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The Architecture and Design Review of Houston  
Spring 2016 — The Finance Issue  
No. 98 — \$7



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## FROM THE GUEST EDITOR

“Understanding Pennzoil Place requires double vision—you must see both the aesthetics and the calculation of financial risks. This special issue attempts to sustain that double vision as we unravel why Houston looks the way it does and how we can make it better.”



*José Solís*  
 JOSÉ SOLÍS

# The Finance Issue

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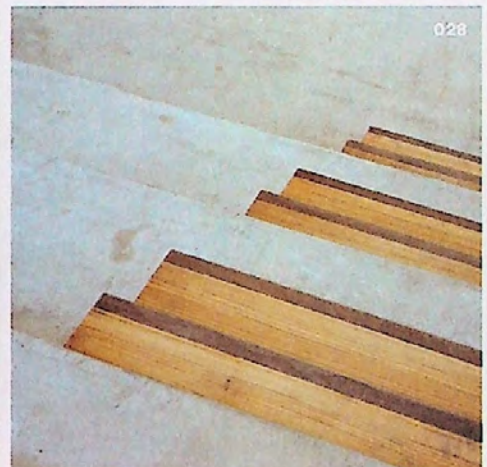
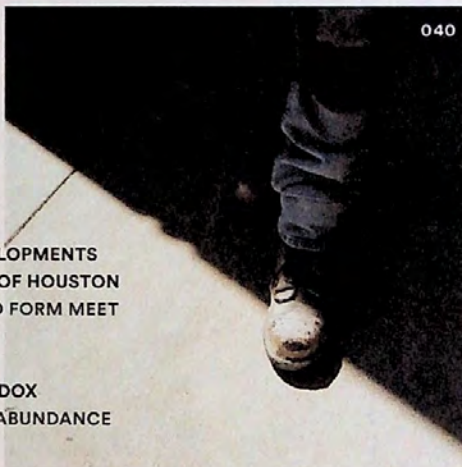
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# Nourish

2016 RDA ARCHITECTURE TOUR

**A**S HOUSTONIANS GATHER WEEKLY AT farmers markets and community gardens and urban farms sprout everywhere from corner lots to utility corridors to former industrial sites, the city seems host to a renewed passion for a habit of dwelling that feeds the spirit and the body. This spring, the Rice Design Alliance invites you to “Nourish,” a tour of six contemporary houses with edible gardens, created by architects, landscape architects, and designers.

“If our kitchen is the heart of our house,” says tour chair and landscape architect Flora Yeh of Mirador Group, “our edible garden would be a nurturing extension. The houses on this tour share an integral theme, a way of life.”

“Nourish: An Architecture Tour of Houses and Edible Gardens,” RDA’s 41st annual architecture tour, takes place from 1 p.m. to 6 p.m. on Saturday, April 9, and Sunday, April 10. The tour includes:

- 01 4523 Teas  
Natalye Appel + Associates Architects, 2015  
Landscape: RH Factor
- 02 3312 University  
Strasser Design, 2016  
Landscape: Edible Earth Resources
- 03 2709 Albans  
1941; English + Associates Architects, 2012
- 04 1514 Banks  
Lantz Full Circle, 2012
- 05 1603 Cherryhurst  
1922; GSMA  
Landscape: Grove Hill Farm
- 06 748 Arlington  
Jay Baker Architects, 2003, 2012  
Landscape: Fischer Schalles

The tour is open to the public. This year, eMember tickets start at \$35, which also provide a year of digital communications from RDA. Current RDA members can purchase discounted tour tickets at \$25; tickets are \$15 for students with ID. As always, RDA membership is open to the public.

Tickets and memberships can be purchased at [ricedesignalliance.org](http://ricedesignalliance.org).

RDA has organized tours every year since 1975 to help Houstonians experience firsthand the most interesting works of architecture and landscape and interior design in the city. This year’s tour is made possible by the support of RDA Underwriters 4b Technology Group; Cardno Haynes Whaley; D.E. Harvey Builders; Hines; Louisa Stude Sarofim; and Walter P Moore. Support also comes from Austin Commercial; Brochsteins; Builders West; Kirksey; Parra Design Group; Planning Design Research Corporation; Putterman, Scharck & Associates; The Southampton Group; Tellepsen; and workplace solutions. PaperCity is the tour’s media sponsor.



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# Vision Envision

## 2015 RDA GALA

**M**ORE THAN 850 PEOPLE GATHERED IN the Westin Galleria to celebrate as the Rice Design Alliance honored Uptown Houston with its annual Award for Design Excellence on Saturday, November 14, 2015. The event, VisionEnvision, raised nearly \$500,000 to support the educational programs and publications of RDA in 2016.

Chaired by Juliè Gauthier and Dallas Felder, and underwritten by 4b Technology Group, Cardno Haynes Whaley, DPR Construction, D.E. Harvey Builders, Hines, Walter P Moore, and Louisa Stude Sarofim, the gala brought together professionals in the architecture, engineering, construction, and design industries, as well as developers, academics, philanthropists, and others. Wendy Heger was the event's Underwriting Chair; Chris Promecene was the Graphics Chair.

As thousands of shoppers streamed past inside The Galleria, gala guests arrived at the ballroom to enjoy cocktails and bid on the 112 items donated for the silent auction, chaired by Jennifer Batchelor and Melanie Herz Promecene. The auction included unique experiences like tours of Houston landmarks; catered dinner parties; travel excursions to Marfa, Mexico, and Maui; and objets d'art like photographs, jewelry, and furniture from a wide range of internationally known artists and designers.

Guests then experienced the kinetic installations and lighting effects inside the ballroom. Designed by Environment Chair John Dupuy, 11 tabletop installations comprised 12-foot arcing steel beams from which hung "murmurations" of laser-cut birds. These Alexander Calder-like mobiles gently dipped and swayed overhead as guests enjoyed dinner and a short program during which RDA President Laurence C. Burns, Jr., of Kendall/Heaton Associates presented the award to John Breeding, President of Uptown Houston. A video presentation featuring commentary by Gerald Hines, Ed Wulfe, and Robert Sakowitz, and others illustrated how Uptown Houston has encouraged mixed-use development and enhanced the pedestrian experience and streetscape.



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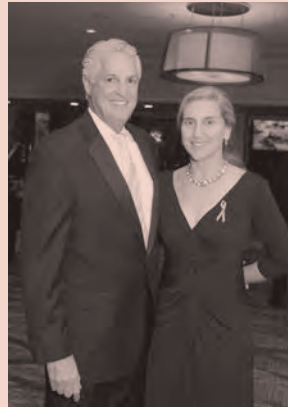
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Thomas  
Colbert  
1954—  
2015





TOM COLBERT'S LIFE FOLLOWED A PATH FROM New Orleans, where he was born, to New York, where he spent time as a child; to Princeton, New Jersey, and Cambridge, England, as an architecture student; to Dublin as a young professional, College Station as a teacher, and finally Houston, where he became an esteemed professional, colleague, educator, and friend. Tom died of stomach cancer on August 21, 2015, and he is sorely missed by his family and friends.

Tom received an A.B. in Architecture and Urban Planning from Princeton University in 1976 and an Honors Diploma in Architecture from Cambridge University in 1978. He arrived at the University of Houston in 1985 and taught across the undergraduate and graduate programs. Over the years he served as Assistant to the Dean, Coordinator of third-year and fifth-year undergraduate design studios, and Director of Graduate Studies for more than a decade. His devotion to architectural education, the profession, and the discipline of architecture was recognized in 2014 when he was honored as "Educator of the Year" by the American Institute of Architects, Houston. Tom believed in opening doors and broadening horizons wherever possible. He single-handedly developed exchange programs with schools of architecture in Paris and Moscow and in 1990 he curated an exhibition of the Parisian Grand Architectural Projects at the College of Architecture. Visitors included the French president Francois Mitterrand. Tom had a wide variety of interests, and he engaged in meaningful causes that ranged from prison conditions, to documentation of the Upper Texas Coast via aerial photographs, to natural disaster prevention.

Tom maintained a passion for the lively culture and the seductive decrepitude of his native New Orleans. Mardi Gras was always an occasion for celebration and Cajun cuisine. Tom was devastated by the news that the levees had broken during Hurricane Katrina and the damage it meant for the city and his own architect father's notable modern house. That emotion was quickly translated to Houston's benefit. Since similar or even worse damage could occur in the Houston/Galveston area, Tom became heavily involved in coastal planning. He documented, he obtained grants, he organized symposia, he informed, he planned, he worked with others — locally as well as with universities in Louisiana, Buenos Aires, and Delft. He participated in the SSPEED Center (Severe Storm Prediction, Education, and Evacuation from Disasters), and he was chair of the AIA Houston Urban Design Committee. A frequent contributor to *Cite* and editorial committee chair, he guest-edited special issues on hurricanes, Chinese cities, and the environment. Tom had

a vision and a purpose: to protect the Houston area and other coastal communities from flooding and tidal surge and avoid destruction such as that caused by Katrina — all while creating urban amenities and making the area more attractive.

Tom had the fortunate opportunity to spend much of the summer of 2014 in New Orleans enjoying the city. Before returning to Houston he headed off to the International Architecture Exhibition at the Venice Biennale where University of Houston College of Architecture students displayed work inspired by his research. He then continued on to the International Architecture Biennial Rotterdam as an invited speaker and presented "New Perspectives for the Galveston Bay."

Tom was a voice of reason. He was patient. He was humble. He was a calm yet tenacious force as a teacher, an architect, an urbanist, an activist, and as an artist. Tom's life as an artist, however, was unknown to even many of the people who knew him well. He finally displayed a small fraction of the drawings he did over several decades in an exhibition at the Architecture Center Houston from May to August 2015. Tom's drawings are truly stunning. They are at the same time very simple and very complex works of free-hand lines on paper. They are a patient, playful and sophisticated weaving of lines — a mysterious calligraphy with a message of connectivity. Tom's drawings are about fundamentals, but also about the endless. Some evoke the constellations of a night sky. They surely reveal something of the man who made them.

One of the walls in Tom's hospice room was a sort of collage his family made that was composed of photographs and colorful drawings by his grandchildren and cards and notes and letters he received from friends and colleagues and students. The notes were heartwarming, and they expressed affection and love and gratitude. That makeshift wall began to tell the story of a life. What was also impressive about the notes, beyond their content, is that they were handwritten — something rare in our digital age. They showed the same humanity that Tom sought in his drawings, his work, and his life. When Tom talked about his drawings he said that "each line is a tracing of a personal history, a dance that creates a point of connection between author and viewer." Tom made many connections with many people in many ways. He made a mark, and he has left a great deal to remember him by.

An exhibition of Tom Colbert's drawings will be in the Joseph Mashburn Gallery at the Gerald D. Hines College of Architecture and Design March 29 to April 21. Books about William Stern and Colbert's exploration of art and architecture will be for sale. ●

# Houston Has Everything To Gain from Understanding Finance and How Developers Think. Risk It.

A

AT THE CELEBRATION OF HIS 90<sup>TH</sup> BIRTHDAY, Gerald Hines said almost nothing. He sat in the center of the Hobby Center stage flanked by eight of the world's most accomplished living architects. Philip Johnson, though long deceased, told the

best stories through his partner, John Burgee.

