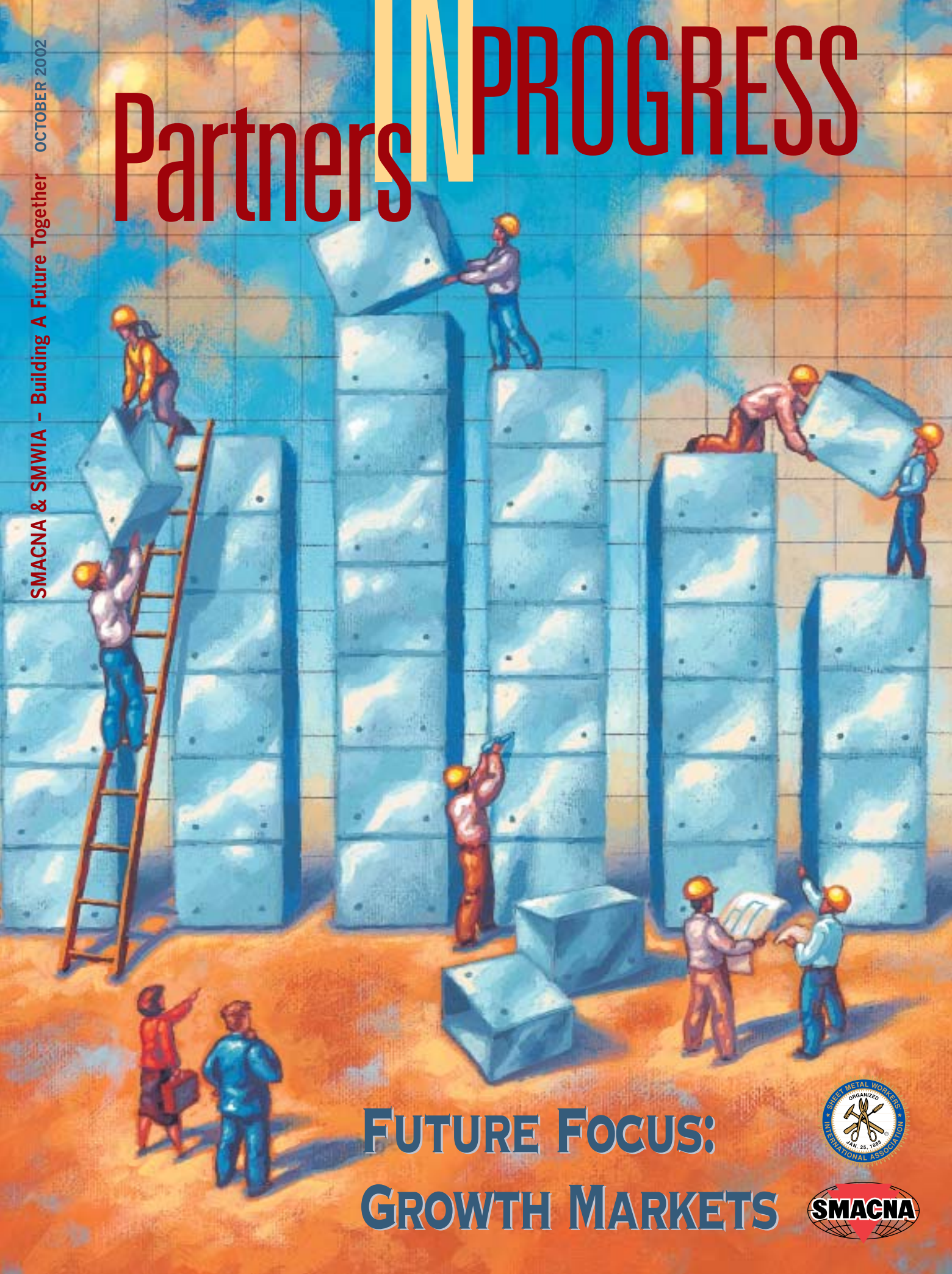


# Partners **IN** PROGRESS



**FUTURE FOCUS:  
GROWTH MARKETS**



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**PARTNERS IN PROGRESS**  
OCTOBER 2002 VOL.1/NO.2

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CANADA PUBLICATIONS AGREEMENT No. 40725004  
STATION A, PO BOX 54, WINDSOR, ON, N9A 6J5

PRINTED IN THE U.S.A.



## NEW LOGO & SLOGAN WILL BOOST SMWIA-SMACNA TEAM

Research by SMWIA-SMACNA led to the creation of a new slogan, "HVAC Expertise." This research, which took place over a period of months, is described at length in this issue (see pages 9 to 14).

In addition to making use of the logo and slogan, it was decided to use the simple two-word phrase to guide future marketing efforts. Behind this is a simple idea:

- We're not selling "sheet metal contracting services," because that phrase, while familiar to us, does not create the image we want in the minds of those in our target markets.
- Instead, "HVAC Expertise" is a concise description of what SMACNA and signatory contractors offer that the customers want.



This judgment was not reached quickly. In fact, it's possible that no one involved had a preconceived notion along these lines! Instead, it was an unanticipated finding of two focus groups. It was so much of a surprise, in fact, that a follow-up survey was sent to confirm the findings (see story on survey results, page 11).

Obviously, "HVAC Expertise" does not translate well into all growth markets, architectural sheet metal, and perhaps others. The initial decision is to go after HVAC, the major area for potential SMWIA-SMACNA gains, first. Future efforts to win market share in the architectural niche market should be able to use the logo design (obviously, with different words).

What comes next? Keep your eyes open for future issues of *Partners in Progress*. ■

# OUR FUTURE IS BRIGHT— HERE'S HOW WE'LL MAKE IT BETTER!

**G**rowth solves many problems, but it can create new ones. Having said that, we are in agreement that SMWIA and SMACNA members would rather manage whatever comes with growth as opposed to the losses associated with decline.

Many SMACNA-SMWIA discussions at the national level center on market share must be a top joint concern at all levels. If there's work that our highly skilled workers are qualified to do, and that signatory contractors seek, "job one" is for us to get it.

Growth markets play a part in the market share equation, and could well be a major factor. Fortunately, we already exist in such a market! According to projections from the Bureau of Labor Statistics (see page 6), employment growth in the industry will outpace the construction industry overall, and the nation as a whole. Where the U.S. labor force is projected to grow by 12% between 2000 and 2010, employment in our part of the industry is seen growing by better than 29% during that period.

Yet, we will fail if we're gaining work in one place while losing ground where markets are "hot"...or even just warming up.

