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DEPARTMENTS

Editor's Note

News

Vignette
Sustainable Design

Interiors Focus
Terrazzo

Special Section with Industry News
Products for Sustainable Design

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Back Page
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A Clue, if Not a Trend

The great surprise in putting together this issue was how few transportation projects were submitted. Apart from a couple of unbuilt projects and a rehab of the El Paso airport, what you see in our feature section—two airports, a streetcar station, and an urban village planned around pedestrianism—was what we got. Nevertheless, we're happy to publish these projects and think that they merit attention individually and as a group.

The two airport terminals—Austin-Bergstrom International Airport and Midland International Airport—are both splendid, efficient buildings. Unlike major international airports where the architectural reference is to flight—two examples being Renzo Piano's Kansai International Airport and Eero Saarinen's Dulles Airport—the architects in Austin and Midland also tried to capture the spirit of place. These airports were conceived to be the portals of their cities, to play the same role that train stations played at the turn of the last century. Indeed, one can't look at these terminals without thinking of those grand old stations. They share the same hopefulness, dignity, and civic pride.

Unfortunately, one also can't help but remember that not so long after the turn-of-the-century train stations were built, our rail system, which was one of the most efficient and complete transportation systems in the history of the world, was slowly dismantled, thanks to the lobbying efforts of the automobile industry. The federal government, which had subsidized the railroads, shifted its support to the automobile industry by building a vast interstate highway system, and then to aviation through defense spending and by subsidizing airports. Technology and a faith in linear progress ruled.

Now, it would be an act of hubris to try and guess what will happen to transportation in the 21st century, but if one looks at all four of these projects, one can spot a clue if not a trend. Going from airports to a streetcar station to an urban village, it appears that we are turning back the clock, but rather, we are diversifying, drawing on all of our resources and experience. The world is becoming such a crowded place, we can no longer rely on one or two forms of transportation. Intermodality is the key.

Judging from the scarcity of these transportation projects, Texas is running behind schedule. It has often been said that for Texans, the car replaced the horse as an emotional symbol of independence, and that we simply won't use mass transit. That appears to be changing. DART is an overwhelming success in Dallas, ridership exceeding all expectations. Houston has finally decided to make its first investment in light rail. Fort Worth is turning the old Texas & Pacific Terminal (1931, Wyatt C. Hedrick) into an intermodal center that will link pedestrians with taxi, bus, and rail.

After World War II, the automobile allowed the great flight to the suburbs. More recently, telecommuting was supposed to make it possible for us to live and work anywhere. But “face time,” as they say in the computer business, is critical and, judging from the crowding and traffic jams in Silicon Valley, proximity is what counts. We are rediscovering our urban centers as places to both work and live, perhaps choosing location over technology, perhaps learning that technology isn't always the answer. When asked if modern inventions weren't wonderful, an Englishman in the 1840s gave an unequivocal “No.” When asked if it wasn't wonderful that he could send his son a telegram in London, he replied, “Yes, but if it weren't for the train, I wouldn't have to.”

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Speedy Construction Challenge
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Speedy Construction Solution
Typically, there is very little lead-time required with masonry wall construction, something other solutions don't offer. On this project, the contractor was able to phase the building into three areas; this allowed the masons to keep progressing while steel and deck were being erected in already completed areas. To address low frequency concerns, which is extremely important in cinemas, masonry was used for demising walls between the auditoriums. In addition, these acted as bearing walls for the roof framing structure. The phased construction also allowed the general contractor more flexibility for starting other critical path trades earlier on the project, as well as, closing up the building quicker. To address the aesthetic requirements of the development, we introduced horizontal patterns of smooth faced and split-faced masonry above a brick wainscot. The brick veneer installation did not interfere with the progress of the masonry as it occurred after the masonry walls were erected.
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Letters

Who's a Critic?

In John Davidson's "Editor's Note", the statement is made that "the dialogue regarding architecture is rather limited in Texas. Only two newspapers—the Dallas Morning News and the San Antonio Express-News—have architecture critics on staff."

I note that a few pages later you announce that Michael Barnes, a critic for the Austin American-Statesman, was given TSA's John G. Flowers Award for Excellence in the Media, which we are most appreciative.

The truth, as is known by your many members in Central Texas, is Michael Barnes is a distinguished architecture writer who has led the American-Statesman's expanded coverage and criticism in recent years. We recognize the importance of your profession to our community and to the built environment.

Michael Barnes meets any reasonable test of architecture coverage and commentary—whether it be time spent on the work, or experience—that could be applied to writers of our colleagues in Dallas and San Antonio.

Rich Oppel
Editor, Austin-American Statesman
Austin

P.S. I've checked with editors Gil Bailon in Dallas and Bob Rivard in San Antonio to verify the following: The Dallas critic works 32 hours a week, but he sometimes writes arts stories or news features, in addition to his core beat. The San Antonio writer actually is titled senior arts critic, and covers many other issues, including sustainable development.

Editor Responds

Needless to say, we are delighted that Michael Barnes is covering architects and architecture in Austin. But I'm not aware of Michael taking strong positions—both pro and con—on projects in Austin, nor does he play the role of an architecture critic in the same way that David Dillon does in Dallas or Mike Greenberg in San Antonio. Thanks to Michael Barnes, Austin is farther along than Houston when it comes to a dialogue about architecture, but coverage and criticism are two different things.

Correction

In "TSA Announces 1999 honor Recipients" (T/4, September/October 99, p. 17) Mayfest, Inc. was awarded a citation of honor for its efforts to maintain and improve the hike and bike trails along the Trinity River in Fort Worth, not Dallas as the article stated. T/4 regrets the error.
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News

Houston Chooses Rail

HOUSTON "The most rail-studied city on earth" has taken the plunge. The Board of Directors of Metro, the Metropolitan Transit Authority of Harris County, voted at their September 23 meeting to proceed with a 7.5-mile light-rail line for the downtown-to-Astrodome corridor. The decision came at the end of a year-long, federally mandated major investment study that weighed the feasibility, cost, and environmental impact of three options: a future baseline alternative of continued roadway and bus route improvements, an enhanced bus alternative (limited-stop bus service in a dedicated lane), and a light-rail alternative.

Given the 20-year-old authority's current transit strategy of general roadway improvements, carpool lanes, park-and-ride centers, and bus service, light rail was the most radical alternative. At an estimated price tag of $272 million, it was also by far the most expensive, compared to $75 million for the enhanced bus system.

Metro's strategy in building public support for the project downplayed the rail line as only a small part of their overall mobility plan. Indeed, the estimated cost of the line represents only about 6 percent of the total $4.3 billion in improvements projected for the years 2000 to 2010. The bulk of the funds will go toward roadway improvements and an expansion in bus service.

Among the most vocal of the rail detractors were the Harris County Republican Party and the Houston Property Rights Association, an advocacy group that is generally against any form of governmental expansion, land use regulation, or anything it views as an infringement of individual liberties. Their chief concern was the proposal's cost/benefit ratio; the significantly higher cost of rail would not add appreciably to ridership and would have a negligible effect on reducing traffic congestion and air pollution.

Their concerns were not without merit. With an overall population density of fewer than five persons per acre, Houston has always faced something of a chicken-or-egg conundrum regarding transit. There is insufficient density to justify rail service, but the density will not occur by continuing to rely on a car-based mobility strategy.

Supporters of the rail line see the project as an essential investment in Houston's future, particularly as a way to target economic development along the corridor. They note that the downtown-to-Astrodome route presents unique opportunities. The proposed alignment links some of Houston's most significant centers, notably downtown, the Texas Medical Center, the Museum District, and the Astrodome complex. It also traverses several significantly underdeveloped areas in Midtown and around the Astrodome.

While the opportunity may be real, it will take more than Metro's investment to take full advantage of it. Much of the proposed route runs along Main Street, which, despite several bright spots, suffers from the inner-city neglect seen so often as a result of suburban sprawl. A broad group of public and private stockholders known as the Main Street Coalition has been working for the past year to build support for a major urban enhancement project along Main Street. Their vision of transforming Main Street into "Houston's signature boulevard" involves creating a dense, mixed-use, pedestrian-friendly, and transit-oriented urban neighborhood. In fact, METRO has been collaborating with the coalition to coordinate their plan in support of this larger vision.

While the still evolving plan for Main Street shows promise, it is based primarily on improvements to the public realm. Houston is notorious among American cities for its lack of zoning and distaste for comprehensive land use planning. As yet unadvised in the planning effort are the strategies and guidelines that will steer the private sector to provide the kind of development needed to transform the corridor into a vigorous urban neighborhood.

Can Houston put all the pieces together? Only time will tell, but this much is clear; Houston must change its habits and support this rail line with carefully targeted incentives and thoughtful development guidelines.

James Hill

James Hill is an architect in Houston.
Dallas Reclaims the Trinity

DALLAS On August 25 the Dallas City Council approved a $1.2 billion plan for the Trinity River, without having laid eyes on a final document. They voted on the basis of slide presentations and outlines provided by consultants and city planning staff.

"Folks, we've got to get going on this," urged Mayor Ron Kirk, who has made the Trinity a cornerstone of his administration. "We're always for something until it comes time to make a decision." But several council members, angered by the sketchy information about costs, environmental effects, and other basic issues, insisted that a second vote be taken when the plan is completed, probably in October. "We're working on some vague concept that none of us can comprehend in any detail," said council member Donna Blumer, one of three "no" votes.

As bizarre as all this sounds, it is business as usual for the Trinity, the meandering drainage ditch that Dallas has been trying to reclaim for nearly 100 years. Two previous bond referendums failed, and no proposal has ever enjoyed overwhelming public support. In May 1998 Dallas voters barely approved $246 million as the city's contribution to the project, but the debate has continued.

The Trinity Plan, known officially as the Trinity River Corridor Master Implementation Plan, rests on four basic ideas: recreation, flood control, transportation and economic development. The recreational component consists of trails, parks, nature preserves and a 135-acre downtown lake, which would sit in the middle of the flood plain and be fed by groundwater and treated effluent. A second lake might eventually be constructed farther downstream. Half Associates of Dallas, the consulting engineers, have shown that the lakes are feasible; the bigger question is whether they will be large enough for canoes and paddleboats but nothing bigger. And because the Trinity is classified as "suitable only for non-contact recreation," they will be off-limits to swimmers as well.

To reduce the threat of downtown flooding, the plan also recommends creating a series of wetlands south of the business district and new levees at Lamar Street and Cadillac Heights, a predominantly African-American neighborhood on the west side of the Trinity. The Lamar Street levee would protect future development sites, but, in the opinion of many engineers and environmentalists, the Cadillac Heights levee will do little for the neighborhood because it has become a toxic waste dump. They recommend that the city buy out the homeowners and allow the area to flood naturally; the city contends that buyouts don't make economic sense and that residents don't want to move.