Like the one about how the top of the model for a highrise Hines wanted to build was removable in case the prospective tenant, Pennzoil CEO J. Hugh Liedtke, didn't like its daring slant. Liedtke loved it. The building would stand out, he said, from all those boring "cigar boxes." The building was completed in 1977, and *New York Times* critic Ada Louise Huxtable called it the "building of the decade."

Commercial real estate speculation changed forever, not just in Houston, but in New York and the world over. Suddenly great architects were playing a leading role in an arena previously known for mediocre design and its twin brother, the bottom line.

Hines did chime in with a few interjections, like this one: "Architecture can reduce your risks."

This compact statement, like the man who made it, is powerful and odd. Isn't architecture about meaning, shelter, function, beauty? Understanding Pennzoil Place requires double vision — you must see both the aesthetics and the calculation of financial risks.

This special issue attempts to sustain that double vision as we unravel why Houston looks the way it does and how we can make it better. What are the financial underpinnings of mixed-use developments? Can the city incentivize the inclusion of workforce housing in developers' plans? What are the economics of maintaining our tree canopy? How do we pay for our transportation infrastructure? Can we reform the construction industry so workers are trained well, kept safe, and paid fairly? Will an innovative approach to financing building retrofits make the environmental choice a profitable one in both the short and the long term?

At times what you read here will be hard. Maybe even upsetting. We ask you to take the risk.

"It is, by any measure, a dramatic and beautiful and important building. It is also a highly profitable investment. It successfully marries the art of architecture and the business of investment construction — a union essential to the American economy and the urban environment."

ADA LOUIS HUXTABLE

"Houston's Towering Achievement"  
February 22, 1976, *New York Times*

# Big Mixed-Use Developments and the Remaking of Houston

Where Finance and Form Meet

You want higher-quality architecture? You want buildings with ground-floor retail oriented to pedestrians? You want the feeling of connection that comes with urban life? You want affordable housing built along light rail and high-frequency bus lines? You want a city that grows while retaining neighborhood identity, scale, and history? Mixed-use developments promise this and more.

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MORE AND MORE MIXED-USE DEVELOPMENTS ARE BEING built in Houston, sprinkled around our massively flat conurbation, offering moments of needed concentration, like raisins in a big, doughy loaf.

Each development takes a different form. Some contribute more to the city than others. Why is this? Let us temporarily suspend our preconceived judgments of developers and see the world from their eyes as we consider three projects: Greenway Commons, CITYCENTRE, and Village at Palm Center.

First, though, a little history. The Rice Hotel is at the heart of Houston's mixed-use past and future. Developed by Jesse Jones in 1913 with a U-plan, cast-iron canopy, and space for ground-floor retail, the hotel was, for decades, where the brokers of political and economic power in the city — our oligarchy — had a physical base in Downtown Houston. The relatively quiet desegregation of local lunch counters is credited to meetings between business and civil rights leaders that Jones convened on the 17th floor of the hotel. African-American leaders arriving for these conferences had to enter through the back door of the hotel and take the freight elevator. The result of such meetings would ironically help lead to the demise of both the hotel and the mixed-use Downtown it anchored.

In the 1960s and '70s, the flight to ever more outlying areas by middle-class Houstonians, both Anglo and African American, set the city on a course of separation — of classes, ethnicities, and land uses. Downtown became an office park by day and a dystopian playground for skaters — the legendary Urban Animals — at night. Rice Hotel closed in 1977, indoor malls expanded, and public life all but disappeared.

In the late 1990s, through a partnership of the Houston Housing Finance Corporation and developer Randall Davis, the Rice Hotel was converted into lofts, which sparked the (halting) rehabilitation of the Main Street and Market Square Historic District. Houston's first mixed-use district, however, returned largely as a "lifestyle" center. You can now walk from office to wine bar to condo with ease, but buying a hammer is still a challenge.

Lifestyle centers also took root in the "lands" — Sugar Land, The Woodlands, Pearland. The "town center" trend eventually began to work its way inside Beltway 8 as Susan Rogers noted in a 2007 *Cite* article, "Instant Urbanism: Mixed-Use Lifestyle Centers, Coming Soon to an Intersection Near You." With some notable exceptions, "coming soon" turned out to mean "on hold" after the financial meltdown in 2008.

Which brings us to risk and those taking it.

## Greenway Commons: Trammell Crow Company and The Morgan Group



HOW DOES A MAJOR MIXED-USE DEVELOPMENT begin — with a property, a loan, a design concept, a market analysis, a tenant, a hunch, a dream?

From offices on the 23rd floor of the Williams Tower, Jim Casey, Senior Managing Director at Trammell Crow Company, and Stan Levy, Chief Operating Officer of The Morgan Group, point out Greenway Commons/3333 Wesleyan, a 24-acre development anchored by Costco. Trammell Crow Company and The Morgan Group built the project with an insurance/investment company as a major equity partner. Seen from so high up, the massive development looks like only one small part of an incomprehensible puzzle.

The two developers first acquired the site, at the northeast corner of Richmond and Wesleyan, at auction from the Houston Independent School District (HISD) in 2004. The original Hattie Mae White building (1969), nicknamed the Taj Mahal for its Brutalist façade and its cost to taxpayers, was sold and demolished in 2006 after HISD moved to a new building.

Trammell Crow Company was aware that Costco was looking for a location in the city. The large HISD site offered an unparalleled opportunity to attract an "investment grade" retailer to anchor the project. Costco always pays its rent, which lowered the overall investment risk of the development and in turn lowered the interest rates on the needed loans. That Costco is itself a destination able to attract other retail tenants boosted values for the projected return on investment (ROI), net operating income (NOI), and other key measures in the "pro forma" — the spreadsheet that helps developers, investors, and lenders determine whether the risk is worth taking.

More than big enough for a large retail project, the HISD site, in fact, was too big. By working with The Morgan Group to add multifamily residential development to the mix, Trammell Crow Company could share the cost of the land purchase and create a retail/residential synergy that would attract tenants to both components. With the basic concept and projected development costs in place, the insurance/investment company came on as an equity partner.

Opposite: Detail from Greenway Commons.



“After you get the equity partner, then you get bank construction financing,” explains Casey. A project that utilizes a significant amount of debt lets developers/investors increase their financial returns without tying up funds in one place. If tenancy or rent levels fall short of targets because market conditions change, though, meeting debt payments gets dicey.

“This deal was 50/50 debt and equity, for all-in costs,” says Levy. In other words, only half of the total costs were funded by debt. With a healthy economy in Houston, a strong anchor tenant, growing multifamily demand, and a prime site, landing a strong equity partner and favorable loan terms was not a major challenge.

The next question becomes: To what extent does the anchor tenant, the dynamics of the site, and the financing determine the form of a development? When do architects come in?

“In order to get the big institutional partner and loans from banks, [we present] the design, the cost, and what the returns look like,” Levy says. Architects are brought on board to create schematic designs—basic approaches, with a site plan and a few renderings—at the earliest stages of the search for anchor tenants and financing. The design then evolves as each major potential retail tenant is sought and as all the components of the development are thought through in detail. At the same time, market conditions pointing to rates of job growth or leasing, likely competition, and construction costs are monitored and can further reshape initial plans. From this give-and-take process emerged Greenway Commons/3333 Wesleyan, which opened in 2008 and has reached stabilized occupancy.

The retail side, the larger of the two uses, takes up 14.6 acres. Designed by CDA Architects, a Houston-based firm, Greenway Commons is more complex than it first appears. A surface parking lot, smaller than typical for Costco, is complemented by a three-story parking garage. Smoothie King, Buffalo Wild Wings, a Memorial Hermann clinic, Bullritos, and other stores are arranged along Wesleyan Street with their own direct access to the garage. LA Fitness is stacked on top of Costco, served by its own “speed ramp” to the garage rooftop so their clients can drive up and walk straight to the weights and indoor swimming pool.

The north side of the site is home to The Morgan Group’s 3333 Wesleyan, a 526-unit multifamily complex that wraps around yet another parking garage, allowing its residents to walk directly onto their desired floor. The intricacy of this parking arrangement is an innovation that architecture firm Wallace Garcia Wilson has exported across the country. Interior courtyards—two pools and two other common

areas—provide access to natural light for units on the inside of the double-loaded corridors. As of November 2015, the rents range from \$1,300 for a one-bedroom unit to \$2,500 for a two-bedroom, two-bath apartment.

Not far away is the River Oaks District, designed by Gensler for a Main Street-like experience. Valets whisk away cars to the garages on the periphery of the site, while shoppers walk along wide sidewalks to Hermes, Cartier, Dolce & Gabbana, and other high-end retailers. In contrast, the drive that runs down the middle of Greenway Commons/3333 Wesleyan is a reciprocal easement designed to provide access to the parking garages as well as the required emergency access for fire trucks. The latter is a sub/urban hybrid, to use Judith DeJong’s term, and the former is a simulated Main Street. Why did these developments take such different forms?

For an answer, again looking down from his Williams Tower offices, Casey points out all the competition they faced—the stronghold that Highland Village and The Galleria already had on mid- to high-end retail, plus other retail projects being contemplated at the time, like BLVD Place and River Oaks District, which were targeting ultra-high-end stores. What niche would Trammell Crow Company and The Morgan Group fill?

“You have to analyze how you stack up against the competition,” Casey says. “You need to develop a project where the retail tenants will flourish, for your property investment to be successful.” So, they looked at population density, spending levels, household income levels, visibility, traffic counts, and the price of houses relative to rent. The data “proved up” their intuitions.

“Our typical resident profile is the Millennial, between 24- and 34-years-old,” says Levy about 3333 Wesleyan.

These same people would be attracted to the wholesale prices on everyday goods at Costco. And the immediate neighbors are also taken into consideration.

“We are sensitive to the community,” Casey says. “For example, leaving the oak trees meant giving up parking and visibility.”

Trammell Crow Company and its partners have since sold the Greenway Commons retail portion. The Morgan Group continues to operate the apartments on behalf of itself and the original institutional investor.

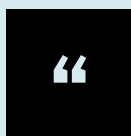
Although Trammell Crow Company did not build Greenway Commons with an eye to being a long-term owner, Casey says that developers are still incentivized to build a high-quality project. They know that buyers of these types of projects are sophisticated and look carefully at the specifications of the construction, sustainability, and performance.

To what extent does the anchoring  
tenant, the dynamics of the site, and  
the financing determine the form?  
When do the architects come in?

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With a big box as its anchor, Greenway Commons/3333 Wesleyan may not be perceived as an urban, mixed-use development. However, the bustling polyglot aisles of Costco and the fully-leased smaller spaces are a testament to the development's appeal to a wide swath of Houston.

