



UP **SKILL** HOUSTON

An Initiative of the Greater Houston Partnership



BUILDING MOMENTUM

A PROGRESS REPORT

UpSkill Houston—an unprecedented, industry-led collaboration—works to close the skills gap across the regional economy.

Sometimes it's a few statistics that are worth a thousand words.

- **41 percent** of all jobs in the Houston region—**1.4 million** jobs—are middle-skill positions, requiring education and training beyond high school but not a four-year degree.
- Middle-skill petrochemical jobs in Houston can pay a median wage of **\$30.61 an hour**.
- Just four years ago, **855,000** Houstonians 25 years and older did not possess the minimum credential for middle-skill jobs, and that number likely has increased since then.
- **74,000** middle-skill positions open up in the Houston region annually.

The math is easy. The mounting challenge for greater Houston's industries equals potential advancement for its citizens. However, the key lies in closing Houston's skills gap. According to *Preparing to Skill Up*, by JPMorgan Chase & Co., the mismatch between job seekers' skills and businesses' needs threatens the region's economic growth and limits the financial well-being of millions of Houstonians.

"If we don't figure out how to share the prosperity with people who don't have a sense of opportunity being available to them, a sense of opportunity for success, the social fabric tears and democracy doesn't work," said Bob Harvey, president and CEO of the Greater Houston Partnership, which launched UpSkill Houston. "Houston needs a vibrant economy with jobs that pay good wages and training to develop the skills that enable people to take those jobs."

UpSkill Houston addresses the skills gap in seven sectors critical to the area's economy: petrochemical manufacturing; industrial and commercial construction; healthcare; port, maritime, logistics; utilities; advanced manufacturing; and oil and gas-upstream and midstream. The initiative aligns stakeholders to pursue three fundamental objectives:

- **ATTRACT** unemployed and underemployed Houston residents and youth to middle-skill positions across the region—in part by raising awareness of and changing perceptions about these careers.
- **TRAIN** individuals in the technical *and* employability skills necessary for success—using curricula built around industry demand and aligned across the sector for portability.
- **PLACE** and retain these workers in middle-skill jobs on career paths that reward those who continue to upgrade their skills and mentor those who need a little support.

"We have a ton of work to do," said Gina Luna, CEO at Luna Strategies, LLC, and chair of the UpSkill Houston Executive Committee. "We also have a lot of positive momentum, and we're seeing lots of activity in the right direction."

Success will paint a different picture. Houstonians who now lack the skills necessary for jobs that pay middle-class wages will possess know-how that employers value. Better wages will create shared prosperity. Developing the pipeline of middle-skilled talent will enable high-demand industries to fill vacancies created by rapid business growth and impending retirements. Long-term competitiveness will spur continued economic expansion throughout the region. There is strength in unity.

"Now the expectation in Houston is that if you're doing anything around workforce—whether you hire, train, or help people find jobs—you're part of UpSkill Houston."

—Carolyn Watson



BOB HARVEY
President and CEO
Greater Houston Partnership



GINA LUNA
CEO, Luna Strategies, LLC, and Chair
UpSkill Houston Executive Committee



CAROLYN WATSON
Vice President, Corporate Responsibility
JPMorgan Chase & Co.

4

ADDRESSING A CROSS-SECTOR CHALLENGE

The development of UpSkill Houston

6

INDUSTRY LEADS THE WAY

The critical nature of industry leadership

8

CONSENSUS FOR A DISTINCTIVE STRATEGY

Collective action and common language as key elements of the strategy

10

NEW PARTNERS, NEW RESULTS

Attracting workers to craft and technical professions

12

MEETING INDIVIDUALS' AND INDUSTRIES' NEEDS

Training workers in technical and employability skills

14

THE PATH TO AN UPSKILL JOB

Placing workers on career paths with opportunity for growth

16

ACCELERATING GAME-CHANGING APPROACHES

Taking the effort to scale, adding new sectors, and engaging new audiences

18

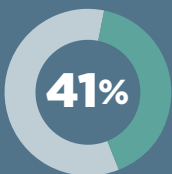
BUILDING MOMENTUM: MID-2014 THROUGH 2016

Good start; right direction; more work ahead

19

THANKS TO OUR MANY COMMITTED PARTNERS

Together we can build a stronger, more prosperous Houston for all



of jobs in the Houston region require education and training beyond high school, but not a four-year degree.

In 2013, **over 855,000** Houstonians aged 25 years and older did not possess the minimal credentials for middle-skill jobs.



ADDRESSING A CROSS-SECTOR CHALLENGE



The Greater Houston Partnership launches UpSkill Houston in mid-2014.

In early 2013, in anticipation of hosting a Houston meeting of the Global Cities Initiative, a joint project of The Brookings Institution and JPMorgan Chase & Co., executives from Chase conferred with leaders in Houston's business, civic, and non-profit communities. Bank executives expected to hear about issues with export imbalances, foreign investments, and transportation logistics. Instead, they heard the top concern across sectors was the need for skilled workers to fill the jobs powering Houston's economy—middle-skill jobs that require more than a high school diploma but less than a four-year degree.

