Houston Business Roundtable  
Special Forum Held on October 12 at Hobby Hilton

“Impact of Katrina/Rita on Houston Area Workforce”

The following information includes presentation materials, speaker notes and brainstorming ideas that came from the special forum held by HBR at the Hobby Hilton on October 12, 2005, to address the impact of recent hurricanes on the Houston area industrial contract workforce.

HBR Presentation Slides

HBR Information

- HBR’s Mission - develop, share and promote best practices that improve industry performance in areas of safety, health, workforce skills, work quality, productivity and costs.
- Non-profit voluntary association of Owner (Members) and Contractor/Supplier (Subscribers) Companies.
- General focus is on Project Engineering, Construction, Maintenance and Turnaround activities with emphasis on issues related to Contractors.

Purpose of Forum

- Share Information about the Impact of recent Hurricanes on the Houston Area Workforce
- Explore Ideas and Actions that might be Considered to Mitigate the Impact on Houston Industry, particularly in areas of contract Maintenance, Construction and Turnaround Work

Forum Agenda

- What did we know prior to Katrina?
- What do we know after Katrina/Rita?
- Brainstorming Session
  - Retention
  - Recruitment
  - Training
- Action Planning

What we Knew Prior to Katrina

A couple of times a year, HBR publishes a summary forecast from its member companies showing the expected contract craft needs for the next 18 months. The following chart is the most recent forecast showing craft labor from July 2005 through December 2006. This is a typical forecast showing peaks during the turnaround seasons in the fall and early spring time.
The next chart has the last three forecasts shown together. Each forecast made shows an increase over the previous forecast for the same time period. 2006 and 2007 were expected to be better years for the petrochemical business as compared to recent years and the labor forecasts are reflecting that.
2004 FMI Study (NCCER)
The following data was developed by FMI, a Construction consultant and reported by NCCER. This shows the expected shortfall (supply less demand) as a percent of U.S. construction labor for non-residential crafts. All crafts show and increasing shortfall over the next three years;

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ironworkers</td>
<td>0</td>
<td>-1</td>
<td>-6</td>
<td>-10</td>
</tr>
<tr>
<td>Operators</td>
<td>2</td>
<td>-1</td>
<td>-5</td>
<td>-9</td>
</tr>
<tr>
<td>Carpenters</td>
<td>-1</td>
<td>-4</td>
<td>-11</td>
<td>-16</td>
</tr>
<tr>
<td>Electricians</td>
<td>0</td>
<td>-3</td>
<td>-9</td>
<td>-14</td>
</tr>
<tr>
<td>Laborers</td>
<td>-3</td>
<td>-6</td>
<td>-12</td>
<td>-16</td>
</tr>
<tr>
<td>Painters</td>
<td>4</td>
<td>1</td>
<td>-7</td>
<td>-12</td>
</tr>
<tr>
<td>Pipe fitters/Plumbers</td>
<td>-7</td>
<td>-9</td>
<td>-16</td>
<td>-21</td>
</tr>
</tbody>
</table>

2005 CMEF/NCCER STATISTICS (2004 Data Shown for Comparison)
- College Enrollment – 1178 (1933) units
  - Spring – 515 (860)
  - Summer – 325 (438)
  - Fall – 338 (635)
- Upgrade Training on Sites – 125 (215) persons
- Upgrade Training at HASC – 120 (167) persons
- Skills Assessments, Taken – 1412 (1800), Passed – 605 (735)

This data shows a 40% decline in enrollments from 04 to 05 in craft training, both at the Houston community colleges and in the upgrade training programs on site and at the Houston Area Safety Council. This means fewer helpers/apprentices are enrolled in formal training. The pass rate for craft skills assessment testing continues to be around the 40% rate.

The data below was received from NCCER early this year and indicates that over one third of all craft skills assessment tests have been given in the greater Houston area (includes Houston, Texas City and Freeport areas). Many crafts persons have taken the test multiple times and the numbers do not reflect the actual number of persons. There are still many craft persons that have not passed the skills tests for their respective crafts.