The Trinity toll road remains the most controversial part of the plan. As proposed, it would run inside the levees from Highway 183 near Irving to Highway 175 in southeast Dallas. The stated purpose of the road is to relieve gridlock on downtown freeways by siphoning through-traffic onto alternative routes. Opponents argue that the toll road would create one more barrier between the city and the river, while introducing noise and pollution into what is supposed to be an urban oasis. The cost of locating the road outside the levees could be offset, they contend, by federal transportation subsidies and by tax revenue generated by new development.

The most visionary elements in the plan are the five arched bridges designed by Spanish architect Santiago Calatrava. Included are an extension of Woodall Rodgers Freeway into West Dallas, crossovers at the north and south ends of the proposed toll road, and replacements for the I-30 and I-35 bridges, which are scheduled to be rebuilt. Instead of replacing existing structures with faster and uglier versions of the same design, Dallas could acquire an ensemble of civic gateways that would also reconnect two halves of the city. The chief stumbling block appears to be money. The Calatrava bridges would cost approximately one-third more than conventional pier-and-beam structures, which has led some critics to dismiss them as frills.

The biggest hole in the Trinity plan is economic analysis. Although its advocates predict a windfall for the city, no comprehensive study has been done of what the $1.2 bil-
Renzos Return

DALLAS Renzo Piano is back. The Nasher Foundation recently announced that the 1998 Pritzker Prize-winning architect who created two of Texas' most artful buildings, the Menil Collection and the Cy Twombly Gallery in Houston, has been chosen to design the Nasher Sculpture Center in Dallas. Raymond Nasher, one of the country's leading collectors of 20th century modern and contemporary sculpture, explains the decision this way. "I made the determination that Renzo Piano was a very important thinker in relationship to art."

Nasher is no stranger himself to expounding on the manner in which art enhances our experience of the world. Years ago, the Nasher Company incorporated sculpture by artists including Jonathan Borofsky, Mark di Suvero and Henry Moore as an integral part of NorthPark Shopping Center, a suburban project that received the American Institute of Architects Award for "Design of the Decade—1960s." (Landscape architect Richard Vignolo, advisor on a number of the company's building programs including NorthPark Shopping Center, will advise Piano.) The collector's home, filled with major works by Alexander Calder, Willem de Kooning, Joan Miró, Auguste Rodin, Richard Serra, and an impossibly long list of other art stars, encourages a dialogue with and about art that is both intimate and unforgettable.

For a number of years, museums across the country such as the National Gallery of Art in Washington D.C. wooed Nasher, hoping he would leave his collection in their care, but, despite the cost, he chose to create his own open-air museum in Dallas. It is the city where he lived with his late wife Patsy, whose keen eye and passion for collecting matched his own, where the couple raised their children, and where the developer continues to make his mark. Now, two years after he selected the Dallas site, and after a lifetime of touring the world's finest museums, Nasher is certain he's found the right architect. Perhaps attending the opening of Piano's Beyeler Foundation Museum in Basel, Switzerland, which, like the Twombly Gallery, uses natural light as the guiding design principle, influenced his decision. No doubt, it didn't hurt that the versatile architect designed the world's largest airport in Osaka, Japan.

"In the end, it was Renzo's vision for the institution, his inspiring achievements, and his enthusiasm for the project which made him the perfect choice," Nasher says of the Dallas project. "There's no model for it, this urban sculpture center in the bowels of the city, with a rotating sculpture collection and educational institute." He envisions that his $32 million gift to Dallas (the Nasher Foundation will fund all costs associated with the development, maintenance, and programming for the center) will provide an oasis in the midst of the city's urban environment.

The center's two-acre site located between the Dallas Museum of Art (DMA) and the Morton H. Meyerson Symphony Hall in the Dallas arts district will include an outdoor exhibition area as well as an indoor gallery, and an institute for modern and contemporary sculpture. Visitors will have the opportunity to see changing exhibitions of objects from one of the finest collections of modern sculpture in the world, a collection that continues to grow. At the same time, the foundation will continue to loan works to museums worldwide and presumably lure their treasures to Dallas. Nasher is certain that, "with the rotating exhibitions and partnerships with other institutions, Dallas will have the opportunity to be an international center for modern sculpture around the world."

Benefiting from all that international at-

1 Architect Renzo Piano
2 Raymond Nasher in 1987, standing before David Smith sculpture, "Voltri VI."
3 Raymond and Patsy Nasher on a construction site at NorthPark Shopping Center in 1965
tention will be the DMA across the street, which owns a complementary and much broader collection of objects. Nevertheless, the Edward Larabee Barnes building itself appears to take a dim view of Nasher's project; its stern, windowless facade discourages an easy relationship between the two institutions. Nasher had hoped the city would close the street between the two, but neighboring property owners took up arms over the potential restriction of traffic flow.

Renzò Piano sided with Nasher's opponents. "You must accept the city as it is, not try to create some kind of kingdom of art," the architect advised his client. Piano's Centre Pompidou, a contemporary art museum developed with British architect Richard Rogers, and the reconstruction of the nearby Constantine Brancusi studio thrive in a bustling mixed-use neighborhood in the middle of Paris. Nasher now seems content that Harwood Street will narrow to three lanes with wide sidewalks and a double row of trees in front of the museum. The Sculpture Center and the DMA will collaborate on programming, audience development, parking, and security, rather than establishing a physical link. In fact, within the next month, the DMA has plans to host a program with the Nasher Sculpture Center; Renzo Piano is coming to town and will speak at 3:00 p.m. on November 10 in the Horchow Gallery at the Dallas Museum of Art.

Rebecca S. Cohen

Rebecca S. Cohen writes about art for the Austin Chronicle and Texas Monthly.
Of Note: Gotham on the Lake

AUSTIN The city is up in arms over the Gotham, a 12-story condominium that Houston developer Randall Davis is building at 200 Congress Avenue, just south of the Congress Avenue bridge. The Austin City Council passed Davis' zoning request, but the Austin Neighborhoods Council, the South River City Citizens, and the South Congress Improvement Project plan to fight the project on the grounds that it obstructs sight-lines to the Capitol and diminishes the park-like character of the hike-and-bike trail. Responding to criticism that the neoclassical building was too "Las Vegas," Page Southerland Page of Austin has removed statuary from the front and back of the building's original design and the word "Gotham" over the entrance. The Austin Chronicle's depiction of the Gotham to the left, the architects' elevations to the right.
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Of Note: UT Tower Reopens

AUSTIN The University of Texas commissioned Austin architect and metal artisan Lars Stanley to design and build an enclosure for the observation deck at the UT Tower (1937–Paul Cret), which opened to the public for the first time in 24 years. As the site of seven suicides and the infamous Charles Whitman sniper attack in 1966, the Tower presented extraordinary security problems and a unique architectural challenge. Stanley avoided any solution that would suggest a “cage” or create the sensation of enclosure. Instead, he opted for a lattice of wrought iron and stainless steel. The lattice arches over the observation deck as an extension of Cret’s original stone scrollwork. Stanley made hand-forged wrought iron scrolls to attach the lattice to the building.

CALENDAR

AIAS Annual Forum
The American Institute of Architecture Students will hold its annual forum in Toronto, Canada. Lecture topics include selecting a graduate school or internship, architects working in other design fields, technology in architecture firms, and international architecture. Keynote speakers are AIAS distinguished alumnus, Bruce Kuwabara of Kuwabara Payne, McKenna, Blumberg in Toronto, and architect Moshe Safdie, of Moshe Safdie & Assoc., Inc. Thanksgiving dinner will be served. For reduced airfare or registration information, e-mail ikik@mail.utexas.edu. AIAS (202/626.7472, e-mail aiasnatl@aol.com, www.aiasnatl.org) NOVEMBER 23-27

Pritzker on Display
Twenty years of Pritzker Prizes will be exhibited at the Carnegie Museum of Art. The work of previous winners such as Frank Gehry, Richard Meier, Kinzo Tange and current recipient, Sir Norman Foster are included. Recognizing living architects’ creativity, contributions and commitment to architecture, the Pritzker Prize is the most prestigious award that can be bestowed upon an architect. Heinz Architectural Center, Carnegie Museum of Art, Pittsburgh, Penn. (412/688.8690) THROUGH FEBRUARY 27

Dallas Celebrates Architecture
"Celebrate Architecture," an evening of recognition for distinguished architects, planners and designers who have shaped our environment, will be hosted at the Great Hall of the Dallas Apparel Mart. The 1999 AIA Design and Community Honor Awards will be presented by members of the Dallas Young Architects Forum and designers, followed by a silent auction of art by prominent architects. Contact Jeff Jensen (214/969.5599) or Mardi Rendell (214/871.2788) NOVEMBER 12

Rivera Retrospective
An exhibition of Diego Rivera’s work is at the Museum of Fine Arts in Houston. The retrospective exhibition of the artist explores the last 30 years of his life and controversial career, focusing on his blending of European modernism and Mexico's pre-Columbian history. The Museum of Fine Arts, Houston (713/639.7300) THROUGH NOVEMBER 28TH
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Three Firms Audition for Performing Arts Center

AUSTIN As the transformation of Austin's Palmer Auditorium into the Long Center for the Performing Arts moves from the realm of dreams into the world of reality, two architects will mark their anniversary with the project. Six years ago, Austin architects Stan Haas and Michael Guarino seized upon the idea that Palmer would be the perfect answer to the needs of Austin's performing arts groups, including the symphony, the opera, and the ballet. Playing the unsung role of architectural advocates, they studied the 1939 structure, developed a way for it to accommodate two auditoriums and a smaller, flexible space (known in the theater world as a "black box"), and sold the idea to the arts groups, who came together to form Arts Center Stage two years ago. "Michael did sketches," Haas recalls, "and it began to open eyes." The two logged as many as 96 hours speaking to different groups about the possibilities of the transformation. "They pioneered the whole thing," says Austin architect Wayne Bell, chairman of the design committee for Arts Center Stage, "and they did it pro bono."

Now Haas and Guarino, who never believed that they had the experience to take on the job themselves, are the very interested bystanders in Arts Center Stage's selection of an architect. In fact, the board of trustees generously urged all Austinites to share that role when they invited the public to lectures by their finalists on three nights in late September.

