ENROLL IN THE COEDUCATIONAL INTERIOR ARCHITECTURE OR LANDSCAPE ARCHITECTURE PROGRAM AT CHATHAM COLLEGE

NEW INTERIOR ARCHITECTURE PROGRAM

- Three degrees offered:
  - Bachelor of Interior Architecture (for women only)
  - Master of Interior Architecture, for students with a bachelor’s degree in a discipline other than interior design or architecture
  - Master of Science in Interior Architecture, for students with an accredited degree in interior design or architecture
- Program emphasis on social responsibility and a holistic design process in which interior design is integrated with the surrounding architecture

MASTER OF LANDSCAPE ARCHITECTURE

- Pittsburgh’s only landscape architecture program
- Earn a professional, applied degree leading to licensure
- Curriculum emphasizes environmental concerns and sustainability
- Sample courses include Landscape Ecology, Historic Landscape Preservation, Soil Science, and Community Design of Public Landscape
- Field work and design integral to curriculum

MASTER OF ARTS IN LANDSCAPE STUDIES ALSO AVAILABLE

www.chatham.edu ■ 800-837-1290 ■ admissions@chatham.edu
Chatham College ■ Woodland Road ■ Pittsburgh, PA 15232

READY TO CHANGE YOUR WORLD
Our communications committee has elected to take on the daunting but worthwhile task of a communication plan for AIA Pittsburgh.

**IN THIS ISSUE**

*The Future for Architects* .......... 6
By P. Richard Rittelmann, FAIA

*New Towns for Old*
A book review by Rob Robinson, AIA ............ 16

*BUILD Pittsburgh 2006*
A preview of AIA Pittsburgh's Annual Continuing Education Conference .......... 18

News .......... 4-5

Breaking Ground .......... 20

On the cover: Members of AIA Pittsburgh's Programming Committee: (TOP) Ken Stehle, Assoc, AIA, WTW Architects; Jenn Neal, AIA; Astorino; Tom Price, Assoc, AIA; Strada; Carl Bolton, Assoc, AIA; Perilo Weiskopf; (Bottom) Ana Migone, Assoc, AIA, WTW Architects. Photo by Tracy Certo.

**Changes. And More Changes.** By Anne J. Swager, Hon AIA

When my daughter Betsy was in junior high

she brought home an intriguing assignment which I can still remember. She had to name five or maybe ten things that her parents had used but that were no longer relevant for her. The only one I remember was the slide rule. My father, an engineer, was extremely adept with a slide rule and I actually was reasonably proficient in high school. Of course that was back when a (as in one) computer took up a whole room and calculators needed cords and cost what a really good PDA/cell phone costs today. By college I could no longer use the slide rule or at least I didn't need to. We had computer labs and calculators on every desk.

Dick Rittelmann's intriguing and important article on the future of the architectural profession in this month's issue talks about many of these profound changes—in how we work and how we receive communication. You need to read his article to get to his conclusions but it will be well worth your time... I promise.

I hesitate to enumerate the changes the AIA has undergone since I started for fear that I will instantly become a dinosaur in your eyes but the changes have been many. The publication you're now reading is a product of a brainstorming session from about 18 years ago. In many ways it has not changed much since its debut issue. Certainly the editorial content has evolved and the graphics have been redone but its mission of a newsletter/magazine or as one member of the communications committee opined "the face of AIA Pittsburgh" has largely remained the same.

What has happened is that *Columns* has been joined by eColumns and the website. We only do direct mail occasionally and our directory is online. While we have a variety of communication tools, it's not always clear to us what is getting read and, more importantly, what matters to you.

That's why our communications committee has elected to take on the daunting but worthwhile task of a communication plan for AIA Pittsburgh. Eric Osth, AIA is leading (quite capably I might add) this effort with the help of Donald Zeilman, AIA who is now chairing the committee. We're happy to say that the committee includes new members Michael Kuchera, AIA and Roxanne Sherbeck, AIA who have much to offer.

The plan will examine our communication tools and evaluate their efficacy with you, the architect, and also our other target audiences. What outcomes should you expect? A change in the design of the different products for one and, at the very least, a clearer understanding of what information comes from what source.

After all, we not only want you to read what we offer but we also want you to be able to retrieve the information if and when you need it. Our ability to do this will take resources and it will take your willingness to let us understand what you need and what you want.

In March we ran a brief reader survey of *Columns*. By brief, I mean it took less than three minutes to fill out online unless you added comments which many of you did. My favorite statistic is that 23% of you have kept every issue of *Columns* you have ever received. Your biggest complaint? The illegibility of the print. We were pleased with the response and we sincerely thank all of you who participated.

Expect more surveys. We know you have too much to do and so we promise to be brief but we need your input to move forward and to be successful. And we will listen.

If there is one constant in my years with AIA Pittsburgh, it is your willingness to engage with us. No matter how much information there is, and it grows exponentially every day, sharing with each other—as opposed to assuming what the other understands—remains at the root of effective communication. So please let us know what's on your mind by any method—email, letters, phone calls or face-to-face. We relish the opportunity to talk with you.
A Call For Volunteers
Rebuilding Together Pittsburgh

AIA PITTSBURGH is looking for people interested in providing one day of community service for the repair of homes for our elderly, disabled and low-income neighbors.

WHEN: Saturday, April 29, 2006 from 8:00 a.m. - 4:30 p.m.

WHERE: This year we will be doing repairs for the home of Betty Alexander of 2459 N. Charles Street on the North Side. She is a 64-year-old woman who lives with her husband in a home that needs many repairs: painting, clean up, carpentry, kitchen and bathroom safety improvements, plumbing and electrical work.

WHO: Both skilled and unskilled volunteers are needed to assist.

NOTE TO IDP INTERNS: This is a great way to fill those community service credits.

TEDCO CONSTRUCTION will be providing the skilled trades people and project management as they have for the past twelve years. Their assistance has been invaluable.

CONTACT: Jennifer McCarthey of Loyal + Kuehneimer Architects at (412) 924-0006 or Email at jennyjomac@yahoo.com. She will be coordinating AIA's volunteers. Please get in touch with her before April 15th so that we can organize work assignments. For other information you may also contact Todd Havenkotte 412-486-4350 at TRHArchitect Inc.

2459 N. Charles Street on the North Side will be repaired on April 29th.
AIA Pittsburgh Welcomes New Members

This January, members gathered to welcome those new to AIA Pittsburgh and to enjoy the atmosphere of Six Penn Kitchen. More than 50 people sampled the food and listened as Head Chef Chris Jackson spoke of the concept and development behind this new restaurant in the heart of the Cultural District.

This Yuengling's On Us!

Members gather at the AIA Pittsburgh office for the first "Designing Under the Influence (DUI)", an informal happy hour on the first Thursday of every month. Want to know what your peers think about regional development, downtown revitalization or how the Penguins are doing? April's DUI will take place Thursday, April 6th from 5-7 p.m. at the AIA Pittsburgh office. Topic: Can gaming create spin-off economic development?

DUI: Designing Under the Influence

Uptown Rhythms

Artist James Simon completed his latest public art piece for Duquesne University's Forbes Avenue garage in Uptown. Uptown Rhythms (you must see this in color) is the first part of the university's $70 million rebuilding effort in the Uptown area. Simon, a local artist with a home/studio on Gist Street, created The Three Musicians at 947 Liberty Avenue next to the AIA offices.
IN the 1870s, a young man considering a career in architecture had the great fortune to meet with the already famous architect, H. H. Richardson. The young man asked Richardson what he thought was the most important issue in an architect's career. Richardson replied, "Get the work". The young man, expecting a more esoteric reply, then asked, "Well, what would be the second most important issue?" Richardson again replied, "Get the work." From at least Richardson's time (and probably much earlier) a pattern was set that has prevailed to today: An architect that doesn't "get the work" has no practice. We believe that this long-standing impellant has very nearly run its course and will no longer be the battle cry for the next three decades. What will replace it? Get the people.