<table>
<thead>
<tr>
<th></th>
<th>Tests Taken</th>
<th>Passed</th>
<th>% Passed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Houston</td>
<td>23,924</td>
<td>10,910</td>
<td>46</td>
</tr>
<tr>
<td>US Total</td>
<td>61,063</td>
<td>27,411</td>
<td>45</td>
</tr>
</tbody>
</table>

EXPECTATIONS FOR 2006 & 2007
The above data and trends lead to certain expectations regarding craft labor in Houston for the coming months and years. Additionally, there are other expectations that have arisen in forums and discussions at HBR meetings this year.

Few new cranes have been manufactured in recent years, largely due to the significant rise in steel pricing in recent years. The HBR Crane & Rigging Committee has been concerned for many months that availability of heavy lifting equipment will not meet the needs for turnarounds in 2006 and 2007.
Other reports indicate the lead time for fabricated equipment is stretching out as much as two years due to fewer shops being in the business. Prior to Katrina there were already expectations of shortages in labor and other construction resources;

**Expectations for 2006 & 2007**

- Shortages of skilled craft labor
  - Recent forecasts indicate increase in demand
  - Fewer helper/trainees enrolled in training at local colleges
  - Few recruits in pipeline
- Shortages of heavy lifting equipment
- Lead times for fabricated equipment increasing, fewer shops available
- Increasing competition for limited supply of skilled construction workers and other resources

**Comments by Don McCollister, Turner Industries Group, LLC**

- Meetings regarding workforce shortage issues are also going on in Baton Rouge and New Orleans. This is impacting the whole country.
- Issues can be defined in terms of Pre-Katrina and Post-Katrina, similar to another major event, pre- and post-911

**Pre-Katrina**

- Commercial and residential construction already is and will increase to a higher rate than ever before. This is already taxing a limited workforce.
- Bureau of Labor Statistics reports craft workforce numbers as:
  - 1992 – Over 4 million
  - Currently – 6 million
  - 2012 – will need 7 million
- Construction is in the top 10 fastest growing sources of employment.
- Shortages projected for 2006:
  - 4% Carpenters
  - 3% Electricians
  - 9% Pipe fitters
  - 6% Laborers
- Cockshaw Report recently included the following:
  - 185,000 new workers will be required annually between now and 2015 to keep paced with craft workforce demands.

**Post-Katrina**

- 50 million tons of debris to be removed from the New Orleans area.
- 350,000 structures to be demolished.
- 25,000 homes have already been marked for demolition by FEMA and they are only half done with their assessments.
- 200,000 automobiles (underwater after Katrina) to be removed.
- 250,000 appliances to be removed.
- Baton Rouge has estimated that their population has more than doubled.
- Turner Industries has been contracted to provide fuel for Entergy and until recently, were running 4 fuel trucks, 24 hours a day.
- Estimated $50 million to be spent on seeding and siding roadways.
- Twin-span between Slidell and New Orleans to be re-built for an estimated 600 million.
Louisiana annually averages a total of $20 to 30 billion in construction work. The estimate for re-building New Orleans is $262 billion, more than doubling construction work for the next ten years.

Currently, clean-up contracts are being awarded to FEMA approved contractors. As re-build contracts are released, the need for skilled workers will increase causing greater shortages.

Despite labor shortages, many workers are not currently working, as many industrial facilities are not operating; including plants in Port Arthur, Lake Charles and New Orleans area.

Specific crafts are being pulled away from previous work for clean-up and this has affected wages.

Have seen an increase in demand for Operators, Truck Drivers, Laborers and Abatement workers.

Hourly wage ranges recently reported:
- Laborers – increased from $8-$12 to $12-$16
- Abatement workers - $5 to $7 increase
- Operator pay – increase of $4 to $6
- Generally wages that were $17 to 19 are now 20 to 24
- Bonuses are being paid for retention are $5 to $7
- Per Diems reported at $40 to $70 per day.
- Bus transportation and housing is being provided in some situations.
- 700 new applications were submitted for contractor licenses in Louisiana.
- There are no available hotel rooms in Baton Rouge
- The real need for higher skilled workers is probably 10 to 12 months off when significant rebuilding projects start.

