), a few small dormers, and a metal gutter along the eaves.

A small wood structure was built at the rear of the lot to house the carriage horses, two small compartments for fire wood and coal, not to mention the outdoor convenience, were located nearby. Two wrought iron gates mark the entrance into the back yard.

The address can be seen in the transom above the front door. The door contains a metal knob, which when turned, manipulates a bell. Visitors enter the hall or entry space, which originally contained a grandfather clock, a hat tree with seat and mirror, and other assorted furnishings.

The family entertained in the parlor, which was carpeted with a red rug adorned with a floral design. Long satin draperies contrasted to the natural wood patterns in the mantel of the fireplace, which is covered by an embossed cast iron door. Ceramic tile was used around the door. The dining room, which contains a cast iron fireplace was the setting for formal evening meals. A china pantry served as a passageway from the dining room to the kitchen. Noon meals were often served in the kitchen, which also contained a large pantry.

Throughout the Hayden home can be seen ornate brass light fixtures either hanging from the ceiling or attached to the walls. Doors or openings are accentuated with beautifully carved woodwork in contrast to the smoothly plastered pastel walls. From these walls originally hung elegantly framed portraits, still life and landscape paintings.

The future of this excellent example of Victorian life and its architecture is uncertain at this time. All three of the owners, the children of H. R. Hayden, strongly intend that the house be preserved. Several citizens of Big Spring hope that it may later serve as headquarters for and be maintained by a historical society of the community.
You'll find that a sprinkler fire protection system can be a liberation movement in itself. You get new freedom in material selection and a wider latitude in building code provisions when a sprinkler system is included in your plans.

More wood and other interesting materials may be permitted under updated codes or through negotiated offsets. Fire wall requirements go down; so it's possible to have more open spaces or make more use of moveable non-bearing walls for building adaptability. Insulation of supporting members may not be required. Greater building height may be allowed.

All of these factors can be cost savers and may more than pay for the fire protection system. As a bonus your client gets a greater assurance of continuity of use of the building.

Fire protection underwriters are so sure of the value of sprinkler fire protection that they normally reduce fire insurance premiums substantially. Premium savings alone often return the cost of the system in 5-7 years or less. And then go right on benefiting your client.

If you have questions about sprinkler fire protection systems, just write or call United Sprinkler.

**Architects' liberation movement**
Every once in a great while there is a building that shouldn’t have a San Vallée clay tile roof.

But not often.

San Vallée TILE KILNS
1717 N. HIGHLAND AVE., LOS ANGELES, CALIFORNIA 90028
PHONE: (213) 464-7283 • 464-7386

If it isn’t clay… it isn’t tile.

TITANALOY for design, diversity, dependability

TITANALOY "A"—the zinc-copper-titanium alloy that outclasses many metals, is corrosion-resistant, forms easily, and weathers beautifully. Available now in new 36'-width continuous coils. Get the full story from:

DOUG D. HARPER & ASSOCIATES
P. O. BOX 5202
SHREVEPORT, LOUISIANA 71105

MANUFACTURED by
MATTHIESSEN & HEGELER ZINC COMPANY
Main Office: La Salle, Illinois

TEXAS QUARRIES INC.
P. O. BOX 69
AUSTIN, TEXAS 78767
472-3171

SEPTEMBER, 1971
Mosher Covers The Field

This is the Texas Stadium, the new home of the Dallas Cowboys, the 1970 NFC Champions.

Located in Irving, Texas, just west of Dallas, the stadium has been designed specifically for football and the comfort of Cowboy fans.

Over 2,814 tons of Mosher steel was used in the construction of the unique roof which covers the seating area but not the field. Its arch design eliminates the need for posts giving a clear view of the game from any area in the stadium.

Covering a width of 625 feet and a length of 780 feet, the seating capacity of the structure handles up to 65,000 attendance.

Football enthusiasts throughout the country will see the Dallas Cowboys play under a roof fabricated by Mosher... both Pros In Their Respective Fields.

TEXAS ARCHITECT
Texas Society of Architects
32nd ANNUAL MEETING
Dallas - October 27-29

... Texas: Handle With Care—
the logo of TSA's statewide environmental campaign—will be the theme of the organization's coming convention. Be proud that your profession has emerged carrying the banner for protection of our future.

... and we want you to be a part of this worthwhile endeavor. Plan now to be there and find out just what your TSA is accomplishing with this program, visit interesting manufacturer's exhibits, hear exciting Ralph Nadar—and learn that it can be FUN handling Texas with care.

You will be receiving advance registration information within the next few days. Don't miss the excitement in Dallas at the fabulous Fairmont Hotel—October 27-29.