The start of a new year often makes people wonder what lies ahead. When it comes to the global economy no one can ever forecast what will definitely happen—it's like the experiment where monkeys and economists with master's degrees tried to pick winning stocks, and the monkeys did at least as well as the seasoned analysts.

But we have to rely on industry experts to give us some kind of basis, some kind of roadmap to help us plan ahead. Therefore, in this article we present information presented at CMD's 6th annual North American Construction Forecast conference and from F.W. Dodge's Outlook 2002 Executive Conference.

The CMD conference was held at the National Press Club in Washington, D.C., on Oct. 16. The event was attended by more than 300 construction industry leaders. CMD is a worldwide provider of construction information products and services designed to advance the businesses of its customers with timely, accurate and actionable project, product and cost data. CMD collects, adds value to and distributes construction industry information through print and online references and resources for architects, engineers, contractors, manufacturers and other professionals in the construction industry. Founded in 1975, CMD is an active participant in the construction industry, partnering with its customers and industry associations to meet customer information needs. CMD is a division of Cahners Business Information, a member of the Reed Elsevier plc group.

That outlook presented at F.W. Dodge's Outlook 2002 Executive Conference was given by Robert Murray, vice president of economic affairs for the Construction Information Group, a division of the McGraw-Hill Companies. That conference was held Oct. 30 at the Capital Hilton in Washington, D.C.

Murray is the author of the F.W. Dodge Construction Outlook and also coordinates the five-year industry forecast, the Construction Market Forecasting Service, which analyzes national and regional trends for building products.

F.W. Dodge, a division of The McGraw-Hill Companies, is the construction industry's project marketplace and a source of construction information since 1891. F.W. Dodge is part of the Construction Information Group that includes Sweet's, Engineering News-Record, Design-Build, Architectural Record and www.construction.com.

That said let's get down to business. Read on, and plan ahead for continued success in 2002.

**CMD Conference: North American Construction Activity Expected to Decline 6.3 Percent in 2002 but Is Predicted to Recover by 2003**


According to Bill Toal, chief economist for the Portland Cement Association, the U.S. construction industry can expect an overall decline of 6.3 percent in activity next year due to the economic downturn. Still, “by historical contrast, this would put construction spending back to slightly above 1998 levels, which were record levels of activity,” he said.

“We expect a 10 percent decline in private, nonresidential con-
struction spending [in 2002] after a 5.4 percent drop [in 2001],” Toal said. On the residential side, increased unemployment and stock market volatility will hit the consumer, causing home sales to decline by 8.5 percent [in 2002] after increasing by 1.2 percent [in 2001].

David Seiders, chief economist for the National Association of Home Builders, agreed that the residential market has been hurt and will continue to suffer in the immediate future. He pointed out that industry sales are now about the same as they were in the mid 1990s which is “not that bad ... baby talk when compared to the 1980s and early 1990s.”

Toal and Seiders said it won’t take long for the construction industry to recover. Toal predicts the construction industry overall will see a 4.2 percent increase by 2003 and Seiders forecasts recovery for residential markets to begin as early as the first quarter of 2002. Toal, Seiders and other construction industry analysts, as well as experts from Canada and Mexico, shared their outlook on the economic state of the nation and the construction industry.

U.S. Construction Outlook

Toal attributed the decline in construction activity in part to a “hole in the economy The economy was already weakening significantly before the events of Sept. 11.” Forecasts have been revised down further because of those events. For the overall economy, Toal revised his spring forecast of a 1.7 percent growth in economic activity down to 1 percent growth for 2001. He revised his overall economic growth rate predictions for 2002 to 1.8 percent, down from his prior forecast of 2.7 percent.

In the construction industry, the hardest hit segment will be nonresidential, which will see an overall decrease of 5.4 percent this year. Next year, that sector will decline by 10 percent, but it should begin recovering by the end of 2002 and experience a 3.5 percent increase in 2003.

“The weaker areas of nonresidential construction are hotels, industrial, office and retail,” Toal said. The technology sectors, which fell about 20 percent in growth in the first two quarters of 2001, will hold down the office markets. Office vacancies had been predicted to rise to about 10 percent by the end of 2001, but we may see a greater rise in vacancies going into 2002.