## CITYCENTRE: The Midway Companies



WE LOOK FOR GENERATIONAL REAL ESTATE — real estate that will be great for the next 150 years,” says Jonathan Brinsden, CEO of Midway Companies, from his offices in CITYCENTRE, the mixed-use development that Midway developed and

opened in October 2009.

Though nowhere near Downtown, CITYCENTRE may well be at the exact demographic center of the well-heeled I-10 corridor. It sits between two business centers and adjacent to Houston's wealthiest zip code. Formerly home to Town and Country, a mall that died in the early 2000s, the site was acquired “off market” by Midway in 2004 with 30 days for due diligence and 30 days to close.

“We had to go to sources where we had relationships,” such as Amegy Bank, Brinsden says. Drawing on its network and institutional capital, including a “mezzanine loan” from another group, Midway came up with the money fast, though it had no specific plan for the property.

“You don't have to be a real estate genius to know something will work,” says Brinsden of the location.

Once the site was acquired, the market research began in earnest. What was the current demand for offices, retail, residential, and hotels? The numbers for all four types of uses came out exceptionally positive, which meant no one use would have to subsidize another. (Ground-floor retail is often built with the understanding that it will be a “loss leader.”) The demand was pent up. The last major hotel to open in the area was a Hyatt in 1984. The last multifamily residential complex was a 1970s garden apartment.

The Houston offices of Gensler were brought on as master planners. At the time, Shon Link was at Gensler. Brinsden, Link, and others visited approximately 30 mixed-use projects across the United States.

“We mostly learned about what not to do,” says Link, who is now Executive Vice President for Development at

Midway. One positive example was Country Club Plaza, a mixed-use development in Kansas City built over 100 years ago. “It ebbed and flowed. It survived. Sticking to a simple urban grid accommodated new uses,” says Link.

The CITYCENTRE master plan is also a simple grid that separates residential, retail, offices, and hotels on different plots of land, allowing for investors to go in on the types of projects that play to their expertise. As Brinsden puts it, there is “a different capital partner for every different food group here.” An owners' association provides landscaping, utilities, trash, security, and parking management. In addition, Midway develops each project and serves as the “common thread” so the parts add up to a unified whole.

The parking came ready-made with the site. When the old Town and Country mall was demolished, its parking garages were left standing and so could be reused by CITYCENTRE. “Because of the existing parking, no public incentive was needed,” Brinsden says. Houston's otherwise onerous parking code is progressive regarding mixed-use projects: it allows spots for daytime uses (offices) to be double-counted for nighttime uses (bars). Midway takes full advantage of using each spot multiple times and phases new sub-developments around the shared parking. (This type of cohesive parking management is what the Kinder Institute recently recommended in their study of Rice Village.)

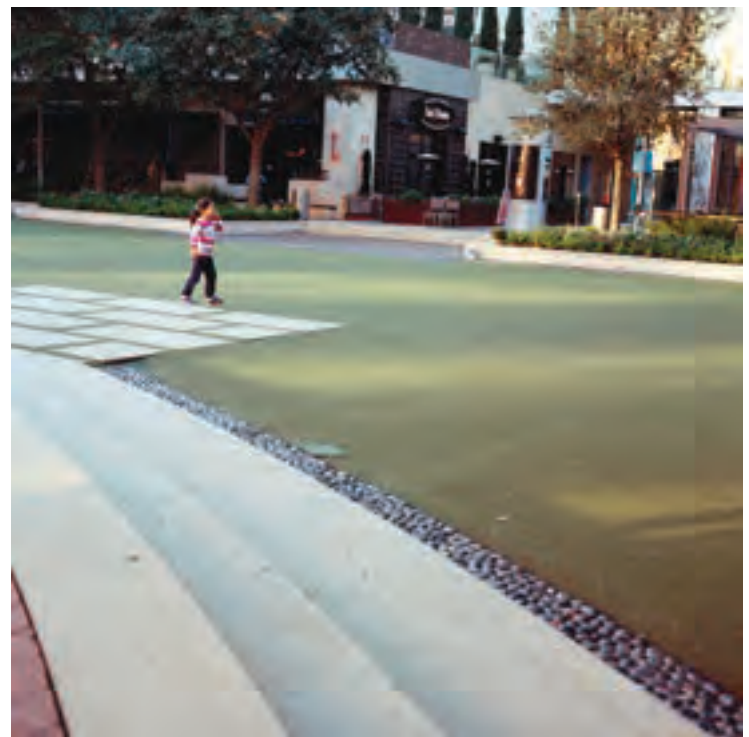
The wide sidewalks of CITYCENTRE are packed with people both during the day and at night. The mixed-use magic worked. The grass for the small plaza had to be replaced with artificial turf because it is so popular.

“We are starved for experience,” Link says in explaining how quickly residents of surrounding neighborhoods flocked to CITYCENTRE and adopted the private development as a space akin to a public commons. Some 200 to 300 events are held in the plaza each year. It is an oasis of activity in a vast sea of cul-de-sacs and frontage roads. Indeed, Link adds, “With our mobility problem, creating these nodes so that people don't have to drive to Downtown to have this experience is incredibly important.”

The design process, the Midway executives say, was iterative, not linear. The program, financial models, and architecture developed in cycles as they tested options.

Whereas Gerald Hines mitigated risk by hiring the world's leading designers to create icons, Brinsden and Link see the creation of a singular experience as Midway's ideal method of reducing risk. By lasting through all the boom and bust cycles of Houston, Hines has shown that “if you have the best building, chances are you will be full even if you are not getting the rents you wanted,” says Brinsden. “We are achieving the same thing with community.” He

Opposite: CITYCENTRE.



readily acknowledges, “On an individual level, the buildings will not win architectural prizes,” but goes on to identify the critical design decisions in his view: sidewalks, plazas, air flows, shade. “You have to deliver the experience in Phase One.”

The biggest risk for developers occurs when they are forced to open a project at the beginning of a bust, which is exactly what happened to CITYCENTRE. “The world was ending,” quips Brinsden. Only about 60 percent of the project was “leveraged” or financed through debt, though, which is relatively low and so allowed Midway to take additional time to land tenants. “We performed well during a difficult time,” Brinsden says. “It proved up that if you have something unique, it is better for financial performance.”

## ITEX Group: The Village at Palm Center



**I**N 2013, THE FIRST RENDERINGS THAT ITEX Group shared at community meetings in Southeast Houston showed 16,000 square-feet of retail space and over 200 housing units, including apartments reserved for those with affordable-housing vouchers.

The feedback came back loud and clear. But not the kind of anger we expect from neighborhoods opposing developers. The community did not tell the developers to go away or to eliminate the affordable housing.

Give us a more urban development, they said. Put the parking in the back and bring the retail up to the sidewalk.

Advocates like Minister Robert Muhammad, who has a doctorate in urban planning from Texas Southern University, and Cedric Douglas, a graduate of the Gerald D. Hines College of Architecture, helped others in the community to articulate a vision for a walkable and inclusive neighborhood in formal terms.

And the developers listened. Working with Humphreys & Partners, an architecture firm with offices in Dallas, they revised the plan.

“When you see the neighborhood leadership coalesce like it has in the Third Ward, it is amazing what you can accomplish,” says Clark Colvin, Executive Vice President at ITEX Group. “They know exactly what they want. They all have the same goals.”

That coalescing of leadership has to do with decades of

organizing by many individuals and a veritable alphabet soup of organizations. Preston Roe and Paulette Wagner of Super Neighborhood 68 are among them. In 2011, a \$100,000 grant from National Endowment for the Arts (NEA) to Carroll Parrott Blue and the University of Houston funded community-based planning for the area around The Palm Center (a 1955 outdoor shopping mall now used by nonprofits). The Southeast Houston Transformation Alliance (SEHTA) has carried forward the work begun under the NEA grant. Funding from Houston LISC to the Neighborhood Recovery CDC established the OST/South Union GO Neighborhood, which is a community-driven approach to comprehensive community development.

And that’s not all.

Colvin also notes the substantial investment in this predominantly African-American area by the city through its acquisition of The Palm Center, the expansion of light rail into the neighborhood by METRO, the building of a new library and park, and the infrastructure improvements achieved via a tax increment reinvestment zone (TIRZ).

Now under construction, the Village at Palm Center is, in some respects, a test case for how the city might move forward with its new General Plan with concerted efforts to layer public investments. The impetus was the availability of Ike Disaster Funds. An open Request for Proposals (RFP) was put out by the city for developments in five neighborhoods, including Southeast Houston/OST.

To finance The Village at Palm Center, the ITEX Group leveraged the 4 percent Low Income Housing Tax Credit, or LIHTC (pronounced li-tech), vouchers for housing veterans close to the nearby Veterans Administration Hospital, \$15.3 million from the Hurricane Ike Disaster Recovery Housing Program funds, and an undisclosed mix of loans and equity.

Confused yet?



Colvin stresses that navigating the complex world of building workforce and affordable housing requires the special expertise that the ITEX Group has acquired over years under the leadership of the late Ike Akbari. However, Colvin also stresses that it was the years of preparation by community groups working in the neighborhood that made the project possible.

“We wanted to make sure the people who lived in the neighborhood could remain,” says Gwen Fredrick, the Go Neighborhoods Community Coordinator.

The Village at Palm Center will be the first transit-oriented, mixed-use development with a mix of market-rate and affordable housing in Houston. The comprehensive approach to the entire Palm Center area points to a future in which Houston can leverage a mix of tools and funding streams to transform neighborhoods without displacing longtime residents. The acronyms are dizzying but the goals are common sense.

“Why not a coffee shop across from the library?” says Colvin. When he points out that 40,000 UH students are less than two miles away, the vision of a thriving retail center does not sound far-fetched.

The ITEX Group came to SEHTA as a result of federal government and City of Houston requirements that developers engage community residents. “An added bonus,” say Blue, “is that the ITEX Group will make money off this project.” That point is, perhaps, what is so promising about The Village at Palm Center. If community groups have a meaningful voice, if comprehensive planning identifies the best sites, if all the various pots of public money are used in a comprehensive manner, and if developers profit while contributing to the city, then we can expect a bright future for this city. And those are conditions in which architects can do great work.

## Global Finance, Local Gain



AS HE STANDS AT THE 23RD-FLOOR WINDOW of his office, Jim Casey of Trammell Crow Company surveys the great arc of buildings stretching from Uptown to Greenway to the Medical Center to Downtown. Most Houstonians would name a few landmarks like the Southwest Freeway. Readers of *Cite* may be able to name the designers of several buildings: Gensler, César Pelli, Johnson/Burgee. Casey names off the major institutional

investors who backed the buildings: “Prudential, MetLife, JP Morgan, Brookfield, Invesco, Principal, TIAA-CREF ... ”

The developer sees the world with different eyes.

And the eyes of the developer today have to take in a global picture. When Trammell Crow the man began his career building warehouses in 1950s Dallas, he borrowed from banks based in Dallas. By 2009 when he died at the age of 94, capital moved in profoundly different ways.

Hard as it is to imagine for the average person paying monthly bills, huge piles of money are out there, often managed by real estate investment advisors, in need of safe places to invest. These big pools of equity include municipal pension funds, university endowments, life insurance companies, private equity funds, foreign governments or sovereign funds, and real estate investment trusts (REITs).

