The Center works to solve our region’s toughest problems by engaging diverse leaders, providing impactful research, and defining actionable strategies.
LEADERSHIP

RESEARCH

SOLUTIONS
LEADERSHIP FORUMS
LeadershipNEXT
Reaching The New Millennials
2012 Community Indicator Report
Human Capital Development & Education

Early Childhood
Kindergarten - 12
Workforce Preparedness
2011 Community Indicator Report
Introductory Video
ECONOMIC DISADVANTAGE OF GREATER HOUSTON STUDENTS
2010-2011

Source: Texas Education Agency, PEIMS Standard Reports (2011)
EARLY CHILDHOOD
Higher ROI for Early Investments

Source: James J. Heckman, Ph.D., Nobel Laureate in Economics, University of Chicago, 2008
EARLY CHILDHOOD

Teacher Quality, an important metric in the report card

QualiFind Ratings on Teacher Education, All Gulf Coast Counties

- **Child Care**: 35% Minimal, 25% Good, 40% Excellent
- **Head Start**: 98% Excellent, 1% Minimal
- **PreK**: 100% Excellent

Source: Collaborative for Children’s QualiFind Early Childhood Education Database, 2011
K-12
Third Grade Reading – A Critical Metric

Percent of Region’s Third Graders Reading at Commended Level on TAKS by Economic Disadvantage Status, 2003-2010

Source: TEA, Children at Risk analysis
K-12
Algebra I – gateway to higher education

Regions’ Ninth Graders Passing Algebra I 2000-2010

Source: TEA
HIGH SCHOOL ATTAINMENT RATES

The Cost…

Texas’ drop outs = $9.6 billion loss/year

What if…half of Texas’s 135,100 dropouts from the Class of 2010 had stayed in school and earned a high school diploma?
The results would be…

- $593 million in increased earnings
- $786 million in increased home sales
- $715 million in gross state product
- $470 million in increased spending
- 3,950 new jobs
- $715 million in increased state tax revenue
- $43 million in increased state tax revenue
HIGHER EDUCATION PAYS...

2010 US Full-Time Wage & Salary Worker Annual Averages (Ages 25+)

Unemployment rate in 2010 (%)
- Doctoral degree: 1.9%
- Professional degree: 2.4%
- Master’s degree: 4.0%
- Bachelor’s degree: 5.4%
- Associate degree: 7.0%
- Some college, no degree: 9.2%
- High school diploma: 10.3%
- Less than a high school diploma: 4.9%

Average: 8.2%

Median weekly earnings in 2010 ($)
- Doctoral degree: $1,550
- Professional degree: $1,610
- Master’s degree: $1,272
- Bachelor’s degree: $1,038
- Associate degree: $767
- Some college, no degree: $712
- High school diploma: $626

Average: $782

HIGHER EDUCATION AND HIGH-DEMAND JOBS

Occupations Adding the Most New Jobs or Growing the Fastest 2006-2016, Gulf Coast

Number of 2010 Bachelor's, Associate's and Certificates in Related Fields (in thousands)

Source: FSG Social Impact Consultants

Brazoria • Chambers • Fort Bend • Galveston • Harris • Liberty • Montgomery • Waller
WORKFORCE PREPAREDNESS

Necessity of post-secondary education

In the 2013 Houston Growth and Staffing Outlook Survey, 66% of respondents said finding qualified workers was their main concern.
WORKFORCE PREPAREDNESS

By 2018, 63% of jobs will require some postsecondary education.

1973 workforce composition:
- 72% high school graduates
- 28% college or above

2018 workforce composition:
- 38% high school graduates
- 62% college or above

THIS MEANS 20 MILLION NEW AND REPLACEMENT JOBS WILL REQUIRE SOME COLLEGE OR ABOVE

Source: Georgetown U. Center on Education & the Workforce
In 2009, only 28.9% of people 25+ had a college degree
SCENARIOS 2040
Major Media Launch of Scenarios 2040

Think tank sees 2 paths in future of Houston

One offers quality of life, one holds class disparity

By Jeannie Kever

A Houston think tank has seen the city’s future. Make that two futures.
One version shows the Houston metropolitan area in 2040 as beginning to grow after decades of economic stagnation, focused on improving the environment, education and quality of life. The other is through higher taxes.

The second forecast for Houston is a holding in size even split by stark.