The selection will be made from a short list that includes Barton Myers Associates, Inc. of Beverly Hills, Polshek Partnership Architects, New York, and the Chicago office of Skidmore, Owings & Merrill (SOM). Although these firms all share a proven capability with theater design and a flair for capturing the dazzle that makes theater-going exciting, what differentiates them (and may become critical for the board of trustees of Arts Center Stage) is the nature of their various practices. Barton Myers, for instance, is the single head of a 20 person firm; Polshek likes a pluralistic approach made up of inter-generational partners; and SOM multiplies that team-building approach to a much larger, corporate level.

The first to speak was Barton Myers, who mounted the stage dressed in blue jeans with a coat and tie. Such a casual demeanor was immediately belied, however, by the scope and visual impact of the very formal work he flashed on two slide screens. His New Jersey Performing Arts Center for Newark, which mixed two performance theaters with restaurants and community rooms, catalyzed the urban renewal of the once-blighted downtown. His Cerritos Center for the Performing Arts, in Cerritos, California, boasts an auditorium that can be configured in five different arrangements. His Portland Center for the Performing Arts involved the conversion of a historic theater into a concert hall in a complex, adding two new performance spaces.

Before showing any slides of work, James Stewart Polshek spent a good fifteen minutes explaining his philosophy of design. He remarked that if his lecture had a title it would be "The Transformations of Existing Places," and then proceeded to describe how his firm operates a little like a Cistercian abbey — "a small, feisty, questioning place." Announcing that he "would rather transform something than build it from scratch," he began to discuss various renovation projects. Slides of his Rose Center for Earth and Space in New York City showed the design respecting the circular opening of the 128-year-old institution by enlarging the idea of the circle into a full, three dimensional sphere. His addition to a hall at Columbia University Law School opened the building up in a similarly sculptural and light-filled way. In the realm of theater design, the examples were impressive: the redesign of the famous Santa Fe Opera Theater and the renovation and expansion of New York's Carnegie Hall.

"In order to change something, you have to understand it," read a letter to the selection committee from SOM. This was a note struck repeatedly as four architects from the famous firm reminded the audience that SOM "defined the age of modernism, the age in which the Palmer Auditorium was built." Slides of the Lever House, the Air Force Academy, and even the LBJ Library and Museum in Austin illustrated the point. After a formal introduction by senior partner Bob Wesley, three younger partners took turns describing SOM's recent work; the master plan of Ravinia Festival, the famous outdoor location of the Chicago Symphony Orchestra, provided one strong example, and was matched by dozens of other theaters from around the world. SOM's renovations of Chicago's most venerable concert halls—the 1928 Art Deco-style Lyric Opera and the 1927 Symphony Center originally designed by Daniel Burnham—stand out as models of sympathetic modernization.

During each presentation there was a lot of talk about Austin, and what kind of city Austin is. No one mentioned that Austin voters enthusiastically supported the transformation of Palmer in a referendum last year, or that half of its $50 million cost has already been pledged.
There was little talk of Palmer's site—on a hillside that slopes down to Town Lake and looks north, taking in a close-up view of downtown. Instead, the presentations focused on Austin's quirky sense of itself and ended up sounding a bit like the proverbial blind men describing different parts of the elephant.

There will be time enough for the winner to understand the character of the city. Maybe the clues can be discovered in Palmer itself. After all, when Haas and Guarino began to appreciate Palmer's siting, its stunning glass walls, its roof of aquamarine aluminum panels, and its flying-saucer dome, they knew the building was too good to pass by. It had thrilled the city once, might it not thrill it again? “Converting that building on that fabulous site—recycling it in a way—is the Austin kind of thing to do,” says Haas with an enthusiasm undiminished by six years of stewardship.

Lisa Germany

Lisa Germany is a new contributing editor for Texas Architect.
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Organic Office

PROJECT Frogdesign Digital Media Offices, Austin
CLIENT Frogdesign, Inc., Sunnyvale, Calif.
ARCHITECT Michael McDonough, New York
ARCHITECT-OF-RECORD TeamHaus Architects, Austin
CONTRACTOR Marcon Construction
PHOTOGRAPHER Nie Leboue

Frogdesign's new office in downtown Austin is shaped to fit the industrial design firm's, high-tech and "green-tech" image. The quick-changing computer business dictated the 12,000-square-foot office layout. Architects designed the office for easy disassembly, so when computers or telephones are moved, recabling or reconfiguring can be done easily with a screwdriver and a simple materials list. Panels are joined with mechanical connectors and steel studs so reassembly or adjustments are simple.

Materials for the office are all recycled or renewable. Partitions and ceilings are recycled newspaper panels, and dividers are biotech panels constructed of recycled wood fibers pressed into boards that resemble shredded wheat.

Walls and ceilings are leaning, skewed, or curved to express the theory that nonlinear patterns are the rule in nature and geometric shapes the exception. Architects built asymmetrical floor plans for their offices in Silicon Valley, Austin, and New York to create the sensation of continuity for the workers who commute between the three locations. The angled partitions are used as light baffles, bouncing and guiding light further into the floor design, for maximum assimilation of sunlight.
2000 Editorial Calendar

<table>
<thead>
<tr>
<th>Issue</th>
<th>Editorial Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan/Feb</td>
<td>The Future of Architecture</td>
</tr>
<tr>
<td></td>
<td>This issue debuts the redesign of Texas Architect and looks ahead to the 21st</td>
</tr>
<tr>
<td></td>
<td>Century by focusing on a new generation of young architects and the trends that</td>
</tr>
<tr>
<td></td>
<td>will set the stage for the future.</td>
</tr>
<tr>
<td></td>
<td>Portfolio: Schools: This annual special section will feature the winners of the</td>
</tr>
<tr>
<td></td>
<td>1999 Texas Association of School Boards Design Awards Competition</td>
</tr>
<tr>
<td>Mar/Apr</td>
<td>The Border: Five years after the implementation of NAFTA, Texas Architect</td>
</tr>
<tr>
<td></td>
<td>spotlights one of the fastest growing and most culturally fertile regions in the</td>
</tr>
<tr>
<td></td>
<td>U.S._PORTFOLIO: Libraries</td>
</tr>
<tr>
<td></td>
<td>Interiors: Restaurants</td>
</tr>
<tr>
<td>May/June</td>
<td>Architecture for Sport:</td>
</tr>
<tr>
<td></td>
<td>Sports are a growth industry in the 1990s, and Texas cities and universities</td>
</tr>
<tr>
<td></td>
<td>have made huge investments in athletic facilities. Texas Architect scores the</td>
</tr>
<tr>
<td></td>
<td>results.</td>
</tr>
<tr>
<td></td>
<td>PORTFOLIO: Health Care Facilities</td>
</tr>
<tr>
<td>Jul/Aug</td>
<td>Architecture for Animals:</td>
</tr>
<tr>
<td></td>
<td>The relationship between man and beast continues to evolve, and the built</td>
</tr>
<tr>
<td></td>
<td>environment for animals reaches new levels of sophistication. TA will feature</td>
</tr>
<tr>
<td></td>
<td>the best work by Texas architects.</td>
</tr>
<tr>
<td></td>
<td>PORTFOLIO: Office Buildings</td>
</tr>
<tr>
<td>Sep/Oct</td>
<td>2000 TSA Design Award Winners:</td>
</tr>
<tr>
<td></td>
<td>The best design in Texas is the focus of this annual issue that sets the stage</td>
</tr>
<tr>
<td></td>
<td>for the 61st TSA Annual Meeting and Design Ideas &amp; Products Exposition.</td>
</tr>
<tr>
<td>Nov/Dec</td>
<td>New Texas Houses:</td>
</tr>
<tr>
<td></td>
<td>Residential architecture is often the most heartfelt and innovative work that</td>
</tr>
<tr>
<td></td>
<td>architects do. Texas Architect visits the best projects in the state.</td>
</tr>
<tr>
<td></td>
<td>PORTFOLIO: Sustainable Design</td>
</tr>
<tr>
<td></td>
<td>Interiors: Architectural Millwork</td>
</tr>
</tbody>
</table>

To submit work for publication: mail images, a project description and other pertinent information to: John Davidson, Texas Architect, 826 Congress Ave., Suite 970, Austin, TX 78701. To have your submission returned, please include a self-addressed, stamped envelope. For more information, call 512/478-7386, or e-mail davidson@texasarchitect.org.

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Green Goes Traditional

PROJECT McBride Residence, Spicewood
CLIENT Gail McBride
ARCHITECT Barley & Pfeiffer Architects, Austin
CONTRACTOR Katz Builders
CONSULTANTS Conrad Engineering (structural); Tom Randall (landscape)
PHOTOGRAPHER Image (Connie Meverly)

1 Barley & Pfeiffer Architects of Austin combined sustainable materials and traditional building techniques to create this 3,545-square-foot house overlooking Lake Travis. The house’s most prominent feature is the cupola which creates a chimney effect by ventilating heat through windows placed high in the cupola. This creates a draw that pulls in cooler air from lower, ground floor windows. To enhance this traditional strategy for dealing with hot Texas summers, the architects added motor-operated upper windows in the cupola. The air conditioning system selected consists of three small condensing units (commonly used in commercial buildings) that use evaporation to cool the inside air. The separate units, coupled with corresponding programmable thermostats, give the owner temperature control over separate areas of the house, hence contributing to energy efficiency. The architects used recycled materials where possible. The result is a house that looks deceptively traditional, has low long-term utility costs, yet is open to the outdoors as the client requested.

2 To take maximum advantage of the prevailing lake breezes, the house is sited in a grove of shade trees with the largest windows facing southeast. Deep roof overhangs extend over double-paned windows to divert heat and provide additional shade. Insulation board and a self-venting radiant barrier system establish a thermal break between the metal roof and the upstairs rooms.

RESOURCES
Art Underfoot

INTERIORS One of the most remarkable features of the recently opened Austin-Bergstrom International Airport is the terrazzo in the main terminal and baggage claim area. Two murals are part of the terrazzo floor that encompasses 150,000 square feet, costing $1.8 million and taking 35 full-time employees 15 months to install by hand. The murals are a map of the rivers of Texas, representing Austin's love of nature, and a map of Austin's downtown streets with their Spanish names reflecting the blending of Anglo and Mexican cultures.

The hand crafted technique of terrazzo extends back to 15th century Italy. Sculptors would shape marble outdoors and the chips would fall onto the terrace—hence the name terrazzo. Artists would collect the chips, mix them with cement and use them for flooring. The traditional blend of cement and marble is still widely used today. Additionally, architects and designers have the option to specify epoxy matrix terrazzo, which offers an even more unlimited color palette. Chips, also referred to as aggregates, are available in marble as well as granite, glass, and synthetic materials.