## WHERE WE'RE GOING

One problem with rapid growth is that you can "look good" standing still. But you can *gain* in a "hot" market while simultaneously *losing* market share. In other words, if employment is up, on average, 1.5% annually over the next few years, we might congratulate ourselves. But if the projections prove correct, at that rate we would be leaving lots on the table.

That's why this second issue of *Partners In Progress* focuses on growth markets. To grow faster than the projected 29% in this decade—to gain market share—growth markets are one of our keys.

## WHAT WE'VE ACCOMPLISHED

Inside, you'll find a four-page section—"briefs" based on research by the National Energy Management Institute ([www.nemionline.org](http://www.nemionline.org)). NEMI is jointly funded by SMWIA and SMACNA.

We've provided highlights of NEMI's reports which are intense, deep, and fact-filled. The HVAC Energy Retrofit report is 87 pages; IAQ weights in at 78; the Building Commissioning document at 73; and "Retro-Commissioning" at 66.

These research pieces, produced in the past year, can guide our industry—at the national level *and* in your area...wherever SMACNA and SMWIA members gather to look to future gains. Indeed, we accomplish little if anything if we don't find ways to take that information to the local level.

No doubt, you'll read what follows and list "missing" markets! Indeed, we have skimmed the surface. There is more to each report, and more work to do.

Together, we can come up with ideas that move the industry forward. A great example is what we've done on testing and balancing, via the International Training Institute—our organizations created the Certified TAB Technician. Note also that SMACNA has "market sector councils" (info on which is at [www.smacna.org](http://www.smacna.org)).

## YOUR ROLE

But what we've done is not as important as what we will do. Of course, while the two of us can agree on going after growth markets, we can't really accomplish anything without you.

We created this magazine to get people talking—most of all, to get a dialogue going between members of both organizations. Therefore, please consider this issue nothing more than a conversation starter...something to get all of our brains perking—looking forward together.

We're open to your ideas on growth markets, and more. Please e-mail them to [magazine@sheetmetalpartners.org](mailto:magazine@sheetmetalpartners.org). ■



MICHAEL J. SULLIVAN



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*Michael J. Sullivan*      *Ron Rodgers*

# ENDLESS HORIZON IN IAQ WORK

BY A. LEE CHICHESTER

**I**ndoor air quality (IAQ) is a difficult market area to comprehend, as reflected in the 2002 NEMI study on this growth area—complicated in part because it’s divided into two phases: Investigation and remediation (fix).

What’s more, there’s a technical difference between IAQ and IAC (indoor air comfort). Things that dictate comfort (humidity, temperature, improper lighting, drafts) also can be components of IAQ. Included in IAQ are airborne particulates including mold spores (humidity and temperature), contaminants (odors), and lack of fresh/filtered air (still or “stale” air).

Pile on top the fact that owners most commonly seek an IAQ investigation as a direct result of occupant complaints, and you might find confusion. Is the complaint due to temperature fluctuations? Real contamination? Equipment failure? Mold spores?

Often, a building’s in-house O & M staff conducts initial investigations spurred by a complaint. If an “outsider” does the investigation, it’s usually a Certified Industrial Hygienist. Once those investigations are completed, whether in-house or not, about 35% result in “no action taken.”

But what about that 65% that result in something being done?

## MARKET DRIVERS ABOUND

NEMI found that 75% of all IAQ investigations recommend HVAC system repairs or replacements as key solutions. IAQ concerns are hot today, with press coverage of “Sick Building Syndrome,” “Building Related Illness,” and “Multiple Chemical Sensitivity”—human ailments.

IAQ is also hot in part thanks to our severely litigious society. Given the chance, an occupant diagnosed with an illness caused by the place he or she works might just sue the pants off the building owner or employer (or both). Fear of being sued is the prime motivator for IAQ investigations by owners (as are insurance companies, which want investigations done now to prevent future claims). Further, a significant increase in recent mold

litigation cases is driving market growth.

While the majority of IAQ work place in existing buildings, the National Institute for Occupational Safety & Health (NIOSH) has taken a significant interest in the increase in public concern over IAQ. When NIOSH gets on the bandwagon, you can bet more new building owners will be looking at IAQ.

## STRATEGIES FOR GROWTH

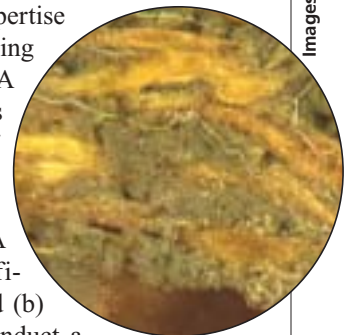
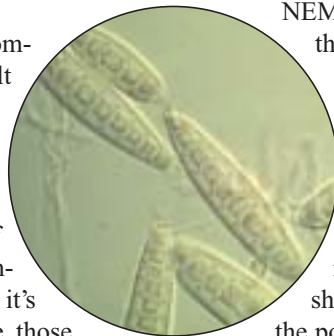
NEMI suggests IAQ investigations be left to those with expensive, special testing equipment. But the remediation or “fix-it” phase is perfect for SMWIA workers and SMACNA and signatory contractors. Remediation often calls for installation of new ductwork, cleaning existing ductwork, fans/ventilation systems replacement, TAB, and replacing filters. While sheet metal workers have some of this work, the potential for growth is enormous.

SMWIA/SMACNA members should expand their hold on this market, NEMI notes, so investigation-phase companies don’t come to keep the remediation phase to themselves! How can we do this?

Contractors and unions might “get into bed” with firms providing the investigations. This would help us to avoid new competitors. It would also help building owners see the value of outside expertise to fix IAQ problems. An owner using an outside specialist (i.e., a SMACNA contractor) to do needed repairs won’t be subject to “conflict of interest” charges from an attorney.

Other NEMI study recommendations: (a) SMWIA and SMACNA should develop a remediation certification standard for IAQ work; and (b) the sheet metal partners might conduct a customer education campaign on the efficiency of IAQ investigation and remediation. ■

A. LEE CHICHESTER IS A FREELANCE WRITER BASED IN MEADOWS OF DAN, VA.



Images courtesy of www.doctgorfungus.org © 2003

# ENERGY RETROFITS: TOUGH NUT TO CRACK

BY A. LEE CHICHESTER

In February of this year, the National Energy Management Institute (NEMI), jointly funded by SMWIA and SMACNA, trained its magnifying glass on the growth potential of the Energy Retrofit market. NEMI's report looks at the market's history and current status, then suggests strategies for market share expansion.