The weakening in consumer confidence and increase in unemployment have contributed to declines in residential building. “Along with expected drops in consumer spending, home sales will most likely fall,” Toal said. As a result, residential construction will decline by 8.5 percent next year after finishing this year with a 1.2 percent increase. The sector should recover sufficiently by 2003 to see a 5.8 percent growth rate. Housing starts will be at about 1.6 million for 2001 following 1.93 million starts in 2000. Next year, the residential markets will have about 1.485 million housing starts.

Residential Construction Outlook

Seiders said NAHB adjusted its housing market index following the Sept. 11 attacks. About 10 days after the attacks, housing production fell by about 5 percent, he said. In a supplemental survey of homebuilders, 56 percent of respondents said new home sales had declined even further in the wake of the attacks. Figures released a few hours after Seiders’ speech showed the NAHB monthly index dropped 8 points from 56 to 48.

By the fall of 2000 the U.S. economic slowdown was in process, but as Seiders pointed out, it began with the Federal Reserve tightening monetary policy to purposely slow down a rapidly growing economy in late 1999 and early 2000. In 1999, Seiders had predicted the home building market would bottom out by mid 2001. In reality energy prices, the rapid retreat of the stock market, the fall of the technology sector and other factors made the rest of 2000 and much of 2001 a darker picture than originally envisioned; the situation was exacerbated by the terrorist attacks.

The government has stepped in to provide stimuli that should keep the slide in the home building market to a two-quarter event, Seiders said. In the meantime, there are positive trends occurring in the housing industry, he added. The upward trend in house sizes and numbers of amenities continues to rise, so housing values are on an upward trend, rising at about 5 percent per year. Also, the stock market woes mean “the perception of housing as an investment has strengthened,” Seiders said.

Retail/Industrial/Commercial Outlook

Glenn Mueller, professor, John Hopkins University Real Estate Institute and managing director, Real Estate Investment Strategy, Legg Mason, Inc., said there are two ways to look at how con-
struction is faring: the physical realities of demand and supply, and the financial realities of where capital is flowing and how it affects pricing. For example, demand and supply in the office sector has reached some equilibrium after several decades of dramatic swings in what was available and who wanted it, he said. Those levels will remain somewhat balanced though both sides will be lower for the next year or so, he said.

As far as financing for the different segments, the late 1980s saw a phase of false price appreciation from too much financing that peaked in the first quarter of 1996, then began to fluctuate widely through the 1990s as the public markets became more involved in financing real estate. Originally, Mueller predicted the physical cycle would be bottoming in 2001 then returning to a growth phase by late 2002, but the Sept. 11 events may push that into 2003 he said. Capital flows will be affected by fear. However, the lowest interest rates in this lifetime have created significant opportunities for investing in real estate, he added.

The commercial real estate market is weak in most regions of the country, a fact Ray Owens, research officer and senior economist for the Federal Reserve Bank in Richmond, Va., largely attributes to the anemic high technology sector. Relative to a decade ago, however, the commercial real estate sector appears sound, according to Owens.

The early 1990s found the commercial real estate sector in worse condition—the economy was in a recession just as the commercial real estate market was feeling the effects of a giant “overhang.” That overhang was caused by a spate of commercial building brought on by favorable depreciation write-offs created by the Economic Recovery Tax Act in 1981. The incentives were removed in the Tax Reform Act of 1986.

“The U.S. economy was dramatically overbuilt at the same time balance sheets were weakened,” Owens said. At the time, economists predicted it would take 10 to 15 years for the overhang to disappear, but by the mid-1990s vacancy rates fell below the 10 percent level for the first time since 1984.

In the late 1990s the growing technology work force needed more office space—about 20 million square feet were built between 1998 and 2000. Then “the year 2000 party came to an end,” Owens said. The stock market plunged, high technology companies started to go belly up and metropolitan areas again saw vacancy rates climb into the double digits.

