PARTNERS in PROGRESS
2008 CONFERENCE
FACE CHALLENGES CREATE SOLUTIONS
Study Participants

- Interviewed selected union HVAC and sheet metal contractors
- Identified approximately 4,000 union and non-union HVAC and sheet metal contractors nationwide
- 98 survey participants (2.5% response rate)
- Good representation of both union and non-union firms

Pie chart showing:
- 100% Union: 49%
- 100% Non-union: 36%
- Combination: 15%
Business Description (all respondents)

- Architectural: 11%
- Custom Fabrication: 14%
- HVAC: 56%
- Industrial: 13%
- Mechanical: 28%
- Residential: 8%
- Other: 9%

% of Respondents Selecting Description
Annual Sales, Union vs. Non-union Respondents

% of Respondents

$5 million or less

Greater than $10 million

Union

Non-Union

31% 55% 48% 37%

0% 10% 20% 30% 40% 50% 60%
Annual Sales by Market, Union vs. Non-union Respondents

<table>
<thead>
<tr>
<th>Market</th>
<th>Union</th>
<th>Non-union</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>9%</td>
<td>27%</td>
</tr>
<tr>
<td>Commercial</td>
<td>37%</td>
<td>23%</td>
</tr>
<tr>
<td>Industrial</td>
<td>21%</td>
<td>22%</td>
</tr>
<tr>
<td>Institutional</td>
<td>18%</td>
<td>22%</td>
</tr>
<tr>
<td>Service</td>
<td>15%</td>
<td>18%</td>
</tr>
</tbody>
</table>
Key Findings

1. Union contractors’ productivity is higher
2. Union contractors’ field supervision cost is lower.
3. Employee retention is higher with union firms (less turnover).
4. Union contractors experience less expensive rework.
5. Union bid prices tend to run between 12%-21% higher.
6. Union labor costs are higher, ranging from 22 percent (entry level) to 39% (journeyman level).
7. Crew mix differences are significant and work to the non-union contractors’ advantage from a labor cost perspective.
8. Survey respondents indicate that duct fabrication costs are about 20% higher for union firms.
Union Bid Prices Tend to Run Between 12%- 21% Higher than Non-union

- Interviewees—Union bids are 10%- 20% higher than non-union
- Survey respondents—Union/non-union bid differential is 15%- 20%
- 80% of all survey respondents perceive union bid prices to be higher than non-union
- Similar pattern observed among other trades (Electrical Contracting Foundation example).

<table>
<thead>
<tr>
<th>Price</th>
<th>Union is more expensive</th>
<th>Union is less expensive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of Respondents</td>
<td>Price Differential</td>
</tr>
<tr>
<td>&lt;$250K</td>
<td>80%</td>
<td>21%</td>
</tr>
<tr>
<td>$250-$500K</td>
<td>81%</td>
<td>18%</td>
</tr>
<tr>
<td>&gt;=$500K</td>
<td>82%</td>
<td>15%</td>
</tr>
</tbody>
</table>
Average Fully Burdened Labor Rate

![Bar chart showing average fully burdened labor rates for different roles and union status.](chart_image)

- **Inexperienced Apprentice/Laborer**
  - Union: $28.57
  - Non-union: $22.23

- **Experienced Apprentice/Laborer**
  - Union: $41.30
  - Non-union: $27.36

- **Journeyman/Tradesman**
  - Union: $58.07
  - Non-union: $35.06

- **Foreman**
  - Union: $61.78
  - Non-union: $35.29
### Perceived Fully Burdened Labor Rate Differential

<table>
<thead>
<tr>
<th></th>
<th>% Reporting Union is More Expensive</th>
<th>Perceived Labor Rate Differential</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Apprentice/ Laborer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Union</td>
<td>83%</td>
<td>31%</td>
</tr>
<tr>
<td>Non-union</td>
<td>87%</td>
<td>26%</td>
</tr>
<tr>
<td><strong>Journeyman / Tradesman</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Union</td>
<td>81%</td>
<td>34%</td>
</tr>
<tr>
<td>Non-union</td>
<td>86%</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Foreman</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Union</td>
<td>70%</td>
<td>28%</td>
</tr>
<tr>
<td>Non-union</td>
<td>83%</td>
<td>13%</td>
</tr>
</tbody>
</table>
Market Price Differential of Union vs. Non-union Fabricated Ductwork