Energy crunches of the 1970s brought about retrofitting and replacing of existing systems for energy cost savings. When fuel was expensive, lots of folks looked for ways to cut energy costs. They found good equipment with energy-saving technology on the market, and the requests for installers were significant.

That was *then*.

NEMI estimates that now, only about 10% of the existing North American HVAC work involves energy retrofits. Add this: If SMWIA/SMACNA members mount an exhaustive marketing campaign to change this situation, that expenditure might result in annual growth of...all of 1%.

A preliminary conclusion: Promoting existing system retrofits for the purpose of energy savings will not cause building owners to create more work for the SMACNA-SMWIA team.

## THE GOOD NEWS

There is good news, too: Sheet metal workers and contractors currently conduct the majority of dry retrofit work (fans, duct, blowers, etc.). At the same time, TAB-trained workers work in energy retrofits, spotting problems and ways to increase system efficiencies.

An obvious question is, "How do we get more?"

Before discounting energy retrofits as a non-starter for growth, NEMI says, "Consider that a significant number of HVAC systems continue to fail every year [2001 estimates at \$23 billion in the U.S. and \$2 billion (Canadian dollars) in Canada], that could be avoided or prolonged following a few



simple energy management techniques, of which retrofitting is one."

Why do owners request energy-minded retrofits? Equipment failure tops the list. Another main driver is energy audit—which identifies high usage and cost-sensitive alternatives that appeal to the owner.

As noted elsewhere in this issue, it's not "sheet metal" that comes to mind first among the owners. The HVAC contractor is viewed by the owner as the first choice for retrofit work.

## PENETRATING THIS MARKET

NEMI suggests several routes for SMWIA and SMACNA members to make headway here:

*Partnering with utilities* to target high energy users, approaching them with retrofit suggestions for energy dollar savings, and becoming the installers of choice is one strategy.

Another approach is for SMWIA, SMACNA, and signatory contractors to *ally directly with manufacturers*. This would involve selling "brand equity" to building owners—on the strength not only of the Trane or York or Carrier name, but also on the SMWIA/SMACNA alliance. The deal would include a free three- or five-year audit on the installed systems, to ensure an owner of quality over time. Certainly, the investment in this approach is greater, as members will have to commit to the future "free" labor costs of the audit "guarantee."

Finally, NEMI suggests SMWIA/SMACNA members develop a relationship with and *support their local audit firms*, so that post-audit recommendations of SMWIA/SMACNA members could be made to the owner by the audit firm, a friendly, trusted, energy-savings ally.

Several of these approaches are no doubt already used by SMWIA and SMACNA around the country. Perhaps the NEMI report will stimulate these, and others, to look to enhancing these tactics—so they include energy retrofits in their strategy to grow market share. ■

# CONSTRUCTION EMPLOYMENT GROWTH: BLS SAYS WE'RE THE TOP MARKET!

**G**overnment data—as illustrated by the accompanying graphic—show that the greatest future growth in construction employment will be in the sheet metal industry. What's more, the recent government data says—those who obtain apprenticeship training will do particularly well!

Information in this article is based on the *Occupational Outlook Handbook*, a Bureau of Labor Statistics publication on work opportunities in the U.S. Find the 2002-03 edition at [www.bls.gov/oco/](http://www.bls.gov/oco/).

There were 8.3 million construction jobs in 2000, the *Handbook* says, making it “one of the nation’s largest industries.” More than three out of five wage and salary jobs were with “special trade contractors” such as HVAC and sheet metal contractors.

Sheet metal workers have their own section (starting on page 471), which includes these lines:

“Job opportunities are expected to be excellent for sheet metal workers in the construction industry and in construction-related sheet metal fabrication, reflecting both rapid employment growth and openings arising each year as experienced sheet metal workers leave the occupation.

“In addition, many potential workers may prefer work that is less strenuous and that has more comfortable working conditions, thus limiting the number of applicants for sheet metal jobs.

“Opportunities should be particularly good for individuals who acquire apprenticeship training. Prospects are

expected to be better for sheet metal workers in the construction industry than for those in manufacturing, because construction is expected to grow faster than the manufacturing industries that employ sheet metal workers.

“Employment of sheet metal workers in construction is expected to increase faster than the average for all occupations through 2010, reflecting growth in the demand for sheet metal installations as more industrial, commercial, and residential structures are built.

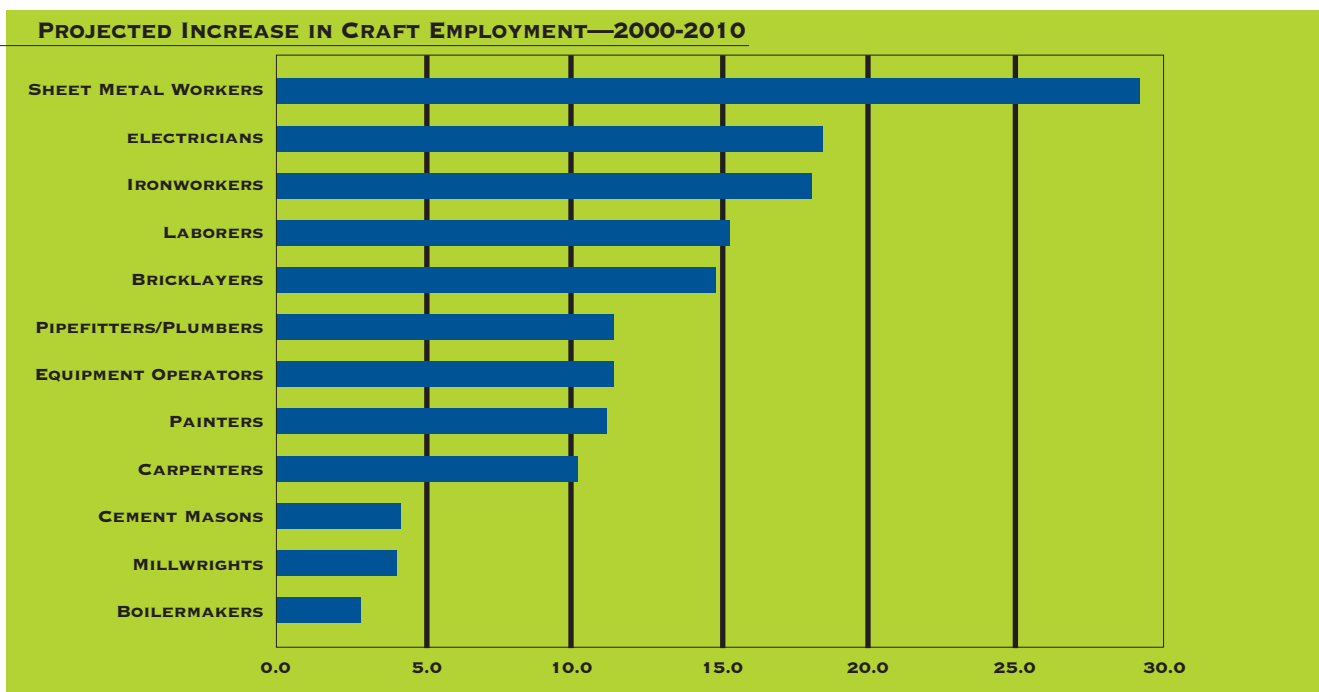
“The need to install energy-efficiency air-conditioning, heating, and ventilation systems in the increasing stock of old buildings, and to perform other types of renovation and maintenance work, also should boost employment.