What happened in Northern Virginia mirrors the rest of the country, according to Owens. Between 3.5 and 5.5 million square feet of space available for subleasing hit the market between 2000 and 2001, and the area recorded its first negative net absorption amount (500,000 square feet) in years during the first quarter of 2001. Average office vacancy rates reached 8 percent, which is lower than current vacancies in some areas such as the Mid-Southwest (16 percent), the Southeast (14 percent) and the Midwest (13 percent).

As a result of the Sept. 11 attacks, he said the Washington, D.C./Northern Virginia corridor has seen the strongest rebound as the Pentagon and other federal agencies aggressively lease office space available due to the dot-corn meltdown. Across the rest of the country, he said that the events appeared to have weakened the sector further but the weak period, “doesn’t appear to be terribly long.”

**Major Projects, Trends**

A panel of design, construction and engineering experts outlined the trends for the built environment based on recent and planned projects. Speed of delivery was the most common theme the industry panelists said was affecting the course of their current construction projects.

Edward Friedchts, FAIA, president and CEO of Gensler, mentioned several adaptive reuse projects of structures that
had not attained sufficient occupancy rates, such as turning a large plant into a mega-church.

Ray Messer, PE, president and chairman of the board for Walter P. Moore, said new business is coming in from many areas of the country that need to build up deteriorating infrastructure.

Pat Priest, CFO/managing director of The Beck Group, noted that early signs indicate changes in the basic design/engineer/estimate/construct process. Instead of acting in different “silos,” companies are forming teams among its experts to deliver projects quicker, with fewer prices and at less cost.

Harold Adams, FAIA, chairman of RTKL Associates, Inc., which just won a contract to work on replacing parts of the Pentagon, observed that while the rest of the world is seeing slowdowns, China is a hot market for his company. “We see China as a big part of our future,” he said.

RTKL, a worldwide planning, architecture, design and creative services organization, “is tightening up ship” in expectation of worsening conditions this year. “We’re going into [2002] somewhat scared,” Adams said. “We are still on budget, but are prepared to be flexible because of the uncertainties of the market.”

Stephen Fiskum of Hammel Green & Abrahamson, as well as several panelists, noted his company’s backlog is shrinking. “Our backlog is down 80 percent from a year ago,” he said. Competition is up as evidenced by a recent pre-proposal meeting where 70 firms showed up to get information. Fiskum says one of today’s greatest challenges is to keep expenses down and to “broaden the existing pond instead of looking for new places to invest in the marketplace. He expects to see staff turnover plummet this year.

Several panelists foresee that training and education, as well as technology and communication within firms will be vital in the coming years. “The most important factor right now is a sharing of expert knowledge across the firm,” Friedrichs said. To accomplish that, his firm is highly networked—“Employees have the ability to get in touch with someone with the knowledge they need, when they need it.” The firm also created a series of educational programs and has an active internship program with a local university.

Sustainability and green building are coming to the forefront, according to several panelists. Friedrichs said the events of...
Sept. 11 may accelerate that trend: “People are now saying let’s look at what’s important. If we’re going to build it, let’s do it right.”

**Outlook for Canada**

While the Canadian overall economy is following the U.S. in a downturn made worse by the events of Sept. 11, there are some bright spots ahead, according to Alex Carrick, chief economist, CandaData. One of those bright spots is the institutional building market where several segments of have hit seven-year building level highs.

The segments include hospitals, which climbed in 2001 to more than $4.4 billion in commitments to new projects for 2001; schools, which had more than $2.3 billion allocated for education-related projects in 2001; and senior homes, which hit a high of $1.35 million and hold promise for further growth.

Unfortunately, other sectors of the construction industry don’t look as bright.

The biggest drop in construction starts occurred in the industrial market, which fell almost 50 percent, from 23.5 million square feet in 2000 to 12 million square feet in 2001. A large part of the decrease was due to events in the automobile industry where a lo-year boom just ended and an anticipated three- or four-year decline began.

Other aspects of construction in Canada are tracking closely to what is occurring in the United States, and some of these areas will most likely feel the effects of decreased consumer and business confidence that was exacerbated by the terrorist attacks.