An alternate title for this article might have been "A Profession in Crisis". I prefer, in this case, not to use the English definition but rather the Chinese version which is represented by two characters which separately mean, "danger" and "opportunity". This represents exactly my view of the future of the profession: In the near future we will be confronted with great dangers and great opportunities. Let's explore the reasons why.
"Tomorrow's clients will have no need for today's architects." Yes, a provocative statement, but one that perceptive analysis will show to be quite prophetic. There are at least eight recognized models available to conduct Long Range Strategic Planning, all of which involve some method of looking into the future. Not all models are appropriate to all enterprises. We have found a blend of two models—Trend Analysis and Scenario Building—to be most appropriate for professional design firms. The primary reason is that we are a service profession and the future trends of our clients strongly impact our future. This certainly doesn't mean we have no control over our destiny. A myriad of choices lies within the design profession genre. In fact, we constantly strive to differentiate our respective firms. Firms that have assertively differentiated themselves by virtue of their LRSP will likely have no trouble differentiating themselves in their day-to-day marketing. Those firms who try to maintain the status quo and be all-things-to-all-people will always struggle and eventually fail. The only difference between now and ten years ago is that the failure will be more rapid.

The reason? The concept of "singularity" introduced by Professor Jon Von Neuman at Princeton in the 1940s which refers to the convergence of human intelligence (H.I.) and artificial intelligence (A.I.) to the point where the two are indistinguishable. Associated with this principal is that of an increasing rate of change of the H.I./A.I. interface. We see examples of this everywhere we look. A simple example, which has held true since 1965, is Moore's Law of computer processor performance which states that the processor capability in MIPS (millions of instructions per second) will double every 18 months. The best performers in any business learn to thrive on this accelerating change rate. Those who ignore it or misread it usually fail. The classic dot com failures of 2000-2003 is an example.

This article is not intended to be a treatise on LRSP for design firms. That involves scenario writing that shapes individual firms and involves much sensitivity to a firm's particulars, not the least of which is the intent, drive, emotion, ambitions, talents, etc. of a firm's leaders and personnel.

The prelude to Scenario Building, however, and the focus of this article is Trend Analysis which was popularized by John Naisbett in his 1983 book, Megatrends. Trend Analysis is a method of looking into the future which is not futuring or forecasting and certainly not crystal ball-gazing. Instead, it is the recognition of existing facts and directions and extrapolating what is known to what may be the likely outcome.

Trend Analysis provides the innovation fodder that fills the hoppers of the Scenario Builders.

For the sake of organization, we will look at trends in four categories:
- Global Trends
- Industry Trends
- Societal (personnel) Trends
- Practice Trends

GLOBAL TRENDS

THE WORLD IS AWASH IN CASH!

What do you think has been fueling the strong residential market in recent years? Why has there been no significant inflation when the economy has been so strong? Why are interest rates still quite low? Why are Venture Capitalists so willing to fund new ventures?

The answer to all of these questions is in the title. The International Monetary Fund (IMF) estimates that the global cash surplus is now approximately $11 trillion—equal to the entire U.S. economy. Why is this happening?

1) Japanese corporations are making a major recovery from their financial doldrums of the last 20 years, but aren't reinvesting;
2) oil companies in Russia and the Middle East are making record profits, but are not reinvesting due to political instabilities;

3) China is putting cash into the marketplace at an unprecedented rate due to their newfound economic muscle;

4) Europeans are saving at unprecedented rates due to concerns over retirement security; and

5) U.S. corporations put $634 billion in profits into company coffers in the last 12 months—twice the rate of just two years ago.

Former Chairman Alan Greenspan noted that we are in uncharted waters with this unprecedented cash availability. The ability of the Federal Reserve to control interest rates by raising or lowering the prime rate has been significantly diminished by the global cash surplus. It’s a competitive monetary market and if the Feds try to raise interest rates, the world surplus of cash will push them back down. For a variety of reasons, this cash surplus is likely to be present for some time in the future.

That is why we believe the global construction market will be very strong in the foreseeable future. These cash surpluses will be available to fund most any legitimate venture, including the next round of technology in the U.S. and unprecedented growth in developing countries.

Despite the growth impediments of Middle East political unrest and unprecedented oil prices, many economists believe we are on the verge of a global economic boom of significant proportions.

GLOBAL ECONOMIC COMPETITION

Regardless of statements about “global economies”, there remains a rather fierce nationalism. Global economic superiority today boils down to one issue: education.

China will graduate nearly 1,000,000 scientists and engineers this year; India nearly 500,000. The U.S. will graduate 80,000.

The scientists and engineers of a nation are the wealth creators. Science, engineering and architectural graduates are decreasing in the U.S. We have a serious problem in the U.S. because high school graduates want to avoid the intellectual rigor of a scientific or engineering education in favor of softer, less rigorous endeavors. Japan graduates 10 engineers for 1 lawyer. The U.S. graduates 10 lawyers for every one engineer. How can we ever win the Global Economic Competition when we create so few wealth creators and so many wealth disposers?

OFF SHORING

Much has been said recently, both pro and con, about off shoring. It’s not a new story. Just after WWII, cheap European wages were seen as a threat. In the 1960s and 1970s, the Japanese were supposedly taking U.S. jobs away. In the 1990s, the effect of NAFTA was ostensibly a southern migration of U.S. jobs. And today? We wring our hands over the white collar job exodus to India and manufacturing jobs to China.

Let’s review the history of what really happened: the post-war European economy quickly created jobs in Europe, and soon European wages were close to parity with similar jobs in the U.S. Some jobs may have gone to Japan in the 1960s, but that was halted in the 1970s as Japan’s economy grew. The exchange rate in 1965 was 320 yen per dollar. In 1975 it was 100 yen per dollar. If NAFTA caused so many jobs to go to Mexico, why did the legal Northward migration of Mexicans increase by 184% from 1994 to 2002? If there is a U.S. concern that we’re losing manufacturing jobs to China, proportionately Mexico is losing more. Why? The average manufacturing wage in Mexico ($1.50/hr) is 600% more than China ($0.25/hr), but the manufacturing jobs in Mexico are more adaptable and attractive to China than U.S. manufacturing jobs. U.S. wages average about 400% more than India’s, but U.S. off shoring to India has already created a skilled labor shortage in that country and skilled worker salaries are climbing at more than 15% per year.
Economic strategists state that the salary advantage required for successful off-shoring is 300% to 400%. India’s skilled labor will soon be below this threshold, but as we will see later in this article, we will likely rely on off-shoring for non-economic reasons.

Thus far we have dwelled on largely economic global issues. When considering Scenario Building, trends in all aspects of global life should be considered. Space prevents us from discussing all of the global trends that may have meaning for us in the future. To give an abbreviated version of some other issues, the following may be interesting.

**A GLOBAL CONSUMPTION BOOM IS AHEAD**

While many people in India live in poverty, it is hard to conceive that India also has more people making more than $50,000 per year than the U.S. does. Many emerging economies are rapidly adding citizens with incomes significantly above poverty level and with substantial disposable income. And they want the kinds of products produced by the U.S. In fact, we are witnessing the beginning of a very long term trend of consumers emerging in growing third world economies wishing to purchase U.S. products. It’s not just a material acquisition issue, it’s a status issue.

**CHINA ON THE EDGE**

Many superlatives that can be applied to China’s economy, but watch out! There are a lot of State Owned Enterprises (SOE’s) in China. These SOE’s are not intended to make a profit, but rather to artificially support 40% of China’s workers. In late 2006, China must open its economy to foreign competition to join the World Trade Organization. As foreign banks target Chinese banks with much higher interest rates for savings, billions of dollars will move from the Chinese banks that had been using these moneys to fund the SOEs.