“In addition, the popularity of decorative sheet metal products and increased architectural restoration are expected to add to the demand for sheet metal workers. On the other hand, average job growth is projected for sheet metal workers in manufacturing.

“Sheet metal workers in construction may experience periods of unemployment, particularly when construction projects end and economic conditions dampen construction activity. Nevertheless, employment of sheet metal workers is less sensitive to declines in new construction than is the employment of some other construction workers, such as carpenters.

“Maintenance of existing equipment—which is less affected by economic fluctuations than is new construc-

CONTINUED ON PAGE 14



# 'COMMISSIONING' IS A TAB OPPORTUNITY

BY A. LEE CHICHESTER

**S**ystems commissioning is in its infancy. A definition: "Whole building commissioning" is testing a building's entire system performance and all co-systems synchronization to ensure they meet the building's intended use.

NEMI studied whole building commissioning as a potential growth market—and concluded that it is not the direction to go for SMWIA/SMACNA members.

While NEMI's researchers deemed it too risky, they offered a possible alternative strategy.

## BLUEPRINT: AN IDEAL WORLD

Ideally, whole building commissioning begins in construction's design phase, involving engineers, architects, and installers. The building's design and intended use are thoroughly documented. Systems contractors provide design input.

During construction, whole building commissioning occurs at varying stages, as systems are installed—when problems revealed through commissioning can easily be solved on the spot.

In this ideal world, SMWIA members and SMACNA contractors would have lots of work. Up-front, we would work closely with engineers to ensure all HVAC, IAQ, climate control, and related systems are designed to work together smoothly.

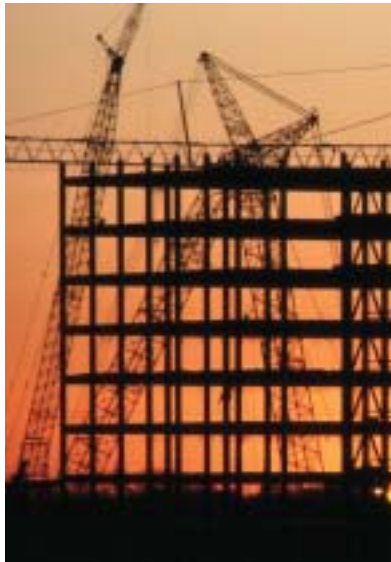
Before the doors open, the whole building commissioner would deliver to the owner documentation of test results, tests and synchronization schedules, proof that the building meets the designer's intent, and more.

## BUT IN THE REAL WORLD . . .

Here comes the reality check.

1. Owners neither understand what commissioning is all about nor what the benefits might be.

2. Pricing for commissioning projects (up to 1.5% of new construction cost) seems too high to owners—perhaps why less than 5% of new construction is commissioned.



3. The equipment vendor is the preferred commissioning agent (the TAB contractor is second in line).

4. Equipment advances and manufacturer warranties could make commissioning obsolete over time.

5. An increase in design/build projects is likely to limit outside participation in the entire construction process.

## THE BEST APPROACH

NEMI's report discusses possibilities such as "getting in on the ground floor" to help design standards, create a certification for commissioning, and educate the consumer in this emerging marketplace.

But NEMI deems this too ambitious, due to the potential quick shrinkage for this start-up market.

What's the best approach? Split up the "whole building" aspect of the commissioning process, NEMI suggests—with SMWIA-SMACNA team members selling advantages of piecemeal commissioning of systems. This would help the organized sheet metal industry win more of TAB work, the market segment we're ready to do.

SMWIA and SMACNA already have worked together to create experienced TAB installers and contractors; NEMI says they can be the foundation of this potential specialist marketplace. Building owners say finding experienced providers for commissioning systems is a top priority. TAB experience already is significant among SMWIA/SMACNA members.

Meanwhile, since TAB already is seen as an acceptable *alternative* to whole building commissioning, obstacles and resistance to getting "a foot in the door" are much less than in whole building systems commissioning.

What would come next? The SMWIA-SMACNA team would educate building owners on the value of the TAB contractor and trained technicians. An integral step toward developing this strategy into a viable growth market for all SMWIA/SMACNA members is to have existing TAB contractors and workers help educate others who might want to enter the field. ■

# ‘RE-COMMISSIONING’ LEANS ON EDUCATION

BY A. LEE CHICHESTER

**W**hile this NEMI study to some extent mirrors the New Building Commissioning report (see page 7), there are notable differences. First, “re-commissioning” amounts to “retro-commissioning”—isolating problems that occurred during new building construction (if commissioning wasn’t done) or identifying and solving system problems that have developed over a building’s life.

Re-commissioning comes into play when a building is renovated or an existing building gets an addition. These changes usually alter the building’s function—which frequently requires code compliance checks (a different code might apply if the building’s use changes).

NEMI estimates the market for re-commissioning is probably 1.5 times larger than in new building commissioning. Best prospects for re-commissioning—the “low hanging fruit”—include:

- buildings with multiple, complex systems (hospitals, universities);
- those whose systems use a great deal of energy (manufacturing); or
- highly regulated environments (laboratories, “clean” rooms, and high-tech manufacturing).

## SOME DIFFICULTIES

Older buildings with failing equipment (where system replacement is the best option) and those in need of energy-saving upgrades might also need re-commissioning.

Whole building re-commissioning is extraordinarily labor-intensive, however. Re-commissioning requires research (by the commissioning agent) to see if the building actually meets its design intent or not. Add this to any renovation’s challenges (physical impediments surrounding the systems you need to test and perhaps replace) and re-commissioning can be quite expensive.

Further, as with new building commissioning, engineers and design/builders are working to make systems re-commissioning obsolete—or at least erode opportunities for the SMWIA/SMACNA team.