Meanwhile, the lack of a middle-skilled workforce was a common thread in discussions Bob Harvey, president and CEO of the Greater Houston Partnership, was having with his members. "Not everybody used that term, but that's what they

were describing," Harvey said. "Manufacturing, energy, health-care—all the major sectors—including the Port of Houston, said they were experiencing this problem." At the Global Cities meeting in May 2013, Harvey announced that the Partnership would create a taskforce to address the Houston region's middle-skill challenge.

Half of the taskforce's 80 members were business leaders. The remaining participants hailed from nonprofits, community colleges, K-12 school systems, labor unions, and the public sector. "We wanted everybody who felt they had a vested interest or something to contribute to be at the table," said Gina Luna, CEO of Luna Strategies, LLC, who co-chaired the taskforce with Shell Oil Company President Bruce Culpepper.

Many technical degrees lead to higher first-year earnings!

BACHELOR'S DEGREE

\$39,725

TECHNICAL DEGREE/ CERTIFICATE

\$50,827

2 out of 5

JOBS IN HOUSTON
ARE TECHNICAL-SKILL
OCCUPATIONS.

ADDRESSING A CROSS-SECTOR CHALLENGE

The taskforce identified the most pressing challenges to attracting, training, and placing middle-skilled workers as:

- **AWARENESS** of the positive attributes of middle-skill jobs and the thousands of them available across the region.
- **SKILLS**, both technical and foundational (e.g., timeliness, communications, critical thinking, teamwork), needed for these positions.
- **COORDINATION** among the region's nine community college systems, 68 independent school districts, more than 70 workforce development programs, multiple industries, and innumerable businesses.
- **DATA** on the labor market and demand likely in the near and long terms.

Then the group's members developed a strategy and tactics to address those issues. "That plan was to focus on seven industry sector councils, trying to share best practices across the sector councils but allowing each industry the autonomy to do what made sense for that particular industry," said Luna. Another principle was a near- and long-term focus—addressing the skills gap in the near term by training underemployed and unemployed adults while working over the long term to help young people understand the opportunity for financial stability and career advancement with middle-skill jobs.

"We launched UpSkill Houston as the brand to capture all of that," Luna said. With the launch, JPMorgan Chase announced a five-year, \$5 million commitment to develop Houston's workforce by investing in UpSkill Houston, in training programs, and in career awareness for high school students.

Such support has enabled UpSkill Houston to follow its high-level plan. The initiative established the petrochemical and construction councils first. Those sectors expressed the

most urgent need and had existing organizations with which UpSkill could work. The remaining sectors will be built out over time. Healthcare is on tap next and will be followed closely by utilities and advanced manufacturing.

UpSkill Houston provides resources, structure, and convening opportunities to foster region- and sector-wide collaboration. It engages a diverse set of players, including representatives from community organizations. Though business leaders initially questioned the presence of community leaders, Harvey knew "if we didn't continue to provide social service supports with these efforts, we would lose workers due to issues such as child care, transportation, and financial instability—issues that keep workers from completing education or training."

That education and training will continue to increase in importance. Middle-skill jobs accounted for 56 percent of all Texas jobs in 2015. Nationwide, by 2020, two-thirds of all jobs will require a postsecondary education. Exacerbating that skills shift is the lack of higher-educational attainment in key demographic segments. Meanwhile, Houston has experienced a demographic transformation from 54 percent white, 19 percent black, 23 percent Latino, and 4 percent Asian in 1990 to 33 percent white, 18 percent black, 41 percent Latino, and 8 percent Asian in 2010.

UpSkill Houston works to extend opportunity to everyone, as the region's demographics change. Harvey explained, "the Partnership took this on because it was going to affect our economy if we didn't, and it was the right thing to do."

UpSkill Houston is now inextricably linked with the region's competitiveness. "Prior to the taskforce, there was a conversation, but the business community was not leading on it," said Carolyn Watson, vice president for Corporate Responsibility at JPMorgan Chase & Co. By comparison, she now sees "a broad embrace across the community of the UpSkill Houston effort."



60 x 30TX Goal:
Ensure 60 percent of the region's population achieves a post-secondary degree or credential by 2030.



BRUCE CULPEPPER
President
Shell Oil Company

INDUSTRY LEADS THE WAY



PENNY PRITZKER, former U.S. Secretary of Commerce, visits LyondellBasell's training center, while in town for an UpSkill Houston meeting.

Houston is not alone in experiencing a skills gap. Cities around the country face the same challenge. Forty-five percent of U.S. employers report difficulty filling jobs, according to a report by ManpowerGroup.

However, Houston is exceptional in the leadership that its business community has assumed for addressing this skills gap, as former U.S. Commerce Secretary

Penny Pritzker learned when she met with UpSkill Houston partners last year. In April 2016, Pritzker sat down with executives from the area's petrochemical and construction sectors, community colleges, school systems, and public workforce board. LyondellBasell hosted the group at its new training facility.



OF U.S. EMPLOYERS REPORT
DIFFICULTY FILLING JOBS.



BARRY KLEIN
General Manager, Shell Deer Park
and Chair, EHCMA Workforce Steering Team

INDUSTRY LEADS THE WAY

In a speech eight months later, Pritzker cited Houston as a winning example among seven areas selected nationwide to participate in the department's Communities That Work Partnership. She recalled her takeaway from the UpSkill Houston event. "Business leaders mapped the demand they had in petrochemicals and construction," she said. "They coordinated with social services to ensure that workers undergoing mid-career training had the safety net they needed to succeed. And they worked with K-12 schools, community colleges, and universities to launch a 'prototyping' based workforce training program, where multiple new programs are developed and run simultaneously."

