

The 2010 Construction Outlook

Economists say that the recession is over. Thought to have begun in December 2007 and likely concluded during the late summer of 2009, this recession was in many ways the deepest since World War II and has impacted every construction market sector, state and metropolitan area, some more than others.

The decline in construction activity in 2009 was broader, steeper and faster than many economists anticipated as private non-residential building markets succumbed to the credit crunch and many public markets waited for stimulus funding to be delivered. The consensus of this year's batch of forecasts for 2010 says the worst is over, but most gains will be the result of percentage comparisons with dismal 2009 numbers, while market fundamentals discussed later will be unable to sustain much forward momentum. The year will be one of continuing general declines in overall construction. The sharpest declines will be in those segments most closely associated with speculative financing.

It will take most of 2010 or longer to reverse the non-residential building decline as it has yet to bottom out. The rebound in this sector usually lags behind the recovery in the overall U.S. economy by 12 to 18 months but may be a littler longer this time.

Project delays are running about 4 times the normal rate while cancellations are 5 times the normal rate. This will probably continue until lending and operating trends improve.

The architectural billings index (ABI), which measures the number of architecture firms with increases in billings minus the number with decreases compared to the prior month, continues to indicate uncertainty in the construction industry. It indicates some signs of progress but is short of a recovery. No region of the country seems poised for an upturn. The new-project

inquires index is rising which is an encouraging sign. But the number of inquires could be inflated as numerous firms compete for the same projects.

Current Economic Influences. Availability and access to capital and their associated sources and mechanisms, has fundamentally changed. Credit availability may not return to pre-recession levels, even as the economy begins to pick up. Banks, particularly weak, small or regional banks are heavily exposed to commercial mortgages. The banks are extremely reluctant to provide financing for projects, and their new equity requirements and conservative appraisals make it even more difficult for a borrower to get loans. Also, as loan demand becomes stronger, credit rates will gradually rise.

The construction industry is impacted by a combination of financing constraints-rising unemployment and a lack of confidence in local economies across the nation due to falling tax revenues which make it difficult to justify new construction.

A big new wave of loan maturities is coming due in the next 24 months of at least \$200 billion in commercial real estate senior bank loans and commercial mortgage-back securities due to the boom in leveraged deals in the early 2000s. There is a lot of speculation regarding what will happen if and when borrowers cannot refinance. CMBS are held by scores of investors (hedge funds, mutual funds and other financial institutions) and the loan servicers have limited flexibility to extend or restructure troubled loans like banks do.

The delinquency rate – the percentage of loans 30 or more days delinquent – among commercial mortgage-backed securities (CMBS) rose in February to 6.93 percent. They began 2009 at 1.21 percent. The casualties reached all types of commercial property. The delinquency rate among hotel mortgages ballooned over 900 percent in the past 12 months to 13.87 percent. The office delinquency rate rose more than 560 percent to 3.42 percent. The

delinquency rate for retail real estate loans in CMBS was up 475 percent to 5.50 percent. The industrial delinquency rate rose more than 410 percent to 3.98 percent while multifamily was up 325 percent to 9.27 percent. It is forecast that by year's end delinquency rates on commercial property loans could rise to between 10 and 15 percent.

Above average debt default rates and late payments, foreclosures or bankruptcies will probably last through 2011, since defaults historically lag changes in gross domestic product (GDP) by 12 to 18 months. If current GDP expectations prove too optimistic, this could hit commercial real estate particularly hard. Unwilling to seize devalued properties, (down 45% from their October 2007 peak), in a moribund market, lenders have foreclosed on fewer than 10% of the loans. Mounting foreclosures would likely depress values even further as properties are dumped on the market. This would put pressure on banks, particularly small and regional banks to write down loans. What landlords need is occupancy and rents to rise so they have cash flow to service debt, and that means employers have to start hiring, and consumers need to shop more. So far, there are few signs this is happening.