## ON THE OTHER HAND . . .

The good news is that mechanical and sheet metal contractors and their workers currently hold about 40% of the existing market share in re-commissioning work.

For one thing, it’s an easy “sell.” During an energy retrofit, for example, systems can be commissioned at every installation phase, making it easy to show the owner exact energy operations savings. An existing building has a history of lower performance for comparison. Selling re-commissioning, in many cases, is not all that difficult.

As in the commissioning report, NEMI identifies a TAB-focused approach to the market’s expansion as the most viable. As SMWIA members and SMACNA contractors already are

involved to some degree in this work, the report suggests building on this to grow in this market. In other words, “Deal to your long suit.”

Market-share expansion here comes down to these elemental efforts:

1. SMACNA-SMWIA could concentrate on the renovation/addition market, by tracking licenses, following those leads, and educating the customer.
2. In the institutional marketplace, the sheet metal partners could focus on hospital and university campus expansions, hiring in manufacturing or governmental departments, and the like.
3. We could follow a strategy similar to that recommended in the new building commissioning study—build on our team’s existing TAB expertise by training new workers in the field. This would involve selling re-commissioning in pieces and educating the owners of the value our industry can add.

With these suggestions, the SMWIA-SMACNA team can remain in a “game” that is in many respects already theirs. They also can work to gently expand their mastery of re-commissioning work, while allowing others to foot the major bill underlying actively developing the market in its entirety. ■



# CUSTOMERS TALK

## —WE LISTEN • PART 2



**EDITOR'S NOTE:** THE START OF THE SMACNA-SMWIA EFFORT TO PROMOTE THE SHEET METAL PARTNERSHIP TO CUSTOMERS WAS LISTENING—TO CUSTOMERS IN DALLAS AND CHICAGO—IN TWO FOCUS GROUPS. MEMBERS OF OUR INDUSTRY SAT IN ONE ROOM, LISTENING TO WHAT CUSTOMERS HAD TO SAY IN ANOTHER ROOM ABOUT TOPICS AND QUESTIONS WE PROVIDED TO A PROFESSIONAL FACILITATOR. BELOW, FIND THE FINAL INSTALLMENT OF A TWO-PART FEATURE BASED ON THE FACILITATOR'S REPORT. PART ONE APPEARED IN THE AUGUST ISSUE.

BY DAN SKLAIRE

Overall, attendees agreed that HVAC was a top consideration in the market today. Those in Chicago said HVAC is more important than five years ago.

“Comfort is a concern. Controls are getting better. There is more testing for air quality.”

“Systems are now digital, and owners hold us to exact measurements...systems used to have some built-in fat. Now, they are mean and lean. The specs are higher.”

One attendee noted that as work productivity has grown in importance, so has the need for comfort. HVAC plays a large role in a worker's overall comfort level.

### DESIGN-BUILD

Dallas attendees felt that the “judge is still out” on how design/build is affecting building quality; Chicagoans believed it has improved quality. With regard to HVAC sys-

tems specifically, positive and negative effects were noted in both groups.

On the positive side, Dallas attendees indicated that design/build offered better value, greater return on investment, and the opportunity for owners to opt for better quality (if willing to pay for it). One thought that owners haven't been as pleased with design/build as they thought they would be.

One Chicago attendee added that: “The HVAC contractor has ownership of the system design with the design/build approach.”

Another said: “You design it, you put it in and you're responsible for it.” A Chicago attendee added that this approach can be cheaper, but there must be good communication early on—or it can become a nightmare.

Also noted: There are fewer long-term considerations with design/build, thanks to more emphasis on “first costs.”

In effect, the project was done right the first time, resulting in fewer problems in the future.

When asked specifically about the changes in building design, in terms of systems—energy management, indoor air quality, green buildings, employee comfort, and system life cycle costs—Dallas attendees indicated the following:

- “If the customer is mad, it is because of quality, and not price. There is too much emphasis on energy efficiency when the customer wants comfort.”
- “The home buyer is more concerned with the number of zones. Regulations have caused big problems.”
- “The government is telling people what they should want instead of letting them get what they do want.”

Apparently, Dallas attendees didn’t agree with government standards in these areas. Customers, they said, aren’t concerned with these issues—only with their own comfort.

### ROLES IN HVAC PROCUREMENT

Attendees were asked to look at the following list and indicate their role in each type of system:

HVAC systems design—Four Dallas attendees were involved; Chicago attendees indicated that it was the role of mechanical engineers to design systems.

Purchase of HVAC equipment—Six in Dallas were involved. Chicago attendees indicated that it was the role of owners, contractors, and general contractors, depending on how the contract was written. Most said that they were involved.

HVAC system installation—Five Dallas attendees were involved at this level. In Chicago attendees, this was the responsibility of the HVAC contractor. Dallas attendees added the architect, engineer, and builder to that list.

Testing, adjusting and balancing of systems—One Dallas attendee was involved in this area.

Chicago attendees noted that a third party, such as an independent testing organization, would usually do this. Some in Dallas added that it might require certification and is highly specialized.

Commissioning of systems—Two Dallas attendees were involved. Chicagoans noted that there is often a committee chosen to do this, and Dallas attendees added it was highly specialized and required by banks.

### UNION VS. NON-UNION

Opinions on union vs. non-union workers differed sharply. When the word “union” was thrown out to be defined, the first Dallas comment was “a four-letter word;” the first

response in Chicago was “trained, skilled, worker.”

There were points on which attendees agreed—union jobs generally cost more and union members usually got excellent training. However, they disagreed on most other issues.

From Dallas:

“[When I think of a union job], I think of people standing around. It takes two or three people to do the same job.”

“Someone had to be on the job even though there was nothing to do. We had to work eight hours even if the job only took two.”

“Great training does not always mean great quality.”

“Unions are too entrenched in their thinking of trying to self-perpetuate.”

Opinions on labor unions in Dallas may stem from, (a) Texas is a “right-to-work” state, and (b) state/local building codes there are perhaps less stringent than elsewhere. Some unions weren’t interested, it was said, in getting the job done; they were going to be on the job for a certain number of hours, and that was all. This was mostly the case with union plumbers or electricians.

When polled, no one in Dallas liked using union workers; three said they disliked using union workers; and five said they didn’t care.

Mechanical, electrical, and plumbing contractors were thought to need more skills than other trades. Dallas attendees said unions provided the greatest benefit in these fields. They appreciated that these workers went through the traditional union training, starting as apprentices, moving into journeymen, and then becoming masters in their fields.

However, those in Dallas were unable to specify what they considered to be the “best” union.