A few thousand dollars of my own retirement is invested in TIAA-CREF. As I learn from Casey, this means I have a fractional stake in Four Oaks Place, which includes a new office tower, currently under construction in Uptown. We are all implicated in this vast flow of money even as it seems beyond our grasp.

Grasp that complex world we must if we are to achieve the local goals set out in Houston’s General Plan and espoused by Mayor Sylvester Turner. How can we tilt the equations in the developer’s pro forma in favor of affordability and urbanism?

The Holy Grail in mixed-use development would be a marriage of equity, urbanism, and innovation. The twentieth-century version of that dream — the Modernist union of aesthetics and social aims — is said to have died with the failure of housing blocks like Pruitt-Igoe in St. Louis. While it’s unlikely that mixed-use centers and inclusionary housing will push the boundaries of design, we need to remember that before Gerald Hines built Pennzoil Place, no one thought a developer-built office tower could do that either.

In her 1976 review of Pennzoil Place, Ada Louise Huxtable writes, “If Houston has found the formula for turning prosperity and growth into beauty and elegance, it is indeed the city of the future.”

Here’s to rediscovering the formula. ●

## A View of Emerging Mixed-Use Centers

On the twenty-third floor of the Williams Tower, located in Houston's biggest mixed-use center, Jim Casey, Senior Managing Director at Trammell Crow Company, sees a developer-enabled environment in which the lack of zoning allows the private sector to respond to the demand for more dense, close-in, mixed-use districts. Each has its own rhythm and vibe driven more by existing circumstances and market forces than a strong governmental hand.

RIVER OAKS SHOPPING CENTER (River Oaks Corporation, 1937, now owned by Weingarten), Regents Square (GID Development), and surrounding areas of Montrose have densified incrementally.

DOWNTOWN was mostly offices, sports complexes, theaters, hotels, and courts until recent and ongoing construction of 3,000 residential units.

RIVER OAKS DISTRICT (Oliver McMillan, 2015) and MILLENNIUM HIGH STREET (The Dinerstein Companies, 2013) bring more high-end retail and residential to Westheimer.

HIGHLAND VILLAGE (S. N. Adams, 1949, now Haidar Barbouti) has seen retail redevelopment and densification.

UPPER KIRBY DISTRICT has densified with new retail, restaurant, and residential, such as West Ave (Gables 2009) and soon, offices at The Kirby Collection (Thor Equity) and Kirby Grove (Midway).

The view from Trammell Crow Company's office.

MIDTOWN has evolved over many years and is becoming home to a thriving scene of bars, retail, and residential, including Camden McGowen Station.

GREENWAY PLAZA (Century Development Corporation, 1973), a stronghold for offices with more condos and apartments nearby.

GREENWAY COMMONS/  
3333 WESLAYAN (Trammell Crow Company and The Morgan Group, 2009) added retail (Costco) and multifamily residential.



# In 2014, roughly 3 billion dollars were spent on mobility.



**T**HAT TOTAL INCLUDES INVESTMENTS IN new infrastructure for neighborhood streets, highways, and METRO's bus and lightrail network. This enormous sum of money moves through a complex system. Public records for total expenditures are relatively easy to obtain but teasing apart tax sources and the exact outcomes is far more difficult.

Houston-Galveston Area Council channels federal funds to various other governmental entities. Federal and state gas taxes only account for a portion of the Texas Department of Transportation (TxDOT) total. The \$229 million spent by the City of Houston on neighborhood streets and thoroughfares comes out of the general fund and a new drainage fee. METRO's budget includes the revenues from a one-cent sales tax and fares, and their expenses include operating costs, debt servicing, and capital projects.

Many of the operating costs of car-oriented roads, including the police who manage them, are not included. As a result, comparing the totals across governmental

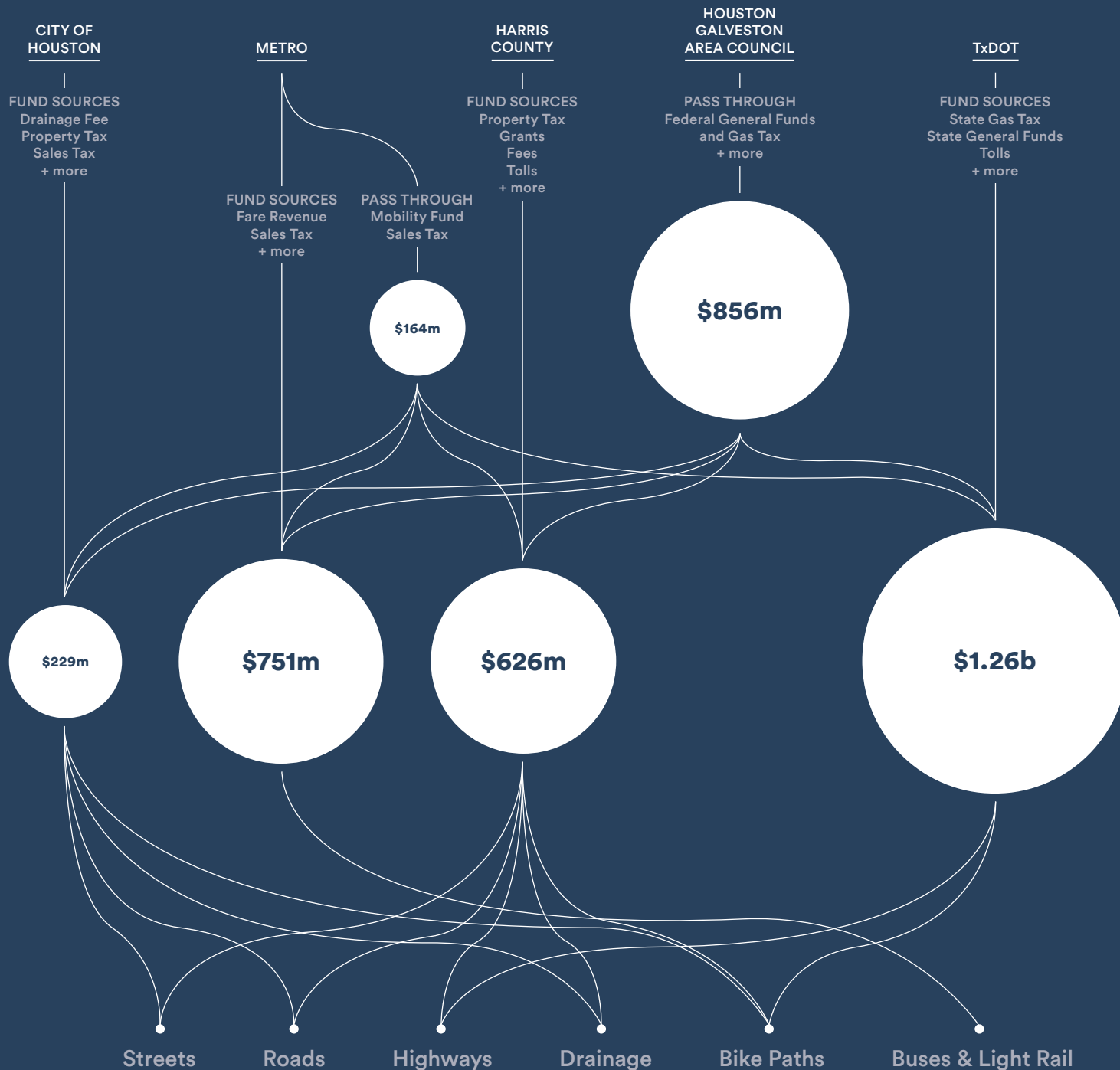
entities is not straightforward. Management districts and Tax Increment Reinvestment Zones are not included as well because poring over their many separate reports is outside the scope of this project. Indeed, a full accounting would be a major research undertaking.

Harris County is, perhaps, the most difficult government entity to understand because it collects tolls, encompasses Municipal Utility Districts, and multiple cities.

Respondents to the 2015 Kinder Institute Houston Area Survey identified traffic as the biggest problem for the region. Understanding the size of our budgets and how the money flows through bureaucracies is a first step to reframing and rethinking the challenge.

If we had a better understanding of the facts and funding of mobility, we could make more informed decisions. For example, would we rather put a high-quality bikeway in every neighborhood in Houston giving more people transportation choices or widen I-10 to temporarily alleviate peak hour congestion on that segment but moving the bottleneck elsewhere? ●

# Transportation Funding 2014\*



\* These figures were taken from the websites of each agency with clarification by email from staff. Known unknowns include the budgets of Management Districts, Tax Increment Reinvestment Zones, Public Private Partnerships, and traffic operating costs (law enforcement) to the city, county, and state.

# Sparking —Creativity

Houston's Smaller Arts Groups  
Finally Meet Their MATCH





HE BUILDING IS BEST UNDERSTOOD AS THE light changes. Midtown Arts & Theater Center Houston (MATCH) is a beacon among blocks of darkened construction projects that border it on nearly every side. Still, the surrounding blocks are buzzing. Streets closed by reflective cones and food trucks, a beat broadcasted down a block queued with cars and couples quickly crossing sidewalks. The steady flow of headlights, spilling across the pavement like the surf or swinging around corners. Within the MATCH's breezeway—a glass-lined canyon cut through white metal panels and galvanized steel—the audiences of four simultaneous small shows spill out into the glow that emanates from the heart of the building, lighting up the block.

With its first show in October 2015, the Lake/Flato and Studio RED-designed MATCH opened as one of Houston's most unique performing and visual arts venues. Designed to support rotating troupes of performers and artists rather than a single anchor tenant, the building is designed for flexibility. It is split into two separate buildings by its generous covered breezeway that cuts across the block from Main Street to Travis. The north building includes four primary performance spaces (or "MATCH boxes") of various sizes, the smallest with a max of 100 seats and the largest 329, along with dressing rooms and back-of-house support for each box allowing for concurrent use. Variable seating configurations and audio/visual controls mean the boxes can accommodate theater, dance, or visual art displays. A box office and glassed-in café overlooking a small square plaza on the corner of Main and Holman complete the north building. The south building supports three rehearsal rooms that can double as small performance spaces, a 3,000 square-foot gallery (which also has a sprung wood floor for dance classes, if necessary), and 5,000 square feet of second-floor office space also available to tenants. The outdoor breezeway essentially functions as the building's lobby, and its openings are a response to Houston's climate, according to Ryan Jones, partner-in-charge of the project from Lake/Flato. "The materials are a response to the building's need to breathe. What I love about the building is that it almost feels like you're in a haze the way the light reflects. It's almost cloud-like. We wanted the architecture to be a background for unique experiences and diverse tenants," said Jones.