The project at Austin's airport used the traditional type of terrazzo, the same that was used in the recent extension of the Texas State Capitol Building. It consists of an equal blend of 1/4- to 3/8-inch marble chips and white cement. The cement and marble chips are custom-blended at the jobsite, and hand-troweled into the grid-like patterns on the structural slab.

The detail of the murals required a metal specialist to fabricate the letters and edges of rivers and streets. Because the adaptations of the original map were completed on CAD, the specialist was able to program a water jet, which uses high pressure water to cut stainless steel sheaths to precisely reproduce the designer's adaptations. When the metal outline of the design was completed, it was brought to the site in ten separate two-by-four foot panels, welded together, and then placed into the mud-bed portion of the terrazzo system. The terrazzo colors were poured in place to complete the design element of the murals.

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had to be given a day to set. An additional three to four days were required for the terrazzo to completely dry, then it was ground and polished. Grinding the terrazzo to trim the top 1/16 inch off the floor necessitates manually pushing a three-to four-hundred-pound machine across the surface.

Designers and airport officials chose to create the murals in terrazzo for reasons of durability, cost, texture, and visual relationship to other materials in the facility. They wanted the floor to be smooth, to minimize noise, and yet maintain a balance between materials elsewhere in the airport buildings. The technological advances that have increased the versatility of terrazzo gave the designers the latitude to create intricate artistic designs, blending and embedding the images that capture the spirit of Austin.

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Model of Barbara Jordan Passenger Terminal, courtesy Page Southerland Page
Turn of the Century

by Susan Williamson

When the City of Austin hired Gensler of Houston and Page Southerland Page of Austin to design a passenger terminal for the Austin-Bergstrom International Airport, the City Council asked for a facility that was easy to use and that captured the character of Austin. The architectural team responded with a building that is thoughtfully and coherently organized, an open expanse of natural light and muted earth tones.

The 680,000-square-foot Barbara Jordan Passenger Terminal, built at a cost of $130 million, is a long, shallow crescent with rectilinear wings extending at each end. The narrow plan reduces the distance from the curb to the most heavily used gates and allows a visual connection from ticket lobby through security checkpoints to the central gates.

The building's most striking feature is its openness. Virtually all of the airport's public operations are visible from the doors—ticket counters, gates, retail, and food services. Even the baggage claim area, so often hidden away at the end of a long hallway, is on display here; a large central atrium opens this grand lower-level space to view from the concourse. On the gate side, the building opens up even more, to a double-height wall of...
glass that fills the space with natural light and provides panoramic views of the sky and the outdoors. In this central area, the architects placed what they call the marketplace: a series of freestanding metal and glass pavilions that house food services and retail shops. This is the terminal's gathering spot, with cafe-like clusters of seating looking out on the main concourse and even a stage for live music.

A great deal of effort went into determining how the character of the city might be revealed. Working with a citizens' advisory committee, the architects decided that two traits were central—a love of the natural world and an emphasis on technology. Architect Lawrence W. Speck, FAIA, of Page Southerland Page and dean of the University of Texas School of Architecture, says the team was determined to render those values architecturally without resorting to cliche; he cites the openness to the outdoors and the use of natural materials as manifestations of one side of the equation. The simplicity of the plan and the crisp detailing, as well as such things as exposed structural elements, are representations of the educated, analytical Austin mind that has fueled the technology boom, he says.

In terms of ease of use, the architects meet almost all expectations. The only exception is the long walk to some gates. The total number of gates was increased from 20 to 25 after the plan was developed, and the additional gates are located in an extension at the western end of the long terminal. The walk to those far gates is now almost as long a trek as to the farthest gates at the old airport. Moving sidewalks were considered but finally deemed unnecessary.

The goal of reflecting the character of the city proves more elusive. The subliminal architectural message is that Austin is a lively, open, and sophisticated city. And the new terminal is, indeed, all of those things. The marketplace is a mostly convincing approximation of Austin's hang-out culture, with local vendors represented rather than anonymous national concessionaires, and with Texas music on the sound system. The sweeping wall of glass provides a clear connection
to the outdoors, while the concourse itself is a refined assemblage of metal panels in shades of gray interspersed with sections of sisal and fabric in earthy browns and others of golden wood. Terrazzo floors are patterned in rectilinear blocks, again in shades of gray with an occasional strip of green.

The result is a terminal that is sleek and efficient, but at the same time devoid of the quirky energy that has, for many, defined the city. At the heart of the problem are the carefully neutral and ordered interiors; the terminal spaces are refined to the point of blandness. A flood of natural light reveals the exposed system of roof trusses, cables, and connectors, but both the flat ceiling and the structural members are painted a uniform grayish cream. Texas pearl granite is used as an accent in several areas, as well as on a large wall in the baggage claim space, but the granite is so close in color to the terrazzo that it becomes just one more element of the monochrome scheme. The most colorful elements are murals above the ticket counters, particularly the scenes of neighborhood life by Fidencio Duran. Other artwork is, for the most part, clever and well executed although sometimes too subtle to compete in the large spaces. Wrought-iron hand railings by Austin architect and artisan Lars Stanley provide a welcome tactile warmth but are visually overwhelmed by the code-required glass and brushed metal guardrails.

Certainly, as Speck points out, Austin has long been an oasis for the educated. But it has also been a haven for the nonconformist, and the ferment, the clash of opinions, the warmth implicit in that culture is not represented in the new terminal. Or maybe the architects have gotten it
right. Maybe the technology boom has rendered idiosyncrasy out-of-date. Perhaps this is the new Austin—cool and precise, ordered and sleek. Certainly the terminal serves its users admirably at a functional level and is a dramatic improvement aesthetically over the old. Maybe only those nostalgic for Austin’s less well-ordered past (or at least for the myth of that past) will question whose city is reflected here.

Susan Williamson was editor of Texas Architect from 1997 to 1999.

PROJECT  Barbara Jordan Passenger Terminal Complex
CLIENT  City of Austin
ARCHITECT  Page Southerland Page, Austin (architect-of-record); Gemsler, Houston (project design architect); Conner Keller & Negrete Architect (associated architect); Lawrence Speck, FAIA, Austin (project design architect & consultant)
CONTRACTOR  Marganti Group
CONSULTANTS  TCA-Landrum & Brown (aviation planners); Burns & McDonnell (associated engineers); Jaster-Quintanilla (structural engineers); Lozano Ortiz & Kent (associated engineers)
PHOTOGRAPHER  John Linden; Paul Bardagjy where noted

SELECTED FACILITY MATERIALS AND CONSULTANTS
Foundations: MW Builders; roofing: Johns-Manville, Centria; acoustical ceilings: Decoustics, USG Interiors; woodwork: Quality Woodwork Interiors; terrazzo: National Terrazzo, Tile & Marble, Inc./American Terrazzo Co.; plastic laminate doors: VT Industries; toilet compartments: Santana Products (J.M. Maly, Inc., distributor); curtain walls: Viracson; soil testing: Reba-Kistner Consultants; construction materials testing: HBC Engineering, Fugro South; wall panel & column cover system: Environmental Interiors; geotechnical engineering: Fugro South; metal cladding: Pohl, Inc.; structural engineering: Jaster-Quintanilla, P.E. Structural Consultants; environmental service, remediation and demolition: Law Engineering & Environmental Services; metal ceilings and exterior soffits: Hunter Douglas Architectural Products; granite wall facing, stairs and floor trim: Cold Spring Granite; civil engineering: Jaster-Quintanilla; runway and drainage design, water control and environmental consulting: PBS&J; parking garage consultant: Jose Guerra, Inc.; countertops: DuPont Corian

1 Frosted glass filters heat from Texas sunlight.
2 Land-side exterior is clad in metal panels with accents of Texas pearl granite.
3 Baggage claim area opens to both levels of terminal.
4 Murals by Fidencio Duran.
Gates of the City

by Lawrence Connolly

Faced with the charge of replacing a twice-remodeled air terminal built in 1951, the City of Midland looked to Gensler’s airport group in Denver. The new $35-million 185,000-square-foot Midland International Airport is straightforward, easy to understand, and manages to make the task of getting on an airplane or picking up a passenger a pleasant experience.

The Gensler architects used offset metal-skinned vaulted roofs throughout the project to recall the structure and material of airplane wings. The taller of the two offset vaults of the terminal has its fascia interrupted by three massive masonry towers that lean curbside and, according to the architects, recall oil derricks. The crisp corners of the towers are made possible by a unique custom-cut canted brick instead of corbeled common brick. The towers are not stylistic indulgences, but hide the facility’s three large mechanical units and define the front doorways.

In the interior, a great atrium lobby makes interior signage almost unnecessary. The vaulted space’s long sight lines allow one to immediately see how the building functions. At the center of the atrium, a vertical circulation element contains an elevator with see-through shaft, flanked by sym-
metrical pairs of parallel escalators and monumental stairs. The walls of this circulation structure are clad in alternating horizontal bands of limestone and polished marble which reference the core drilling samples that are so much a part of the region’s oil field exploration. The airplane wing part is repeated in the shape of the inverted arc-ribbed canopies that define specialized areas within the terminal and the concourse. The ceiling at the terminal level rises to 50 feet and at the concourse level up to 40 feet. Part of this volume is filled with the historic Pilska airplane (the first aircraft to be flown in the state of Texas), suspended from the roof structure in the baggage claim area. Clerestory windows in the offset of the vaulted roof wash the ceilings in an ethereal natural light from both the east and west. The white vaulted ceilings and structural truss system are unencumbered by any electrical lighting fixtures or air registers. Indirect lighting is provided in the atrium primarily by light troughs at the base of the vaults opposite the clerestory windows.

Part of the challenge of replacing the old terminal was the task of providing uninterrupted passenger service while the new one was being built. Locating the new terminal so close to the old, allowed most of the existing parking lots, runways, utilities, and tarmacs to be reused with only a few modifications. Two welcome additions to the parking areas include the new short-term parking canopy structures that are derived in form and materials from the terminal, and the new 500-foot long landscaped pedestrian boulevard that bisects these linear structures, linking
1. the north pair of parallel monumental stairs and escalators in the lobby
2. polished limestone and marble circulation core with the elevator's transparent shaft opposite the central tower and its perforated screen
3. canopy of the covered walkway leading to the porte cochere
the main terminal entrance to the long-term parking lot. This boulevard is supplemented by two shorter walkways: one for the ticketing area and the other for the rental car and baggage claim areas. The six-lane-wide and 600-foot-long curbside provides ample passenger loading and unloading capacity even when all three entrances are in heavy use.

Midland's terminal is a refreshing design for a small hub airport, but it also represents a trend in large-scale projects; the facility can be expanded without increasing roof area. A second floor can be provided over the ticket and baggage claim areas when needed. The linear configuration of the terminal also allows for expansion of up to eight additional gates. This new user-friendly airport insured that it will continue to work well in the future if, and when, the Permian Basin's commercial air travel needs increase.