**THE COMING AGE OF SINGULARITY**

As previously mentioned, Singularity is the merging of Human Intelligence and Artificial Intelligence—the phenomenon of accelerated change. The popular speaker is Ray Kurzweil, a well respected inventor and visionary. Some of his predictions:

- By the end of this decade we will have super computers able to emulate human intelligence.
- By 2020 that ability will be in PCs.
- By 2030 Artificial Intelligence will be indistinguishable from human intelligence.
- By 2045 Artificial Intelligence will dwarf human intelligence.

**THE INFORMATION REVOLUTION**

We’ve all experienced the first four phases of the Information Revolution:

1) The 1960s — main frame computers
2) The 1970s — mini computers
3) The 1980s — The PC penetrate businesses and households
4) The 1990s — The internet revolutionizes communications

Now comes the fifth wave which is driven by three forces:
- Cheap computing devices
- Infinite bandwidth
- Open standards

The fifth wave really isn’t a revolution. It is simply the maturation of the first four phases aided by the evolution of the above technologies. It is where we extract the accumulating intrinsic value of the Internet, PC’s, cell phones, PDAs. The Internet will become virtually ubiquitous, just in time for Internet 2. The Telecom industry will suffer further with the advent of VOIP (Voice over Internet Protocol). And the fifth wave will be a great leveling device among companies and businesses where the client will be far less able to distinguish between the “big guys” and the “little guys.”

**INCREASING ENTREPRENEURSHIP**

Don’t confuse off shoring with outsourcing. Off shoring is generally recognized as the movement of some parts or all of a company’s activities out of the U.S.
Outsourcing can be done off shore, but the majority of outsourcing for U.S. companies is done within the U.S. This activity is likely to grow significantly in the near future. As major corporations try to be more competitive and flexible, they are looking to outsource many overhead as well as some production activities that were previously done in-house. This is just one of the forces driving the move to increased entrepreneurship. Obviously the present state of computer power, the Internet and the advanced capabilities in IT make it possible for small, boutique companies to serve large mega-corporations with lower cost, and often faster, more creative services.

We believe the demographic problem mentioned later in Personnel Trends will be a driver of the entrepreneurship movement. Baby boomers may be approaching retirement age, but look for many of them to “retire” from their basic career to begin new companies as “seniorpreneurs”. From the standpoint of talent, opportunity, finances and technology, there has never been an easier time to start a business than now.

There is a flip-side benefit to this growing entrepreneurship. There are already world-class services such as accounting, marketing, human resources, call centers, IT support, etc. that are available and affordable to the smallest of startups. Health care co-ops may soon be added to that list.

All of this bodes well for the U.S. economy as small businesses have historically provided more jobs proportionately than large corporations. The coming manpower shortage may be mitigated somewhat by small enterprises designed with more flexible time, venue and compensations that will keep people gainfully employed, supplementing their pensions and Social Security well beyond previous retirement ages.

There are numerous other trends which we could discuss but space does not permit. We are frequently asked how all of these issues affect architecture. Often they don’t. But they do affect your thinking. Architects are trained to be holistic thinkers. We think at different scale levels. It doesn’t take too great a leap of faith to realize that these global trends are thought provokers. What if I told you there will be a glut of red grapes in Bulgaria this year? Will that affect your architectural strategic planning? Probably not... Will it affect your thinking? It should. We’ll show you why.

INDUSTRY TRENDS
We have seen that the economic trends of the global market are very positive. What about the domestic markets?

Reed Construction Forecasting predicts that we will double the existing U.S. built environment by 2030! That seems astounding, but it’s really only a growth rate of 3% per year compounded and we expect to be surpassing that in most markets. A significant portion of that “doubling” will be the renovation of existing buildings and replacement of existing buildings and infrastructure.

In a recent report on the future of domestic construction, AIA's Chief Economist Dr. Kermit Baker stated: “We're expected to get close to 5 percent real growth in non-residential construction activity this year. After six years of recession – like conditions in the industry, 2006 is shaping up as the year that will launch a non-residential expansion, picking up some of the slack from the cooling residential market. We should see the best year for this sector since 1998 with growth evenly balanced between the commercial/industrial and institutional sectors.”

### Fig 1. Projected Construction Growth for 2006

| Source: AIArchitect, Jan 13, 2006 |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                 | McGraw Hill     | Global Insight  | economy.com    | FMI              | Reestablished Business Information | Consensus |
| Non-Residential Total | 5%              | 12%             | 1.7%           | 4.7%             | 7.3%             | 4.7%            |
| Commercial Total  | 5.0             | 3.2             | 2.3            | 6.1              | 5.5              | 4.4             |
| Office           | 8.0             | 5.2             | 0.3            | 6.0              | 9.0              | 5.7             |
| Retail/Other Commercial | 2.0             | 2.5             | 1.7            | 4.4              | 1.2              | 2.4             |
| Hotel            | 19.0            | 3.1             | 2.3            | 5.2              | 6.2              | 7.2             |
| Industrial Total | 12.0            | 8.3             | 3.4            | 13.6             | 13.6             | 10.2            |
| Institutional Total | 4.0             | N/A             | 1.3            | 8.6              | 8.6              | 4.3             |
| Health           | 3.0             | 6.4             | -0.7           | 9.3              | 9.3              | 4.0             |
| Education        | 6.0             | 6.5             | 0.9            | 10.5             | 10.5             | 5.7             |
| Religious        | 3.0             | -2.6            | N/A            | -0.5             | -0.5             | -0.2            |
| Public Safety    | -3.0            | N/A             | 6.0            | 9.5              | 9.5              | 3.4             |
| Amusement/Recreation | 7.0             | 3.1             | N/A            | 5.5              | 5.5              | 4.6             |
For over a decade, the AIA has had a Consensus Construction Forecast Panel. Its charge is to seek estimates from leading construction forecasters and from them develop a consensus forecast. For 2005 and 2006, the Panel chose five forecasters: McGraw Hill, Global Insight, Economy.com, RMI and Reed Business Information. The results of this survey for 2006 are shown in Fig. 1. We've chosen to show all five forecasts and the consensus for two reasons:

1) There is a wide range between forecasters in certain sectors, but in the vast majority of markets, all estimates are for growth.

2) We see that the Panel's consensus is not simply the arithmetic average of all forecasts. Additional judgment of the panel has been applied.

All but two markets show a growth rate well beyond the 3% mentioned earlier which results in a 24-year doubling period. A 5% compounded growth rate has a doubling period of 14 years. In addition to the near term forecasts, most forecasters see this strong growth being maintained through at least 2011. In the 2011 to 2013 time frame, the U.S. could enter a recessionary period due to the demographics of the baby boomers rapidly entering retirement and substantially altering their consumer spending habits.

Fig. 2 shows the historical construction expenditures in various non-residential markets. We see that in the late 1990s all markets were strong with a 5% to 10% growth from the previous year. In 2000 the commercial market, much more than the institutional market, took a precipitous decline. In 2003, the commercial market began to rebound—the projections shown in Fig. 1 are an extension of this trend. The institutional market began additional growth in 2005 and it is expected to strengthen through the next several years at least.

Our economy has proven to be amazingly robust. The negative impacts of a large foreign trade deficit, huge deficit spending by the federal government, the rapid doubling and tripling of energy costs, and the economic impacts of this year's natural disasters have all failed to significantly dampen this economy. Despite this strong economy, there is still a negative attitude in the general public that has developed an irrational pessimism and has devalued our entire corporate world by about 30%. Our corporations are averaging at least 30% below intrinsic value and we are still enjoying a robust economy. All of this is to say we have a strong economy with 30% of its strength tied behind its back.
PERSONNEL TRENDS

The U.S. is on the very brink of a major shortfall in skilled workers. By 2010 we will have a shortage of seven million workers, five million of those skilled. By 2020, we will have a twenty-two million worker shortfall; fourteen million of those skilled workers. How could such a radical change occur? Keep in mind this is not a forecast but rather, fact—projections based on people already born tend to be amazingly accurate. Fig. 3 summarizes the above graphically while Fig. 4 reveals the reasons why.

