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Canadians Commit To Concessionaire Contracts for Infrastructure and Buildings

Investors say U.S. neighbor has done well in learning from Asia and Europe

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By Aileen Cho and Dan O'Reilly
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In just a decade, the "big four" Canadian provinces of Alberta, British Columbia, Ontario and Quebec have embraced public-private partnership (P3) projects to the point where they are almost a mainstream construction-delivery method. While concessionaires continue to keep an eye on the uneven progress of the U.S. P3 market, they have gone north to land solid P3 projects.

Photo: Stoney Trail Group
Canada is becoming a pillar of the P3 industry.

Photo: Stoney Trail Group
Calgary ring road is Alberta's second highway P3 project.

"In Canada, there is a big pipeline of opportunity," says Steve Small, senior vice president of development in Bilfinger Berger Project Investments Inc.'s Vancouver, British Columbia, office. "We are actively bidding on five projects and looking at another five. In the United States, a lot of projects have come out, but only a few have actually closed. There have been a lot of start-stops. There is huge potential [for U.S. P3 projects], and we're watching closely until we get some comfort that the processes are inplace and the political will is there."

Bilfinger Berger is the concessionaire on two 30-year P3 highway projects currently under construction in Alberta. One is for the $630-million, 21-kilometer northeast section of the new Stoney Trail ring road in Calgary, to be completed this fall; the other is a $1.4-billion, 21-km northwest ring road in Edmonton, to be completed 2011. Both projects are being built by a design-build team of Flatiron Construction Corp., Longmont, Colo., Graham Group Ltd., Calgary, and Parsons Corp., Pasadena, Calif. They are the second and third P3 highway projects the province has tackled since 2003.

Neill McQuay, now an assistant deputy minister for strategic capital planning on Alberta's treasury board, was one of the chief architects of Alberta's P3 model. "The big thrust here is that you can't do a P3 unless you have political support," he says. "The minister, now our premier, gave us the support we needed." One of the biggest lessons learned from other P3s is up-front negotiation, he adds. "Prior to price submittals, we develop an agreement: Whoever wins will sign," he says of working with the competing concessionaires. "There are no [price] negotiations after the award. It's an open and transparent bidding process."

"We're getting more experienced as time goes on and as we do more of them," says Trent Bancarz, spokesman for the Alberta Ministry of Transportation. "We did the first one in 2005. We did a lot of due diligence. We studied different P3s from all around the world, not just highways but buildings, bridges, transit—you name it. We took all the best elements and put them into our model."

Calgary Cruise

The concessionaire and design-build team seem to agree. "Alberta is being the ultimate owner—it is miles ahead of some owners in the U.S. in terms of innovative project delivery," says Lorie Holte, project manager for the Flatiron-Graham-Parsons team, called Stoney Trail Group. It has a 30-year concession to design, build, operate and partially finance and maintain the Northeast Stoney Trail road. The design-build team is a month ahead of its scheduled Nov. 1 completion after less than three years of construction.

One (literally) concrete example of success is the production of 225 precast girders. "There are three or four precasters in the province," notes Holte. "This contractor shows up and says, 'We'll do it ourselves.' It blew [provincial officials'] minds, but they embraced it."

Still, as only the second P3 road project in Alberta, experience is gained on the job. "It's a learning process for everybody," says Holte. "More so for the owner. At first they were leery, asking a lot of questions. We did a lot of hoop jumping. But overall, it's gone well."

Other regulatory agencies had a learning curve as well. "I was working on the Third Tacoma Narrows Bridge design-build job," says Eric Ostfeld, the team's design manager. "The owner there was a lot more involved in helping with...

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...permit requirements...but these projects are relatively new in Alberta. The regulatory agencies aren't used to dealing with design-builders. There's no background, connections, relationships." Adds Holte, "This project technically isn't that glamorous. However, on these P3 jobs there are always a lot more players involved. We're trying to satisfy the operators and maintainers, and the ultimate owner, Alberta Transportation. There are lots of meetings all the time. With utility owners, even that takes hundreds of meetings...we have to go out and get all the approvals."

In at least one case, adversity led to innovation. The team developed a new method for multiple stakeholders to review and approve drainage plans, condensing into a few months a process that typically would have taken several years. "Nobody expected the approval process to be so tough," recalls Jason Rudyk, assistant project manager. "What we did was pull everybody into a room and convince the regulatory agencies that...the overall system had to be looked at as one pond. We brought in independent experts to review the analysis and each owner's representative to look at specific portions of the drainage." The province has officially lauded the team for the revamped process.

Communications was another contractual requirement, adds Dale Gamble, the team's construction manager. "We had open houses, media events," he says. Although the corridor for the ring road had been designated since 1976, residential construction since then means that, "for about half the road, we're up against the backyards of citizens," he notes.

Bancarz says one lesson the province learned from its first P3 job, the southeast leg of the Edmonton Ring Road, was, "if we put a little bit of our own money up-front, it makes the project more attractive to the private sector, so we get more and better bids." On the first job, no provincial funds were involved. On Stoney Trail, the government provides a $300-million down payment. "You have to consider how much can you budget for it...find the middle ground between 'not attractive to' and 'too generous' to the private partner."