In contrast, Chicagoans had a more favorable opinion of labor unions. While they agreed that costs were higher when using union workers, they equated this with greater work productivity:

“[Unions maintain] minimum standards.”

“[There is a] certain level of quality you know you can expect.”

“A non-union worker might have bought his tools yesterday. Now, he is a tradesman.”

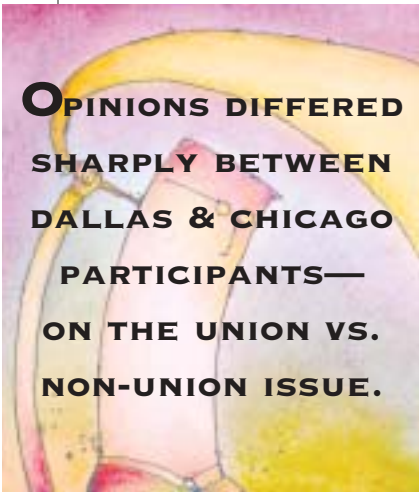
“You can’t just buy a [union] card anymore. It is tougher to get in.”

Asked to rank unions on a scale of one-to-10 (10 being high), nine of 10 in Chicago ranked unions at seven or higher. Of the 10, six used mostly union workers for their jobs. One Chicagoan shared much of the opinion voiced by Dallas participants, indicating that some union workers weren’t really productive.

Some attendees also noted that a construction union could be protective and limit the number of members. By doing this, a union would ensure that there is a limited workforce—which gives it economic muscle.

Everyone agreed with the Dallas group that the skill level needed of the “big three” (mechanical, electrical, and

CONTINUED ON PAGE 14





## TABLE ONE

### RESPONDENTS RANK DECISION CRITERIA

1. QUALITY
2. EXPERTISE
3. SCHEDULING PRACTICES
4. ON-TIME PERFORMANCE
5. PAST EXPERIENCE WITH THE CONTRACTOR
6. TEAM ATTITUDE
7. PRICE
8. SERVICE/WORKMANSHIP GUARANTEED
9. WORKMANSHIP OR SERVICE WARRANTEE
10. PERSONAL RELATIONSHIPS
11. TRUSTWORTHINESS.
12. RECOMMENDATIONS

SOURCE: FMI CORP. SURVEY FOR SHEET METAL PARTNERS, 2002

In fact, respondents awarded similar ratings to HVAC, mechanical, and electrical work. Responses indicated that sheet metal, concrete, and carpentry were seen as less attractive (relative to the above-named trades). The difference is stark in responses from contractors and designers; those groups have more technical construction knowledge than do owners.

After listening to the focus groups, the Task Force had discussed the pros and cons of using “sheet metal” in marketing efforts. Based on what was heard, a decision was tentatively taken to move away from “sheet metal,” as target audiences place a lower value on the term as compared with HVAC.

FMI Corp. believes this survey validates the “HVAC Expertise” theme chosen by the Sheet Metal Partners as a result of the focus groups. It seems to already be meaningful to the key target audiences.

### HOW WE’LL BE JUDGED

“Quality” finished first, as the highest-ranking decision criterion (for each group). “Expertise” ranked second for designers, third for owners, and fourth for contractors. Significantly, “Expertise” was the only element other than “Quality” to rank in the top four responses for each group.

Of course, Price was important (owners and contractors each ranked it second).

Notably, warranties, service and workmanship guarantees, and recommendations (“word of mouth”) were ranked lower. See Table One.

In FMI’s opinion, the high ranking of “Expertise” reinforces use of the term by Sheet Metal Partners in marketing to these potential target audiences.

### WHO SELECTS THE SUB?

According to all respondent groups, the general contractor (GC) plays the most significant role in selecting subcontractors. Designers and owners mostly are “influencers,” not decision-makers. This was true across all procurement methods.

While almost 30% of owner respondents said they have no input (the GC makes the decision), more than 40% said they make suggestions to the GC.

Owners play a more important role when the sole-source negotiated method of contractor selection is used in a project. In these cases, the owner’s influence over subcontractor selection increases, with the GC’s reduced.

FMI’s conclusion is that the owner can be positioned as a secondary target for the Sheet Metal Partners’ marketing communications.

### LOW BIDDER CAN LOSE!

The bid process is the most commonly used contractor selection method—66% of owners, 61% of contractors, and 51% of designers prefer bid to negotiated processes.

“Qualified bid” came out on top, with 43%, 47%, and 40%, respectively, favoring this method. Hard bid was the

number-one choice of 23% of owners, 14% of contractors, and 11% of designers.

Important note: Seven of eight contractors (88%) indicated that it was “definitely likely” (9%), “likely” (39%), or “somewhat likely” (40%) that they would select a subcontractor who was not the low bidder.

Why pick a bidder who is not low? Past experience with the contractor, quality, and ability to meet a schedule were leading reasons.

### OTHER KEY FINDINGS

While owners were asked to rank the importance of indoor air quality (IAQ), personal comfort, and utility cost, the designer and contractor surveys asked recipients to rate the importance of these issues to owners/customers.

IAQ was the top issue to both owners and designers. Contractors rated personal comfort on top, with IAQ a close second. Owner preference for IAQ over other issues was dramatic.

### SUMMARY

These results support two of the Task force’s initial decisions. First, the term “HVAC” has relevance and importance with the target audience for the marketing message. Second, “sheet metal” does not resonate with that same audience.

Combining the fact that expertise is an important purchase criterion for all three target buying groups, and that they see HVAC as one of the three most important crafts, the “HVAC Expertise” theme should be successful in marketing to the Sheet Metal Partners’ target audience. ■

ELLIS IS A SENIOR CONSULTANT WITH FMI CORP., RALEIGH, N.C.

# FIRST PERSON: WHAT I HEARD

**EDITOR'S NOTE:** BRUCE WORD, BUSINESS MANAGER OF SMWIA LOCAL 104 IN SAN FRANCISCO, WROTE A REPORT ON A SMWIA-SMACNA FOCUS GROUP FOR MEMBERS OF HIS LOCAL. IT'S REPRODUCED HERE WITH MINOR EDITORIAL CHANGES.

BY BRUCE WORD

**A**s part of the SMWIA/SMACNA Best Practices Marketing Task Force, I recently attended a focus group meeting that was interesting, to say the least. The group comprised owners or representatives of these types of firms:

- engineering;
- architectural;
- general contractors;
- mechanical contractors;
- building management; and
- building owners.

...basically, the folks who keep us employed.