Barry Klein, general manager at Shell Deer Park, believes companies must lead the way. "When the message comes from folks who own the problem, the impact is greater," he said. "This is not easy work. But business stepping up to the plate is critical."

Yet Klein knows his experience in Houston is rare. At a gathering of representatives from chambers of commerce across the country, where the topic was workforce development, Klein was the only business executive present. He attended on behalf of UpSkill Houston. "That was one thing we were doing differently from the others," Klein said.

UpSkill Houston sprung from a Greater Houston Partnership taskforce strongly supported by the region's business leaders. Taskforce members decided the new initiative should remain under the Partnership's auspices to ensure continued business community ownership and accountability. "There's a big difference," said Partnership President and CEO Bob Harvey, "between having business people in the room, at the table, invited to someone else's party and having them feel they own this."

Linda O'Black, vice president for Community Impact at United Way of Greater Houston, attributes UpSkill Houston's success in part to its business roots. "The effort is employer-driven and results-oriented," she said. "It's working in not just one area but in multiple sectors that are coming together."

With business at the forefront of its efforts, UpSkill Houston secured a grant from the U.S. Chamber of Commerce Foundation to participate in the foundation's Talent Pipeline Management program, supported by Strada Education Network. Designed to help employers close the skills gap by applying lessons from supply chain management, the program provided UpSkill Houston with a framework for understanding the area's talent challenge as similar to a manufacturer's supply chain. The concept resonated with UpSkill Houston's partners and helped them to see their unique roles in addressing the talent pipeline.

J.D. Slaughter, vice president at S & B Engineers and Constructors, Ltd., emphasized that industry's role can't be limited to writing checks. Slaughter's pitch to companies considering a partnership with UpSkill Houston: "Be part of the organization and work beside it. Be ready to be a doer. Give of your time. Give not just of your financial capability but also of your business capability and your knowledge."

Klein and Slaughter's companies have worked with UpSkill Houston since its founding in mid-2014. So, too, has ExxonMobil. UpSkill Houston formed collaborations among the petrochemical and construction sectors first. Already those sectors are experiencing noticeable returns on their investment.

Bob Catudal, Baytown Chemical Plant Manager, ExxonMobil Chemical Company, said ExxonMobil measures the success of its efforts to close the skills gap by the number of new graduates from community colleges it employs and by increased enrollment in petrochemical programs at those colleges. The company has been excited by the number of new hires from those schools to date.

"We're getting the skilled employees we need, and we're changing the trajectory of people's lives," Catudal said. "When a family can move from a \$30,000-a-year job to an \$80,000- or \$90,000-a-year job ... children have the opportunity to have a better life."



LINDA O'BLACK
*Vice President, Community Impact
United Way of Greater Houston*



J.D. SLAUGHTER
*Vice President
S & B Engineers and Constructors, Ltd.*



BOB CATUDAL
*Baytown Chemical Plant Manager
ExxonMobil Chemical Company*

CONSENSUS FOR A DISTINCTIVE STRATEGY

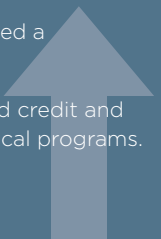


Members of UpSkill Houston's Executive Committee at one of their bimonthly meetings to strengthen coordination and set policy.

MIDDLE-SKILL PETROCHEMICAL
JOBS IN HOUSTON CAN PAY
A MEDIAN WAGE OF
\$30.61 AN HOUR.



In 2016, CCPI colleges experienced a
42% increase
in the completion of degrees and credit and
non-credit certificates for technical programs.



CONSENSUS FOR A DISTINCTIVE STRATEGY

From an 80-member founding taskforce to a governing executive committee of 32 members and growing, UpSkill Houston has stayed its course, bringing a broad spectrum of players together to address Houston's middle-skills gap. Executive committee members and other partners say the value of widespread collaboration has been immeasurable. Among the keys to the initiative's success: common language and collective action.

The executive committee meets every other month to strengthen coordination, consider new services, set policy positions, or design experimental prototypes. The bulk of the work is done by sub-committees and sector councils that gather to oversee industry- or population-specific (e.g., women, veterans, youth) tactics. These smaller groups share their successes *and* failures with the larger body, so everyone benefits. UpSkill Houston serves as guide and convener—bringing industry together with community-based organizations, community colleges, K-12 school systems, philanthropy, and government agencies.

"We launched the initiative without any reference to 'collective action' and 'collective impact,'" said Bob Harvey, president and CEO of the Greater Houston Partnership, which founded UpSkill Houston. "To business people, 'collective' anything can sound counter to 'responsibility' and 'accountability.' So, we used aspects of the model without being dogmatic about it. Eventually," Harvey said, "it became clear that we needed to get everybody onboard with the model."

Working through collective action encourages different groups addressing the same problem to establish a common goal, align their efforts, pursue separate tactics, and share results. "The objective is to try things, change things, and have an impact," said Allatia Harris, vice chancellor of Strategic Initiatives at San Jacinto College. "We didn't lose time waiting for someone to develop a plan. We didn't lose partners because they didn't want to march in someone else's direction."