For 30+ years the baby boomers have demographically been the “pig-in-the-python”, the bulge moving through the population base. Despite the assertions of many politicians and some economists, we have not had a shortage of jobs through the past 30 years; instead we have had an oversupply of workers. We are about to prove this.

Politicians are still touting the need to create jobs, evidently unaware of the government’s own data. The data we are presenting is from the U.S. Labor Department and the U.S. Census Bureau. The message? “It’s not jobs, stupid, it’s people”.

The explanation is simple: baby boomers are retiring. While 47% of all architects are over 50 years old, 60% of all NASA scientists are over 50. In the next five years, 30% of all science teachers will retire. Our educational system in no way can produce replacements for retiring baby boomers let alone provide for growth. As Fig. 4 shows, in the two decades prior to 2000, we had a 54% growth in workers. In the two decades following 2000, we will have a 3% growth in workers. We can’t have that radical a change in worker supply without a major impact to U.S. businesses.

What are the possible solutions? A major push to get young people to enter the science and engineering professions is a noble effort but it won’t solve near-term problems. A possible solution is to increase the number of immigrant architects. The shortage of architects is not a global problem: There is an excess of archi-
tects in Western Europe, Eastern Europe, Russia and parts of Southeast Asia. It is a spotty situation around the world. With an excess number of people in the work force the past 30 years, the public has established a distinct anti-immigrant mind-set bolstered by the illegal immigrant problem. This condition was further exacerbated by 9/11. We have great difficulty bringing superbly qualified architects into the country. Immigrants have pulled our fat out of the fire three or four times in prior history. This is a time they could do it again if we could just get the government out of our way.

Now that we know that we have a major national crisis looming in skilled worker shortage, let’s look at the specifics of the architectural profession. Fig. 5 shows that despite an increase in female architects, there is an overall decline in graduate architects. We must put this in the even broader perspective. The peak years for architectural graduates were the late 1980’s when the nation was graduating nearly 9,000 Bachelors and Masters combined. In addition to this graduate decline, we have heard but were unable to quantify, the fact that in recent years, a substantial number of architectural graduates are not going into practice, but are being attracted to other endeavors such as: graphic-arts, animation, entertainment, computer gaming, etc. Even if we discount this bleed-off, Fig. 5 shows that we might count on 4,000 architectural graduates in 2006. That is only 2.40% of existing practitioners and doesn’t even come close to providing the architects needed to replace retiring baby boomers, let alone provide for the projected domestic construction growth.

Fig. 6 attempts to summarize the problem. We have an increasing need for architects determined by the expected increase in construction activity. We show only a 3% compounded growth rate for construction with the assumption that baby boomer architects will retire at the same rate projected for the rest of their peers.

We then show the rate of new architect production by assuming the projected 4,000 rate of 2006 will continue with no further decline. There will be some limited opportunities to hire foreign architects. And we will enjoy some benefits from off shoring, but as we will discuss more in the next section, this may not offer as much opportunity as first thought. This still leaves a considerable shortfall in future architectural skills. Although we expect a significant portion of this gap to be closed by increased productivity per architect, one concern is that the remaining gap, if any, will somehow be done outside the profession, further weakening the architect’s position in the building industry.

There is, of course, a counter argument, that with the general over supply of the workforce by the baby boomers, there is no need to worry about the forecasted shortfall. But we must consider the current employment situation. It is likely that more architects will be needed to staff the expanded building activity than the current employment levels. A key factor is the cost of achieving the current rate of new architects. The rate of new architects is about $100K/year. Assuming current market conditions, that translates to a cost of about $500K/year. Even if we were to discount that there is a substantial amount to be paid to train the new architects. The question remains, will industries and/or architectural firms be willing to pay this amount to train the needed architects? It is likely that some level of government support may be necessary to provide the needed architectural skills.
MAINTAINING THE
PROFESSION'S STATUS QUO
WILL FURTHER MARGINALIZE
THE ROLE OF THE ARCHITECT
IN THE DESIGN PROCESS.
SHIFTING STRATEGIES SHOULD
BE "FRONT-AND-CENTER" ON
THE RADAR SCREENS OF ALL
DESIGN FIRMS HOPING TO
SUCCEED. CONTROL OF ARCHITECTURAL DESIGN WILL GO TO
THAT ENTITY MOST CAPABLE
AND WILLING TO ASSUME
RESPONSIBILITY.

boomers there was a corresponding over supply of architects. Some will argue that this has been the condition for quite some time and has contributed to the relatively low wages of architects and the intense competition on recent projects—but if this has been a condition of long standing, why has the percentage of construction put in place by architects been declining? An overabundance should have resulted in increased market share not less. Why haven’t more architects been appearing in peripheral roles such as construction, government (regulators), building material and equipment design, etc.?

When we look back over the last 30 year history of the role of the architect in the building industry we see the considerable decline of the architectural press (which I think more telling than others), and the current client demands for increased speed, fewer errors and greater accountability. We can start to get the idea that the coming abundant supply may not be the answer to the profession’s ills.

PRACTICE TRENDS
"An Expanding Practice in a Shrinking Universe" was the subject off a recent symposium by the AIA California Council.

- The “Expanding Universe” acknowledged that filling the diverse needs of tomorrow’s more sophisticated and demanding clients will require a more collaborative and interdisciplinary team.

- The “Shrinking Universe” considers that the client sees the architect as lacking in responsibility and accountability and wants to explore alternate solutions.

  The result?

- Architecture as a profession is being marginalized by outside businesses offering greater, more comprehensive accountability.

Maintaining the profession’s status quo will further marginalize the role of the architect in the design process. Shifting strategies should be “front-and-center” on the radar screens of all design firms hoping to succeed. Control of architectural design will go to that entity most capable and willing to assume responsibility.

Construction Managers and general contractors are frequently selling themselves as the technical and constructability watchdog over the professional providing “checks & balances”. Yet many owners are deciding they don’t want “checks & balances” and the adversarial relationship that is implied (and frequently occurs). They would rather have a single, focused team with singular—not divided—responsibilities all working in the same direction for the same purposes and in the best interests of the client.

The major shift in responsibility that occurs from the Architect to the Contractor at the end of Construction Documents is one of the dumbest traditions in the construction industry. Any thoughtful project manager from outside our industry would readily point out that this is probably the worst possible time in a project to have a major responsibility shift.

We have a major practice challenge! We must develop methods of assuming major accountability and responsibilities for our clients without destroying ourselves financially.

This seems to be a strong recommendation for Design-Build or some variation on that theme. While the Architect is the more appropriate discipline to manage the entire Design-Build process, for some elusive reasons this rarely seems to happen. And in fact, Design-Build rarely happens. The DBIA (Design Build Institute of America) will cite that over 20% of building construction contracts are Design-Build, which may be true. It doesn’t mean, however, the process is true design-build. True Design-Build would be a process performed by a D-B team that has done 20 or 30 buildings together and have developed a true team relationship that brings
a distinct efficiency advantage to the client. Since that rarely happens, there is very little true D-B.

Although a few firms around the country can legitimately claim to be a Design-Build firm, many contracts are the result of a one-time matter of convenience between an architect and a contractor with few, if any, prior D-B relationships, particularly with the same team. The client is paying for a learning experience, not design/construction efficiency.

One of the reasons for the lack of true Design-Build in the U.S. is the reluctance of a major architectural firm to develop an exclusive relationship over time with a major construction company to provide numerous D-B opportunities and an even greater reluctance for a major construction company to tie itself exclusively to one architectural firm over time. Does anyone see a significant Long Range Strategic Plan here? If not, let’s add some supporting information from trends we see:

- The distinction between architects, engineers and contractors in the minds of the owners will diminish in the years ahead. Design-Bid-Build will also diminish, but will not die.