Commercial construction starts for 2001 are expected to be 45.5 million square feet, slightly less than the 47.9 million of 2000. Carrick predicts starts will continue falling to 42.5 million square feet in 2002, but rebound to 44.5 million by 2003. The probable effects on commercial construction of the terrorist attacks include more office building in the suburbs rather than downtown skyscrapers; lowered retail construction activity because of consumer anxiety; and negative impacts on the hotel industry. Conversely, the entertainment industry, including casinos and entertainment complexes, may flourish as people seek escape from their worries.

Carrick said residential housing starts for the year were fairly strong going into September rising to 162,000 average units per month from January to August as compared to 153,000 starts for the same period the year before. But, he predicted that the year will end at about 157,000 housing starts per month and that in 2002, starts will fall to an average of 153,000 units. That number is much closer to the year 2000 when starts were just over 150,000.

It is anticipated that decreasing immigration levels will contribute to falling housing needs and that Sept. 11 may lower broad-based demand for commercial and residential high-rise space. The residential side will be further impacted by empty nesters who choose to stay in their homes longer rather than go to high-rise retirement communities.

**Outlook for Mexico**

Mario Rodarte, chief economist for the Center for Economic Studies for the Private Sector, said the Mexican economy is still growing and inflation levels are lower than predicted. However, the construction industry, which comprises 4.2 percent of the nation’s Gross Domestic Product and employs 6.3 percent of the work force, is not faring well under current economic conditions and is expected to decline modestly in 2001.

“. . . the real driver of the Mexican economy is consumption,” Rodarte said, “And consumption has fallen over the year.” Mexican export trends follow U.S. industrial production levels very closely since the United States is Mexico’s main market. Both Mexican exports and U.S.
Production levels have fallen steadily over the year, reaching negative levels in March and April before falling even further. Retail sales have also fallen off in the country to an annual variation of about -0.4 in the month of July.

Additionally, the current administration faces a $9 billion dollar deficit. Since much of the construction industry depends on public spending, as well as investments from other countries including the United States, “this is not good for the construction sector,” Rodarte said.

This year Mexico’s gross capital formation saw a negative growth rate after years of positive growth. Fixed gross capital formation for the construction industry has fallen into negative numbers every month this year, and some of the construction-related sectors have had an especially hard time. The pinewood industry, for example, fell 29.5 percent and the brick industry fell 17.2 percent.

**F.W. Dodge’s Outlook 2002 Executive Conference:**

**Construction Industry Will Continue to Lose Momentum Through Early 2002; Second Half Improvement Will Enable 2002 to Match 2001 Activity**

Hesitant home-buyers, cautious real estate investors, the weaker fiscal standing of state and local government and a reduced demand for commercial space will pose the biggest challenges to the construction industry during the first half of 2002.

But despite those issues, low interest rates and the potential support of a federal stimulus package should help construction activity improve during the second half of 2002.

The result is that the value of new construction starts for all of 2002 is projected at $481.0 billion, just slightly below the $481.4 estimated for 2001, according to Robert Murray, vice president of economic affairs for the Construction Information Group, a division of The McGraw-Hill Companies.

“Against the backdrop of a slowing economy, construction has stayed reasonably healthy for most of 2001, helped by an offsetting pattern by project type. It’s true that commercial building has lost considerable momentum this year, dampened by weaker business conditions and tighter bank lending standards. However, further expansion was reported for public works, electric power plants and schools. In addition, single-family housing for much of 2001 has stayed strong—even factoring in a fourth quarter decline, single-family housing should be able to match 2000 levels,” Murray said.

For all of 2001, Dodge construction
Demand/Supply Cycles and Capital Markets
Impact Office, Industrial and Labor Forecasts

When looking at real estate cycles and how a particular industry is doing, there are two sides to the coin: the physical cycle of demand and supply, and the financial cycle of where capital is flowing, explained Glenn Mueller, Ph.D., professor, John Hopkins University Real Estate Institute and Real Estate Investment Strategist for Legg Mason, Inc. Both sides will affect how well the construction industry does in the upcoming months.

The demand and supply cycle is local in nature, Mueller said, and different cities in the United States are at different points in their cycles. For example, in the office market cycle analyses, Washington, D.C., San Diego, Los Angeles and parts of New York, as well as a host of other metropolitan areas, are in the hyper supply stage of their cycle—they are experiencing increasing vacancies, but new construction is still occurring. Dallas, Jacksonville, Tampa and Salt Lake City, however, have bottomed out—they have low or negative demand growth and construction starts have greatly slowed, but completions are still occurring. They have actually entered a recession stage in their office market cycle.