Small theater groups are subject to a catch-22. They typically cannot raise the money to build a new facility without the clout that comes from bigger audiences, and they cannot attract larger audiences while housed in inadequate facilities. Realizing this, four art groups located in insufficient spaces (Aurora Picture Show, DiverseWorks, Suchu Dance, and The Catastrophic Theatre) pooled their resources and ultimately sought to create a destination that could not only support their organizations but that could potentially change the culture of the arts scene in Houston. With the help of over 50 donors and a loan that was guaranteed by the developer of Mid Main—a mixed use project currently under construction just south of the MATCH—the group purchased the parking lot of the City of Houston's former permitting center. The site became central to the MATCH's identity and the realization of its mission: provide a centralized, well-connected destination that could bring small-to-midsized arts organizations together, promoting a cross-pollination of audiences and creativity. Roughly halfway between Downtown and the Medical Center, as well as between Houston's theater arts and museum districts, the site is edged by bus routes and the METRORail's Red Line, which stops just south of the MATCH at the Ensemble/HCC station. This provides connection to some of Houston's strongest economic and cultural drivers, as well as thousands of college students, residents, and professionals who live, work, and study along the rail.

Multiple planning grants from Houston Endowment (totaling just over \$1 million over the course of 8 years) initially enabled the MATCH board to develop a business plan and schematic architectural designs. An all-inclusive goal of \$25 million was established, and a subsequent capital campaign grant from the Houston Endowment for \$6 million was critical to the MATCH's development. "The Houston Endowment was truly the bellwether. They were partners all the way," said Jill Jewett, former assistant director of cultural affairs in Mayor Bill White's administration and a key consultant in the development of the MATCH. "The \$6 million grant was really the seal of approval for us to go to other foundations." A list of additional philanthropic gifts from various foundations can be found on the MATCH's website.

Annual operating support from Houston First in the amount of \$450,000/year over 8 years is especially critical to keeping the MATCH affordable for its target tenants, according to Emily Todd, former president and current member of the MATCH's board of directors. Though originally intended to have all operating expenses covered

Small theater groups are subject to a catch-22. They typically cannot raise the money to build a new facility without the clout that comes from bigger audiences, and they cannot attract larger audiences while housed in inadequate facilities.



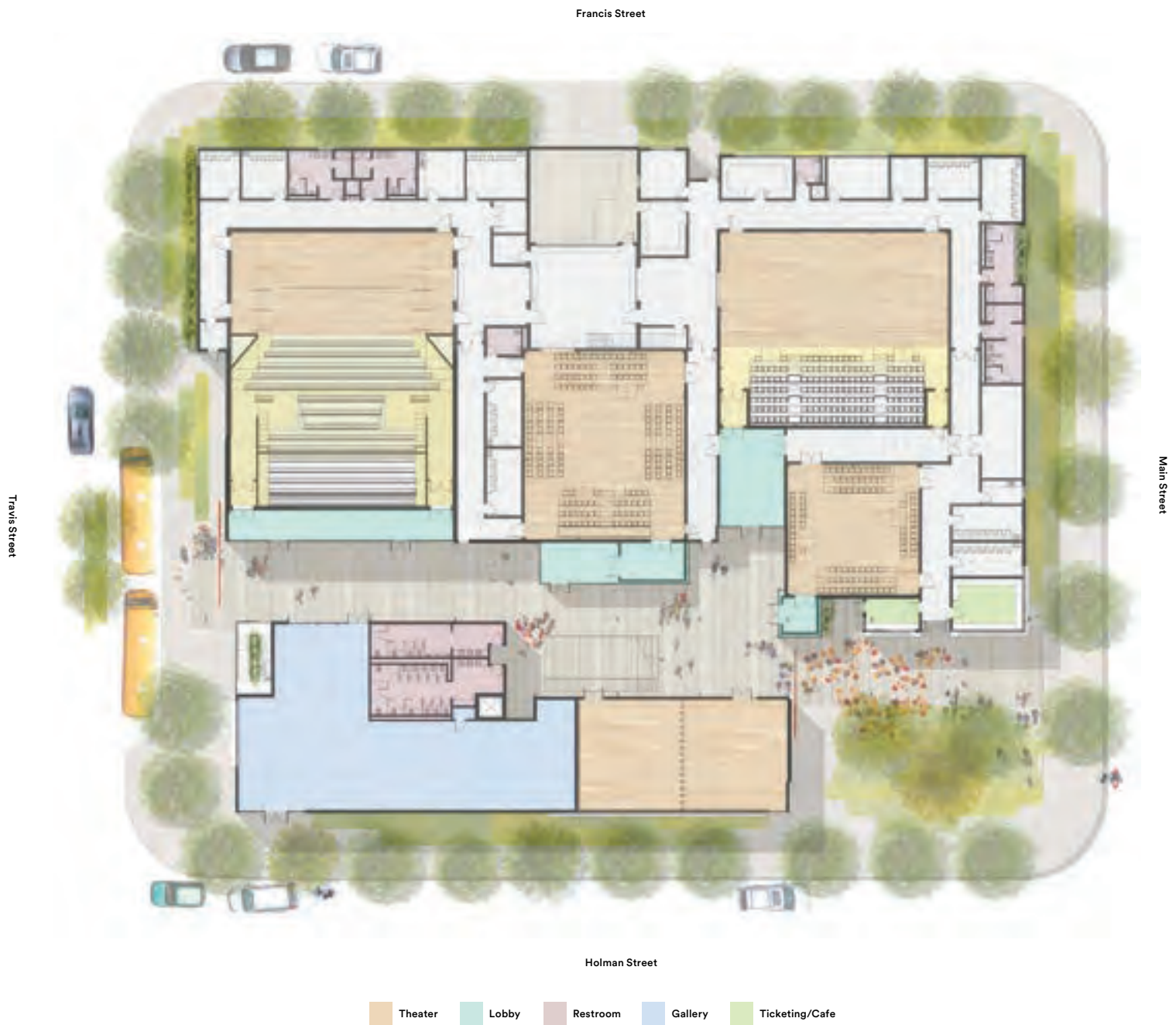
without the need for annual fundraising, both Todd and MATCH Executive Director Chuck Still expects fundraising to be a necessity. “We need to serve the little guy first. We’re more for the have-nots than the haves,” said Still. “We worked backwards. Instead of figuring out how much it would take to operate the building and charging that, we determined what these organizations could realistically pay and said ‘we’ll make it work,’” said Still. This financial model enables smaller organizations to stay afloat, not only through affordable rents but through the fact that they are only paying rent for a facility when they are using it. A final source of public money comes from a 380 agreement funded through incremental sales and mixed beverage tax. A state-approved program designed to provide financial incentive for development in specific areas, the 380 agreement will allow the MATCH to capture up to \$6 million, half of which will be split with Mid Main, which will make a portion of its parking available to patrons of the MATCH.

The MATCH stands as a model of a truly grassroots public/private development, and it has already demonstrated the commitment of the City and local philanthropists to the continued propagation of the performing and visual arts in Houston. Following the model of the Hobby Center, the MATCH has been conveyed to the City, though it remains managed and operated by its original nonprofit. It’s easy to see the potential for continued growth in the area and to imagine that the MATCH will serve for some time as a landmark and hub for the small and experimental groups who are vital the city’s arts scene.

Donations to the MATCH’s ongoing capital campaign can be made at its website, [matchouston.org](http://matchouston.org). ●







“We need to serve the little  
guy first. We’re more for the  
have-nots than the haves.”



# A Sunny Day Fund



## Private Financing Allows Profits from Sustainability on Day One



HAGBARK LUMBER AND FARM SUPPLIES, inc., in East Haddam, Conn., looks like any rural TrueValue Hardware with an extended outdoor area: it has wood paneling, pallets stacked with potting soil, and a weathervane on the roof. Relaxed

and unfussy, it appears ready to serve the dusty needs of farm and garden. But here's the difference: Along with the weathervane, the roof holds 540 270-watt solar panels.

Co-owner Joanna Hunt and comptroller Julia Leonardo were able to have those installed through a property-assessed clean energy (PACE) loan for \$485,000 with the Connecticut Greenbank, and the panels went live in July 2014. Leonardo says that they have covered all the firm's power needs and allowed Shagbark to make money ahead: in late summer 2014, Leonardo noted that they have banked a 13,000-kilowatt-hour credit since the installation and that the hardware business's energy costs are down by about 80 percent, and she confirmed by email recently that the company is still financially very much ahead as a result of the change.

Being able to make that change was a surprise to them. They had always wanted to use solar and to save money — but as a small business, they had not dreamed that they'd be able to afford the transition, Joanna Hunt said in a case study on the C-PACE website in Connecticut.

PACE is a program that began in Berkeley in 2007, when Cisco DeVries, then an aide to Mayor Tom Bates, was thinking about ways to help each homeowner afford rooftop solar panels. In the funding program, currently supported in 23 states and the District of Columbia, building owners receive 100-percent financing in advance to make changes in lighting, heating, cooling systems, insulation, motors and water pumps, or to add solar panels and other efficiency systems.

In early October, Houston City Council gave notice of intent to establish a municipal PACE program. This was open to public comment later in October. Travis County (Austin) adopted PACE in March, and Dallas City Council reviewed a proposal for PACE around the same time the Houston Council did.

In general, PACE works like this: An interested business owner contacts the PACE program and is directed to a

contractor, then helped to figure out which energy upgrades make sense to the owner for the project. The system arranges 100-percent private financing that is paid back in up to 20 years with an assessment added to the property tax bill. If the building is sold, the assessment is transferred to the new owner. In most cases, assessments can also be shared by tenants on leases. The goal is for the immediate utility savings to be greater than the debt payments. Also, this is a type of financing that can allow speculative developers and owners, who are not in building ownership for the long-term, to make an immediate gain.

The goal in municipalities, of course, is to help owners make energy-efficiency improvements without paying upfront. "Buildings in the United States use about three-quarters of all of the energy that we consume, and so building owners and policy makers, they're all looking for ways, how do we cut that energy use, how do we save money?" DeVries noted in a video on the PACENation website. "PACE is often the best way to come up with the up-front cost to pay for those improvements, and then allow that to be paid back over time."

Things have moved right along lately. The Texas Legislature approved a statewide PACE program with SB385 in 2013. In 2015, Texas, Utah, Illinois, Colorado, and Florida expanded commercial PACE programs. The nonprofit organization Keeping PACE in Texas has also developed a PACE in a Box program intended to make PACE programs easy to launch across the state.

"PACE is a win for property owners, contractors, lenders, communities and the City of Houston," noted Laura Spanjian, former Director, Office of Sustainability, City of Houston. "It will finally be easier and more affordable for commercial, industrial and multi-family property owners to obtain low-cost, long-term loans for water conservation and energy-efficiency retrofits, and distributed energy projects. PACE breaks down the barriers that exist in the market today, creating a solution that saves money as well as resources."

In Connecticut, small projects continue to move through the PACE system. The Bushnell Center, a Hartford performance hall built in 1919, received C-PACE funding of \$384,000 to buy a new hot water heater and three high-efficiency boilers to replace an inefficient 40-year-old boiler. The center's vice president of finance/CFO, Patti Jackson, said, "This project had been on our 'critical capital needs' list for some time, while we looked for ways to finance the significant expenditure. C-Pace provided a unique solution to fund the project that will save us in excess of \$30,000 annually." ●

Hermen Valdez realized that he wasn't going to be able to afford to get back to Texas. His oldest son, a Houston native, was set to graduate from Baylor, and Valdez needed a plane ticket.