About \$770 billion or 55% of \$1.4 trillion in commercial loans due by 2014 have debts exceeding current property values. There were \$65 billion of loans in special servicing at the end of November and the special servicing rate had climbed for 19 months in a row. Regulators have been expressing increasing concern that problems in commercial real estate could unglue the nascent economic recovery by slamming financial institutions with billions of dollars in new losses. Retail mortgages continue to account for the largest percentage of loans in special servicing – 32% or \$21 billion. Multi-family mortgages come next at 22% or \$14 billion, followed by hotel loans, at 19% or \$12.5 billion. Hotel loans' share of the special-servicing universe is significantly higher than that property type's 9.9% share of overall CMBS collateral. By contrast office loans account for only 10.7% of mortgages in special servicing, versus a 30% share of

outstanding collateral. The difference partly reflects the fact that hotels are susceptible to economic downturns more quickly than office buildings.

In addition to the building loans, 10% of commercial construction loans are troubled while for condominium construction 38% of construction loans are troubled.

Construction Forecast and Commentary. The following table and commentary discuss the construction picture for 2010 and the factors affecting a number of the construction market sectors.

Type of Construction	Percent Change in \$ Volume		
	2008-2009	2009-2010*	2011
Residential			
Multifamily Housing	-54	+16 to -3	42
Non-Residential			
Office Buildings	-33	-3 to -19	28
Hotel and Motels	-61	-9 to -25	19
Stores and Shopping Centers	-39	-5 to -21	28
Other Commercial	-51	-3	-
Manufacturing	-62	-14 to -24	13
Educational Buildings	-18	-3 to -6	11
Health-Care Facilities	-31	+5 to -3	13
Other Institutional Buildings	+2	+3	-
Distribution Warehouses	-51	-1	34
Parking	-20	+1 to -4	38
Public Buildings	+10	+14 to +1	1
Non-Building Construction			
Bridges	+16	+12 to +6	8

*Range covers optimistic to pessimistic forecasts.

McGraw-Hill NonResidential Summary – Sq. Ft.			
Starts – Square Footage	2009	2010	2011
US	-42%	-4%	21%
Amusements, etc.	-29%	-4%	15%
Dormitories	-27%	-7%	10%
Gov't Service Buildings	-3%	8%	-2%
Hospitals, etc.	-36%	3%	11%
Hotels and Motels	-56%	-13%	18%
Manufacturing, Warehouses, Labs	-49%	-4%	21%
Miscellaneous Nonres Bldgs	0%	13%	7%
Offices & Banks	-51%	-9%	38%
Parking Garages, etc.	-49%	-7%	38%
Religious Buildings	-6%	-3%	2%
Schools, Libraries, etc.	-23%	-8%	9%
Stores & Restaurants	-52%	-4%	40%
Warehouses	-61%	-4%	35%

Multifamily housing. Some economists expect the turnaround in the multifamily market to be delayed until 2011 with a 42% increase for that year while forecasting another 3% decline in starts in 2010 following this year's 58% drop. Others are forecasting an improvement of 16% in dollars and 14% in units during 2010.

The sharp decline in this market is likely related to financing and high unemployment of would-be-renters. The housing bust has flooded some of the most overbuilt housing markets with new apartment inventory as developers have converted unsold condominiums into rentals. The vacancy rate is projected to peak at well above 8% in mid-2010.

Commercial construction may be defined as a composite of office, lodging, retail, automotive, and warehousing. The overbuilding following the 2002-03 recession and recent massive monthly layoffs will prevent growth in office construction in the next couple of years. The office

market has deteriorated broadly across virtually all regions of the country. Nationwide, effective office rents has seen some of the steepest year-over-year declines since 1995. For the first three quarters of 2009, the net decline in occupied space totaled a record 64 million square feet, the highest so-called negative absorption recorded since 1980. Office building vacancy rates are expected to rise to 19% in 2010.

Lodging. The ongoing economic downturn, which has severely cut into employment and household wealth, has made consumers cautious about recreational spending on activities such as travel. Businesses too have reduced travel in an effort to control spending. The result is declining occupancy rates and excess capacity in lodging. Overcapacity and a frozen securitization market for commercial loans have put many projects in jeopardy and will hinder lodging construction in the near-term.