- BIM (Building Information Modeling) will revolutionize design and production processes. As a tool to enable multidisciplinary participation, it will allow many separate studies or analysis to be accomplished on the same model and it will allow dynamic energy analysis. It has obvious extensions into shop-drawings, construction detailing, bidding documents and procurement documents for contracting. It should give the architect enormous power and stature in the construction process, but will anyone recognize this?

- The firm of the future will not be a production shop. This is important because the production of contract documents has been the primary revenue source of firms in the past. We are transitioning from a production shop to a consultancy. Our clients don’t want assistance in determining how to build buildings, but in what buildings to build. This proves a level of experience that isn’t easy to achieve in normal office roles. How do we get these advanced levels of consultant talent?

- Here we will reflect back to the previous discussions on off shoring. Those jobs least susceptible to off-shoring are those of place. The local barbers, the UPS delivermen, and the local roofer have no danger of having their jobs offshore. The work must be done in-situ. As we increase collaboration, and develop the use of BIM systems, we realize they are more systems of place than those of our previous practice. We could (and have in the past) offshore the detachable tasks of CDs. With BIM we are reducing those detachable tasks for which off shoring is appropriate.

There is much more we could discuss (and will in future articles) about the future of the profession, but the dénouement of this article is:

- The future building construction market (domestic and global) is going to be stronger than at any time in history.

- We are facing a shortfall of architectural skills of unprecedented proportions.

- The Profession (and firms) must change to survive.

- The architect should build buildings.

BIBLIOGRAPHY:
U.S. Census Bureau
U.S. Department of Labor
National Architectural Accreditation Board
AIArchitect, Jan. 13, 2006
"Business 2.0", Sept. 2003
"Technology Review", MIT Press, numerous issues
"Design Intelligence" Fifteen New Directions Sweeping the Design Profession, Jan. 2006
"Kiplinger Forecasts" electronic newsletter Reed Construction Forecasts
"Architecture and Design Almanac" 2006

1 James P. Cramer – Greenway Consulting
NEW TOWNS FOR OLD

BOOK REVIEW BY ROB ROBINSON, AIA
URBAN DESIGN ASSOCIATES

The first thing that strikes you after a few pages of Nolen’s original text is the underlying optimism about progress, technology, automobiles, society and civic responsibility that colors the time period of the work we are familiar with. It is the chapter of new urbanism that we don’t experience all that often today. New Towns for Old is partially a republication of Nolen’s last book published in 1927 and a new introduction written by Charles D. Warren that gives us a bit more context about Nolen. The original publication is a series of project descriptions that cover a number of built projects that came out of Nolen’s planning firm in Cambridge, Massachusetts between 1905 and 1937. While the project descriptions are a bit difficult to dive into, the project types and the focus of the planning work should be interesting to urbanists working the “middle ground” of new towns, new neighborhoods and small town expansion.

Nolen’s legacy picks up on European Garden City planning principles and North American principles established largely by Olmsted with places like Forest Hills in Long Island, Roland Park in Baltimore; Riverside, Illinois and Palos Verdes Estates in California. These plans come out of a landscape architect’s eye for the picturesque and desire for a balance between natural systems and forms and built environments. Nolen’s education as a landscape architect in the Harvard program followed undergraduate studies at the Wharton School at the University of Pennsylvania. At Harvard, Olmsted, Jr. was one of his principal teachers. The influence of the body of planning work from Olmsted Senior’s office, produced from the unique perspective of the landscape architect, found purchase with Nolen. The design of new urban fabric was more interesting to Nolen than the conventional practice of landscape architecture that focused largely on garden and park design. Nolen was driven and began working on commissions long before graduating. He graduated in 1907 and by 1910 had already worked on planning commissions for San Diego, Roanoke, Va; Charlotte, NC and just started on Madison, Wisconsin. The emphasis on city planning and development mirrored the Olmsted practice model.
The time period represented in the book is interesting because of the sponsorship and commissions of complete places rather than bits and pieces of things. There is some of that in the book, but mostly the larger plans of new settlements or precincts reads as a stronger part of the practice. Nolen was determined to change the conventional model of the surveyor's imposed grid over any landscape as the generator of American towns and cities, to a more "fitted" pattern of streets, blocks and public spaces. This reading of landscape form and play against natural forms was part of the legacy and context for Nolen's work. When you study his plans, you are struck by the clarity of the most urban work. Interesting block forms with sufficient, straight ahead block and street fabric within which Nolen inserts geometric twists and turns to create interest and special places. Often the natural preservation of topography or preserved streams and environmental resource areas provide a foil for the regularized geometry. The plans are a study of Nolen's art and method. We can learn great lessons from these well resolved plans as both two dimensional and three dimensional designs.

This work was influenced heavily by the English Garden City movement practiced and promoted by folks like Raymond Unwin. New towns like Letchworth and Welwyn Garden City are reflected in many of Nolen's designs and writings. He toured Europe and became interested in the German approach to city planning which was widely reference as a model in the north east planning schools. There is also a heavy dose of responsibility to make better places for the working class and create an alternative from the overcrowding and often dismal condition of housing in the industrial cities of both Europe and the United States. The thinking extended to social responsibility as a broad topic of the day. The early 1900s became an era for the company town as well as the first public housing efforts for workers in the shipyards during the war effort. The early seeds of ideas about uniform or segregated economic neighborhoods appears in this body of work. While there is an interesting intellectual and patriotic mindset about the quality of life and purpose that directs the planning concepts, there is also a glimpse into the cultural bias and perception of both racial and ethnic incompatibility. Nolen wonders aloud how to control immigrant residents who can't properly maintain or live in the outdoor spaces created by the community plans. The early arrival of strict design guidelines and the predecessor to homeowner associations and regulations pop up in many of the project discussions.

For practicing urban designers and planners, the background information provided by Warren is the most valuable content in this publication. The project descriptions are difficult to digest as more than a bit of context for the commissions. I find that the art of the planning and sensitivity to creating great addresses with public infrastructure is a fascinating hallmark of Nolen's approach. The landscape architect's attention to the subtle changes in setbacks, street and park character, approach and orientation can be seen in the built work. He was also interested in the same principles embraced by practitioners of urbanism today. Connectivity, walkable neighborhoods, picturesque communities, preservation and enhancement of natural resources, streets for people, defined rural and urban edges - the elements are fundamental to the way we need to think about expanding towns and building new towns. The idea of sustainable design methodology is present in this work, and was an intellectual underpinning in the early 1900s. Reading Albert Shaw's original introduction is not far removed from the discussion we have today about social equity, appropiate balance between nature and the built environment, corporate and civic responsibility and regional sense of place. All issues in the forefront of urban design then and now.
Michael Gartner: "You Can't Do It Alone"

Michael Gartner has been a lifelong journalist. He has been Page One Editor of The Wall Street Journal, editor and president of The Des Moines Register, editor of the Louisville Courier-Journal, general news executive of Gannett Co. and USA Today, and president of NBC News.

In 1997, he won the Pulitzer Prize for his common sense editorials about issues deeply affecting the lives of people in his community written for The Tribune of Ames, Iowa, where he then was the editor and co-owner.

He also has won most other newspaper awards for editorial writing. He is the author of "Outrage, Passion & Uncommon Sense," a book of American history as told through newspaper editorials of different eras.

In early 2000, Iowa Gov. Tom Vilsack named Gartner chairman of Vision Iowa, a board the Legislature established to oversee grants to Iowa's tourist attractions and to disburse up to $300 million to help Iowa communities build major recreational or cultural facilities. In 2005, Gov. Vilsack appointed Gartner to the Iowa Board of Regents, a group of nine citizen volunteers committed to improving quality of life in Iowa by governing Iowa's public universities and special schools and providing policymaking, coordination, and oversight of these institutions and affiliated centers. Gartner was subsequently elected president of that board.