But he also needed to make payroll that month.

How C3 is Trying To Do  
Right By Its Workers

# An Industry in Crisis



**MAREK**  
STRENGTH FROM WITHIN

SAFETY  
SAFETY  
SAFETY

SAFETY  
SAFETY  
SAFETY



ALDEZ, WHO HAD MOVED AWAY IN THE late 1980s from the recession in Houston to New England in search of more steady construction work, was an independent contractor, responsible for the salaries and insurance payments and taxes on a crew of about 20 general and skilled laborers.

He started working in the construction industry in high school. Before that, since 10, he had been helping his parents as a manual laborer. He grew up a few hundred miles southeast of Seattle, where his parents settled after emigrating from Mexico. When he graduated from high school in the late 1970s, he heard there were opportunities in Houston, then in one of its booms. Developers like Hines were financing big commercial projects Downtown, and the Medical Center was expanding. You could move to Houston, build buildings, start a family—and that's what Valdez did.

The recession forced him north to hustle for work in a new part of the country. There, the competition of the free market wasn't always friendly. Running his business out of the passenger seat of his truck, Valdez often bid lower on jobs than most union shops, and he allows that some stooped to intimidation to drive him out. "The unions made me miserable," he says. The tires of his truck were regularly slashed. Once, says Valdez, a story was fed to a small Massachusetts newspaper that alleged he was forcing his workers to share a cramped apartment, implying that he was engaged in human trafficking. It wasn't true, but there wasn't much Valdez could do. Hiring a lawyer to file a libel suit and collect damages wasn't in his budget.

Telling these stories now, Valdez shrugs. What choice did he have? He put up with the forced itinerance. The intimidation. The 70-hour weeks. After 16 years of having to live and work away from his family, his marriage ended. He began to realize that he wasn't saving nearly enough for retirement. Eventually, he arrived at the dilemma that would drive him back to Houston: he could pay his workers, or he could see his son get his college degree.

He had to let his son down.

"That was the last straw," he says.

Such difficulties and indignities are not uncommon among career construction workers. Even as building booms again in Texas, where one in 13 workers is employed in the industry, where Austin, Houston, San Antonio, and Dallas are considered among the fastest-growing cities in the country, the industry still promises but a low quality of life for many of its workers and struggles, at the same time, to recruit young people who no longer see the building trades as means to the middle class.

A survey of almost 1,200 construction workers in Texas, compiled in 2013 by professors at the University of Texas, University of Illinois at Chicago, and researchers with the Workers Defense Project (WDP) in Austin, show an industry today that is compromised by low wages, lack of benefits, job insecurity, unsafe working conditions, and little to no continuing education or vocational training. Only 18 percent of the workers surveyed reported that they had received training on a job; 22 percent reported some form of wage theft; 52 percent reported earnings below the federal poverty line; and 78 percent reported that they are not covered by employer-based medical insurance.

One of the industry's most insidious problems is payroll fraud, with employees being misclassified as independent contractors. Doing so allows employers to avoid paying Social Security and payroll taxes and providing overtime pay, benefits, insurance, and unemployment for their workers—which, in turn, allows these employers to make lower and lower bids on jobs "in a race to the bottom." (Meanwhile, law-abiding employers complain they can't compete in such a race.) The pretense is that an "independent contractor," as the self-employed owner of a small business—his own body, that is—should be responsible for setting aside, out of hourly wages that rarely surpass \$15, his own taxes, insurance premiums, and payments into a retirement plan. (Not to mention provide access to his own safety equipment, tools, etc.)

The WDP estimates that, in Texas, as much as 40 percent of the construction workforce—or upward of 400,000 people—is thus misclassified. Worse, many others are paid in cash "under the table." This leads to an estimated \$1.6 billion every year in unpaid federal income taxes.

Texas is also the most dangerous state to work in, with the highest fatality rate in the country. The WDP found that as many as 20 percent of workers surveyed reported at least one workplace injury that required medical attention; 60 percent reported never having received basic safety training. Meanwhile, employers in Texas are not required to provide workers' compensation. For that matter, they are not required, in this hot and humid state, even to provide water breaks.

These problems have led to an industry in something of a crisis. Leaders describe a shortage of skilled workers, which drives costs higher, as jobs take longer to complete. When they are completed, they are not always jobs done well. Owners spend as much as 90 percent more than the initial cost on repairs and maintenance over the life of the building.

"This is the most complex business problem I've ever seen





“This is the most complex business problem I’ve ever seen in my life. It’s not just a workforce problem. It’s a human problem.”

in my life,” says Chuck Gremillion. “It’s not just a workforce problem. It’s a human problem.” A native Houstonian, Gremillion has experienced the city’s busts and booms. He witnessed the collapse of the economy in the ‘80s that drove Valdez and others like him away in search of work. He witnessed how the industry was soon forced to cut costs and became, as he says, “bottom-line driven.” First, says Gremillion, union members — one of the last places where workers can receive “formalized training” — were deemed too expensive. Then, even hourly workers were deemed too expensive; they started to be misclassified as “independent contractors” — given 1099s instead of W2s — and paid by the piece. Often, they were fired if they complained, fired if they were hurt. For decades, now, the industry has confused its people with its tools, treating them with indifference and neglecting their upkeep, then casting them aside when they break down. “Some owners look the other way, shooting themselves in the foot in the long run.”

In 2009, this crisis led five industry leaders — the top executives from Vaughn Construction, Marek Companies, McCarthy Building Systems, Associated General Contractors – Houston, and Chamberlin Roofing & Waterproofing — to establish a nonprofit initiative that they called the Construction Career Collaborative (C3). Gremillion now serves as C3’s Executive Director. C3, explains Gremillion, intends to revive the industry’s reputation and restore the building trades as middle-class occupations. That’s done primarily, he says, through the participation of owners — including M.D. Anderson, Memorial Hermann, The Museum of Fine Arts, Houston, and Texas Children’s.

“It’s the right thing to do for a lot of reasons,” says Peter Dawson, AIA, Senior Vice President of Facilities Services at Texas Children’s. Building with C3 accreditation was, for

Though these provisions do ensure  
better conditions for the workers  
now employed by C3-accredited  
companies, the overall sustainability  
of the industry remains uncertain.



Texas Children's, a way to support a "social value." But it was also a business decision with at least a few important considerations. Primarily, Dawson explains, it was a way of leading the industry forward; the growth of Texas Children's depends directly on the growth of a skilled workforce. "It costs a lot to build a hospital," he says. "It has a lot of systems — mechanical, electrical — that are sophisticated. In order to get a building like that built, you have to be able to call on different trades and different levels of skilled labor [that] can do highly specialized work effectively and correctly. [Working with C3] is encouraging a marketplace of these skills."

If LEED measures the energy and resource efficiency of a building, C3 accreditation might measure the quality of workplace for the people who built it. "Ultimately," predicts Dawson, "C3 will become the standard for construction." A building built with C3 accreditation means that the contractors of record have submitted signed agreements with 14 "assurances" about payroll compliance, workers' compensation, safety training, and more. Contractors must provide assurances that their employees are paid by the hour, given overtime according to federal law, and are designated as W2-receiving employees, not 1099-receiving "independent contractors" on tax forms; they are also required to provide OSHA 10-hour safety training for workers and 30-hour training for supervisors. Additionally, C3 conducts spot audits to reinforce these assurances — which are further reinforced by annual accreditation fees. Contractors can pay \$1,500 for an entire job or pay a range, from \$100 to \$2,000, for specialty work.

Though these provisions do ensure better conditions for the workers now employed by C3-accredited companies, many of which are the largest and longest-running general and specialty contractors in Houston, the overall sustainability of the industry remains uncertain—suffering, as Gremillion describes it, from a "perception problem."

"Young people don't see it as a path to the middle class. More people are recognizing that the problem exists," says Gremillion. "But we are just scratching the surface." As Gremillion explains, those workers trained by unions — the last generation of skilled laborers — have now reached retirement age. Where will the next generation come from? Policies resulting from the No Child Left Behind Act in 2001 have added more urgency to that question. Funding — scarce in education to begin with — went to support preparation for standardized testing — that is, preparation for college. Cuts to arts and music programs are the ones that receive the most outrage, but cuts to vocational and technical programs delimit career opportunities, as well.

Additionally, 40-50 percent of the construction industry is made up of undocumented workers. C3, as Gremillion explains, doesn't take a stance on immigration policies. "We train the workers we have," he says. But it's clear that a worker's lack of documentation would be incompatible with the payroll practices — which demand transparency, aside from local, state, and federal compliance — that C3 advocates now.

Still, it's clear that C3 is working for a skilled laborer like Valdez. Since moving back to Houston in the late 2000s, Valdez landed with Marek Companies, a C3-accredited employer. "I started all the way back at the bottom," he explains. But he has since moved up to become a general foreman, and he spends his days planning meetings and coordinating among the laborers, engineers, architects, and owners, on a job site. Marek pays him an hourly wage and guarantees a 40-hour week. Marek pays into a retirement account and provides vacation time, healthcare, and insurance, in case he's injured. Marek also provides classes after hours, in English and in Spanish, for skilled workers and site supervisors like him — and such continuing education provides these employees a way to advance and increase their earning potential.

Valdez is working, now, on a new patient tower for Methodist Hospital in Sugar Land, where Vaughn Construction is the general contractor. Every morning, Valdez drives in and forms a huddle at the job site. The employees — who will spend their day framing walls, hanging drywall, sealing the seams, painting, wiring, and installing the floors — hear from him about safety procedures. About production issues. About quality. Those who will bend and hoist 100-pound panels of drywall into place review proper lifting techniques and are even led through a stretching routine. In other industries, that wouldn't be news. It wouldn't be worth noting. But on the construction sites where Valdez has spent his entire career, and his entire adult life, it is. ●





# Financing the Canopy

Where Agribusiness, Horticulture, and Urban Planning Meet

**E**VEN THOUGH HOUSTONIANS CAN'T AGREE on much, the protective love for the city's trees feels nearly universal. Live oaks, pin oaks, water oaks, magnolias, redbuds, dogwoods, palms, loblolly pines — they are beloved. As Lars Lerup says in his 1995 essay, "Stim and Dross: Rethinking the Metropolis," "In Houston, the entire foundation of the ground-level ecology is soft, rhythmic, and unstable, held together by the roots of the canopy of trees, creating the absurd impression of a city suspended from the treetops from which its cars, riders, and roads gently swing." Our canopy negates the gritty gray of what could be a concrete jungle and instead covers us with a cape of flourishing nature. A tree is an object rife with hope.

The canopy, however, did not create itself.