Another lesson learned was a "good mistake" that the auditor general of Alberta helped to remedy. "When we get bids for P3s, we go through a process to determine what this would cost us if done conventionally," says Bancarz. "P3 bids have to come within the range of the 'public-sector comparator.' We lowballed our own estimate, so the cost savings didn't look that great. What the auditor general told us is that our public sector comparator bid should've been higher. He pointed out a couple of flaws in our process. It was very instructive."

McQuay cites increased upfront collaboration with bidders. “After our first P3, we went and expanded our model to include proponent meetings regarding engineering, design and maintenance. It opened up a lot more discussion that worked well for the [bidders]. The main goal is to get it to the point where we have a template for what works.”

Even so, provincial officials were shocked at the bids for Stoney Trail. “The three bids we got, two were surprisingly low,” Bancarz recalls. “One was close to the public sector comparator. Stoney Trail’s bid—we couldn’t believe how low it was. We got a little worried. Was this too good to be true? We went through it with a fine-tooth comb.” Instead of the approximately $1-billion estimate, Bilfinger Berger’s team bid $630 million.

But province officials are breathing easier as the project nears completion. Despite bad weather, silty clays, labor shortages and an Alberta construction season that runs from approximately May to November, the team expects to finish its last major milestone of asphalt paving a month ahead of its Oct. 24 deadline and avoid potential liquidated damages of $50,000 a day overall.

The team not only bears the risks of inflation and weather-related delays but must fulfill a 30-year warranty. The government made a $300-million down payment and will commence annual payments of $21 million for 30 years once the road opens. “This is a totally different mind-set,” says Gamble. “It’s not based solely on the money. For whomever gets the work, it’s a process, and performance is a big part of the evaluation. At the end of the day we have to be confident of what we’re doing. Then we can step back and say we did the job we said we would.” Adds Holte, “For all the firms involved in the joint venture, we want to do it again, and the only way to do it is by reputation.”

As for the government, it estimates that building the road conventionally would cost it up to $1.39 billion over 30 years, instead of $930 million—as well as two more years of construction time. “People tend to get fixated on the money and ask ‘why go through this? It’s only a few million dollars difference,’” says Bancarz. But from the general public’s perspective, “They just want a road to drive on. That’s what they care about. If you can give it to them two years sooner, all the better.” And if the concessionaire doesn’t maintain and operate the road adequately, Bancarz says, “We can withhold payment.”

Bilfinger Berger and the Flatiron-led team are doing it again, in a joint venture called Northwest Connect, on the $1.42-billion Northwest Anthony Henday Drive in Edmonton. The construction phase is scheduled for completion in fall 2011, and involves 21 km of up to six lanes of freeway, 29 bridges, eight interchanges and two rail crossings. The contract was signed in July 2008. “We were on site with earthmoving equipment the second week of August,” says Mark Basher, deputy project manager for that team. This time, weather has cooperated, and Northwest Connect is nearly finished with 13 million cu m of earthwork, along with eight bridges, as the construction season winds down for the year. “Merit goes to the owner for spending time working through the functional plan with stakeholders prior to presenting the request for qualifications to the industry,” Basher says. “They prepared a bid package that represents their stakeholders’ interests. So we can take that and finalize our designs in accordance.” The team did a redesign of two major interchanges, which decreased overall costs by more than $10 million.

There’s still some challenges in dealing with other agencies. “Design-build is still relatively new to the industry, and not fully appreciated by all the regulatory agencies out there,” he says. “We work hard with them to try and bring our...

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...schedule concerns forward." Despite the greater risks shouldered by the contractor, the P3 model, Basher says, "gives us greater control of the process. We can apply our constructibility expertise and bring that forward to the designers. It makes for a better product in the end." The province plans another P3 for another section of ring road next year. Flatiron, Graham and Parsons all plan to pursue it, says Holte, although not necessarily in the same joint venture. Adds Bancarz, "Our conventional way of building things works fine for 95% of projects. But on a larger-scale, multifaceted project we just find P3s a better way to go."

Nationwide Trend

Bilfinger Berger's Small admits some surprise that Canada has forged ahead of the U.S. on P3s. "Canada has gone over to the U.K. and Australia and looked at the models there. There are firm political commitments from the governments," he says. "They had the tenacity to push these through."

P3s are now being used to reduce Canada's infrastructure deficit, says Derek Burleton, senior economist with TD Bank Financial Group, Toronto. British Columbia, in particular, embraced this delivery method in response to the huge deficit the Liberal government inherited when it took office in 2001. That led to the creation of Partnerships British Columbia, an arm's-length agency that provides advice to public-sector clients on P3s. Several projects have either been completed or are under construction, especially in preparation for the 2010 Winter Olympics, says Burleton.

The evolution of P3s has been "a rapid and steep learning curve. But Canada is gaining a reputation for stability and reliability and for projects that come in on time," says Duncan Glaholt, a partner of Glaholt LLP, a Toronto-based law firm specializing in construction.