Harris said collective impact "gives everyone a place at the table," which fosters a better appreciation for each partner's contribution to the whole. For example, some businesses had preconceptions about the depth of skills training community colleges could offer. Likewise, neither businesses nor

community colleges previously viewed community organizations as workforce partners.

Barry Klein, general manager at Shell Deer Park, said "People also are starting to realize that every time we go off and do our own thing, it's not nearly as effective or as productive. We all want to leave a legacy. Now I see folks saying more often, 'Let me take this for the team.'"

That approach has aligned and reinforced existing efforts, while spurring new coalitions. The Community College Petrochemical Initiative (CCPI), a collaboration of the region's nine community colleges that started in June 2013 with support from ExxonMobil, trains workers for area petrochemical plants and refineries. An unparalleled collaboration between the East Harris County Manufacturers Association (EHCMA) and Associated Builders and Contractors leads an effort with CCPI and community partners to attract and develop skilled petrochem and industrial craft workers.

The starting point for those collaborations is a common language cultivated by UpSkill Houston. San Jacinto Chancellor Brenda Hellyer remembers early initiative meetings where "UpSkill Houston helped us build relationships across sectors and made sure we were all talking about the same issues."

Harris elaborated, "We had to define 'middle skills.' We had to define 'training.' We all perceived those ideas through our own lenses. I was thinking of the 'training' in colleges. I had to understand 'training' through the unions' lens and through the employers' lens."

Over time, using a common language has expanded to also mean coordinating websites so workers can easily find information on middle-skill positions across industries.

"We've been successful, in part, because we've evolved along the way, as our process dictated and as we moved through our lifecycle," said Gina Luna, CEO of Luna Strategies, LLC, and chair of the UpSkill Houston Executive Committee. "The structure and the model we set up initially may not be the right one over time. We continue to monitor that and listen to our constituencies."



ALLATIA HARRIS
Vice Chancellor, Strategic Initiatives
San Jacinto College



BRENDA HELLYER
Chancellor
San Jacinto College

NEW PARTNERS, NEW RESULTS



When she lost interest in her four-year college program and dropped out, Cari Williams wasn't sure what was next. She bounced around at a few minimum-wage jobs, but knew she wanted more for herself. She finally sought advice from friends who seemed to have good jobs in manufacturing. One friend referred her to Lee College. Soon Williams was excitedly headed back to school for a degree in process technology at Lee.

CARI WILLIAMS, *process technician,*
ExxonMobil

Williams fast-tracked the two-year ExxonMobil Process Technology Program at Lee College. In 12 months, she was working as a process technician at ExxonMobil—making more than four times her wage at previous jobs, receiving benefits unavailable to her before, and on a career path that could earn her \$100,000 a year as she progresses up the career ladder.

"I wish I had known sooner that there was something I could do over a short-term that would prepare me to make a huge difference in my life," Williams said.

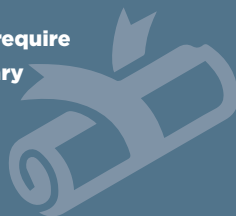
Like Williams, many underemployed and unemployed residents of the Houston region don't know that a small investment of time and money can prepare them for thousands of high-paying jobs in their own backyards. Similarly, those Houston residents may not realize that success doesn't require a four-year degree.

UpSkill Houston is changing that by connecting area employers with the nonprofits and public-sector agencies that provide support to job seekers. "UpSkill Houston has

"I wish I had known sooner that there was something I could do over a short-term that would prepare me to make a huge difference in my life."

—Cari Williams

By 2020, **2 out of 3**
U.S. jobs will require
meaningful post-secondary
education and training.



In 2016, nearly **32,000**
Houston-area
students explored
career opportunities through
Junior Achievement and the
Houston Hispanic Forum.

NEW PARTNERS, NEW RESULTS

helped industry reach into a population that wants to work but doesn't know the skill set that's needed," said Brenda Hellyer, chancellor at San Jacinto College.

Rene Solis, vice president for Emerging Public Initiatives at BakerRipley, said his organization works with people who are unemployed or underemployed. "We didn't always know which employers had opportunities, what jobs they had open, and what skills those jobs required. We needed that information to appropriately guide job seekers."

Now that he's at the table with industry, Solis has a better handle on the skills industry needs in the workforce. That information enables him to identify from a database of tens of thousands of underemployed individuals those who are "hard workers and have no barrier to employment and to try to move them from low-skill, low-wage jobs to middle-skill employment," he said.

BakerRipley conducts rigorous assessments of potential recruits to test not only for the necessary skills but also for the right attitude and mindset.

NextOp takes a similar approach with veterans, many of whom possess can-do attitudes and other "soft skills"—focus, team spirit, arriving early, staying late, catching on quickly—learned during their military service.

"Often, veterans don't know what they don't know," said John Boerstler, NextOp's executive director. "They don't know that they could make twice as much working in a trade or craft career field as they could make in a white-collar job. They're told to use their GI Bill benefits to earn a four-year degree. A lot of the opportunities out there require only a two-year degree or some technical training."

NextOp educates transitioning military and veterans about careers that can put them back in the workforce faster, while conserving their benefits. The group also conducts extensive assessments with veterans and directs them to vocational and technical training connected with middle-skill jobs available in the region. "We want veterans to be a significant piece of replacing the highly skilled but rapidly aging workforce across Houston's industry," Boerstler said.