Lawrence Connolly is an architect practicing in Midland.
River Station
by Lisa Germany

All the lines—red, blue, yellow, purple and brown—of San Antonio's little fleet of rubber-wheeled trolleys lead to the Riverwalk Streetcar Station. This stop in front of the convention center happens to be about a half block away from the Alamo and right above the place where the Riverwalk branches out and leads either to the convention center or the River City Mall. What distinguishes this particular streetcar station is not simply that it makes San Antonio's historic central business district accessible from distant points of the city, but that it provides a gracious connection to the Riverwalk. At this hub of pedestrian traffic, the streetcar stop, outfitted with an elevator and a spiraling staircase, smoothly brings together the city's famous split levels.

The City of San Antonio and VIA Metropolitan Transit jointly arrived at the idea of a streetcar station that would also be vertically connected to the river, and they agreed to share the project's $1.5 million construction cost. Because the architect's job would be high profile and possibly controversial (every move made in the historic core of San Antonio is closely scrutinized), they advertised the job widely and carefully interviewed finalists. When the final votes were counted, local firm Beatty Saunders Architects, Inc., which is also heading up the Riverwalk Access Master Plan, had the job. "We had generated sketches of what it might be like," remembers city architect Bill Hensley about the firm's first design, "But Mike [Beatty] came up with something so much better than we imagined. He redesigned the whole convention plaza."

"We took everything on the plaza off," says Beatty, "so we had a clean palette." The removal of old lamp posts, signs, and street furniture gave the firm a chance to observe the way the site was used. They knew they would need to accommodate streetcar stops on each of four sides of the busy plaza, but the unencumbered site also allowed them to see the way people meandered from one side to the other. Wanting to respect the natural, easy quality of pedestrian traffic, they decided to shape spaces with simple, limestone columns that moved along the plaza in a serpentine fashion. While thus keeping the flow of people loose and ambling, the curving lines also referenced the current of the river below.

With a desire to keep every addition simple, the columns were outfitted with lights that smoothly extended their heights with cube-like and sandblasted glass. Canopies to shade patrons cantilever out from the columns, and steel beams designed by Beatty subtly tie the structure together. Artwork in the form of colorful tiles by San Antonio artist Ann Adams were also worked into the four sides of each column.

Beatty's light touch on the plaza kept the station from impeding views of the historic city, but that was only part of his assignment. The job of connecting the station to the Riverwalk with a staircase and an elevator turned out to have a multitude of hidden difficulties. Beatty knew that he would have to abut his structure against a historic bridge, but he did not expect to encounter a 36-inch sewer line and a 30-foot-wide siphon vault. Nor could he have anticipated that a huge storm sewer discharge would hem him in still further. Ultimately, the sewage line was moved; Beatty Saunders redesigned the siphon vault and hid it inside the curvilinear form of the elevator, and then, somewhat miraculously, wedged the entire structure between
the storm sewer discharge and the bridge.

When the project was finished just before Fiesta began this year, it was widely proclaimed a success. Bill Hensley, who is particularly thrilled with the station says he really likes the intermodal aspect of it. "You can be a pedestrian, you can pick up a street car going any direction or you can go down to the river and ride a boat," he says.

1. Spiraling staircase lightens the mass of the elevator it encircles.
2. Sandblasted cube lights on columns are unobtrusive by day, luminous by night.
3. The station from Convention Plaza, the busiest pedestrian intersection in the city.
4. The station smoothly connects the two levels of San Antonio's downtown.
Discovering the Street

by Willis Winters

As the epicenter of both suburban sprawl and uninspired freeway architecture, Addison, Texas is the unlikely site for an enlightened public/private mixed-use development based upon "new urbanism" planning principles. Nonetheless, this small suburban community is home to Addison Circle, a planned, high-density urban neighborhood currently in its third phase of construction. The 80-acre development is sandwiched between the Dallas North Tollway and the Addison Airport, its southern boundary defined by a proposed DART rail alignment that will extend to the Dallas/Fort Worth International Airport. As an interim measure, DART recently completed a bus transfer station adjacent to Addison Circle on the future rail station site. This DART project represents a rare case of station being built in response to high density development rather than, as is historically the case, development following rail.

The development of dense residential or mixed-use projects adjacent to light rail is a recent phenomenon in Dallas, but several other major projects are currently under construction. A $150 million loft and retail development is being built near the Cedars station south of downtown, and on the north end of the DART line, two major projects have mushroomed to envelope the Mocking-
bird Lane station. Like Addison Circle, these projects are located close enough to adjacent light rail that daily vehicular trips by residents could be significantly reduced: good news for a city choked by poor air quality and traffic congestion.

As Addison Circle currently takes shape on the flat, featureless expanse of the North Dallas prairie, it incorporates a pedestrian-friendly, hierarchical street network serving an interior mixed-use district of up to 4,000 residential units. The second major component of the land-use plan is a high-density, primarily commercial, mixed-use zone located along the development's eastern edge, parallel to the Dallas North Tollway. This area is planned to encompass up to four million square feet of office, residential, hotel, and retail space, creating a potential employment base of 10,000 jobs. These jobs would be only a short, potentially pleasant stroll (one block) from the nearby residential district.

To date, the first two phases of development are complete, with a population of 1,500 residing in both apartments and townhouses. RTKL has designed all the mixed-use residential buildings for the project, including those currently under construction in phase III, and those planned for phase IV. These residential units are generally full-block buildings with interior courtyards and parking garages, tapering down in height from seven floors adjacent to the tollway commercial district to an average height of four floors at the project's center. They are designed to overlook the public streets and parks with front doors, balconies, and porches, instilling in the process a self-policing street life. When all of these elements are considered alongside Addison Circle's other urban attributes, including population density and diversity of primary uses, even urban critic Jane Jacobs might approve.

Architecturally, the mid-rise residential blocks are “background” buildings of indeterminate stylistic provenance; their true significance lies in the urban form they create—splendidly-proportioned public spaces connected by pleasant, pedestrian-friendly streets. These elements are based upon fairly reputable urban prototypes, Commonwealth Avenue in Boston's Back Bay, and John Wood the Younger's monumental Royal Circus in Bath, England.

While it is too early to draw conclusions about Addison Circle, the early signs are encouraging. The residential component is fully leased and the retail is doing well (no closures). With the imminent completion of nearby employment nodes only one block away, one critical question remains—can Addison Circle discover the street?

Willis Winters is assistant director of the City of Dallas, Park and Recreation Department.
Collaboration by Design
How a team of architects built the last major U.S. airport of the millenium

Airports are the quintessential 20th Century building form, an architectural expression of movement and change. From the very beginning, they have presented architects with the daunting task of keeping pace with a rapidly evolving technology. The requirements for airports not only change rapidly, but airports change the world around them. Because they attract development on their peripheries, they have been compared to lakes which eventually silt in and vanish—the Robert B. Mueller Airport in Austin is a case in point. No one in the 1950s anticipated how dramatically the advent of the jet age would rewrite the rules for terminals in the '60s. No one anticipated how accessible air travel would be at the end of the century.

In designing an airport, architects not only have to meet complex demands of technology, they have to satisfy the demands of municipalities, airlines, and the Federal Aviation Administration. Airport design is one of the most complex and collaborative challenges an architect can face. To understand the process, Texas Architect spoke to three architects who collaborated on the new Austin-Bergstrom International Airport. Gary Blankenship is a vice president at Landrum & Brown in Los Angeles who specializes in planning and conceptualizing air terminals. Ron Steinert is the vice president in charge of the airport practice at Gensler. Lawrence W. Speck, FAIA, is a principal at Page Southerland Page of Austin and dean of the University of Texas School of Architecture.

Gary Blankenship

TA: How many terminals have you planned?
GB: I'm going to just estimate, probably somewhere between 50 and 100. Typically, many studies are done before a terminal is built, and there may be several different studies for one terminal. Before we ever knew the Bergstrom site would be available, we were studying the Manor site with PSP, and there was a very different terminal arrangement conceived. So when I talk about terminals that I worked on, I'm talking about the studies and the real projects.

TA: You've been planning airports for Austin for how long?

GB: I think we started out in 1987. At one point, I basically moved down to Austin. They had some of the Air Force facilities that were only a couple of years old, and I was put into what was basically an enormous room which had no windows. It was full of wall space. I work by hand because it's a much faster, and it can be more colorful and interesting. You can respond more quickly to the team's ideas, draw the bad things along with the good things, and have a look at everything. Before we got very far, the walls were just covered with sketches. So we really try to examine every possible opportunity that might be there.

TA: How long does this part of the process take?

GB: The planning studies are very front-end, and they typically last six months. Some last much longer.

TA: When you started the Austin-Bergstrom project, who was on the team at that point?

GB: There were various engineering firms that were part of the process from the very beginning. Of course in the very beginning it was Matt Kreisle and Ron Steinert from Gensler. Matt was PSP of course and Chuck Tilley from PSP. The way these studies work, I will take the lead for the conceptual work. The drawings will all be ones that I do, with everybody looking over my shoulder for that initial phase. And then when we get to the point where we have confirmed a recommended alternative with everyone, including, most especially, the client, then it begins to shift into more of a schematic design and that was taken over by Gensler. They begin to develop the architectural statement, the space through the floor into baggage claim and things which give it a character. Then, as it phases out of schematics, it begins to move through design development. PSP picked it up and took it forward through completion. It's almost like a symphony where the movements rise and fall and sequence in and out of each other. It's like an art form. I just like it so much because it isn't a cut and dried thing, it's always changing.

TA: What are some of the more critical factors in the process from your point of view?

GB: The key in successful projects is achieving a balance between the terminal and its land and air-side capacities. The aircraft gates and air-side
capacity are always the driver in projects like this, because if the aircraft can’t get in and out with passengers, then there’s no need to do anything else.

**TA:** As I recall, you came up with 18 different configurations?

**GB:** They’re not totally separate concepts. There really aren’t that many different concepts for terminals. There are probably four different ones, but these were variations on the theme. It’s an evolutionary process. I can’t remember which one we chose, it was way down the line, though. I think it might have been number fifteen.

**TA:** So it’s not as if you come up with the 18 and then choose one. You work through.

**GB:** In the case of Austin, we developed a very simple matrix. We listed the alternatives along the top by number, and then down the side we had evaluation criteria and definitions of those criteria which were grouped into air-side, terminal, land-side, and I believe, cost considerations. From that we short-listed three alternatives and blew those plans up to a larger scale and showed how they would work internally. We drew up sections, we measured walking distances and the kind of objective criteria that we could know about at that point. And then we went through a second evaluation which resulted in the recommended alternative.