- 94% of respondents found that Union more expensive
- 22% found a price difference of 8%
- 6% found Non-union more expensive
- 8% found a price difference of 0%
Crew Mix Ratio

**Union**
- 1 Apprentice
- 2 Journeymen
- 3 Laborers
- 1 Tradesmen

**Non-union**
- 3 Laborers
- 1 Tradesman

**Supervisors**

**Foremen**

**Journeymen/Tradesmen**

**Apprentices/Laborers**

1 Apprentice – 2 Journeymen
3 Laborers – 1 Tradesmen
Cost of Field Supervision as a Percentage of Sales

8%  11%

0%  2%  4%  6%  8%  10%  12%

100% Union  100% Non-Union
• Difficult to compare

• Training Magazine’s 2005 Training Top 100, organizations nationwide allocating 3.7% of budgets to training

• FMI’s 2005-2006 U.S. Construction Industry Training Survey, 2.7% of payroll allocated to training
<table>
<thead>
<tr>
<th>Annual Turnover, Field/Shop Workers</th>
<th>Union</th>
<th>Non-union</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5%</td>
<td>59%</td>
<td>26%</td>
</tr>
<tr>
<td>5-10%</td>
<td>26%</td>
<td>26%</td>
</tr>
<tr>
<td>11-25%</td>
<td>13%</td>
<td>26%</td>
</tr>
<tr>
<td>26-50%</td>
<td>2%</td>
<td>20%</td>
</tr>
<tr>
<td>&gt;50%</td>
<td>0%</td>
<td>3%</td>
</tr>
</tbody>
</table>
Percent of Jobs Experiencing Excessive Rework

- 91% of respondents experienced excessive rework.
- 74% of non-union respondents experienced excessive rework.
- 20% of union respondents experienced excessive rework.

The chart shows the distribution of respondents by the percentage of excessive rework they experienced, with a comparison between union and non-union categories.
Planning and Scheduling

- Union survey respondents devote minimal time to pre-job planning and scheduling
- Non-union survey respondents report significantly more time spent on these activities
- Planning/scheduling one of project managers’ top concern
- Union contractors spend minimal time conducting periodic schedule updates compared to non-union
- Lack of pre-job planning and schedule management lead to profit fade, poor client satisfaction and threaten long-term sustainability.
Pre-job Planning and Scheduling Time Spent vs. Total Project Duration

- 21% spent in <1%
- 26% spent in 1%-2%
- 21% spent in 3%-5%
- 28% spent in 6%-10%
- 14% spent in >10%

% of Respondents

- Union
- Non-union
Schedule Update Frequency

- **Never/infrequently**: 3% (Union) / 22% (Non-union)
- **Project mid-point**: 2% (Union) / 3% (Non-union)
- **Monthly**: 22% (Union) / 21% (Non-union)
- **Weekly**: 33% (Union) / 22% (Non-union)
- **Daily**: 9% (Union) / 12% (Non-union)
- **On-going**: 22% (Union) / 27% (Non-union)

% of Respondents
Typical Job Profit (Union)

% of Respondents

Budget  Actual

<1%  0%  0%
1-2%  2%  12%
3-5%  34%  38%
6-10%  34%  29%
>10%  30%  21%
Typical Job Profit (Non-union)
## Typical Job Profit (Budgeted vs. Actual)

<table>
<thead>
<tr>
<th></th>
<th>Budget</th>
<th>Actual</th>
<th>Erosion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Absolute</td>
<td>Percent</td>
<td></td>
</tr>
<tr>
<td>Union</td>
<td>7.1%</td>
<td>6.1%</td>
<td>-0.9%</td>
</tr>
<tr>
<td>Non-union</td>
<td>8.5%</td>
<td>7.9%</td>
<td>-0.7%</td>
</tr>
</tbody>
</table>
Common Concerns

1. Insufficient labor availability and quality

2. Elevated and rising materials prices

3. Adverse evolution of legal and regulatory conditions