In addition, Gartner has been a regular columnist for the op-ed page of The Wall Street Journal and the editorial page of USA Today, a commentator for Iowa Public Radio and the Voice of America, and the ombudsman for Brill's Content magazine. Gartner is a lawyer as well as a newspaperman and baseball executive, and he has written extensively on First Amendment issues. He is a member of the bar of New York and of Iowa. 1 AIA/CES LU
BUILD PITTSBURGH: Part 2

EDUCATION SESSIONS • EARN AIA/CES LEARNING UNITS!
THURSDAY, APRIL 27 AT THE KOPPERS BUILDING

TRACK 1
Regional Issues

SESSION 1 8:30 –10:00 a.m.
Lessons Learned from Chattanooga
Mary Navarro, Heinz Endowments
The Civic Design Coalition took regional leaders on an
information and ideas exchange to Chattanooga in
October 2005. This seminar will focus on how
Chattanooga transformed their city in part through the
power of design and how these lessons can be
applied to the Pittsburgh region. 1.5 AIA/CES LUs

SESSION 2 10:30 a.m. — noon
Case Study: Saving the Meason House
Panel Discussion: Bill Bolger, National Park
Service; Harley Trice, Reed Smith, LLP; Arthur
Zeigler, Pittsburgh History and Landmarks
Foundation
Moderator: James C. Radock, AIA, RSSC
Architecture
Numerous individuals and organizations have
struggled for decades to save Fayette County’s
historic Meason House. Built in 1802 by industrialist
Isaac Meason, this hand-cut stone house is
considered to be one of the finest Palladian
mansions in America. This panel discussion will
cover the background and history of the house and
each of the numerous efforts to preserve this
historic home and its current site. What can
preservationists, architects, urban planners,
sustainable developers and others learn from this
process? 1.5 AIA/CES LUs

SESSION 3 1:00 –2:30 p.m.
Award Winning Architecture in Pittsburgh
Thomas J. Briney, AIA, Astorino
AIA Pittsburgh Honor Award and Award of
Excellence recipients from 2005 will be presented
by their firms. Thomas J. Briney, AIA will relay jury
comments and provide insights into what makes
projects and presentations award winners.
1.5 AIA/CES LUs

SESSION 4 3:00 –4:30 p.m.
Gambling on Design in Pittsburgh
Panel Discussion: Members of the Pittsburgh
Gaming Task Force
This panel will discuss the logic behind the design
guidelines and the accompanying text changes to the
zoning ordinance. Come hear their recommendations for which proposal makes the most sense.
1.5 AIA/CES LUs

TRACK 2
Practice

SESSION 1 8:30 –10:00 a.m.
Performance Based Evaluations
Janis Shaw, Strategic Energy, L L.C.
Build insight, empowerment and motivation into your
Performance Evaluation process. In this seminar, you
will learn ways to institute a Performance Based
Evaluation Program that will focus your team
members and their energy on outcomes that mutually
matter. 1.5 AIA/CES LUs

SESSION 2 10:30 a.m. — noon
Risk Management for Design Professionals
John P. Sieminski, Esq., Burns, White & Hickton, LLC
Chad A. Wissinger, Esq., Burns, White & Hickton, LLC
Planning, designing and administering construction
projects is a complex process fraught with liability
risks in every stage. Attendees will learn about the
types of project developments and situations that
have created issues and led to litigation for their
peers through a mix of real-life and hypothetical
scenarios that will provide guidance on future claims
avoidance. 1.5 AIA/CES LUs (HSW)

SESSION 3 1:00 –2:30 p.m.
Nonstandard Owner-Architect Agreements
Michael J. Cremonese, Esq., Burns, White & Hickton
Craig Wisotzki, Accordia Northeast
With increasing frequency, owners are proposing
contractual clauses that range from the problematic
to the uninsurable. Attendees will learn about the
sometimes subtle and sometimes dramatic
contractual forms and clauses that may impact upon
the standard of care applicable to providers of design
services or present additional liability risks.
1.5 AIA/CES LUs (HSW)

SESSION 4 3:00 –4:30 p.m.
Mergers, Acquisitions and Other Ownership
Transitions
John P. Sieminski, Esq., Burns, White & Hickton, LLC
Business organizations evolve and design profession-
als are no exception. Issues involving the form in
which you do business range from initial form of
organization, issues pertaining to merging with
another firm, being acquired by, or acquiring, another
firm, and succession planning. Attendees will hear a
primer on the issues associated with these
organizational changes and learn how to anticipate,
avoid, and manage troublesome areas.
1.5 AIA/CES LUs (HSW)

TRACK 3
Technology

SESSION 1 8:30 –10:00 a.m.
Small Duct Central Heating and Air Conditioning
Ted Brown, Unico
Discover the benefits of Small Duct High Velocity as a
space saving, energy efficient heating and cooling
system. Understand the differences between these
systems and traditional alternatives and how they
relate to historic properties. Learn how Small Duct
High Velocity heating and cooling systems allow
architects freedom of design. 1.5 AIA/CES LUs (HSW)

SESSION 2 10:30 a.m. — noon
The Advancement of Cavity Wall Design and The
Rain Screen Principle
Brian Trimble, Brick Industry Association
This presentation will cover some advanced concepts
regarding masonry cavity walls. You thought you knew
everything there is to know about cavity walls? Come
and learn some newer recommendations from the
Brick Industry Association. Topics include insulation in
cavity walls, flashing around columns, keeping air
spaces clear and functioning, and what I need to know
about weather/vapor retarders/barriers in brick
walls. 1.5 AIA/CES LUs (HSW)

SESSION 3 1:00 –2:30 p.m.
Masonry: New Technologies & Equipment
David Sosinski, International Masonry Institute
This presentation will provide an overview of new
materials, methods and equipment that are changing
the way masonry construction is designed and
delivered. 1.5 AIA/CES LUs (HSW)

SESSION 4 3:00 –4:30 p.m.
Changing Building Technologies and the
Importance of Air Barrier
Stanley Kalb, AIA, Icynene
This presentation will be based on an easy to follow
condensation of the research in building science over
the last ten years that has now begun to influence our
ideas about insulation thickness in walls, attics and
crawlspace. We will explore the background of some
of the changes that are now surfacing in amendments
to the ICC codes. Using practical examples, the
importance of an air barrier and new understanding of
the mechanism of ice damming will be introduced.
1.5 AIA/CES LUs (HSW)

EARN UP TO 6 AIA/CES LEARNING UNITS
Contact AIA Pittsburgh for registration information: 412-471-9548 • www.aiapgh.org
WTW Architects have been chosen to design a new student union (below) for the University of Nevada, Reno, incorporating green building principles to uphold the university's environmental policy.

JSA Architecture Planning Engineering Interior Design has been selected by Pinpoint Real Estate Company, a downtown real estate development company, to design a new 12,600 sf retail strip center (below) at the new Pittsburgh Mills Mall in Tarentum, PA. They have also been selected by the same company to design a new 18,000 sf retail strip center (below) as an outlet development adjacent to Center Commons, located near Beaver Valley Mall in Center Township, Beaver County PA.

Massaro Corporation recently completed the new $7.3 million Animal Friends' Caryl Gates Gluck Resource Center (below). This 30,000 sf facility, which is located in the North Hills, includes a state-of-the-art medical suite, innovative animal housing, an education wing, play areas, and nearly a mile of walking trails.

Business Briefs

Sheri Spoharski of The Design Alliance Architects has recently been promoted to shareholder, marking ten years with the firm.

Michael Mascaro, Prof. Affiliate, manager of business development at Mascaro Construction Company, LP, was recently appointed to the position of chairman of the Marketing Committee for the Master Builders' Association (MBA).
PSI announces the addition of Christine Cilli as a business development manager in their Pittsburgh office. Ms. Cilli comes to PSI with 10+ years experience in marketing and business development.

General Industries has named Brian J. Merdian to the position of vice president of sales and operations. Mr. Merdian has served as project manager with General Industries since 1998 with more than 10 years of managing complex construction projects in Pennsylvania and West Virginia.