Workforce Solutions, the region's public workforce system, also has access to a wealth of candidates ready for skilled jobs with minimal training. From a database of approximately 400,000 people in its system, Workforce Solutions Director Mike Temple says he focuses on people who are eager for jobs and possess some of the skill sets in which employers are interested. Recruits receive training in both technical and employability skills.

To identify recruits for its pipefitter positions, S & B Engineers and Constructors, Ltd., turned to United Way's THRIVE program and to Workforce Solutions, after the three connected through UpSkill Houston. "Company executives said it was the best way they ever found to have qualified candidates delivered to their door," Linda O'Black, vice president for Community Impact at United Way of Greater Houston.

Allatia Harris, San Jacinto College vice chancellor for Strategic Initiatives, said "In college, business, and industry, we didn't have an appreciation for ways community-based organizations had changed their approach to clients and the services they offer. We certainly hadn't seen them as workforce partners before."

UpSkill Houston has fostered a broad dialogue that brings all sectors of Houston's economy together to expand the talent pipeline for the benefit of citizens and industry across the whole region. "This is about our future," said Hellyer. "If we don't figure out how to meet this workforce need, Houston won't continue to be the economic driver for the state and country that it has been. There is a commitment and passion to find solutions from all players."



RENE SOLIS
Vice President
Emerging Public Initiatives
BakerRipley



JOHN BOERSTLER
Executive Director
NextOp



MIKE TEMPLE
Director
Workforce Solutions

MEETING INDIVIDUALS' AND INDUSTRIES' NEEDS



After four years as a medical assistant, Eva Arriaga, a single parent raising four boys, was making about \$2 more an hour than she made when she started the job. Regardless of how hard she tried to save, she kept getting further and further into debt. That all changed once she joined 19 other women for S & B Engineers and Constructors, Ltd.'s Women in Construction training.

While Arriaga worked as a pipefitter helper, she received training in her new craft from S & B as well as training in employability skills such as safety, attendance, time management, and teamwork through the company's partnership with United Way. Six months after finishing the program, Arriaga has continued to upgrade her skills with additional training and now makes twice the wage she did as a medical assistant. She's paid off her debt, bought her first car, and become a better provider for her family.

"UpSkill Houston is not just creating a talent pipeline for middle-skill jobs," said Dorian Cockrell, program manager at United Way of Greater Houston. "UpSkill Houston is changing people's lives."

UpSkill Houston helps break down barriers, foster open dialogue, and create a singular vision to power solutions that prepare Houston's workforce for good-paying, middle-skill jobs in high demand across the region.

"UpSkill Houston is not just creating a talent pipeline for middle-skill jobs. UpSkill Houston is changing people's lives."

—Dorian Cockrell

EVA ARRIAGA, pipefitter helper II,
S & B Engineers and Constructors

MORE THAN **7,000** NEW
CONSTRUCTION JOBS OPEN
PER YEAR IN HOUSTON.



Jacobs and Workforce Solutions
partnered on training prototypes that

graduated 19 out of **19**
new, entry-level workers and

upskilled 1,400
incumbent workers.

MEETING INDIVIDUALS' AND INDUSTRIES' NEEDS

"We're coming to the table in a very different way, thanks to UpSkill Houston," said Allatia Harris, vice chancellor for Strategic Initiatives at San Jacinto College, referring to industry, business, higher education, nonprofits, philanthropy, and government. "We're improving the economic environment of our region together. It's exhilarating."

S & B's 2016 training program for women achieved a success rate of 80 percent, more than twice that of other such programs at the company. S & B Vice President J.D. Slaughter described "success" as getting individuals through the program and hired for the long haul.

"For us, success is the graduation," he said. "If they drop out for any reason other than they don't like the type of work, that's a failure. If we terminate them because they have an 'attitude problem' or they don't have the skill set, then we didn't do our job well enough."

United Way's THRIVE program and its associated organizations provided on-site financial coaching, employability skills training, and math tutoring and mitigated any issues that could have affected the women's ability to graduate. Slaughter described United Way THRIVE as critical to the effectiveness of the training. Now, he hopes UpSkill Houston's construction council will take the Women in Construction model to scale and replicate it at companies across Texas.

Mike Temple, director of Workforce Solutions, already is replicating prototypes his organization has found effective at easing the middle-skills gap in the short-term—including one pioneered with Jacobs, a commercial and industrial construction company. Workforce Solutions partnered with Jacobs to provide eight weeks of basic construction training to a group of individuals currently employed in other positions. All 19 workers completed the training and received permanent job offers from Jacobs.

Workforce Solutions since has started offering upskill training to current Jacobs workers and using the same successful approach with a group of masonry employers and a group of transportation employers.

Meanwhile, community colleges are strengthening their programs that provide workers with middle-skills training. "I see our job as meeting the workforce needs of the region," said Brenda Hellyer, chancellor of San Jacinto College. "We have a responsibility to talk with employers and industry partners and then determine how we're going to fill the skills gap."

UpSkill Houston facilitates those conversations. "The feedback the colleges get from our business and industry partners now is more honest, direct, and useful in terms of what we can do to train new learners and incumbent workers," Harris said. "Business and industry are partnering more with us. They are helping us design new curricula and facilities."