Downtown

Business Journal/Amplify Houston

Tips to take away from the Rankin debacle

Inside

WONORS

Downtown

Crane moves

City & State

Houston Chronicle | chron.com | Thursday, March 22, 2012 | Section B
REGIONAL ROUNDTABLES

Outreach to 3,000 plus Across Region

RICE GLOBAL ENGINEERING AND CONSTRUCTION FORUM

CENTER FOR HOUSTON'S FUTURE
The Region's Think Tank
WORKFORCE SUMMIT
Live Audience Poll

From your perspective, where is the skills deficit most significant?

a) Workers with basic knowledge and skills provided by traditional K-12 education
b) Workers with specialized knowledge and skills provided by vocational schools
c) Workers with math, science and engineering skills provided by community colleges and universities
d) Workers with professional degrees from universities
e) Workers with tangible experience garnered through internships and apprenticeships
What role should business play in closing the skills deficit?

a) Provide information relative to workforce needs
b) Work collaboratively with educational institutions in the development of curriculum and best practices
c) Develop and fund educational programs designed to address specific skill deficits
d) Provide internships and apprenticeships in key areas of skill deficit
McKinsey conducted a global survey across 9 countries and launched an extensive investigation of over 100 case studies covering 25 countries. These countries account for ~40% of global GDP and ~30% of the population. The survey included ~4,500 youth, ~3,000 employers, and ~1,000 post-secondary education providers.
Preparation of new graduates for the US workforce

- Employers: 49%
- Providers: 87%
- Youth: 48%

% who agree youth are adequately prepared

McKinsey & Company
Only one in two youth believe their education improved their chances of finding a job

<table>
<thead>
<tr>
<th>Country</th>
<th>% of respondents agreeing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>60%</td>
</tr>
<tr>
<td>Brazil</td>
<td>59%</td>
</tr>
<tr>
<td>India</td>
<td>54%</td>
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<tr>
<td>Germany</td>
<td>53%</td>
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<tr>
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<td>51%</td>
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<td>46%</td>
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<tr>
<td>Morocco</td>
<td>44%</td>
</tr>
<tr>
<td>United States</td>
<td>44%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>40%</td>
</tr>
</tbody>
</table>

Average: **50%**
Only one out of the three US employer segments is engaging heavily – and seeing results.

37% of employers globally fall under the Racing segment.
Op-ed in the Chronicle by our Chairman, James Calaway

Houston's workforce not ready for the future
Businesses, schools must do more to prep workers for success
By James Calaway | March 27, 2013 | Updated: March 27, 2013 8:20pm

Great change is afoot in the global economy. As occupations and industry sectors constantly trade positions as the gig economy emerges, laid-off workers must transition to new careers.

Economists from the McKinsey Global Institute have estimated that “too few Americans who attend college and vocational schools choose fields of study that will give them the specific skills that employers are seeking.”

Research by the Center for Houston’s Future shows that the fastest-growing jobs in our region, including engineers, nurses, accountants, and educators, will face a shortage of more than 800,000 in the next several years.

All of this puts enormous pressure on the overall cradle-to-career system of education and workforce readiness. This is a burden that must be shared by the business community.

Pre-K-12 institutions need to equip students with the basic skills required to successfully navigate post-secondary academic requirements, and seek innovative ways to include marketable skills training into their curriculum.
Shell Workforce Development

**Middle School**
- Teacher & Faculty Development
- Math & Science Competition
- Engineering & Science Field Days
- Science & Career Fairs
- Traveling Science Exhibits
- Energy Education Tools
- Shell education website

**High School**
- College/University Funding
- Internships
- Trade Associations
- Mentoring Programs
- Dual Credit Program
- Scholarships
- Summer Camps (Engineering & Process Tech)

**College**
- Student Associations

**PARTNERSHIPS**
- Strengthen & Encourage STEM
- Attract to Technical Careers
- Support for Success
- Employer of Choice

Shell Hires
WORKFORCE PREPAREDNESS

Exxon Mobil Baytown Expansion: Demand for Skilled Labor
- Announced June 2013, Houston Chronicle

• ExxonMobil commits $500,000 to workforce training program

• Houston-area community colleges to expand recruitment and training

• Fifty-thousand students and educators to benefit over five years

-46,000 permanent chemical industry jobs
-264,000 jobs with supporting companies and contractors

Source: Texas Higher Education Coordinating Board, 2011
WORKFORCE PREPAREDNESS

Sub-bachelor’s STEM jobs overlooked by policy makers

“The Hidden Stem Economy”
-Brookings, 2013

• Since 2011 - 20% US jobs require a high level of knowledge in any one STEM field.

• Half of all STEM jobs are available to workers without a four-year college degree. These jobs pay on average 10% higher than jobs with similar educational requirements.

• STEM jobs that require at least a bachelor’s degree are highly clustered in certain metropolitan areas, while sub-bachelor’s STEM jobs are prevalent in every large metropolitan area.