**TA:** Did the fact that this had been an Air Force base present any particular problems or make it different?

**GB:** I’m not sure that it was different from a regular airport that has infrastructure you’ve got to work around. There was a munitions dump down to the south, but that didn’t really have too much to do with the terminal.

**TA:** Do you stay involved throughout the life of the project or, once they go into schematics and design development, do you move on to another project?

**GB:** I like to stay with it all the way through. I think that’s the proper thing to do. The role does taper off, however, and that’s just a fact of life.

**TA:** I understand that the City of Austin requested that this be adaptable for the next 50 years.

**GB:** Yes, that was fascinating. And we did look at it, using what we know today about aircraft. But it would be like somebody in 1954 telling us what we need today, and the airline and aviation industry changes so much that it’s almost impossible to know. I think the key was to engineer and design as much flexibility into the plan as you possibly can, and that means keeping elements that can’t be moved or easily changed away from elements that are likely to change. Don’t put your mechanical rooms and toilets on the perimeter of the building if you can possibly avoid it because aircraft need to shift up and down the face.

**TA:** Did the plan for the baggage claim area come in schematics or conceptual planning?

**GB:** We had that very early and it was the second time that we used it. The first time was at the John Wayne Terminal in Orange County.

But there was a real concern about reflecting the character of Austin, and there were lots of different ideas about that. Of course, I wasn’t involved in the later choice of materials and colors and things like that. From the very beginning, there was great concern that this would be the gateway to the city, and it needed to be something that really reflected it. Austin didn’t want to do business as usual, they wanted something special, and I hope they got it.

**Ron Steinert**

**TA:** Is Gensler’s airport practice spread out over the country or is it primarily in California?

**RS:** We have four offices that are our regional airport practice areas. Here in Santa Monica of course, and then a Denver office, Houston, and Washington D.C. All currently have active airport projects.

**TA:** And the Austin project was done out of which office?

**RS:** It was basically a Houston office project. Although the way we work, we use our best people who are available, regardless of where they live, so even though it was a Houston project, it was staffed primarily with LA people.

**TA:** How many airports does Gensler do a year?

**RS:** It obviously depends because these projects are so long in duration. Each lasts about five years; but since 1985, we’ve designed over thirty terminals.

**TA:** How did Gensler assemble the team?

**RS:** Airport projects are maybe “unique” in terms of architectural projects. Perhaps 80 to 85 percent of our projects come from repeat clients and relationships. Airport projects are all in the public sector, and once you begin to know that a project is coming, and usually that’s anywhere from a year to six months before the request for proposals comes out on the street, you look to form teams. Austin, of course, is probably one of the more difficult cities to work in because the city required that roughly 75 percent of the total work be based in Austin. We had a long standing relationship with Gary. In fact, we’ve worked on about eight or nine different terminal projects together. When this project became visible, he suggested that we join the PSP team. So we brought the airport design expertise to the PSP team, and then PSP brought
Larry Speck into the project, and his role was to ensure that the initial design was appropriate for Austin. We had a team of about six people that lived in Austin for just about a year. During that time, we led the design of the facility, and Larry came in and consulted. You look for a team that has a local presence, has local capabilities, and then you get the best people for the best things in the right spots.

TA: So there were six Gensler designers in Austin. Were they involved throughout?
RS: We were involved in the planning side of it with Gary. We were involved in schematic design and design development. During that time, one of our designers, Cap Mallick, led a multi-firm design team. We had a very large space in the PSP office, and we had people from PSP, from Juan Cotera's office, and our people. But in essence we were responsible for turning the planning document into a real building. So it was a very collaborative effort. I think at the peak the team was made up of 15 or 16 people from the four firms.

TA: Other than the teaming requirements, did Austin present any other particular problems or challenges?
RS: For one, we were asked to project what this airport might be 50 years down the road and make sure that whatever we did on opening day, would allow the terminal to grow. Can you imagine in 1950 trying to design a terminal that would be appropriate today? But the advantage of doing that became apparent during the construction of the terminal when the airlines and the airport determined that there was a need for five more gates.

TA: During the process of building?
RS: Correct, and because we had already gone there in the planning phase, we knew exactly how to do it, and it was pretty much complete by the time the airport opened.

TA: This is not a hub airport, it's a destination airport. How much does this kind of airport differ around the country? How much can an airport like this reflect a particular place?
RS: You would think an O&D (origin and destination) airport is an O&D airport. But each city, each community has unique requirements. One of the requirements Austin had for this facility was that it be a "green" facility. We try to be conscious of that in all of our terminals, but not to the same extent that this one was. This was a benchmark.

TA: What were some of those things that made it sustainable?
RS: We had motion sensors for lighting systems and multiple zones for air conditioning, so you only cool those areas that need to be cooled. We used materials that don't off-gas. The carpeting, the glues and the wall finishes were not toxic at all. All the systems were highly energy efficient, and the materials were basically recyclable. That was a very conscious effort. Every community wants their terminal to be distinctive, for the passenger to instantly realize they've arrived in a particular city. This is a real challenge for the designers. One of the nice things we did in Austin is that you can stand above the baggage claim and look out through the windows in the front of the building to the skyline of the city. If the terminal had been designed more enclosed, that wouldn't be as strong.

TA: Do you think it takes citizens in a city a while to appreciate a new airport?
RS: The subtleties of the design and the subtleties of the designer's intent will take a while, but, in terms of function, I believe that the users of the terminal understood the improvement over Mueller airport instantly.

TA: Austin aside, what are the great airports or airports in the United States?
RS: If you were looking at them as purely architecture, I think your selection would be different than if you are looking at them in terms of functionality. Cincinnati is probably one of the most successful terminals, as a hub. But if you are looking strictly at architecture, obviously Helmut Jahn's facility in Chicago at O'Hare and Eero Saarinen's at Dulles Airport are brilliant examples of architecture, but they aren't necessarily the best airports to get around in. I think Austin will be deemed a successful airport. In terms of how it reflects the community and functionally, it is very much a success.

Lawrence Speck, FAIA

TA: You were involved from the beginning. What was your focus at that point?
LS: Well, Gary was generating all these different configurations. At that point, I was interested in what kind of space it was going to be. So we came up with this option that seemed to have great spatial possibilities to me.

TA: How so?
LS: Well that long curve was going to give a central focus, as opposed to one of the more linear configurations.

TA: Had you worked on an airport before?
LS: No.

TA: Was it just another design problem or did you have to go out and educate yourself about airports in a different way?
LS: I did go to lots and lots of airports. But my personal belief is that we often put way too much stock in whether somebody's done fifteen of these things before. I had never done a convention center, but I did the Austin Convention Center. Never did an airport, I did the airport. I have huge admiration for those multi-building-type firms which are the ones generally we admire—Ford Powell & Carson, I.M. Pei. I think there's a freshness that comes from doing many different building types, and you get to learn some lessons about one building type by doing another building type.

TA: There was a great deal of emphasis on using the terminal to establish or confirm Austin's civic identity.
LS: That's true. The mayor and city council really came at this airport as an identity for Austin. So this wasn't just the architects. The council formed a committee to work with us, to try to give this as much character of Austin as possible. So it was an investment the council made.

TA: What did you do to capture the spirit of Austin?
LS: The consensus was what we didn't want was a kind of billboard for Austin that said in a cheap way “Y'all come,” or "Here's who we are." The idea was to penetrate a little deeper and see what is the soul of the city. And we came up with several things that I thought were just wonderful observations. One was the whole reverence for nature and the natural environment. The worst thing about many airports is the sense of enclosure. We wanted a space big enough that you don't feel contained. And there are all kinds of things about nature—local materials, granite from the area—that were a tie into nature. Another thing was the Austin lifestyle, not in the clichéd sense, but the idea of it being a friendly place, an easy relaxed place. That's the real Austin.

The third thing this committee came up with was the notion that we're also about technology. We have a long standing history as an intellectual community, a community that thinks. So the airport needed to have this kind of clarity and intelligence all the way down to how it's made, how the pieces go together. In addition there are all kinds specific signals of Austin, especially in the craft and art part of the project. And this was also very interesting, seeing what can architecture carry and what can art carry. What messages can be specific, and what messages had to be more abstract?

TA: I understand light in the airport was approached as a design element.

LS: It was a risky situation because we were doing things you don't normally do in Texas with light, in part because we can do it now. There's now glass that lets in light but very little heat. We had three different kinds of glass. It's really been those advances in glass technology that enabled us to use so much daylight. It's very interesting. Daylight gives you more lumens per unit of heat than artificial light. Because an airport is internally lit you're concerned about the heat that is generated by bodies, by the lighting system, by the machines that are operating there. We did a lot of testing, but in the end, I was very pleased about the fact that we opened during the summer, and we were able to reduce our cooling because we didn't have to compensate for all that electrical light.

TA: How would you compare this turn-of-the century airport to train stations built at the turn of the last century?

LS: The huge change in airports is that they're for everybody now. They've become a public building in a different way and are much more like train stations were a century ago. I think there's great potential we haven't explored yet. Train stations were not just a place to get on a train but were places where you just hung out. That's where hotels and restaurants were. That may happen with airports in the future. There may be a way to connect with the rest of the city in a much more positive way.

TA: The parking lots of this airport are vast. One doesn't really see the terminal as you approach in a car.

LS: The parking lots are in a great location in terms of drivers arriving at the airport, looking for parking. And then there is, of course, a lot of landscaping to come, a hell of a lot of landscaping to come. Eventually I don't think it will feel so much like you're approaching a parking garage. But we knew from the very beginning that that's not how people experience an airport. Anybody who designs an airport and thinks that someone is going to be standing out front and saying "Oh what a great airport!" is delusional. At an airport, you're getting out of your taxi, you're trying to figure out which airline you're going to, you're gathering your bags. The real experience of an airport is inside. You don't approach an airport the way you approach the Capitol or a nice office building. It's a totally different experience.

TA: You've done very large projects and you've done small. As a designer which do you prefer?

LS: Even when I work on a small project, I don't make all the decisions myself. The client, the contractor—there's always somebody else that is part of it. I can't say I like one better than the other. I really like the change between them. The down side of a big project like the airport is that there's no immediate gratification. It takes a lot of patience. You're thinking of something now, and it's going to be five years before that comes out. Or you're four and a half years down the line, and you're trying to remember, what were we thinking? So it takes a lot more patience and a lot more grand comprehension of where we're going and what we're doing to keep ourselves on track.