Horizon Properties recently announced the hiring of Mark Koontz who will lead Horizon’s ongoing land and site development. Mr. Koontz is a registered professional engineer with more than ten years of experience.

Kudos

Perkins Eastman was honored by the National Association of Home Builders (NAHB) 50+ Housing Council for three recent projects rated among the “best of the best” in the senior housing industry. Those projects are The Tradition of the Palm Beaches, West Palm Beach, FL, Hatsutomi Royal Care Garden, Japan, and Grand Rapids Dominican Sisters Marywood Center, MI.

Alan J. Cuteri, AIA, principal of Strada, recently received a Certificate of Completion from the Society of College and University Planners (SCUP) Planning Institute. Completing all three institute sessions over the past two years, AI is only one of 28 professionals across the country to earn this certificate.

Jessica Howell, Assoc. AIA of RSCC Architecture fared well at the MBA/AIA Pittsburgh’s Young Architects Forum Carpenter’s Training Program, placing first in a speed competition and doing well in the drawing category.

Seven individuals were honored recently for winning the John P. Daley Safety/Craftsmanship Award at the Ironworker Employers Association of Western PA Annual Dinner. The winners: Jason Trypus, Scott Marshall, Donald Zahorchak, Havey Meyer, Bill Kesneck, Mark Beatty, and Dave Schadel.
<table>
<thead>
<tr>
<th>CONTRACTORS' DIRECTORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A LISTING OF AREA CONTRACTORS AND THEIR PROFESSIONAL SERVICES. To include your firm in this directory, call AIA Pittsburgh at 412-471-9548.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ALLEGHENY CONSTRUCTION GROUP, INC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>450 Washington Avenue, PO Box 425</td>
</tr>
<tr>
<td>Bridgeville, PA 15017</td>
</tr>
<tr>
<td>PHONE: 412-221-0500 FAX: 412-221-0188</td>
</tr>
<tr>
<td>CONTACT: Laura S. Deklewa</td>
</tr>
<tr>
<td>Commercial / Construction Management Exterior / General / Industrial / Interior Renovations / Pre-engineered Metal Buildings / Certified DBE/WBE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BRIDGES'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1300 Brighton Road, Pittsburgh, PA 15233</td>
</tr>
<tr>
<td>PHONE: 321-5400 FAX: 321-9823</td>
</tr>
<tr>
<td>CONTACT: Paul R. Bridges/Gus Marquart</td>
</tr>
<tr>
<td>WEB SITE: <a href="http://www.BRIDGESPT.com">www.BRIDGESPT.com</a></td>
</tr>
<tr>
<td>Commercial / Construction Management Exterior / General / Industrial / Interior Renovations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BURCHICK CONSTRUCTION CO., INC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 Lowries Run Road, Pittsburgh, PA 15237</td>
</tr>
<tr>
<td>PHONE: 369-5700 FAX: 369-9891</td>
</tr>
<tr>
<td>CONTACT: Joseph E. Burchick</td>
</tr>
<tr>
<td>E-MAIL: <a href="mailto:burchick@burchick.com">burchick@burchick.com</a></td>
</tr>
<tr>
<td>WEB SITE: <a href="http://www.burchick.com">www.burchick.com</a></td>
</tr>
<tr>
<td>Commercial / Construction Management Exterior / General / Industrial / Interior Renovations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAVCON CONSTRUCTION COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>211 Huff Avenue, Suite B</td>
</tr>
<tr>
<td>Greensburg, PA 15601</td>
</tr>
<tr>
<td>PHONE: 724-834-5220 FAX: 724-834-7533</td>
</tr>
<tr>
<td>CONTACT: Michael C. Phillips</td>
</tr>
<tr>
<td>E-MAIL: <a href="mailto:mphilpa@cavccon.com">mphilpa@cavccon.com</a></td>
</tr>
<tr>
<td>WEB SITE: <a href="http://www.cavcon.com">www.cavcon.com</a></td>
</tr>
<tr>
<td>Commercial / Construction Management Exterior / General / Industrial / Design-Build / Metal Buildings / Project Management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JOHN DEKLEWA &amp; SONS, INC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1273 Washington Pike, P.O. Box 156</td>
</tr>
<tr>
<td>Bridgeville, PA 15017-0158</td>
</tr>
<tr>
<td>PHONE: 412-257-3000 FAX: 412-257-4486</td>
</tr>
<tr>
<td>CONTACT: David Deklewa</td>
</tr>
<tr>
<td>WEB SITE: <a href="http://www.deklewa.com">www.deklewa.com</a></td>
</tr>
<tr>
<td>General construction / Construction Management / Design-Build / Development Services</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DYNAMIC BUILDING CORPORATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>51 Pennwood Place, Suite 200</td>
</tr>
<tr>
<td>Warrington, PA 15086</td>
</tr>
<tr>
<td>PHONE: 724-772-9208 FAX: 724-772-6770</td>
</tr>
<tr>
<td>CONTACT: John Nolan</td>
</tr>
<tr>
<td>E-MAIL: <a href="mailto:jnolan@dynamicbuilding.com">jnolan@dynamicbuilding.com</a></td>
</tr>
<tr>
<td>WEB SITE: <a href="http://www.dynamicbuilding.com">www.dynamicbuilding.com</a></td>
</tr>
<tr>
<td>Commercial / Construction Management General / Industrial / Interior Renovations Multi-Family / Design-Build</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GENERAL INDUSTRIES'</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 Arentzen Blvd., Chartiers, PA 15202</td>
</tr>
<tr>
<td>PHONE: (724) 483-1800 FAX: (724) 483-0990</td>
</tr>
<tr>
<td>CONTACT: Donald L. <a href="mailto:lvi@genindustries.com">lvi@genindustries.com</a></td>
</tr>
<tr>
<td>WEB SITE: <a href="http://www.genindustries.com">www.genindustries.com</a></td>
</tr>
<tr>
<td>Commercial / Design-Build / Construction Management / Industrial / Pre-Engineered Metal Buildings / General Construction / Interior &amp; Exterior Renovations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HARCHUCK CONSTRUCTION CO., INC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4203 Route 66, Building II, Suite 222</td>
</tr>
<tr>
<td>Apollo PA 15613</td>
</tr>
<tr>
<td>PHONE: (724) 727-3700 FAX: (724) 727-2800</td>
</tr>
<tr>
<td>CONTACT: David A. Harchuck</td>
</tr>
<tr>
<td>WEB SITE: <a href="http://www.harchuck.com">www.harchuck.com</a></td>
</tr>
<tr>
<td>Commercial / Construction Management Exterior / General / Industrial / Interior Renovations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A. RICHARD KACIN, INC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3875 Old William Penn Hwy.</td>
</tr>
<tr>
<td>Munynsville, PA 15668</td>
</tr>
<tr>
<td>PHONE: 724-327-6894 FAX: 724-733-5993</td>
</tr>
<tr>
<td>CONTACT: A. Richard Kacin, Pres.</td>
</tr>
<tr>
<td>Commercial / Construction Management General / Industrial / Residential</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KUSEVECIC CONTRACTING, INC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Walnut Street, Pittsburgh, PA 15223</td>
</tr>
<tr>
<td>PHONE: 412-782-2112 FAX: 412-782-0271</td>
</tr>
<tr>
<td>CONTACT: George Kusevecic, Jr.</td>
</tr>
<tr>
<td>E-MAIL: <a href="mailto:gkjr@kusevecic.com">gkjr@kusevecic.com</a></td>
</tr>
<tr>
<td>WEB SITE: <a href="http://www.kusevecic.com">www.kusevecic.com</a></td>
</tr>
<tr>
<td>Commercial / General / Renovations Education / Design-Build</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MARCO CONTRACTORS, INC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Commonwealth Drive, P.O. Box 605</td>
</tr>
<tr>
<td>Warrendale, PA 15086</td>
</tr>
<tr>
<td>PHONE: 724-741-0030 X 35</td>
</tr>
<tr>
<td>FAX: 724-741-9335</td>
</tr>
<tr>
<td>CONTACT: Amy Fonzi</td>
</tr>
<tr>
<td>E-MAIL: <a href="mailto:alfonz@marcoccontractors.com">alfonz@marcoccontractors.com</a></td>
</tr>
<tr>
<td>WEB SITE: <a href="http://www.marcoccontractors.com">www.marcoccontractors.com</a></td>
</tr>
<tr>
<td>Commercial / Construction Management Interior / Renovation / Restaurants / Retail</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MISTICK CONSTRUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1300 Brighton Road, Pittsburgh, PA 15233</td>
</tr>
<tr>
<td>PHONE: 412-828-5500 FAX: 412-828-6488</td>
</tr>
<tr>
<td>CONTACT: Anthony Marinetti</td>
</tr>
<tr>
<td>E-MAIL: <a href="mailto:a.marinetti@marcoccontractors.com">a.marinetti@marcoccontractors.com</a></td>
</tr>
<tr>
<td>WEB SITE: <a href="http://www.marcocontractors.com">www.marcocontractors.com</a></td>
</tr>
<tr>
<td>Commercial / Construction Management General / Industrial / Interior Pre-engineered metal buildings</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NELLO CONSTRUCTION COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Houston Square, Suite 200</td>
</tr>
<tr>
<td>Canonsburg, PA 15317</td>
</tr>
<tr>
<td>PHONE: 724-746-0800 FAX: 724-746-1966</td>
</tr>
<tr>
<td>CONTACT: Janet Torriero</td>
</tr>
<tr>
<td>WEB SITE: <a href="http://www.nello.net">www.nello.net</a></td>
</tr>
<tr>
<td>Commercial / Construction Management Exterior / General / Industrial / Interior Renovations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOTA CONSTRUCTION SERVICES, INC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 Union Avenue, Pittsburgh, PA 15202</td>
</tr>
<tr>
<td>PHONE: 412-766-4630 FAX: 412-766-4634</td>
</tr>
<tr>
<td>CONTACT: Ernie Sota</td>
</tr>
<tr>
<td>E-MAIL: <a href="mailto:esota@southaconda.com">esota@southaconda.com</a></td>
</tr>
<tr>
<td>WEB SITE: <a href="http://www.sotaconstruction.com">www.sotaconstruction.com</a></td>
</tr>
<tr>
<td>Commercial / Construction Management Exterior / General / Industrial / Interior Renovations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TURNER CONSTRUCTION COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two PNC Plaza, 620 Liberty Ave.</td>
</tr>
<tr>
<td>27th Floor, Pittsburgh, PA 15222-2719</td>
</tr>
<tr>
<td>PHONE: 412-255-5400 FAX: 412-255-0249</td>
</tr>
<tr>
<td>CONTACT: Joseph Milicia, Jr.</td>
</tr>
<tr>
<td>Commercial / Construction Management General / Industrial / Interior / Renovations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VOLPATT CONSTRUCTION CORPORATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Castleview Road, Pittsburgh, PA 15234</td>
</tr>
<tr>
<td>PHONE: 412-942-0200 FAX: 412-942-0280</td>
</tr>
<tr>
<td>CONTACT: Raymond A. Volpatt</td>
</tr>
<tr>
<td>E-MAIL: <a href="mailto:ray@Volpatt.com">ray@Volpatt.com</a></td>
</tr>
<tr>
<td>WEB SITE: <a href="http://www.volv.com">www.volv.com</a></td>
</tr>
<tr>
<td>Commercial / Construction Management Exterior / General / Industrial / Interior Renovations</td>
</tr>
</tbody>
</table>
New Member