Comments from Scott Barringer – PALA Interstate

- Employees are leaving to work in hurricane affected areas, but not in great numbers as yet; however it is expected that these numbers will increase as work moves from clean-up to construction.
- Report indicates shortages in Equipment Operators, Truck Drivers and Laborers. Crane Operators are leaving to take earth moving equipment jobs because of increased wages and bonuses.
- One electrical contractor reported losing 40 to 50 people and expected things to get worse as rebuilding begins.
- Reported having to pay higher per diems to workers going out of state for jobs because of higher wages offered in state.
- The Pelican Chapter is offering a fast track basic construction training course to address need for workers to set up trailers. As many as 9000 workers will be needed just to install the 300,000 temporary buildings. A two week, seven hours a day, course has been developed and includes NCCER Core, math and reading, and basic safety orientation that is given at the safety councils. ABC is coordinating with local colleges.

Comments from Rodney Page, Ref-Chem LP, & ABC incoming Chairman

- Houston ABC recently held a contractors meeting on workforce shortage issues. Contractors present at this meeting reported a combined loss of approximately 300-400 workers.
- Crafts most affected include; Insulators, Scaffold Builders, Carpenters, Electricians and Asbestos Abatement workers.
• Rita has added Beaumont and Port Arthur to areas affected, causing increase strain on Houston Area workforce.
• One contractor reported materials cost increases as high as 40%.
• Shortages for equipments (cranes) are already being reported.
• Lump sum contracts are becoming more difficult in these uncertain times.
• Short term solutions:
  o Adjust wages to be competitive
  o Generate and disseminate accurate information on shortages and demands.
  o Work with Owners to remove restrictions such as, requirements for background checks and English only requirements
  o Evaluate contracting structures.
• Long term solutions:
  o Market Industry to make it more attractive to new entrants.
  o Use portion of funding for recruiting new workforce.
  o Increase funding and dedicate to workforce development issues
  o Inform and train ourselves regarding the new generation of workers.
  o Provide more flexible training options to craft persons and shorten the time to enter the industry.
  o Promote training and provide incentives for training.
  o Emphasis should be placed on quality, safety and skilled workforce rather than pricing being the only factor in selecting contractors.

Open Discussion:
• HBR Workforce survey would be more meaningful if it included non-HBR companies. Contractors should work with their clients to get this information.
• New issues with regard to shortages will include planners, schedulers, and supervisors. We need to begin looking at where contractors will get these people. Work with current Construction Management programs through colleges, such as Texas A&M, to encourage them to increase the number of graduates.
• Vocational programs in High Schools are shrinking. Graduates from high schools are not coming into the construction industry.

Brainstorming Notes
During the breakout sessions, three related issues were brainstormed with the intent to identify ideas that might be used to mitigate the impact of losing significant numbers of crafts persons to work in the hurricane affected areas for an extended time.

1) Retention of skilled craft persons
2) Recruitment of qualified candidates
3) Training to improve skills

RETENTION (what can be done to retain skilled labor in Houston)
• Short term – provide wage increase and retention bonus
• Long term offer more $, benefits and incentives
• Offer bonuses to workers for attendance and staying to completion
• Challenge the lack of construction benefits
• Stop doing business as usual
• Don’t wait too long to take action, be proactive
• Get clients (Owners) and contractors on same wave length
- Turnover penalty within same facility
- Turnaround completion bonuses
- Challenge what employer will pay for (PPE, training time, etc.)
- Keep people working
- Evaluate drivers (particularly for turnarounds) and see if more balance or leveling of worker headcount can be achieved
- Conduct comprehensive and periodic wage survey to understand what is really happening
- Legislative reality (?)
- Provide effective supervisor training and how to coach people
- Can Safety Orientations (HASC) be done differently?
- Reduce time it takes to bring workers on to the job
- Fast track NCCER curriculum without reducing effectiveness
- A lot of misinformation, have HBR and other associations gather and distribute accurate information more effectively
- Need better data on craft availability, include all area owners
- Must recognize that this an industry issue for both owners and contractors
- Need to make training easier and more attractive
- Gather fact based information and share with owners
- Solutions must address both maintenance and construction
- Enhance image of career – increase wages to provide:
  - Acceptable standard of living
  - Better marketing
  - Better benefits
- Historical pay increases have been less than inflation
- Provide accurate information to crafts persons