The petrochemical industry is working with San Jac to create a new center for petrochem engineering and technology. Hellyer meets regularly with plant managers from the sector to ensure the center's labs and curricula will address current and future needs of the industry.

The Community College Petrochemical Initiative (CCPI), led by Lee College, offers its members guidance on issues ranging from programming and equipment to faculty development and new hires. "CCPI works with companies and their employees who have announced plans to retire to discuss the possibility of a second career, post-retirement, teaching at a community college," said Lee College President Dennis Brown. "We work to integrate retirees in the training programs we offer."

Said Linda Aldred, senior vice president for Human Resources and Organizational Development at Texas Children's Hospital, "Partnering with our community colleges and other educational institutions to grow the talent pipeline has to be a priority for us—for our organization and for the Texas Medical Center, as a whole."



DORIAN COCKRELL
Program Manager
United Way of Greater Houston



DENNIS BROWN
President
Lee College



LINDA ALDRED
Senior Vice President, Human Resources
and Organizational Development
Texas Children's Hospital

THE PATH TO AN UPSKILL JOB



JONATHAN EUBANKS,
apprentice electrician, Trio Electric

Jonathan Eubanks was looking for more reliable work hours, a path to career growth, and wages that enabled him to better support his family. He didn't see those attributes in his job as a security guard. So, he started searching for a new opportunity.

Trio Electric was looking for dedicated workers interested in becoming journeymen electricians. Apprentices at Trio make \$13 an hour to start and can earn \$22.50 by the end of

the four-year program. Those who take the journeymen's exam when they complete their apprenticeships earn \$34 per hour and up.

Eubanks got placed at Trio with the help of BakerRipley's ASPIRE program. He became a full-time apprentice after a three-month evaluation period.

ASPIRE grew out of UpSkill Houston's efforts to fill the skills gap at companies across the region and improve the lives of Houston-area families.

"ASPIRE takes, for example, maintenance workers who are pretty good with their hands but never received any certification and helps them get the right certification to move into an industrial or commercial construction job with better pay and benefits," said Rene Solis, vice president of Emerging Public Initiatives at BakerRipley. "We put ASPIRE in place to provide a solution to the problem that UpSkill Houston was highlighting."

"We'll measure success by the number of graduates from community colleges who we can bring into our workforce."

—Bob Catudal

68 workers placed

IN MIDDLE-SKILL JOBS IN 2016 THROUGH BAKERRIPLEY'S ASPIRE PROGRAM, SUPPORTED BY JPMORGAN CHASE.

570 workers placed

IN MIDDLE-SKILL JOBS IN TWO YEARS THROUGH NEXTOP.



THE PATH TO AN UPSKILL JOB

JPMorgan Chase & Company supports ASPIRE with funding and with connections to employers who have agreed to hire qualified ASPIRE graduates. Since its founding in 2015, the program has placed 68 workers in new jobs.

Workforce Solutions is also a partner in ASPIRE, providing access to the Workforce Solutions' database of more than 400,000 individuals and their skill sets. "We measure ourselves on employment outcomes—the number of people who go to work and stay in work," said Mike Temple, director of Workforce Solutions. "We also measure results by income—the number of folks we have helped increase their incomes and educational attainment, which can be a proxy for income."

NextOp—an organization that recruits, trains, and places veterans at area companies in the energy, construction, and health-care sectors—touts similarly positive results, in part thanks to its participation in UpSkill Houston. Since it was established two years ago, NextOp has placed 570 veterans at an average starting salary of \$55,000, generally within 27 days after they joined NextOp's program.

"We've achieved over \$30 million in economic impact," said John Boerstler, NextOp's executive director. "Plus, we estimate that we've saved the federal government more than \$2 million in unemployment benefits because we shortened the time our veterans are on unemployment."

UpSkill Houston's guidance also helped NextOp align 10 U.S. Army construction specialties with their reciprocal private-sector credentials through the National Center for Construction Education and Research (NCCER), the accreditation body for construction training. Previously, individuals trained in certain construction jobs in the military didn't receive the same certification as individuals trained in those jobs in the private sector. So, veterans had to repeat their training, costing them money and preventing them from working sooner.

"With this adjustment in policy," Boerstler said, "veterans will be able to walk off active duty with a job-ready skill. They'll cost taxpayers a lot less and make a positive economic impact on the communities they return to a lot faster."

The benefits of such efforts accrue not only to workers but also to area companies, which have had trouble hiring for skilled positions. "The jobs they're looking to fill don't require a four-year college degree, but do require training or the ability to be trained beyond high school," said Linda O'Black, vice president of Community Impact at United Way of Greater Houston. "They're all jobs with career paths."

Bob Catudal, Baytown Chemical Plant Manager, ExxonMobil Chemical Company, said his company will need about 350 skilled people for two new plants in the Houston area. Through investments in community colleges, "our industry has bolstered the number of people in the workforce trained and ready to work when we're ready to go," he said. "We'll measure success by the number of graduates from community colleges who we can bring into our workforce."

The oil and gas industry has focused on expanding the talent pipeline for skilled jobs in part through participation in the Community College Petrochemical Initiative (CCPI), funded by ExxonMobil and led by Lee College to increase enrollment in industry courses at the nine area community colleges. Last year, enrollment in petrochem programs was up 32 percent over 2015.

