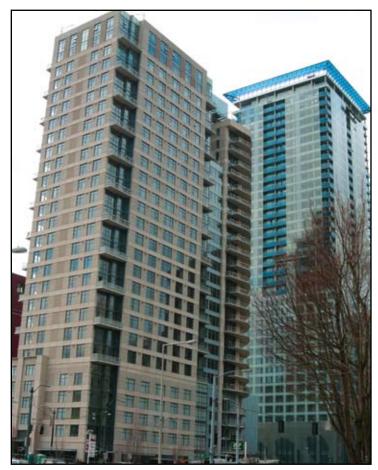
Pacific Northwest Feels Pain Along with Rest of Country

But Encouraging Signs Emerge By Larry Kahanar



Seattle, WA skyline.

The good news for the Seattle metropolitan area is that it no longer relies on a single company (Boeing) for its main source of wealth. The bad news is that the area still is suffering along with the rest of the country, now in the throes of a recession. "We're not a one company town anymore," said Jerry VanderWood, Director of Communications for the Associated General Contractors. "We are the home of several industry hubs, and have a presence in biotech and aerospace. We are one of the largest seaports in the country in terms of international trade, we have a greatly increased tourist presence, and we are the headquarters for companies like PACCAR, Weyerhaeuser, Starbucks and Nordstrom." Microsoft is based in nearby Redmond.



Olivian and Olive 8 mixed-use/residential/hotel towers, Seattle, WA. Courtesy of KPFF Consulting Engineers.

He added: "Seattle feels that we are off the roller coaster of the past big highs and big lows. Nevertheless, we are experiencing a construction downturn like the rest of the country."

The downturn came late to the region, which had experienced huge multiyear growth in construction, especially residential and condominium projects, while the rest of the country had already begun to taper off. Part of the reason is geography. "Historically, Seattle has been less impacted by swings of the general economy compared to other areas of the country," said Greg Schindler, Associate in the Seattle office of consulting engineers KPFF. "Typically, there was always more construction here because Seattle is somewhat isolated. There's not a lot of other major cites near it, Portland being the exception. If major construction is going to happen in the Northwest, it usually happens in Seattle or Bellevue."

When the economy recovers, many expect the Seattle area to once again get the lion's share of the region's construction projects.

Cary Kopczynski of Bellevue-based Cary Kopczynski & Company, Inc., noted: "Condo work has dried up completely... We were extremely busy last year until November, then it began to drop off quickly. The private market is off 50 percent, and it hasn't changed too much. We do private market, very little public market work, but the good news is that it's not getting any worse." Kopczynski said that, just in the past few weeks, he has gotten inquiries from developers talking about projects in the concept stages. "They believe that now is a good time to get ready to catch the next wave."

With little condo or commercial construction, some firms are seeing work in apartment projects. "We are doing some high rise apartment towers," said Kopczynski. "People have to live somewhere, and they're renting. Rental rates have stabilized in the past few months, and that's helped by a lack of good quality rental property in downtown." He notes that downtown Bellevue, for instance, has changed from a work environment to a work-and-live environment. Still, even some apartment projects have been put on hold until rental vacancy rates

Portland is reporting similar conditions, according to Art Johnson, KPFF Vice President and General Manager for the Portland office. "There are a lot of unsold condos. The boom has come to a screeching halt." He notes that some of the boom was caused by speculators hoping to buy condos and roll them over for a quick profit. "It is similar to what has happened in the rest of the country."

Johnson cites the Park Avenue Tower West as a typical situation. The 34-story, mixed-use building has six levels of below grade parking, retail space, and 24 levels of offices with condos over it. "It is currently under



Bellevue Towers Project, Bellevue, WA. Courtesy of KPFF Consulting Engineers.

construction... They are now pouring the next-to-top level parking; and they have pre-leased a good portion of the office space to a law firm. However, the condos may be rented out as apartments instead."

Public work, aided by the federal stimulus package, probably will lead private work for the near term. "Public projects appear to be the much bigger game in town for right now," said VanderWood. "The state legislature just released the transportation budget, and they are saying it will be the busiest summer for transportation construction in recent memory. We don't doubt that's true."

The big public project on everyone's mind is the Alaskan Way viaduct. The elevated roadway was completed in 1953 and runs along the

Elliott Bay waterfront in downtown Seattle. It is the smaller of two major north-south roadways through Seattle, the other being Interstate 5. The viaduct was damaged during the 2001 Nisqually earthquake; and it probably will be replaced by a \$1.9 billion bored tunnel, although a decision is not yet final. Construction is expected to start in 2011 after a lengthy and not-yet-completed study and public comment period. Supporters of a bored tunnel tout its advantages over a cut-and-cover tunnel, especially that it could be built largely without disrupting traffic.



Park Avenue West, Portland, OR. Courstey of Bob Thompson, TVA Architects and KPFF Consulting Engineers.