You know, I've never sat down until very recently and even analyzed what happened in the collaboration. It just didn't dawn on me to focus on that. Lately, I feel like pretty much everything I do is a collaboration. Whatever I do always involves a lot of people, and I love that too. With my colleagues at the university, I'm learning from them all the time. And doing the convention center, it seemed very much the same kind of thing. Everybody is smart, and everybody is growing.
Industry News:
Products for Sustainable Design

AFM R-Control Building Systems and their Texas partner plant, Therma Foam, Inc. of Fort Worth, have announced that R-Control Insulated Panels (SIPs) were recently recognized by the Texas Department of Insurance (TDI) as an acceptable method of construction in the Class IV high wind areas of Texas.

R-Control SIPs have been accepted and listed in Product Evaluation Report # FR02 from the TDI as investigated for wind design. For a copy of the report, contact Therma Foam, Inc., or visit the TDI website at: www.tdi.state.tx.us. Click on “Windstorm,” then on “Product Index/Product Evaluations” in the documents box.

TDI policies require plans for affected structures to be examined and approved by a Texas Professional Engineer. Construction Detail Books and Load Design Charts are available from Therma Foam, Inc. or may be downloaded from the AFM website at www.r-control.com. R-Control SIPs have been thoroughly tested for structural, fire, thermal, sound, durability, and insect resistance. They can be professionally designed to replace conventional framing in walls, roofs and floors of residential and light-commercial projects.

Carrier Corporation has released the Comfort Heat Pump System that uses the non-ozone-depleting refrigerant Puron. This new system is built specifically for long-term environmental friendliness and features an upgraded variable speed coil fan, a heat pump, and one control panel for both temperature and humidity.

The goal of the Comfort Heat Pump System is to maximize energy efficiency, provide consistent household temperature and improve indoor air quality. The Thermidstat Control, which takes the place of conventional thermostats and humidists, and the low-noise heat pump that uses chlorine-free Puron contribute most to the pump’s energy-efficiency.

As part of the federal initiative Partnership for Advancing Technology in Housing (PATH), Carrier Corporation participated in building and designing a model home that would use the most affordable and energy-efficient products. Most of the products used to build the house were market-ready but not widely known. Combining the Comfort Heat Pump System with high-performance windows, home wiring, ducts, insulation and solar water heating, the model home in Simi Valley, California, was able to trim 35 percent off energy costs, compared to traditional building practices. This is the third year Carrier has promoted environmentally-sound technologies by participating in PATH. Carrier supplied three Weathermate furnaces to a previous model home built on the Pine Ridge Indian Reservation in South Dakota.
Parched Dallas droughts. Hot, humid Houston summers. Punishing San Antonio storms. Tough weather requires tough windows. Only Weather Shield craftsmen could combine the graceful lines of 7/8 inch muntin bars, the historic beauty of individual lites and the energy efficiency of insulating glass. Other companies have boasted of divided lite windows, but for them, it's really a false front. Most merely adhere a wood grill to their glass and pass it off as TDL. The danger is the adhesive may cause stress fractures in the glass, or the grill may pop off. Weather Shield offers true divided lites along with truly superior craftsmanship. We carefully detail each and every TDL window and door to provide the same look and feel of early American architecture. We also offer TDL across our wide line of styles and shapes — as well as in our True Oak™ Cherrywood™ and pine options. Choose the TDL that shares a bond with architectural history, rather than a bond with adhesives.

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"This traditional residence is just one of many speculative projects we have designed for Curt Welwood. With the larger window panes, wall dormers, and dormer windows provided by Weather Shield, we were able to stick with standard sizes and specifications while still achieving a traditional style."
— Lloyd Lumpkins, Principal Designer, Fusch Serold & Partners, Inc., Dallas

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Which Texas symphony hall has been described as "music for the eyes?"

The Shape of Texas, a new radio series featuring architectural and travel destinations, is funded in part by Texas Architect magazine and Texas Highways magazine. To find out how you can hear The Shape of Texas in your area, call your local NPR radio station or contact TSA.
Willamette Industries, Inc., has created a new zero-formaldehyde fiberboard. The medium density fiberboard (MDF), Euro ZF, maintains all the normal characteristics of MDF: smooth surfaces, cutting and routing without splintering or breakout, high-strength screw holding, and stability. No formaldehyde, in any form, was used during its manufacturing. Developing a MDF with a low formaldehyde content was important because in environmentally sensitive building such as hospitals, museums, schools, or nursing homes, small levels of air pollution can affect what is inside.

Although formaldehyde is found naturally in wood, Euro ZF contains less than one milligram of formaldehyde per 100 grams, which is lower than the HUD 24 standard in the United States. Formaldehyde emissions from Euro ZF are well below general ambient outdoor levels.

Euro ZF was recently used for the wall paneling, display cases and furniture in the construction of the Museum of Scotland. The museum houses a collection of more than 10,000 Scottish artifacts, which are extremely sensitive to air quality.

California Economizer is introducing a new low pressure zoning damper. The new, strong, high-end damper is equipped with an interior beaded seal for tight closure to avoid leakage. This feature provides continuous room-by-room control and increases comfort.

The damper's hat section is insulated to avoid sweating and can operate at voltages as low as 17VA. California Economizer makes low pressure dampers in sizes from six to 16 inches in circumference, and for residential or commercial projects. It opens against and supports external static pressures of 0.5 inches W.C.

California Economizer also offers ten zoning systems, ranging from residential systems for two to 20 zones to commercial systems supporting up to 200 rooftop units. Modulating diffusers and DDC controls that are complementary with the HVAC industry's zoning products are also available. The systems are compatible with major manufacturers' equipment, including gas-electric, electric/electric, heat pumps and geothermal units.
Index to Advertisers

Page .. Advertiser .. Circle No.
2, 19 .. Acme Brick ................. 16
4 .. AIA Trust .................. 14
18 .. Arriscraft International ...... 37
24 .. BGR Specialties ............ 206
33 .. BMC West ................ 24
24 .. Cold Spring Granite ......... 52
6 .. Decoustics .................. 30
31 .. DuPont Tyvek Home Wrap ... 157
61 .. Early Texas ............... 225
65 .. Featherlite Building Products .. 6
62 .. Fogno South .............. 31
63 .. Glass Block Shop .......... 104
65 .. HBC Engineering .......... 61
20 .. Hunter Douglas ........... 205
22, 53 ..ICI Paint Stores ....... 133
16 .. Inext Steel Inc. .......... 196
62 .. Jack Evans & Associates ... 54
21 .. Jaster-Quintanilla ....... 199
62 .. JEH Company ............. 33
65 .. Jose Guerra, Inc. ......... 131
61, L.A. Fuess Partners ....... 2
26 .. Landscape Forms .......... 105
30 .. Lehigh Portland Cement .. 35
11 .. Marvin Windows Planning Center .. 28
9 .. Masonry & Glass Systems, Inc. .. 10
65 .. MCT Sheet Metal Inc. .... 71
63 .. Milestone ................ 66
23 .. Miller Blueprint .......... 13
8 .. Morganti Group, Inc. .... 202
15 .. MW Builders ............. 205
6 .. PRSAI .................. 215
60 .. Pelton Marsh Kinsella .... 81
6 .. Petersen Aluminum ...... 83
8 .. Pohl, of America ........ 204
10 .. PyroTherm/Texas Industries .. 242
61 .. Raba Kistener Consultants .. 47
21, 52 .. Reemay Inc. ....... 105
1 .. Southern Building Code Congress Int'l .. 39
29, 55 .. Southwest Terrazzo .... 99
61 .. Stairways, Inc. .......... 39
61 .. Superior Shakes of Texas .. 209
10 .. Texas EIFS ............... 19
7 .. Texas Masonry Council .. 207
61 .. Texas Woods ............. 40
32 .. TexasStone Quarries .... 62
54 .. ThermaFoam ............. 67
23, 55 .. Trustoist MacMillan .. 52
IFC .. USG Interiors ........ 48
53, 66 .. Weatherization Systems .. 9
60 .. Wrightson, Johnson, Haddon & Williams .... 212
60 .. York Metal Fabricators .... 72

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Tracks to the Future

**TRANSPORTATION** Anyone who’s driven lately on Interstate 35 between Austin and San Antonio knows that it’s a deathtrap. Booming NAFTA trade and exploding population growth in Central Texas have stressed the highway to the breaking point. In seeking solutions, policymakers are eyeing a bold, far-reaching project that could re-introduce a 19th century technology for a 21st century purpose: passenger rail between Austin and San Antonio.

1-35 in the Austin-San Antonio-Corridor is the deadliest highway in Texas, with more than 100 deaths from 9000 accidents in the last 36 months—double the statewide average for an urban roadway. The reason is twofold: too many people and too many trucks. Each one percent of regional population growth increases I-35 traffic three to four percent, and the corridor now posts double-digit annual population increases. Projections show the area’s current 1.3 million population will grow to four or five million by 2020, the size of Dallas/Fort Worth today. From Austin to San Marcos, for example, traffic has increased 754 percent since the mid-1960’s and doubled in the last 48 months alone. As for trucks, 80 percent of Mexico’s US/Canadian trade passes through Texas, 75 percent by truck on I-35. Loaded track crossings at Laredo have risen from a pre-NAFTA average of 15,000 to 20,000 per month to 110,000, a 400 percent increase since 1994. By year 2000, it will take longer to go from San Antonio to Dallas than it did 30 years ago, before the interstate was built. Within the next ten years, fatalities, congestion, travel times, and air pollution will all double along I-35 in the corridor.

**SLAUGHING TOWARD GRIDLOCK**

I-35 was built as part of a national defense transportation grid that was begun just after World War II, and it was almost an afterthought to the east/west transcontinental routes like I-10 and I-40. But with post-war population flight from urban centers to the suburbs along I-35’s length, with the continental tradeflow shifts resulting from NAFTA, and with growth in the Mexican and Canadian economies exceeding the highway’s capacity, the millennium finds transportation specialists pondering what to do when a freeway system has finally matured.

To meet anticipated demand by 2025, I-35 would have to be expanded from the current six to 18 lanes through central Austin—a daunting engineering and political challenge that would require triple-decking the existing roadway. To meet anticipated demand by 2025, I-35 would have to be expanded from the current six to 18 lanes through central Austin—a daunting engineering and political challenge that would require triple-decking the existing roadway. A far more practical solution is the alternate highway being fast-tracked by the Texas Department of Transportation, State Highway 130, that will parallel I-35 from Seguin to Georgetown and offer through-shipments a way to avoid congestion in the Austin-San Antonio Corridor. But even that massive $900 million project promises only partial, temporary relief.