While ExxonMobil's community college investments preceded UpSkill Houston, Lee College President Dennis Brown said conversations sparked by UpSkill Houston helped increase national exposure for the greater Houston region—attracting talent, stimulating funding opportunities, and even helping raise the number of internships for area community college students.

Mike Stilley, director of Training and Development for S & B Engineers and Constructors, insists "there's got to be a job at the end of a program. If there's not a job, it's not a successful program. If an organization is getting funding for training, they should be providing a job at the end," he said. He hopes UpSkill Houston will make that a requirement for its future partnerships.

IN THE PAST YEAR, MORE THAN
32,500 USERS HAVE VISITED
PETROCHEMWORKS.COM.



MIKE STILLEY

*Director, Training and Development
S & B Engineers and Constructors, Ltd.*

ACCELERATING GAME-CHANGING APPROACHES



Carol Guerrero is one exam short of reaching her long-held goal of a career in medical coding. She's pursuing her certification at San Jacinto College, thanks to guidance from BakerRipley's ASPIRE program and a San Jac Health Profession Opportunity Grant. When she passes the coding exam, Guerrero's employer, Houston Children's Dental Center, will promote her into a coder position that will open shortly.

CAROL GUERRERO, *office manager,*
Houston Children's Dental Center

Despite 16 years of medical billing experience, Guerrero knew she would need to go back to school to achieve financial stability and advance in her career. Soon she will have realized her professional dream and put her family on a better course. Coders—who review patient diagnoses, analyze them, and assign them the billing codes required by insurance companies—can make up to \$24 an hour. Like medical assistant and surgical technician, coder is a middle-skill job in healthcare that requires training beyond high school, but not a four-year degree.

The healthcare field includes hundreds of different occupations. In hospitals, clinics, and doctors' offices across the Houston area, thousands of jobs in those occupations are going unfilled. UpSkill Houston is bringing together the region's big healthcare employers to address the challenge. Said Linda Aldred, senior vice president of Human Resources and Organizational Development at Texas Children's Hospital, "We're all in and committed to doing the work necessary to bring this effort to life in our sector."

Competition for talent has sometimes kept Houston's medical institutions from partnering, but they all stand to gain from working with UpSkill Houston. "Once we have a sufficient middle-skill pipeline in healthcare, then it's up to

"We're all in and committed to doing the work necessary to bring this effort to life in our sector."

—Linda Aldred

1 OF EVERY **8** JOBS
IN THE HOUSTON REGION
IS IN HEALTHCARE.



of all U.S. jobs require some
training beyond high school
but less than a four-year
college degree.

ACCELERATING GAME-CHANGING APPROACHES

each of us to make our organization a compelling place to work,” Aldred said. “But developing the talent pipeline of skilled people who want to be in healthcare, as opposed to another industry, we can do together.”

For Carole Hackett, senior vice president for Human Resources at Houston Methodist, one area in which UpSkill Houston could assist is standardization of training and competency levels for middle-skill positions. “What better way to help our healthcare organizations and our local population than to train candidates who want to be in these middle-skill positions to the level that they can be successful no matter where they work,” she said.

Another task for an UpSkill Houston healthcare council could be to layout the pathway from entry-level jobs to middle-skill positions and beyond—from high school to healthcare, including colleges and organizations that can provide education and training along the way.

HD Chambers, superintendent of the Alief Independent School District, wants to be sure that pathway is clear to students. “As a result of the passage of House Bill 5 in 2013, our state has moved a lot of career exploration to earlier in the system,” Chambers said. “Career exploration now is happening much earlier than high school. It’s happening in the sixth and seventh grades.”

Chambers applauds this change, particularly because it enables students who don’t go on to college—40 percent in Alief’s case—to graduate high school with a meaningful set of skills and experiences. However, Chambers believes this idea will succeed only if industry becomes more engaged in K-12 and higher education. He has three recommendations for industry: Help write the curriculum for schools and colleges; help teach trade-specific courses at the high-school level and above; and serve as a catalyst for these and other collaborations between business and education.

“To solve workforce needs,” Chambers said, “you’ve got to get kids engaged in education that’s meaningful to them and meaningful to our economy.”

Raising awareness is critical to these efforts. JPMorgan Chase & Co. and Deutser LLC, both partners with UpSkill Houston, have been working to spread the word.

JPMorgan Chase and the East Harris County Manufacturers Association together developed PetrochemWorks.com to inform workers about career opportunities in the petrochemical field. The more than 5,400 visitors to the site each month can find top jobs in the sector, the preparation those jobs require, and the careers they can lead to. Carolyn Watson, vice president of Corporate Responsibility at JPMorgan Chase, sees tremendous potential for other sectors to use the platform as a model, creating cohesion around the UpSkill Houston effort.

Meanwhile, Deutser is focusing on “the more global message that Houston is filled with opportunity,” said Brad Deutser, Deutser president and CEO. Deutser’s team also is letting people know that “in UpSkill Houston, we have an initiative that is designed to connect citizens with opportunity, education, and a meaningful, rewarding career. People in Houston can make \$60,000, \$70,000, or \$90,000 a year in some career paths with a two-year degree. We really want people to understand that opportunity exists and to encourage them to take personal action,” he said.