Another public project is the floating bridge along Route 520 that crosses Lake Washington, separating Seattle from Bellevue. "The northern most one needs to be expanded and is controversial," said Schindler.

The controversy surrounding these two projects typifies the unique nature of construction in the Seattle region, say those who practice here. It makes for special challenges, but also creative solutions and patience. For example, although Seattle does not have a lock on lengthy permitting processes, its procedures rank among the most stringent, albeit not necessarily unfair. "Our public processes are unique in that we go to great lengths to open it up, and take a long time to make decisions," said VanderWood. For example, the viaduct project has been going on since it was damaged in 2001. "We have a 'process fascination,' and ours is longer and more time consuming than most. It's the Seattle way."

One reason for the lengthy process is the area's innate beauty, which is what attracts visitors, residents and businesses. "Because we have such beautiful scenery - water, mountains, hills - there is likely to be an adverse impact on those who have these views, so it takes time to get projects agreed upon by major parties," said Schindler. Kopczynski adds, "Because the process is so thorough, you know that you're not going to get blindsided halfway through construction by a lawsuit or a disgruntled community group. You get much more positive results in the long run."

Another issue, of course, is seismic activity. Unlike California, the Northwest region does not have a history of frequent, severe earthquakes keeping the issue uppermost in the public mind, despite the fact that there are there are 13 known major faults in the Puget Sound area. Further north, one of the last major earthquakes to hit the Oregon coast was estimated to have occurred in 1797. Seismologists figured the date by studying Japanese records of when a tsunami hit Asia. Centered about 80 miles offshore in the Pacific Ocean, this large size earthquake occurs about every 300 to 500 years, according to Johnson,



who adds: "In the 30 years since I've been here, we've had three nominal earthquakes that did virtually no damage in the city."

This could be why retrofitting older buildings to withstand a large earthquake is not more common in the region, although newer buildings must meet earthquake codes. "There's not a major push to upgrade old buildings," said Schindler, "although some owners are taking it upon themselves to upgrade to attract tenants."

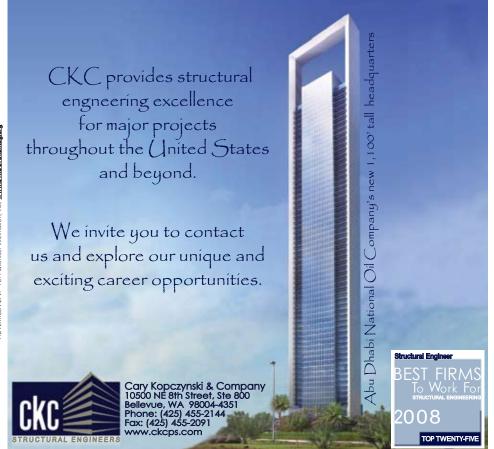
New buildings are a different story. You can see radical differences from one location to another, which presents a challenge to structural engineers. One site may be of good quality, glacial till, for instance, which is essentially like rock. Six blocks away though, you can be in what used to be a swamp. Adds Kopczynski: "We have a lot of hills, valleys and water, which creates radical differences in requirements on a site-by-site basis and not just for an area."

Another local issue is that of sustainability, according to those who work in the area. "You're not necessarily designing to minimize costs, but you score points based on criteria," said Johnson. "Less materials, less energy usage, that sort of thing. It's required on almost every public project, and it gets people thinking about sustainability." Johnson points to China's Zhangjiang Semiconductor Park's newest towers, which will open next year. The office park is 16 square miles, about eight times the size of downtown Portland, and was designed by Portland-based LRS Architects.

Still another issue facing construction engineers is the area's moisture on concrete curing. "It doesn't get hot here very often, and we have a fair amount of rain and high humidity," Johnson says of the Portland area. "Concrete doesn't cure very well on our projects until they get enclosed. By that time, you have finishes in the building that don't like to be around water." He notes that concrete tends to crack more here than in other parts of country, for the same reason. "Concrete behaves differently here than in, say, California. Moisture comes out of concrete more slowly, and shrinkage occurs later in the process."



Escala, Seattle, WA. Courtesy of Cary Kopczynski & Company and JE Dunn Construction.



Although structural engineers and others are confident in a recovery, they have taken some creative steps to get themselves through the current downturn. Many have looked for work overseas, as well as in other states. In addition, these firms have learned, from past downturns, the importance of keeping experienced workers on hand so that they will be prepared when business returns. Kopczynski's firm, which does only structural work, employs about 40 people for their mainly urban projects. Taking a lesson from what they did during the dot com downturn, the firm contacted colleagues in the industry who do public work and loaned out their people with strong resumes in bridge and transportation. "This allows us to keep good staff without massive layoffs," says Kopczynski. "It gives the staff confidence and reduces their tension."

Concludes Kopczynski: "The long term prognosis for the Northwest is very positive, and we are confident that we will resume our growth track. We see this as a temporary slowdown. How long is temporary? No one seems to know."