Our task force sponsored the focus groups to put specific questions to the participants, and listen to them speak candidly about the construction industry. Specifically, we wanted to hear their perceptions about HVAC systems and our involvement as sheet metal workers.

Importantly, the joint focus group sponsors (SMWIA/SMACNA) were unknown to the participants.

Fortune 500 companies have used focus groups as a marketing tool for years. It is just as important for us in the unionized sheet metal industry to conduct focus groups from time to time—to become better acquainted with our customers' needs, our shortfalls, and our strengths.

## AN IDENTITY CRISIS?

Generalizing, the group saw sheet metal workers as one segment of the total equation necessary to install an HVAC system (duct hangers)—along with the UA and IBEW.

The customers put a great deal of importance on the controls, test and balance, and service. They agreed the mechanical crafts require the most skills in the building trades. However, they did not distinguish us from the UA or IBEW for skill or productivity.

Most did not recognize SMACNA as a management association. It appears SMWIA and SMACNA have an identity crisis as far as being recognized as HVAC industry leaders.

## UNION HURDLE

When asked what they thought about unions, most said, "higher prices." Some of the group said they saw no difference between union and nonunion—there were good and bad in both...except in price.

However, most did say they could expect a certain level of quality from a union contractor most of the time, and that union contractors were better at manning larger projects. All said quality performance and teamwork were of value—main determining factors in choosing a contractor.

We in SMWIA and SMACNA must work to make customers understand that HVAC is synonymous with the unionized sheet metal industry—that we are the industry leaders. We will continue to provide the best training possible in all aspects relating to the HVAC system—fabrication, installation, controls, test and balance, service, and more—to our members. This results in benefits for the customers.

## YOUR ROLE

While we can promote and provide the best training available, quality and productivity depends upon you. You represent yourself and all of us—and our collective and individual futures—when you're on the jobsite.

Take pride in the craft you've chosen and perform it to the best of your ability; the Collective Bargaining Agreement requires you to perform to SMACNA standards. Do a productivity and quality check once in awhile.

A building trades journeyman [a member of Local 104] will cost the customer approximately \$425 for an eight-hour day. At the end of each day, ask yourself if you would pay someone else \$425 for the amount of work you performed and accept the same quality.

We are not machines; we all have a bad day from time to time. But if you don't answer "yes" to that question the vast majority of the time, then why do you think anyone else would be willing to pay you that amount?

Remember: Right or wrong, the customer's perception of us is our reality—it controls our destiny. If we in the unionized sheet metal industry approach this as a team, we will always produce a better product at a competitive price. ■



BRUCE WORD

tion—makes up a large part of the work done by sheet metal workers. Installation of air-conditioning and heating systems in existing buildings continues during construction slumps, as individuals and businesses adopt more energy-efficient equipment to cut utility bills.

“In addition, a large proportion of sheet metal installation and maintenance is done indoors, so sheet metal workers usually lose less worktime due to bad weather than other construction workers do.”

**OVERALL**

According to the *Handbook*, “The civilian labor force is projected to increase by 17 million, or 12%, to 158 million over the 2000-10 period.” Opportunities in construction will actually be better! **Construction and extraction occupations.** Construction and extraction workers construct new residential and commercial buildings, and also work in mines, quarries, and oil and gas fields.

“Employment of these workers is expected to grow 13.3%, adding 989,000 new jobs. Construction trades and related workers will account for the majority of these new jobs, 862,000 by 2010. Most extraction jobs will decline, reflecting overall employment losses in the mining and oil and gas extraction industries.”

**TABLE ONE**

**EMPLOYMENT GROWTH PROJECTIONS FROM THE BUREAU OF LABOR STATISTICS**

OCUPATION	GROWTH 2000-2010
CARPENTERS	10.0%
ELECTRICIANS	18.3%
PLUMBERS, PIPEFITTERS, STEAMFITTERS	11.0%
SHEET METAL WORKERS	29.1%
HEATING, AIR CONDITIONING & REFRIGERATION MECHANICS AND INSTALLERS	25.2%

In other words, opportunities in construction will outpace the general economy—and employment in the sheet metal industry is projected to grow faster than any other niche within construction! Specific projections from the BLS data can be seen in Table One. ■

plumbing) lent itself to the union’s traditional training methods. However, overall, there was no preference in using union vs. non-union workers.

**SPECIFICS ON SHEET METAL**

For the most part, attendees had a positive opinion of HVAC contractors. Dallas attendees thought they did a good job on the job’s front end, but were not as good on the back end—in areas such as providing manufacturer warranties and not rushing to get to their next job.

Chicago attendees noted that there was great variation in the quality of HVAC contractors: “[Quality] runs the scale from good workmanship and management to those that don’t have those qualities. The public sector contributes to this problem. Low bid is the only criteria.”

Asked about knowledge of SMACNA, four of eight Dallas attendees and six of ten in Chicago were aware of the standards and could describe what they were:

“Publish manuals that dictate duct construction standards.”

“Installation guidelines for sheet metal workers.”

“...minimum standards. If you meet them, you won’t have as many problems as when you cut corners.”

Attendees agreed that it was good to have standards, but were concerned about enforcement. According to one in Dallas, 99% of contractors don’t follow the standards and don’t know what they are doing. Attendees there were asked the

following question: “If standards are useful, is it worth holding people to the standard?” This was the response:

“If the project dictated a higher standard, you would pay for it. If you started losing money because standards were not followed, you would start doing it.”

“[Contractors] charge more money to follow guidelines. [They say], ‘You want that, it will cost you more.’”

A requirement to meet SMACNA standards must be included in the bid process, Chicago attendees said. They added that there is a book for each job to determine if the standards have been met and there are visual inspections performed all the way down the road during a project to ensure standards are met.

Most in the two groups were not aware that the source of SMACNA standards—SMACNA itself!—had union ties. Once so informed, it did not change anyone’s opinion of union workers.

Here are results on three other sheet metal industry acronyms:

NEMI: Only one Dallas attendee knew of NEMI; in Chicago, no one.

ASHRAE: Five in Dallas and seven in Chicago were aware of this organization.

SMWIA: No one in either group knew of this organization. ■

SKLAIRE IS PRESIDENT OF SYSTEMS RESEARCH CORP. (ROCHELLE PARK, N.J.).

# SMACNA COUNCILS FOCUS ON MARKET SHARE GROWTH

**E**ach construction contractor association has its own structure. It's a pretty boring topic—how the thing is formatted, which committees do what, and so forth...except in SMACNA's case, it's pretty exciting.

