



PRECAST FORECAST 2014

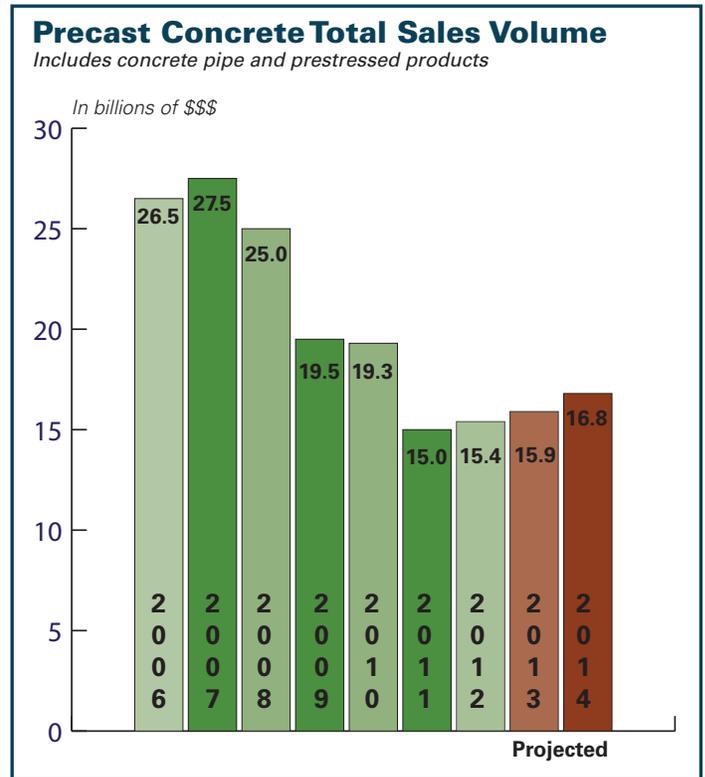
Precast Sector Expected to Add 6%

By the National Precast Concrete Association

It used to be said that the precast concrete industry was recession-resistant because of the wide range of products that cross over into nearly all construction sectors. That was the good old days, when the construction industry was basking in an unprecedented 20-year growth cycle. Then the bottom fell out – all construction sectors tanked – and even the most diverse precast companies felt the steep contraction. Many precasters either slimmed down their operations or went out of business when the recovery proved too small and too slow. Dozens of supplier companies merged operations, and now the industry at the beginning of 2014 looks different from the peak years of the mid-2000s.

While the precast concrete industry was stalled at the bottom from 2009 through 2011, two years of slow growth followed. The NPCA Benchmarking Report, which tracks the industry through an annual survey sent to precast concrete producers in North America, shows the industry at its lowest level in 2011, down nearly 45% from the peak in 2007. While the construction industry as a whole was coming back on the strength of an improved housing market in 2012, precasters recorded a modest 2.5% increase, followed by an estimated 3% increase in 2013. The slow recovery trend should accelerate in 2014, with the precast sector adding another 6% in sales, to \$16.31 billion in total sales, based on the data from the NPCA Benchmarking Report and a variety of construction industry forecasts.

Because so much of the precast industry is concentrated in public works projects that take longer to revive after a recession, the precast sector tends to lag about a year behind the overall construction industry, according to Ty Gable, NPCA president. "Many of these big public works projects are bid and funded years in advance," Gable said. "The result is that the precast industry stayed fairly strong for about



a year after much of the rest of construction went into recession. And now it's taking us longer to come out of it while we're waiting for public works projects to come off the shelf."

Transportation and infrastructure look flat

Transportation projects funded through the federal bill Moving Ahead for Progress in the 21st Century (MAP-21) are stable through Sept. 30, 2014, although the highway trust fund that supplies revenue for MAP-21 is likely to become insolvent in mid-2014, and will require an infusion of cash from Congress to make it to the end of the fiscal year.

On the positive side, states and local governments are finding ways around federal government

gridlock and creating their own funding for transportation and infrastructure through higher gasoline taxes, new tolls, public/private partnerships and bond initiatives, Gable said. "In states where the economy has improved and tax receipts have grown, we're seeing new initiatives to replace aging infrastructure and improve transportation systems," he added. "These local efforts have helped to replace some of the work lost as a result of federal inaction."

