economics

# REFLECTING ON 2011

At last, some subtle signs of a turnaround for the construction industry.

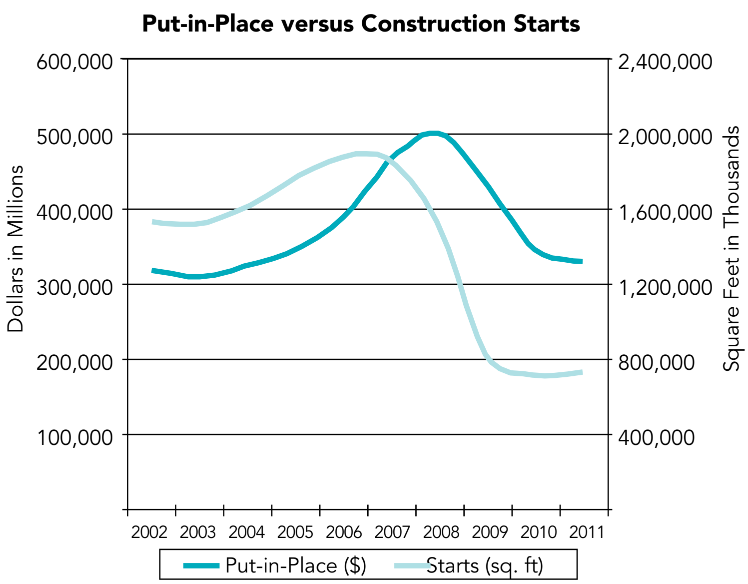
BY JOHN CROSS, P.E., LEED AP

**IT IS EASY TO LOOK** in the mirror every morning and see the same face stare back at you that you saw yesterday, last week, last month and last year. You feel like nothing has really changed. Construction activity in 2011 was like looking into a mirror and seeing 2010—there were no noticeable changes.

Construction starts measured in square feet for buildings (excluding residential buildings less than five stories) showed an increase of less than 2% between 2010 and 2011. In 2011, slightly more than 685 million sq. ft of new buildings started construction compared to 675 million sq. ft in 2010. Both years were still far below the most recent peak in building construction activity of 1.771 billion sq. ft in 2006, reflecting a drop of 62% in the size of the market. AISC maintains records of market size back to 1970 and both 2010 and 2011 reflect the lowest level of activity on record.

But if you stare into the mirror a bit longer, you start to notice some subtle changes: a few more lines around the eyes, a little more gray hair and maybe a new blemish. Even though on the surface 2011 reminds us of 2010, on further examination there were subtle differences in the marketplace that are instructive as the building construction industry looks to the future.

First, we have reached the bottom of the cycle. Media reports may still talk about a decline in construction activity, but they are generally addressing the broader construction market that includes infrastructure projects and reference "put-in-place" construction. Put-in-place construction reflects construction spending during the period, but construction starts reflect the total value (or square footage) of construction started during a given period. As a market indicator, construction starts lead put-in-place construction. The growth in construction starts, slight as it is, is a precursor of growth in construction employment and spending.




Second, the mix of project types is undergoing a significant change. While overall levels of building construction remained relatively constant, there was a significant decline in projects funded publicly versus projects funded privately. The combined total for schools, government service buildings and other publicly funded building construction dropped 14% in 2011 while privately funded construction grew 9%. Public funding represented 27% of building construction spending in 2011 compared to 32% in 2010. An increase in private investment in building construction is a necessary sign for long-term growth.