**THE SHINY IRONS**

Another solution would be to shift half of the shipments currently going by truck to freight railroads, and therein may lie the opportunity for both congestion relief and major economic development benefits not just for the Austin-San Antonio Corridor, but for the entire state.

Currently, the only significant rail line in the corridor is the Union Pacific railroad from Laredo to Dallas. The tracks were laid more than one hundred years ago—long before the towns along its route became heavily urbanized. Now, there are nearly 200 at-grade crossings (places where a roadway crosses the tracks) on the 90-mile route just between Round Rock and San Antonio. In
addition to the commercial inefficiencies inherent in these crossings—trains must slow down as they pass through small and large cities—there are the related safety problems obvious in the railroader's term used to describe them: "auto-train conflicts." These conflicts have resulted in as many as 14 deaths a year in the corridor. Moreover these crossing having a profound impact on traffic congestion in Georgetown, Round Rock, San Marcos, and New Braunfels. San Marcos, for example, has 33 at-grade crossings, 13 within a single mile of downtown. Thirty-four Union Pacific trains run through San Marcos a day, some up to a-mile-and-a-half long that block every intersection in town. Two-thirds of the city lives on one side of the tracks, while the hospital, fire station, and police station are on the other side. This would not be such a problem with commuter passenger trains, as they would consist of only a few cars and would transit at-grade crossings in under a minute.

New Uses for Old Infrastructure

A comprehensive solution to these problems has emerged that is simple in concept, but relatively complex to implement: build State Highway 130 around the most congested portion of I-35; shift Union Pacific's through-freight rail operations into that new corridor so that it is grade-separated, faster, and more efficient than the current line; and develop the existing Union Pacific right-of-way for a duty more suitable to its 21st century role in the heart of a modern, heavily-urbanized area—passenger commuter rail.

A recent feasibility study conducted by the Carter-Burgess engineering company estimates that a passenger rail line through the corridor would move a minimum of three to four million riders annually (8-11,000 per day) on a route directly paralleling I-35 at its most congested point. Spurs from the existing rail line could also connect Georgetown and the new Austin-Bergstrom airport to the system. By acquiring half of Union Pacific's existing right of way and building a new passenger line, a commuter rail service could be put in place for a capital construction cost of $475 million and operating costs of about $25 million per year. Big numbers, but consider for a moment that three freeway interchanges currently under construction in the corridor...
will cost over $100 million apiece and will probably be over-capacity by the time they are completed. Moreover, although that $475 million price-tag is the rough equivalent of constructing an additional single new lane on I-35, there is no longer room to add more lanes to the interstate beyond current plans. Increasing capacity on a passenger rail line, however—one infrastructure is in place—means simply adding more cars.

There are other advantages, as well. Through careful investment in aggressive grade separation and advanced technologies, travel time between the cities would be continually decreasing, while travel times on I-35—for the foreseeable future—will be continually increasing. Rail is less vulnerable to weather or to a jackknifed 18-wheeler. Rail can be time- and cost-competitive with the automobile. It is certainly safer, and offers the rider a more productive use of their time, reading or working en route.

Combined with appropriate land-use policies, a passenger line could lead to denser development around the railheads in the city centers, thus reducing suburban sprawl, and encouraging development within the cities and away from the fragile Edwards Aquifer and the Texas Hill Country. A passenger line would also enhance the urban tax base. (In suburban Arlington, Virginia, for example, the local tax rate went from $1.46 to 79 cents per $100 after being linked to the Washington Metro system.)

While both San Antonio and Austin are currently suffering from critical workforce and affordable housing shortages, the surrounding counties have higher-than-average unemployment rates. An efficient transportation alternative could help solve both problems. Economically, the aging downtowns of these communities would experience revitalization around the railheads and local real estate would increase in value as people realized they could experience the lifestyle of a small town while enjoying the higher wages of Austin and San Antonio—all without the life-threatening and stressful commute on I-35.

Most important, while rail doesn’t end congestion, it gives you an alternative to sitting in it.

It is also true that impact on congestion would be incremental, removing about 10,000 cars a day from I-35. At peak hour, however, that five percent is significant, particularly combined with another 10-25 percent relief promised by SH 130. Every dollar invested in the rail line will make the train trip between cities faster; whereas we could invest $20 billion in I-35 and the trip would never get any shorter than it is right now. Most important, while rail doesn’t end congestion, it gives you an alternative to sitting in it.

As to whether or not Texans would use such a system, to say that they wouldn’t seems to imply that they are not as smart as other people throughout the world. If rail travel is made faster, safer, cheaper, more convenient, and more pleasurable than car travel, Texans will use it: Dallas Area Rapid Transit (DART), for example, has become one of the most successful rail systems in the nation.

The Critics Respond

Despite these many advantages, there are still those who argue that passenger rail is too expensive, that it requires government subsidies, that it doesn’t reduce congestion or air pollution enough, and that, lastly, Texans simply won’t ever get out of their cars to use it. The $475 million capital cost for an Austin-San Antonio line represents, on a regional basis, a sales tax of about one eighth of a penny; operating costs would amount to about $.015 of a penny. Metropolitan transit authorities in Austin and San Antonio each currently collect about $100 million a year for their operations, thus only about five percent of their current revenues, bonded over 30 years, could fund the service, if, as has happened elsewhere, the federal government picks up half the capital cost. Or, the system could be financed through a new, region-wide tax of about one-tenth of a penny.

It is true that such a service—just as with airports and most particularly highways—would be subsidized. Proponents believe that the economic, social, land use, and environmental benefits derived from the proposed system are well worth the cost.

The Next Steps

If there is sufficient political will, rail service between Austin and San Antonio could be in place within four years. The cities’ metropolitan transit agencies, Capital Metro, and VIA, must take the lead in organizing and financing such a system with probable help from both the state and federal government.

Governor Bush signed legislation last year creating a political entity, the Austin-San Antonio Commuter Rail District, to manage the project. Austin has voted to form the district, and officials are now waiting to see if the other communities are willing to participate.

Meanwhile, progress continues on SH 130, with the Texas Department of Transportation voting in September to add $891 million in funding authority for that project in the Unified Transportation Program for the year 2000. It took nearly 100 years for the rail and auto traffic congestion problems of the corridor to develop. It may take nearly that long to correct them. Passenger rail though, properly implemented, could be the track to the future.

Ross E. Milloy is the president of the Austin-San Antonio Corridor Council and a frequent correspondent for the New York Times.

**Coming Next Issue . . .**

The January/February issue looks ahead to the 21st century by focusing on a new generation of talented, young architects. This issue will also mark the 50th anniversary of *Texas Architect* and the launch for a redesign of the magazine. *Texas Architect* will celebrate the new year and the new millennium with a fresh, new look.
When California Was Paradise

Pierre Koenig
Text by James Steel and David Jenkins
Introduction by Sir Norman Foster
169 pages, hardback
Phaidon Press Limited, 1998

BOOKS Having seen combat in World War II, Pierre Koenig was not afraid to take risks in his civilian life. When a studio instructor at the University of Southern California rejected his plans for a steel frame house, Koenig, a third-year architecture student, raised the money and built it himself. In 1950, steel was thought to be too psychologically cold for a domestic dwelling. Koenig, however, believed that it would allow him to simplify the architectural diagram, and make the sort of relaxed houses that he was sure post-war Americans wanted. In 1952, he again used steel frame to build the Lamm House in Glendale that Arts and Architecture featured in October, 1953, along with projects by Mies van der Rohe and Paul Rudolph. Koenig was subsequently invited to build two houses for Arts and Architecture’s Case Study Program, which promoted Modernism in California. Both of these case studies, the Bailey House and the Stahl House, became icons of American architecture.

Using photos (many by Julius Shulman) and text, the authors, James Steel and David Jenkins, trace the rise of Modernism in Southern California, the Case Studies Program, and the arc of Koenig’s early career. The authors divide the book and Koenig’s projects into three sections: “Entering Architectural Practice & The Pursuit of an Ideal,” “The Genesis of the Case Study House Program,” and “The MOCA Show & The Modernist Revival.” In addition to substantial introductory essays for each section of the book, there are 27 projects, each well described with text, photographs, elevations, and floorplans. Looking at these projects, you remember what a mecca California was.

John Davidson

The Last Thirty Years

Contemporary World Architecture
Text by Hugh Pearman
510 pages, hardback
Phaidon Press Limited, 1998

BOOKS In Contemporary World Architecture, Hugh Pearman, the architecture and design critic of The Sunday Times, London, takes a comprehensive look at international architecture in the last thirty years. Pearman chooses as his point of departure the 1970s when the old order of International Style Modernism crumbled, then he sets out on what he describes as “an oblique search for consensus.” Rather than focusing on the many competing styles of the last quarter century, he examines 13 building types and the broad social and economic forces that shaped them. Pearman writes, “The most basic changes in architecture occur not because of academic theory or pure experiment, but because of changes in the way people live, work, are governed, entertain themselves, regard the outside world, and, most importantly, fund their buildings.”

The book is divided into 13 chapters: visual arts (museums and galleries), performance (opera houses, theaters, and concert halls), learning (schools, universities, and libraries), religion (places of worship), consumerism (malls, shops, and bars), living (houses and apartments), workplace (offices and business parks) industry (factories and research centers), leisure (theme parks, hotels, and visitor centers), transport (airports, stations, and shipping terminals), sport (stadia, gymnasiums and pools), the civic realm (public spaces and structures), and towers (vertical cities).

Pearman’s view on the impact of the despised shopping mall is particularly interesting. He sees its influence not only in the design of airports, but also on the arts: “As America invented the modern shopping mall in the form of Victor Gruen’s Northland Center in Detroit, 1949-54, and rapidly evolved it subsequently, so America invented the modern cultural mall in the form of New York’s Lincoln Center, 1955-66, by Harrison, Johnson, Foster, Abramovitz, Saarinen, and SOM, providing a choice of opera, ballet, symphonic music and drama like rival department stores in a mall. Just like a successful mall, the Lincoln Center has extended itself at intervals, providing other cultural attractions which add to the ‘destination’ status of the place.”

Pearman says that the office building has become “less like a piece of architecture, and much more like a very large piece of office equipment.” He writes that architects have been attracted to the “green” movement not only for environmental reasons, but because it has allowed them to reclaim some lost design territory. “It is arguable—but perfectly possible,” Pearman suggests, “that the ‘green’ movement signals the biggest shift in the appearance of architecture since the advent of heroic modernism in the 1920s. Then again, stylistic inertia is a powerful force in its own right, with architects often readier to adapt old forms than to embrace new ones.”

This is a very handsome, lushly produced book that serves as an excellent reference to the last 30 years of architecture. More than 600 projects are included, seemingly everything of consequence built within the last three decades.

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