That reputation and the Canadian market potential have caught the attention of Honeywell Building Solutions. The Minneapolis-based firm is the facility management partner in two P3 ventures at opposite ends of the country. One is an approximately $460-million project to design, build, finance and maintain 18 new elementary schools in Alberta under a 30-year concession agreement. The concessionaire includes financier Babcock & Brown, and contractors Bird Construction Co., Toronto, and Graham Group. Construction is expected to be completed by June 2010. The second venture is the $246-million Woodstock General Hospital in Ontario. Other consortium members include financier LPF Infrastructure Fund and builder EllisDon Corp., Mississauga, Ontario. Construction started last November. "We've been involved in about 20 projects in Australia, are looking at potential global markets and have wanted to establish a presence in Canada for some time," says Jim Keesling, Honeywell's vice president of services.

The Woodstock hospital is one of 30 hospitals, health-care and other institutional facilities currently being built under Ontario's Alternative Financing and Procurement (AFP) delivery model. Financial closings for six of those projects were completed since last October, says Jim Dougan, executive vice president of Infrastructure Ontario, the government corporation overseeing the AFP system. "And we have another 10 or 11 projects in the procurement stage."

While the recession has had an impact, those projects demonstrate P3-driven infrastructure renewal is progressing. Financial liquidity is returning and bond life insurance investors are now considering AFP projects, says Dougan. Adds Alberta's McQuay: "The recession has caused some problems, but so far we think we can ride through the storm. The financial crisis occurred in fall 2008, and we had just signed the P3 for schools a day before. The two projects we're dealing with now will close in early 2010. I think we may be in a position where we never had to sign a deal during the crisis."

One Ontario project wasn't so lucky: An anticipated Deutsche Bank financing for the $498-million, 394-bed, 970,000-sq-ft Niagara Health Systems Hospital in Saint Catharines, Ontario, "suddenly evaporated," says Paul Douglas, chief operating officer with PCL Constructors Inc., Edmonton, the construction arm of the Plenary Health

Niagara design-build consortium. “We had to work very hard with Infrastructure Ontario and our partners to secure alternate financing, mostly from Canadian banks.”

Caution Advised

Douglas uses the incident to underline the tremendous risks and costs P3 projects pose for contractors and other private-sector proponents. Design, legal, financing and other pursuit costs usually amount to 3% to 5% of the...

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...overall project value. “So it doesn’t make economic sense to consider any project under $100 million,” he says. The same goes for the public side. “We are very careful in terms of picking projects for P3s,” says McQuay. “We look for fairly large projects since there is financing associated with it. You have to have something you can measure in the long term—performance goals that you can check over 30 years.”

Legal clauses of most contracts are very restrictive. There are no special exemptions for unforeseen delays or change orders, and the penalties for not turning the project over on the exact stipulated deadline can be as high as $100,000 a day, says Douglas. “You have to deliver a project on the day you say you’re going to deliver it,” he says.

Even relationships among the players within a concessionaire can be complex. On Montreal’s 7-km-long A25 extension project, concessionaire Macquarie and the design-build team of Kiewit and Parsons grappled with who was responsible for payment disputes with independent engineers. “The independent engineer concept is good, but you have to better define the function and limit the liability,” said Keith Sabol, then the design manager for the design-build team, in talking about the project last year at an industry conference.

Bilfinger’s Small notes one difference in Canada’s P3 process and Europe’s: “We need to take it to a more complete stage when we bid,” he says. “You go to financial close in a matter of months. In the U.K., it can take a year.”

Nevertheless, preparing the concessionaire team itself takes about a year. Once the right team is assembled, “success boils down to how to price the risk,” said Sabol. “[We had] no room for value engineering. We devleoped a risk matrix—mitigation, pricing, life of risk.” The team held a three-day lockdown session before submitting its proposal.

“It’s tough. These projects cost a lot of money to pursue,” notes Small. “So when we get into this, we want to be sure we reach financial close.”

Not being certain of closings has held back some global concessionaires from bidding on potential big P3 projects in the U.S. For example, Texas, once a trailblazer, suffered a setback when its legislature refused to extend the authority of the Texas Dept. of Transportation to sign agreements with developers after a two-year moratorium on toll roads ended this spring. But Small is confident the time will come. “It may take another two or three years, but it will be a big market. There just needs to be a couple of successes,” he says.

One success may be Florida’s Interstate 595 project, a 35-year, $1.8-billion agreement signed this year with a team led by Spain’s ACS Infrastructure Development. ACS also entered into a $650-million P3 with the North Carolina Turnpike Authority to design, finance and build a new seven-mile-long toll bridge in the Outer Banks. In February, California Gov. Arnold Schwarzenegger (R) approved a bill allowing transportation agencies to enter into an unlimited number of P3s until 2017.

Small cautions, “P3 is not free money. People have to be aware that it’s going to cost money, and you need a proper procedure in place, with good advisers. It’s not the sort of thing you craft your own documents for. Look at other examples, get all the approvals in place....It makes sense for U.S. authorities to come up and have a lessons-learned session with the authorities here.”