Aerials of the Rice University campus at the start of the twentieth century show a nearly treeless expanse. If you squint, the tiny saplings, planted according to the master plan by Cram Goodhue & Ferguson, are just visible. The surrounding neighborhoods took their cue from the campus. John Staub's architectural aesthetic included the planting of lush trees in the 1920s as part of the overall landscape in which he built his homes, as Stephen Fox notes

in *The Country Houses of John Staub*. Trees were an anchor to what *The Houston Gargoyle* called, in jest, Houston's Cradle of Culture — the areas around Shadyside, Hermann Park, and Rice — setting a pattern for the ever-expanding conurbation we call Houston.

The canopy won't live forever, however. Thanks to drought, storms, and just plain old age, trees every year are removed from the landscape, and it's imperative to not only replace them, but to plant more.

"Trees are a funny business," says Barry Ward, executive director at Trees For Houston. "It has aspects of agribusiness, commodity trading, architecture, and construction."

The most cost-effective way to renew and expand the canopy, Ward explains, runs counter to how the landscape industry operates. Tree sellers maximize profits by raising a small number of plant varieties and selling them in large pots. Planting 100-gallon trees may create an instant landscape but it costs the client about seven times as much as 15- to 30-gallon trees and greatly increases the likelihood of tree death. In addition, smaller pots can be handled by volunteers whereas big ones require professionals and machinery.

By making the most of the efficiencies in planting small trees, Trees for Houston has achieved a huge scale. During the 2014-5 season, the organization planted 26,360 trees, or approximately 500 trees a week, including 13,277 trees with green partners, 1,547 trees along bayous, streets, esplanades, trails, and tribute groves, and 1,884 trees at 31 schools.

Impressive as these numbers sound, Ward says, "We need to increase that substantially if we want a regional, metro-wide, demonstrable impact." He dreams of new ways for financing an expansion of the organization's operations, such as credits and exchanges for industries seeking to reduce their impact.

Not cutting down the trees we have would help as well. Right now, Houston's canopy is protected by ordinance; fines of up to \$300,000 can be levied for illegal tree removal. However, the protection program has currently only one enforcement officer, and could use more. Ward notes that fines alone could pay for the additional salaries for the planting of hundreds of more trees.

For a small donation, Trees for Houston will share a (15- to 30-gallon) tree with you. Also, a \$10 membership to the Arbor Day Foundation gets you 10 trees. They start small, but don't stay that way for long. Just think of the cleaner air, the tranquility gained, the carbon dioxide absorbed, your land values rising, and the urban forest growing around you, reminding you of how nature thrives in its slow, constant way, despite everything.

# Become the Successful Developer Every Houstonian Wants To Be with These Key Words

A GLOSSARY OF TERMS

S

OME CITIES WERE FOUNDED BY RELIGIOUS leaders or by socialists. Houston's founders were real estate speculators through and through. With this guide, you can follow in their footsteps. The basics never change but the language of developers has, well, developed a bit since 1836. Here's a brief guide to navigating your new lexicon.

**CAPITAL STACK**

The list of where the money comes from and who's going to come after you and your children if the project doesn't work out. Usually in a graph.

**CAP RATE**

Capitalization Rate. Calculated by dividing net income by the sale price of the asset. This number is used to estimate the investor's potential return. Let's say you buy a building for \$1 million and it nets \$100,000 annually; the cap rate is 10 percent.

**CREDIT-WORTHY TENANT**

Yes, they might be credit-worthy but they won't make the best 100 restaurants list. Most Houston investors/landlords like credit-worthy tenants the best. The more credit-worthy your tenants are, the lower your interest rates will be. That's why there are so many mattress stores and so few cute little cafes.

**DSCR**

Debt Service Coverage Ratio. This number shows whether you earn enough quarters every year to cover your debt obligations. The ratio of the operating income to the mortgage has to be greater than 1.

**FAR**

Floor to Area ratio. Not a big deal in Houston since we don't have zoning or laws limiting FAR. In huge cities like New York, there is essentially a limit on how tall one can build and how much "light and air" must be present towards the top of the buildings. Almost every developer in New York tries to maximize their FAR. In Houston, you can usually build however high you want ... unless you're Ashby Highrise.

**HISTORIC PRESERVATION TAX INCENTIVES**

It's sometimes possible to maximize your profits by not bulldozing old buildings.

**LOW INCOME HOUSING TAX CREDIT (LIHTC, PRONOUNCED LI-TECH)**

Cool credits that almost no one in Houston ever thinks about or uses. The nonprofits that build much of the low-income housing don't pay taxes, but you can always sell your credits to others.

**LTV**

Loan to Value. The ratio of the bank loan to the full value of the property. If the bank loan is a high proportion of the project's value, say 95 percent, the risk will be high for the bank and the interest rate will be into nosebleed territory for the borrower.

**NOI**

Net Operating Income. This one is pretty intuitive. NOI is how much you bring in minus your expenses, not including debt. You want this to be positive.

**PRIVATE EQUITY**

It always helps to have a few "friends of the family" or to know someone who represents people with deep-pockets looking to invest millions in exchange for a good return. You can minimize your LTV and maximize your DSCR if you have a good chunk of private equity in your capital stack if you know what I mean, and you should by now.

**PRO FORMA**

Usually in Excel. Lots of numbers on a page projecting all the money you will make or lose on a real estate deal. All the jargon and ratios come together in this document. No matter how forward-thinking the design, investors are unlikely to support your project if these numbers do not work out.

**REITs**

Real Estate Investment Trusts. Like a mutual fund but for real estate. Usually pretty conservative. They like credit worthy tenants. They typically have multiple properties, like Uptown Park. If your employer contributes to a big pension plan or 401K you might own part of a REIT without knowing it.

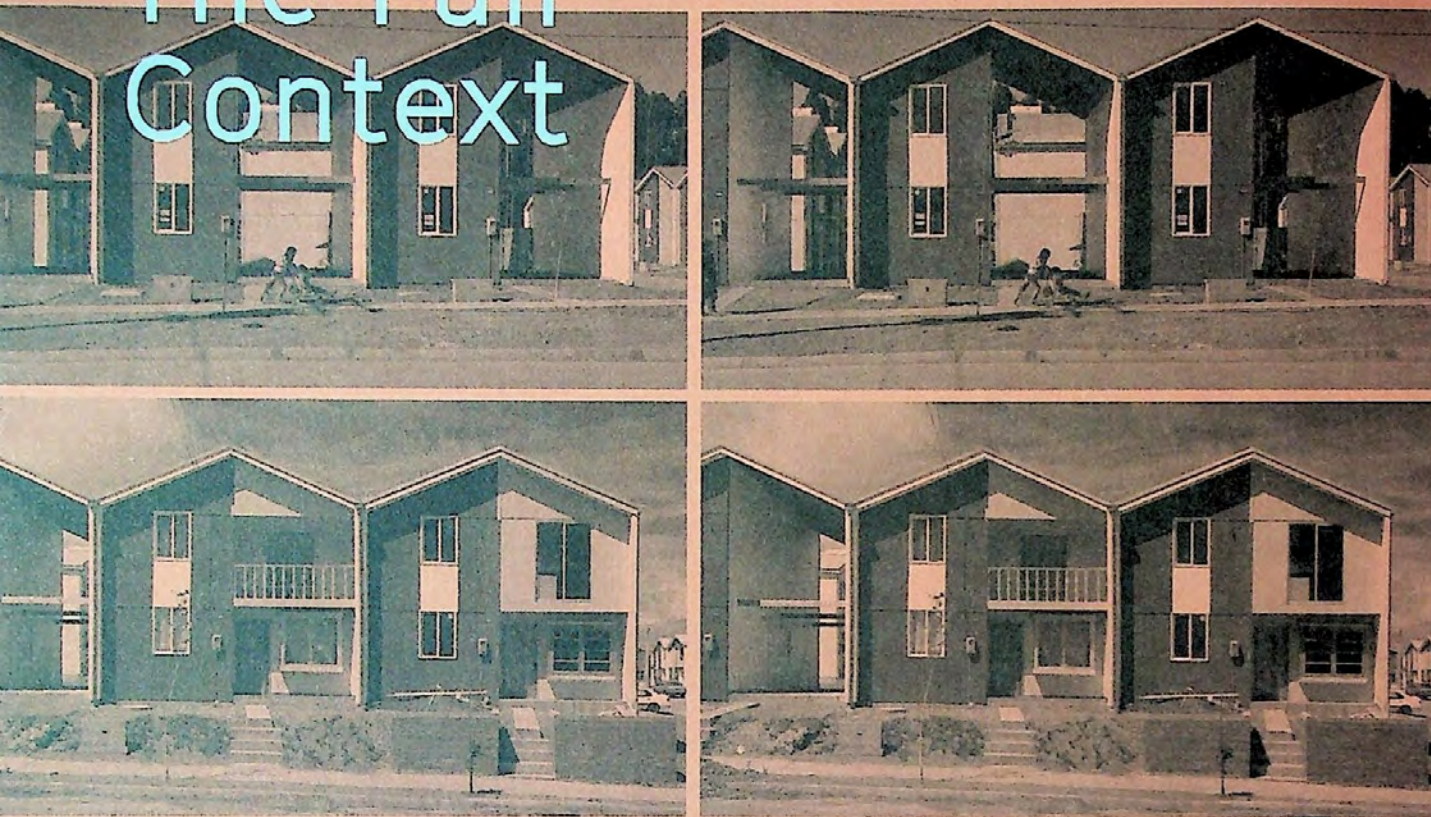
**SOVEREIGN FUND**

Did your main bank loan fall through because of dropping oil prices? Try finding a deep-pocketed, state-owned fund from Singapore, Norway, Japan, China, Saudi Arabia, or Abu Dhabi. Houston seems shaky to our own banks but foreign investors might see your project as a sure bet compared to what's going on in their own countries.

**STABILIZATION**

When you first finish the building, the time between when it opens and when it is effectively fully leased. Usually about two to three years. Good luck! ●

# The Full Context



IN A RECENT FACEBOOK TIRADE, PATRIK Schumacher of Zaha Hadid Architects forcefully criticized the selection of Alejandro Aravena as this year's Pritzker Laureate. He ranted:

*"The PC takeover of architecture is complete: Pritzker Prize mutates into a prize for humanitarian work. The role of the architect is now 'to serve greater social and humanitarian needs' and the new Laureate is hailed for 'tackling the global housing crisis' and for his concern for the underprivileged. Architecture loses its specific societal task and responsibility, architectural innovation is replaced by the demonstration of noble intentions and the discipline's criteria of success and excellence dissolve in the vague do-good-feel-good pursuit of 'social justice'."*

While he does later acknowledge that Aravena's "half a good house" projects are an intelligent response to the lack of affordable housing across the globe, Schumacher, to a certain extent, misses a larger point.

Great architecture is the result of decisions made about a laundry list of project goals, only one of which is formal and spatial ingenuity. A hypothetically ideal project would be as iconic and timeless as the Taj Mahal, as radically futuristic as the Starship Enterprise, would heal all the wounds mankind has inflicted on the Earth and atmosphere, would create an environment as friendly as Mister Rogers' Neighborhood, and would cost nothing. Yet all real projects must make difficult tradeoffs between intensely competing goals. The most skillful architects understand the larger context of all of these conflicting objectives and resolve them by

creating solutions that offer new opportunities rather than compromises. Alejandro Aravena won the Pritzker because his projects offered these new opportunities.