AIA Pittsburgh extends a warm welcome to Mandar H. Kulkarni of Foreman Architects, Engineers of Zelienople. Mandar graduated from the Sir J.J. College of Architecture in Mumbai, India, and then earned his Master’s in Architecture at Penn State University.

His professional goal is to learn as much as he can and benefit society. Interests include traveling, photography, sketching, painting and topics related to green design and sustainable architecture.

To contact him, email: mandar.kulkani@foremangroup.com

UPCOMING ISSUES

- The Bridges of Pittsburgh, book review
- Julie Wagner, Assoc. AIA on Habitat Build
- A Juror’s Perspective, by Roxanne Sherbeck, AIA

Construction Legislative Issues Monitored

The legislative issues important to the entire construction industry can now be delivered to your inbox.

On behalf of the construction industry, the MBA’s Legislative Committee created The Legislative News, a monthly newsletter devoted to informing our industry on the primary local, state and federal legislation crucial to our industry, while at the same time reflecting the interests of Western Pennsylvania.

To signup to receive The Legislative News, contact the MBA at 412-922-3912 or jobrien@mbawpa.org.
The Right Materials

- Fire Resistant
- Low Maintenance
- Durable & Safe
- Aesthetically Valuable
- Design Flexible
- Superior Longevity
- Cost Effective
- Fast Construction Time

The Right Way

Constructed by Experienced Union Craftworkers & Contractors

International Masonry Institute

We Build For Life

For answers to your masonry questions, call 1-800-IMI-0988.

Add a complete staff of local fleet experts without ever hiring a soul.

From acquisition and insurance to maintenance and disposal, only Enterprise will give you a local Account Team to work directly with you, in person, and take responsibility for your entire fleet. With more locations nationwide than any other company, only your Enterprise Team has access to a complete staff of local fleet management experts. We have over 40 years of experience and as a corporation, currently manage over 500,000 vehicles, so you can rest assured Enterprise knows all the ins and outs of fleet management. Call us today and let Enterprise introduce you to the best fleet management staff you never hired.

Call 1 888-353-3875 toll-free or visit our website at www.efleets.com.
LIST YOUR SERVICES IN THE GENERAL SERVICES DIRECTORY

With the General Services Directory, you can list your business by specialty in Columns. List your firm under the heading of your choice.

- Security Systems
- CADD Services
- Blue Prints
- Lumbar
- HVAC
- Masonry
- Electrical Service
- Data
- Design
- Flooring
- Roofing
- Carpeting
- Signage
- Tile
- Windows and Doors
- Plumbing
- Brick Waterproofing
- Others
- Interior Design

Call AIA Pittsburgh at 412-471-9548 for details.
AIA Contract Documents were created from a consensus of contractors, developers, lawyers, and architects. They have been written expressly to balance the interests of all parties. They cover all phases of a project from beginning to end. And, they have been clarified by 115 years of legal precedent. Courts have recognized their legal legitimacy time after time. Which is why no other standard contract document system is as effective at keeping projects running smoothly and finishing successfully. They're available in paper or electronic form, with flexible pricing. Plus, our new software release features full Microsoft® Word functionality and improved navigational aids, as well as formatting and collaboration options. To learn more or to download the software, go to www.aia.org or call 1-800-365-2724.

When AIA Contract Documents are in force, everyone's interests are in balance.

AIA Contract Documents


© Copyright 2003, The American Institute of Architects. Microsoft® and Microsoft® Word are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
Imagine your top client driving up to their new General Industries-built corporate headquarters; ample parking, immaculate landscaping, inviting entryway and spacious floor plans. All designed by you to best suit the changing needs of their growing business.

As the region's leading commercial contractor, we welcome the opportunity to discuss our strengths in providing a facilities-construction solution that is always delivered on time, within budget and of course, guaranteed to impress your toughest clients.

GENERAL INDUSTRIES
GENERAL CONTRACTORS

CAN WE BUILD AN AWARD-WINNER FOR YOU?

FIND OUT MORE ABOUT BUILDING WITH GENERAL INDUSTRIES.
CALL BRIAN MERDIAN OR MARK CASKEY AT (724) 483-1600
15 ARENTZEN BOULEVARD ▶ CHARLE ROI, PA 15022 ▶ www.genindustries.com