Third, the beginnings of a recovery can be seen in the multistory residential market. Apartments and condominium buildings greater than four stories jumped in construction volume from 28 million sq. ft to 53 million sq. ft, a growth rate of al-

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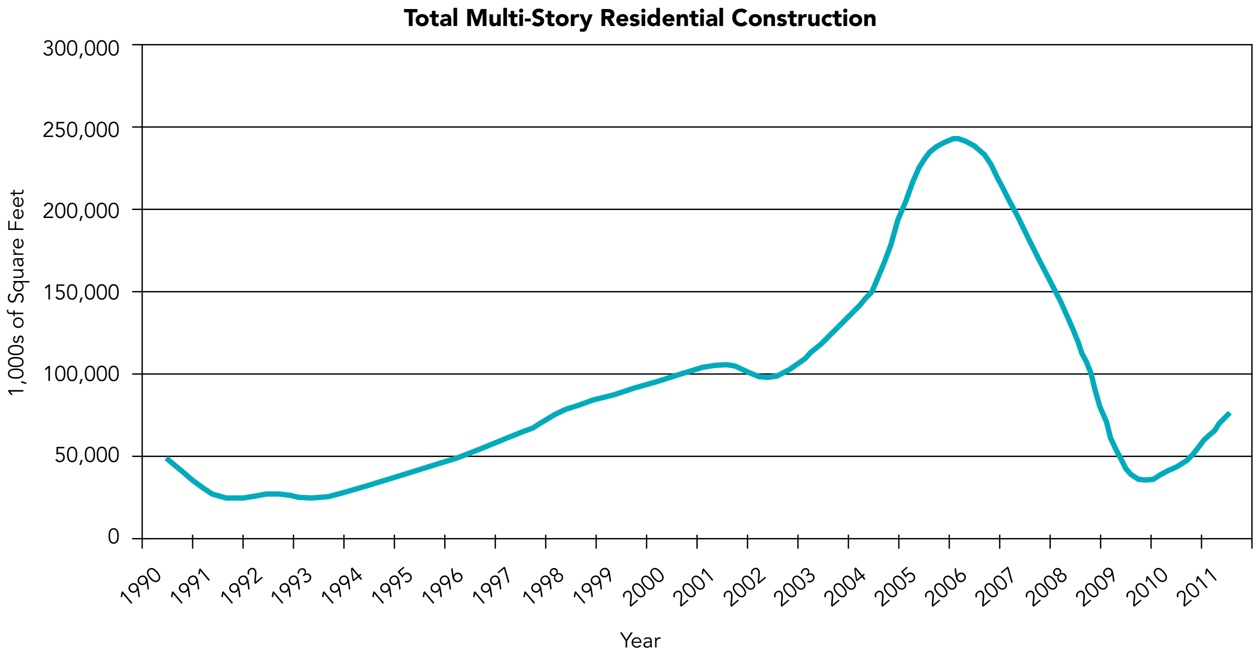


most 90%. The vast majority of this growth is in apartments driven by foreclosure displacements and a reactionary aversion to home ownership. Growth in this market segment is expected to continue over the next several years.

Fourth, the industrial sector, which is tracked independently of the building sector, also showed growth in 2011 with spending increasing by 5%. That trend is anticipated to continue in 2012 with a projected growth of an additional 3%. As a measure of the growing importance of the industrial market, in 2011 the industrial sector accounted for approximately 45% of the demand for structural steel, up from 35% of the demand in 2006 and 2007.

Fifth, the demand for structural steel remains strong with steel-framed construction accounting for 58% of constructed square footage. Concrete framing accounts for 21% of square footage with wood in third place at 7%. Pre-engineered steel buildings, masonry and other types of framing systems equally share the remaining 15% of the market. The structural steel-framed portion of the market has increased from the 53% during the construction boom of 2006 and 2007 to the 58% level of 2010 and 2011.

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In late 2010 the predictions were for a 2% growth rate in 2011 followed by an 8% growth rate in 2012. During the fall of 2011, those predictions were scaled back to a loss of an additional 2% in 2011 and only a 2% growth in 2012. This was based on the stagnation of the U.S. economy resulting from the prolonged debt ceiling debate in Washington. Surprisingly the market rebounded during the fourth quarter and the initial projection of 2% growth was met.

So what about 2012? Growth will probably exceed the 2% projections of last fall with a growth rate of 6% to 8% more likely. Is this good news? It certainly is better than a further decrease or limited growth, but it needs to be remembered that even an 8% growth rate will only move construction activity to 750 million sq. ft of starts, which is still 1 billion sq. ft below the level of 2006 and 2007. MSC