**RECRUITMENT** (of qualified candidates into Construction crafts)

- Advertise more
- Offer attractive wages and benefits
- Involve high schools and local colleges
- Tap into other demographics (Asian, Hispanic, Women)
- Offer overtime work – this can be both good and bad
- Have organized, coordinated Industrial Job Fairs
- Compete with east/west coast wages (attract more travelers)
- Recruit outside Houston area
- Level security of employment
- Increase helpers (entry level apprentices) ratio
- Develop internship/co-op programs (allow inexperienced persons to work on sites)
- Offer paid training
- Show and educate candidates on the Construction Career Path, include:
  - How people can get into industry
  - Helper to crafts person
  - Opportunities in supervision & management
- How do we compete with FEMA?
- Treat craft persons with respect
- Advertise that there is security, it must be there
- Consider Job Corp/Prisons programs to recruit
- Recruit overseas
- Recruit among the new Houston residents (evacuees from hurricane areas)
• Work with Military – people getting out of service
• Offer paid daycare
• Re-focus on technical and vocational schools
• Use high-tech internet recruitment
• Work with new HISD School that is being developed to help drop-outs complete their education and degree.
• Re-consider the English only requirements
• Go after Grant money
• Testing – bilingual
• Reconsider background testing, etc., things that restrict recruiting
• Have long term plan – employment growth
• Vocational programs – owners partnering with contractors need for skilled employees – not only new graduates, consider those that have been out of school a few years.
• Consider salary/hourly – overtime – benefits
• Fill gap with accelerated training
• Provide mentoring and training
• Negotiate training, mentoring and journeyman programs into contracts

Training (to improve skills of current workers and for new people entering workforce)

• Training issues;
  o Recruiting the right people
  o Availability, access, location, flexible, hours worked
  o Pay workers – cost of training
  o Owner support
  o Establish career path – training progression plan
  o Immediate need to bridge gap from hew hire to job site
  o NCCER certified requirements do not allow for helpers/new people
  o Availability of qualified trainers
  o Bilingual trainers
• Allow bilingual training
• Provide career path/progression for new hire – cross training
• Prioritize immediate craft needs and provide short term fast track training
• Develop fast track basic training and include safety
• Boot camp training – entry level
• Owners must be involved with recruitment, training and providing information
• Look at sharing cost – access to training
• All owner support cents per man hour
• Develop mentoring program
• Open more on-site training programs
• Pay for training – pay for completion
• Consider Government support to pay for training and reimbursement
• Introduce verbal testing
• Free internet and computer training to minimize failure in the glass room
• Job notices at education centers
• Do training that is relative to the work
• Make training free
• Training should be close to work locations
• Consider high school - college drop out lists
• Pay raise for license outside of NCCER testing
• Ethnic group attraction
• Need supervision/management training
• Interview workers on their need to go to school
• Must have jobs available when they complete training, more security

NEXT STEPS:
• Work issues through the HBR Workforce Development Committee and CMEF. The HBR committee meets on Tuesday, October 18 at 7:30 a.m.
• ABC and CMEF should work on communications issues, particularly with their employees.
• Reconvene in two months to update information and report progress.
• Hold a Gulf Coast Workforce Summit. CURT may also be trying to arrange something in Atlanta soon.
• Look into available Federal Funding for training assistance.