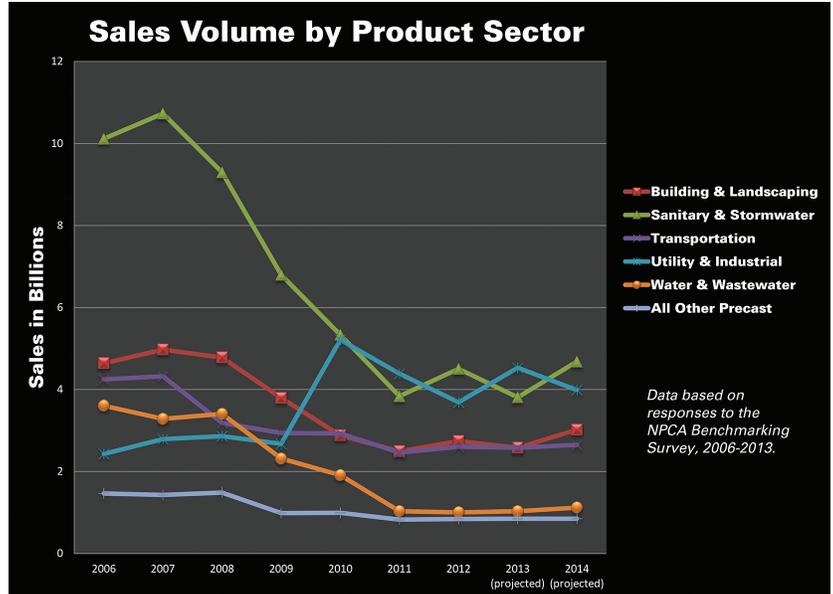
Data from the 2014 Dodge Construction Outlook, FMI's Construction Outlook and market research firm IBISWorld confirm that the construction sectors where precast products are prevalent, such as transportation and water-related public works, will likely remain flat through 2014.

The buzz is still in the housing sector, and both single-family housing and multi-family dwellings are expected to continue their revival in 2014 with a third straight year of double-digit increases. Single-family housing starts should rise another 26% in 2014, according to the Dodge Construction Outlook, while IBISWorld predicts the value of new residential construction to increase by 21.4% to more than 800,000 new starts. That should mean continued good news for precast companies that supply septic tanks and other products to the residential housing market.

Leaner, greener

While the recovery has been slow to come, it hasn't been all doom and gloom since 2008. While most precast operations were contracting, some companies were able to survive, and even thrive, by aggressively seeking out new opportunities – either through diversifying their product lines or by selling precast concrete as a better solution to project designers who had originally specified a different material. Those companies are setting the tone for the leaner, greener precast industry that is now emerging.

"There will be plenty of opportunity for precast manufacturers that are willing to get out into the



marketplace and sell the many advantages of precast over other materials," Gable said. "The prevailing trends in construction are favorable for precasters. The leading companies in the precast sector understand this new environment and are becoming more outward facing and aggressive in marketing the tangible benefits of precast to specifiers."

The LEED v4 building standards recently introduced by the U.S. Green Building Council emphasize material selection in relation to lifecycle costs and environmental impact. As a locally sourced material that can be designed to last 100-plus years and stand up to the most destructive weather events, precast concrete is perfectly positioned as the go-to material for LEED-based construction. In addition, the continued incorporation of building information modeling (BIM) into the design process is leading into a new era where the BIM design team is intent on creating efficient, clean, low-impact construction sites that earn LEED points. These are the same benefits NPCA and many of its members have been trumpeting for many years with regard to precast concrete products.

McGraw-Hill Construction discusses this trend in its recent Smart Market Report, "Prefabrication and Modularization: Increasing Productivity in the Construction Industry." The report, based on a survey

of hundreds of construction professionals, traces the growing impact of BIM. "A key benefit of BIM is enabling the increased use of prefabrication and modularization, which in turn improves worksite productivity and overall project ROI," the report states. Engineers, architects and contractors are on board with this trend because it often leads to reduced timelines, budget savings and less construction site waste.

Positioning precast

While the transportation and water infrastructure side of the precast industry are stable but not expected

to grow in the near term, there appears to be ample opportunity to position precast as a key building material that can enhance the BIM-Prefab-Modular movement.

NPCA's Precast Forecast 2014 is segmented by product line and includes five major sectors of the precast concrete industry and an "other" category that encompasses a wide variety of products. These figures are based on the annual Precast Industry Benchmarking Report published by NPCA. Compiled by Industry Insights, an independent manufacturing research firm, the NPCA Benchmarking Report is based on a survey of precast concrete manufacturers

Building and Landscaping Products **\$3.02 billion**

Includes architectural wall panels, architectural building components, prestressed structural building elements, basement/wall foundation panels, steps and basement entries, burial vaults and other related landscaping and building products.

Sanitary and Stormwater Products **\$4.68 billion**

Includes manholes, concrete pipe, stormwater management and retention structures, curb inlets, catch basins and other related products.

Transportation Products **\$2.65 billion**

Includes box culverts, 3-sided structures, highway and traffic barrier, retaining wall systems, sound wall/barrier, prestressed bridge elements, the emerging category of precast concrete pavement and other related products.

Utility and Industrial Products **\$3.99 billion**

Includes utility vaults, utility buildings and other related products.

Water and onsite wastewater products **\$1.12 billion**

Includes septic tanks, grease interceptors and other related products.

All Other Precast Concrete Products **\$850 million**

Total Precast Sales Volume **\$16.31 billion**

Total Resale Items **\$2.24 billion**

Total Volume Including Resale Items **\$18.55 billion**