Why? A change in the mid-1990s led it to reorganize and create "market sector councils." The result has been eye-catching! You can eyeball six of the seven councils yourself, at [www.smacna.org/members\\_msc.cfm](http://www.smacna.org/members_msc.cfm) (not online is the Duct Manufacturers Council).

What's the big deal? This alignment allows SMACNA contractors concerned with specific growth markets to give the association's staff direction, and focus its resources, on helping members and signatory contractors grow in key markets.

Here are the councils you'll find online:

- Architectural;
- Custom Fabricating and Manufacturing;
- Industrial;
- Residential;
- Service; and
- HVAC.

## SUCCESS STORIES

According to Thomas J. Soles, Jr., a 15-year SMACNA staffer and executive director of the Market Sector effort, the various councils have led the way to many triumphs for the SMWIA-SMACNA team. Here's a sample:

Duct cleaning—"Our members were running into duct cleaning requirements on jobsites a few years ago," Soles says. "It was the result of an effort by a competing association...their specifications started to show up in some contract documents."

Perhaps the low point came when a SMACNA contractor ran into these questionable requirements on a government job—and had to pay \$200,000 more than anticipated on the project.

As a result, the HVAC Council led the way in developing a "white paper" on duct cleaning. The white paper is promoted by SMACNA to be used in specifications, instead of the bogus alternative. Anyone can obtain it, free, from the SMACNA Web site (go to [www.smacna.org/products/publications](http://www.smacna.org/products/publications) to download the PDF document).

Architectural metal—some years ago, the Architectural Sheet Metal Council began meeting with representatives of the American Institute of Architects (AIA) to assist it in revising its contractor prequalification document.

"We were able to work with one of the AIA's professional interest groups to come up with a joint document," Soles recalls. "Basically, the council helped AIA rewrite it to really emphasize training, soldering expertise—some of the things that can be offered only by contractors who have access to a well-trained workforce. We helped AIA to steer that document toward prequalification requirements that are not very easy to meet if your company isn't associated with a bona fide apprenticeship program."

Industrial—like all who pursue growth markets, those on the Industrial Contractors Council know, from day-to-day experience, about the unique needs of their work. "Our members here wanted to create special training that would focus on those things that are peculiar to industrial sector—problems during shutdowns stemming from the compression of time, particular safety problems, heavy welding issues, and more," says Soles.

As a result, this Council formed a task force on industrial training with the International Training Institute. The result is a new course aimed at helping contractors and their workers meet these special needs.

## GRABBING MARKET SHARE

While these seven Councils do not "run" SMACNA, they provide the contractor group with a way to put muscle behind providing just the right type of "fuel" to help the SMWIA-SMACNA team catch fire in niche markets.

Each Council has its own steering committee comprised of contractors. Five councils have newsletters. Each council steering committee meets at least twice a year, and Soles notes that "SMWIA's national office has an open invitation to our meetings." ■



# Markets & Trends

## CONSTRUCTION

### DATA: NO BOOM

Data from the U.S. Commerce Department and McGraw-Hill Construction's Dodge operation provided perspective on where the construction market has been and where it is going.

Every month, Commerce issues its construction "put in place" report (referenced in news reports as "construction spending"). The 9/4 report on July 2002 spending showed overall construction nearly unchanged from June 2002's level, and only 1.1% below the July 2001 rate.

Economists at Dodge reported on contracts for new construction—a glimpse

of the future. In July, contracts dipped by 8% (from June). "The loss of momentum was present across a wide range of building types—public works, non-residential building, and single-family housing," Dodge said.

Neither report provides much insight into a major HVAC business sector: Modernization and repair. Commerce focuses on new construction. Dodge bases its estimates on projects tracked by that company's service—new construction projects and very large rehab jobs.

### COMPONENTS

Through the year's first

seven months, \$474 billion of construction was put in place, the government said—virtually flat (a 0.2% increase) with 2001. This is an actual number, not "seasonally adjusted."

On the look-ahead side, through seven months of compiling contracts for future work, Dodge said the figures were virtually flat—\$297.5 billion in new contracts this year vs. \$297.0 billion in new contracts from Jan. 1 to July 31 of 2001.

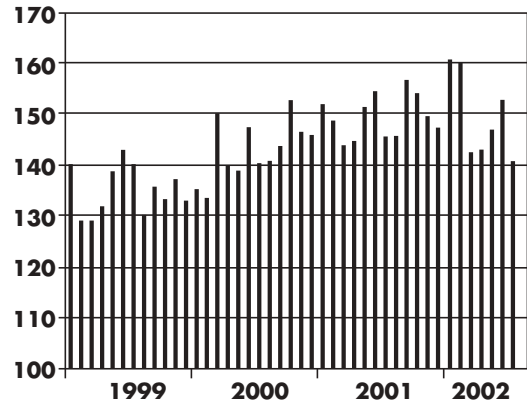
Major problems have been, and apparently will be, felt in nonresidential. The year-to-date value of construction put-in-place for all nonresidential buildings was down 17% on July 31. Industrial buildings were down 44%, offices down 29%, and hotels/motels

down 25%. Strength was seen in educational buildings (up better than 13%) and hospital/institutional (up almost 9%).

Dodge's figures for new construction contracts showed nonresidential construction down 11% in the year's first seven months. Looking at regions, Dodge's figures through July were: Northeast and South Atlantic, up 5% each; Midwest, up 2%; West, down 1%; and South Central, down 10%.

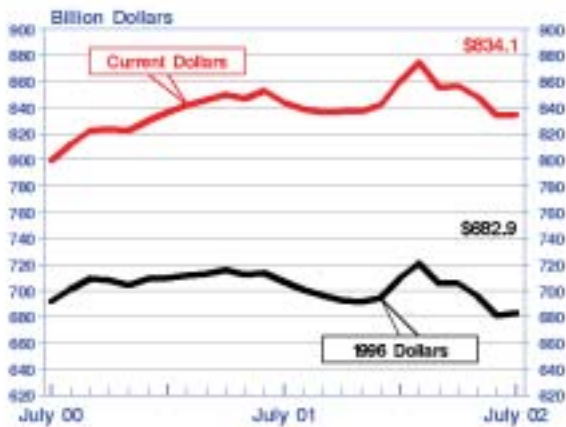
Residential work is bailing out the construction industry as a whole. Residential building put-in-place was up 6.7% in dollars through July 31; and Dodge's tally of contracts for new residential building was up 9% year-to-date. ■

The Dodge Index (1996=100) of Construction Contract Value



Source: Dodge Division  
McGraw-Hill Construction

Total Construction Put in Place  
Seasonally Adjusted Annual Rate



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