As workers and students are ready to act, they can learn about the individual sectors of Houston’s economy. Deutser intends to get those messages to the public through outreach targeted to underemployed and unemployed workers as well as to students—the latter through schools, community centers, and even houses of worship. “This is about creating a societal mind shift,” he said.



CAROLE HACKETT
*Senior Vice President, Human Resources
Houston Methodist*



HD CHAMBERS
*Superintendent
Alief Independent School District*



BRAD DEUTSER
*President and CEO
Deutser LLC*

BUILDING MOMENTUM: MID-2014 THROUGH 2016

Since its founding in June 2014, UpSkill Houston has laid a strong foundation, steadily built the necessary infrastructure, and begun to experience results in closing the middle-skills gap in Houston's regional economy. Among UpSkill Houston's achievements are:

- Strong employer-led petrochemical sector council of ExxonMobil, Shell, LyondellBasell, Dow, BASF, and Chevron Phillips working in collaboration with the East Harris County Manufacturers Association and Associated Builders and Contractors. Also participating: community-based organizations, the Community College Petrochemical Initiative (CCPI), and Gulf Coast Workforce Solutions. The council focuses on the skilled talent pipeline for plants coming on line as early as late this year.
 - Enrollment in CCPI colleges' petrochem courses up 32 percent in 2016, and completion of degrees and credit and non-credit certificates for technical programs up 42 percent.
 - Two "Women in Industry" conferences encouraged more than 850 women to explore petrochem careers.
 - Two Regional Faculty Summits engaged CCPI member faculty, industry executives, and industry human resource representatives around the skills and traits employers seek.
- Growing construction sector council—led by Bellows Construction, TI Constructors, S & B Engineers and Constructors, Jacobs, and Marek Brothers Systems—collaborating to build talent. Supported by community-based organizations and philanthropic and public sectors.
 - Scalable prototypes to identify, train, and place workers in middle-skill positions in industrial and commercial construction. Four hundred underemployed and unemployed workers screened, 80 interviewed, 56 trained, and 39 placed in new jobs.
- Initial engagement of partners for the health sector council. Among them are Houston Methodist and Texas Children's Hospital.
 - JPMorgan Chase support for employer-led, United Way THRIVE prototype to reduce the skills gap in healthcare.
- UpSkillHouston.org launched to help change perceptions and improve awareness about middle-skill careers across the region by providing information on occupations, training and educational requirements, salary ranges, and career pathways.
- Close to 32,000 Houston-area students explored career opportunities in demand in the regional economy through Junior Achievement Inspire and the Houston Hispanic Forum.
- One of only seven regions selected for Communities That Work Partnership, an initiative of the U.S. Department of Commerce and the Aspen Institute designed to promote economic growth. Visit by former U.S. Secretary of Commerce Penny Pritzker to discuss closing the middle-skills gap.
- Grant of \$90,000 from the U.S. Chamber of Commerce Foundation and Strada Education Network Funds to participate with only seven regions in the Talent Pipeline Management Initiative.
- Recognition from:
 - Houston Mayor Sylvester Turner
 - Global Cities Initiative, a joint project of The Brookings Institution and JPMorgan Chase & Co.
 - United Way Worldwide
- Positive coverage in the following media outlets:
 - *Forbes*
 - *U.S. News & World Report*
 - *The Houston Chronicle*
 - *Houston Business Journal*
 - *The Texas Tribune*

YOU CAN HELP HOUSTON CLOSE ITS MIDDLE-SKILLS GAP AND ACCELERATE ECONOMIC VITALITY.

- Participate in a sector council or help create a new one.
- Commit to training or upskilling your workers.
- Help students and teachers become familiar with your industry.

Go to www.Houston.org/UpSkillHouston and learn how YOU can participate. Or email us at UpSkill@Houston.org. What are you up for?

The momentum we've built for UpSkill Houston couldn't have been achieved without many committed partners working toward a two-part goal: a stronger Houston region and prosperity for its residents.

Our people and their talents are the resources driving this economy. Our economic prosperity depends on developing them to be contributors to its long-term success. Your various perspectives elevated key themes that allowed us to build a common and meaningful narrative for action. Consequently, we've started to create the pathways both to meet the needs of Houston's economy and to ensure a high quality of life for its citizens.

Industry and employers took ownership for the initiative, inspiring others to join the effort. Leaders from all segments of our community—business, education, philanthropy, government, and the nonprofit sector—came together to start UpSkill Houston on its road to success. At the helm of this collaboration has been a stellar executive committee representing a cross section of our community.

Our thanks to all our partners. Your time, ideas, resources, and connections have been invaluable. Your passion and commitment for this work has been inspiring. We're excited by the relationships we've forged and the progress we've achieved in just three years. We look forward to accelerating the momentum behind UpSkill Houston in the year ahead, as we move into the next phase of our work together.



PETER BEARD
*Senior Vice President, Regional Workforce Development
Greater Houston Partnership*

MAJOR FUNDING PARTNERS



JPMORGAN CHASE & CO.



Since its founding in mid-2014, UpSkill Houston has meaningfully engaged the leadership of more than

60 COMPANIES

in its effort to reduce the region's middle-skills gap.



PETER BEARD
Senior Vice President, Regional Workforce Development, Greater Houston Partnership



UP**SKILL**HOUSTON

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