Retail. Though consumer spending has bounced back slightly in recent months, retail activity will remain subdued and the appetite for new retail space will remain at low levels with the exception of big-box store construction. Shopping malls are losing tenants as retailers continue to close stores, and even if it were possible to secure financing, empty retail complexes create little incentive for new construction. Shopping centers-open-air centers typically anchored by a grocery store or big-box retailer - have a vacancy of over 10%, the highest rate since 1992. At enclosed malls, the vacancy rate is about 9%, the highest rate since 2000. Retail vacancy rates are expected to increase to 13% in 2010.

Manufacturing. Manufacturing buildings will drop 14% to 19% in dollars and 3% in sq. ft. in 2010 after plunging 62% in 2009. Economists say there is not much hope in 2010 of the manufacturing market picking up while capacity utilization in the sector remains below 70%.

Educational. The educational building market has been vulnerable to state and municipal budget woes, and the market is forecast to decline another 3% in 2010, following an 18% drop in 2009. In terms of sq. ft., the sector dropped 23% to 172 million sq. ft. as state and local governments delayed or cancelled projects and private institutions saw large drops in their endowments. The sector is expected to continue its downward path in 2010 with 158 million sq. ft. of new starts.

Health-care. Health-care projects slid 31% in 2009 due to the tight credit market. The health-care market, particularly hospital construction, will be soft in 2010 due to depleted state and local budget and significant pressure to contain health-care costs but is expected to bounce back 5%. Aside from money supplied to bolster Medicaid funds, the federal stimulus act carries direct support for health-care construction.

Institutional. One of the bigger beneficiaries of the American Recovery and Reinvestment Act in 2010 will be the public sector. Public buildings – particularly courthouses and federal facilities in need of modernization – will receive a sizable increase next year due to stimulus funds reaching the market. In general, institutional buildings will begin to stabilize after losing momentum in 2009. Square footage will decline 2% in 2010 after sliding 23% in 2009. The dollar amount for this sector will edge up 1% helped by energy-efficiency upgrades in federal buildings and continued strength for military buildings. The hope is the stimulus bill will provide a lift and speed up the timing of what would have been a more delayed upturn. However, once federal support ebbs, the institutional sector may weaken further in years to come.

Bridges. The bridge sector's biggest influence in 2009 was the economic stimulus program. States have obligated over 90% of highway stimulus funds but only 23% of funds have been expended. Many states have repeatedly cut back project schedules due to large state government deficits and a sharp fall off in fuel-tax revenue. With few exceptions, states have

been reluctant to raise gas taxes to bridge the funding gaps, opting instead for increases in other taxes and fees. As more stimulus funds become available in 2010, the bridge sector may see a 13% increase in the next 12 months.

Looking Beyond 2010

PCI is preparing a forecast for material prices for the precast/prestressed concrete industry. Various material prices have dropped or spiked over the past few years but low interest rates and high government spending could spark a rise in prices across the board. Although some economists say there is a greater risk of deflation than there is of 10% inflation. We hope to have the information available in the next month so producers have an idea of future material costs as they prepare contracts for 2011.

In preparation for the construction recovery in 2011, producers should be looking at potential improvements in productivity through the use of lean-process improvement methods to ensure high-performance profitability (e.g., lower costs and operating efficiencies). Lean provides a lens through which producers can study different processes with the goal of reducing costs, eliminating waste and improving quality. Conventional cost cutting has been to look for expenses that can be eliminated such as employees. But that approach can still leave waste in the system – hampering the productivity of a smaller workforce that must, if anything, become more productive.

Lean is undeniably a big picture approach, but success depends on starting small. One key is to assemble cross-functional teams composed not only of those who know a process intimately, but also those who are only tangentially involved or perhaps wholly untouched by it. The team analyzes the existing process and then looks for opportunities to remake the physical layout, standardize the steps inherent in the process, or shift responsibilities. It is a continuous process.