While Aravena's "half a good house" projects do, in fact, serve greater social and humanitarian needs, his impressive architectural dexterity lies more in his ability to understand a larger economic context. Such an understanding is no less important to project success than understanding its spatial, formal, social, topographic, or geographic context. He looks at an economic limitation not as a compromise, but as an opportunity. The long-term residents he is designing for can only afford half a house. Now. So that is what he gave them. Now. But he also understood that the same residents could economically prosper in the future, and he provided them an architectural solution that accommodated that potential prosperity. Such recognition of an economic condition as an opportunity rather than a limitation is the mark of a more sophisticated architectural mind and worthy of professional recognition and praise.

Alejandro Aravena is not the first Pritzker Laureate to demonstrate such adept understanding of the economic context of architecture. The Laureate that arguably most expertly illustrated it was actually the first: Philip Johnson. As recounted at the recent panel discussion celebrating the 90th birthday of Gerald Hines, Johnson's notion that better architecture could increase the value of speculative commercial buildings was both radical and astutely observant of the economic context of architecture of the era. His signature Pennzoil Place project turned the

notional status quo in the real estate industry on its head and helped pave the way for many of the other esteemed architects gathered for the panel discussion and perhaps even Schumacher's recently deceased boss, Zaha Hadid, as well. Had Johnson not been so persuasive in his financial hypothesis with an entrepreneurial developer like Hines, Hadid might have remained an asterisk in the notes of architectural history rather than being recognized as a quintessential starchitect within her lifetime.

As these two contrasting Pritzker Laureates demonstrate, a deep understanding of the economic context can effectively guide architectural ingenuity as much as an understanding of the formal, spatial, or geographic context of a project. Such an understanding and, just as important, the ability to effectively and convincingly communicate that understanding, would be an extremely powerful tool that architects, landscape architects, engineers, planners, and any other professional could use to address many of the challenges a city like Houston faces today. Where is the next Philip Johnson to convince a developer like Perry Homes that architecturally sensitive houses that respond to residents' desire for a safer, more connected neighborhood can also be financially rewarding? Who is the local Alejandro Aravena who could help resolve issues of affordability and gentrification? What other problems can visionaries with a solid foundation in the spatial, formal, structural, and social aspects of architecture and planning help our city overcome with a supplemental understanding of economics and finance?

As architects and other design professionals contemplate how to address pragmatic issues like mobility, safety, comfort, and connectivity as well as loftier concepts such as inspiration, sensitivity, and resilience in their projects, we must recognize the fact that economics and finance drive the solutions we come up with just as much as a street grid, a setback requirement, or a building code. While many design professionals see budget constraints as a limitation, the more visionary among us see them as opportunities to create value from a societal perspective as well as a financial one. In his tirade against Aravena's selection, Schumacher laments that "this is not the frontier where architecture and urban design participate in advancing the next stage of our global high-density urban civilization." Yet, as the challenges we face become more complex, interconnected, and entrenched, such an understanding of economics and finance might be exactly the additional skill set architects and other design professionals need to tackle those challenges and create the opportunities that can further advance and enhance cities like Houston. ■

## Who is the local Alejandro Aravena who could help resolve issues of affordability and gentrification?

## Further Reading

THIRTY MAGAZINES IS AN INDEPENDENT, POP-UP MAGAZINE store that brings small press magazines from around the world to Houston. The selections are mostly guided by what founders Evan O'Neil and Tyler Swanner discovered during their travels.

"When you consider the cost of print," O'Neil says, "if you're going to print something, it has to be good. There is some great, thoughtful work on online platforms; but generally it is stuff that overstressed and underpaid

freelancers crank out with little to no lead time, and that's the general economy of the Internet. But there's a substantively large group of people proving work that conveys a unique point of view in a well-researched and comprehensive manner is worth spending effort and money on."

The store is currently located at New Living on 19th Street in the Heights. Brazos Bookstore will be carrying all the selections.

They have recommended five titles from their selection:

### 1 The Outpost

*Beirut, Lebanon*

LATEST ISSUE: NO. 06, SUMMER 2015

*The Outpost* identifies, understands and analyzes the conflicts, morals, energies, and opportunities of a changing Arab world and lays down possible futures. It aims to ignite a socio-cultural renaissance in the Arab world, and a deeper understanding connection abroad, through inspiring its readers to explore a world of possibilities.

### 2 CLOG

*New York, USA*

LATEST ISSUE: LANDMARK, 2015

Each issue of *CLOG* explores, from multiple viewpoints, a single subject particularly relevant to architecture now. The Landmark issue discusses the process of landmarking buildings now, raising questions of how we decide what to let go of and what to preserve.

### 3 Weapons of Reason

*London, UK*

LATEST ISSUE: MEGACITIES, 2015

*Weapons of Reason's* mission is to turn knowledge into action. Each issue is well researched, with stunning illustrations contributing to a deeper understanding of complex issues and an idea of what to do next. This issue focuses on megacities, and the environmental, economic, and psychological impacts of modern mega development.

### 4 The Carton

*Beirut, Lebanon*

LATEST ISSUE: NO. 13, AUTUMN/WINTER 2016

*The Carton* tells the story of Middle Eastern culture through food. In many ways this is the Lebanese counterpart to the Gulf Coast's *Sugar & Rice*. Through recognizing the soft-power potential of food, we find more alike than not with the people of a region that is often misunderstood.

### 5 Jacobin

*New York, USA*

LATEST ISSUE: NO. 20, WINTER 2016

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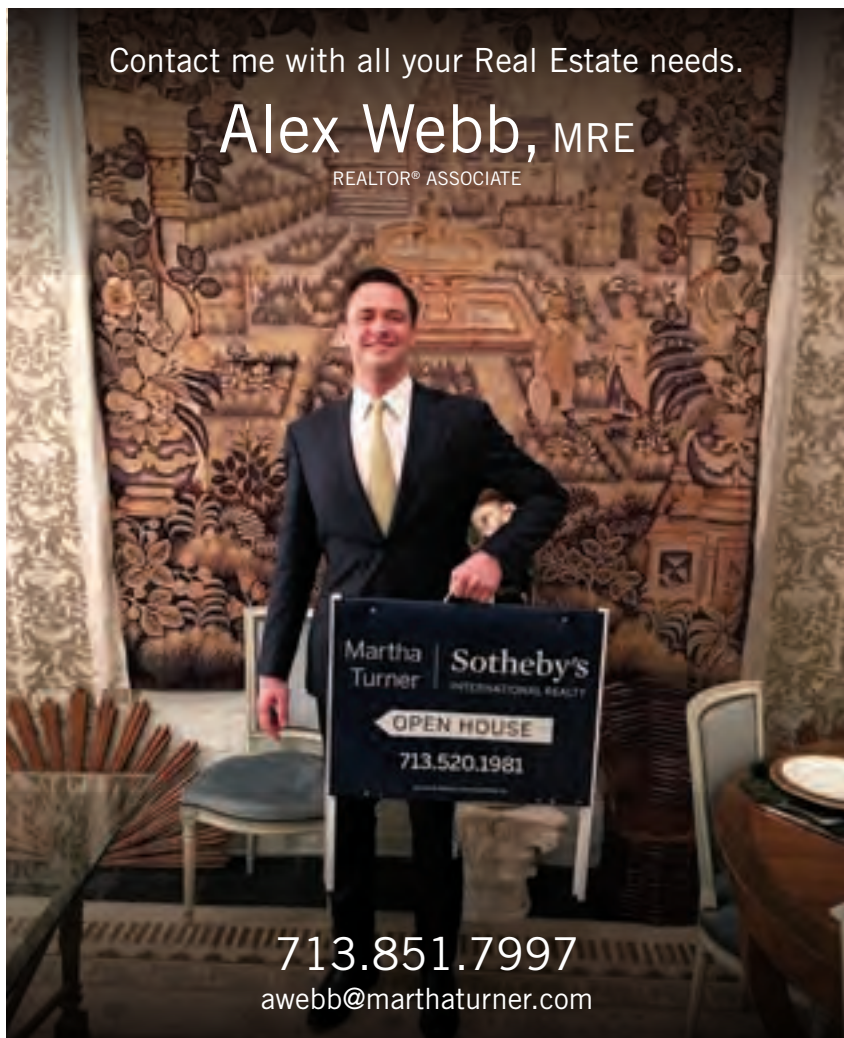
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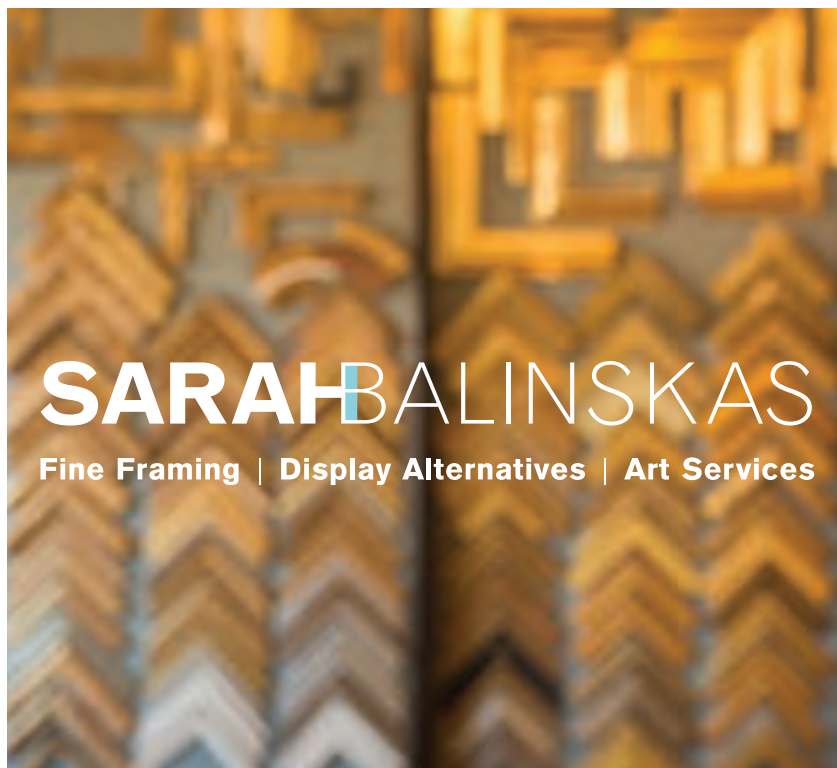
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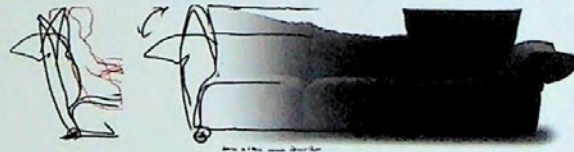
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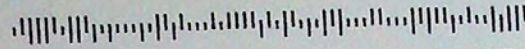


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