In the industrial market, none of the nation’s major cities had yet entered the recession stage at the end of the second quarter of 2001. But in the hotel market, most are moving toward that stage, and some markets—like Charlotte, Cleveland, Indianapolis, Philadelphia, Phoenix and Portland—have already entered it.

Still, although physical market cycles are local, some general macroeconomic trends will affect the entire building industry in the early 2000s. On the demand side, population growth at a rate of about 2.4 million people every year for the next decade will keep demand rising for all property types, Mueller said. Baby boomers are at the highest income earning years of their lives; thus, a second home market wave is occurring among the most populous age group, 40- to 55-year-olds, while their echo boom children are just entering the job and apartment rental markets.

On the supply side, construction labor had been the hardest to find in 2000, Mueller said, but that situation was easing rapidly in 2001. Meanwhile, materials costs are increasing and the nation’s infrastructures have not been expanded, which restricts new approvals and thus new construction.

One trend that has occurred in the last few years and should continue into the next few years is that more efficient capital markets have matched supply levels more closely to demand levels, following two decades of mismatch, Mueller pointed out.

Meanwhile, the capital markets are still evolving and improving. Since the mid-1980s the flow of funds to commercial mortgages, for example, has fluctuated wildly up and down. This is because the public markets are supplying capital such as CMBS mortgage instruments, Mueller said. Today’s low interest rate environment could create opportunities in the short term; however, even though “you are hitting a once-in-a-lifetime low in interest rates,” it may be difficult to finance if you do not have stable cash flow from credit tenants.

What the two cycles mean in view of Sept. 11 has yet to be determined, but Mueller had some predictions. He said demand growth will be stable but slower, and once supply growth slows to match it, equilibrium will return. For most of the construction industry, Mueller said a growth phase should begin either late this year or in early 2003.

As far as the capital markets, fear will play a role, but how great a role will be dependent on how long the fear lasts. He also predicted that public market real estate debt will be more acceptable to people and that Real Estate Investment Trusts will play an increasing role in the real estate capital markets.

Mueller’s presentation was given at CMD’s 6th annual North American Construction Forecast conference on Oct. 16.

Prior to the terrorist attacks on Sept. 11, the economy was already teetering close to recession. Economic growth during the first quarter of 2001 was reported at 1.3 percent, followed by 0.3 percent in the second quarter.

According to Murray, “the impact of the events of Sept. 11 will be to deepen and lengthen the economic slowdown already under way. Substantial layoff announcements in travel-related industries join high technology as depressed sectors of the economy. The weak job market, along with diminished confidence levels, means that consumer spending will not provide the same support as in previous years. However, the stage has been set for the economy to improve as 2002 proceeds, given lower interest rates and the fiscal push coming from the federal government. This will also have a positive impact on the construction industry.”

Murray had the following to say about the year ahead for specific areas of the construction industry:
Single-family housing will retreat through early 2002, as home sales and construction are adversely affected by the weak job market and diminished consumer confidence.

When uncertainty eases, homebuyer demand will be able to show a greater response to low mortgage rates.

The full year is projected at 1.175 million units (F.W. Dodge), a 2 percent decline from 2000, which translates into no change in dollar terms.

Income properties will slide an additional 3 percent drop in dollar volume, corresponding with a 5 percent drop in square footage.

The steepest decline is projected for hotels, while stores, warehouses and offices will experience moderate retrenchment. Apartment construction is the income property type most likely to avoid a decline, since it continues to be viewed favorably as a target by the real estate finance community.

Institutional building will advance 3 percent, due to further expansion for schools combined with a moderate increase for healthcare facilities. However, reduced contracting is expected for courthouses, churches, amusement-related projects and airport terminals.

Manufacturing building is expected to edge up 2 percent, as its extended four-year decline reaches bottom in early 2002. This category will still be extremely weak by historical standards, down 35 percent in dollar terms from its most recent peak in 1997.