How to Navigate a P3

With public-private partnerships at the forefront of the infrastructure debate, here's a look at how one contractor has embraced them

BY LISA CLEAVER — MAY 22, 2017

President Trump has promised a $1 trillion infrastructure package, which may be a great start to fixing America's crumbling roads and bridges.

Since funding is always a core issue of any highway bill, public-private partnerships (P3s) are expected to play a large role in his plan. In those types of partnerships, fewer taxpayer dollars are needed because private industry picks up some of the cost.

"Unquestionably there is a huge need for improved infrastructure in the U.S., and we have seen strong bi-partisan support for increasing investments in the sector," says Magnus Ericsson, executive vice president with Skanska. "Skanska believes that P3s offer states and agencies a very flexible instrument that can be tailor-made to address the specific requirements and needs of the clients."

There are some downsides to P3s, however. To work, P3s must be able to show a steady profit, which means many types of infrastructure won't even be considered using a P3 model.

A toll road is an example of a project that could get a green light under this model. To work, however, this road would have to be in an urbanized area where commuters have congestion and people are willing to pay a price to avoid it. This means many roads and bridges could continue to be neglected.

The benefits of P3s

Of course, there are many upsides to P3s. Ericsson sees myriad benefits to the P3 model. His company, Skanska, has completed more than 30 P3 projects around the world in the last 20 years. They include roads, tunnels, hospitals, schools, power plants, and other social infrastructure projects.

"We have three projects currently underway in the United States – the LaGuardia Airport Central Terminal B in New York, the I-4 Ultimate in Florida and the Elizabeth River Tunnels in Virginia," he says.

P3s projects generally offer savings through a high degree of value engineering and innovation, application of synergies and avoidance of duplications and scope creep, which refers to changes in the scope of a project after the project begins.

Some other strong benefits of P3s include enhanced project innovation (construction and operations), better life cycle costs, condensed schedules, risk transfer, and accountability for the infrastructure to meet required standards throughout the life of the concession and beyond.

"We do not necessarily see P3s as a funding tool but rather a very viable instrument where the clients are looking for sharing design, construction, completion and operational risks with the private sector to achieve a high certainty of on time and on budget delivery," says Ericsson.

In the U.S., P3s make up about 1 percent of U.S. infrastructure projects. In Europe, it's closer to 10 percent. Skanska's experience with P3s started in the United Kingdom 20 years ago.

"We've done projects in the Nordic countries, Europe, Africa and South America, and now in the U.S.," says Ericsson. "We got involved because governments saw the benefits of bringing together the public and private expertise in a unique structure that transfers to the private sector partner the risk of project cost increases and schedule delays typically associated with traditional project delivery.

"Our expertise on how to allocate risk has made us successful with the P3 model," he says.

I-4 Project in Florida

Florida's $2.3 billion I-4 Ultimate project in Orlando, which began in January 2015, includes reconfiguring 15 major intersections, replacing more than 140 bridges and adding two tolled express lanes in each direction for all 21 miles. The project, which is the state's largest P3 project to date, is expected to be completed in 2021.

The Florida Department of Transportation (FDOT) determined that the P3 model would enable them to bring the I-4 Ultimate project to the public much sooner to meet the current needs.

"An analysis was done showing if the project was built under a traditional project delivery as public funding became available, it would have taken 27 years to complete," says Ericsson. "By using the P3 procurement method, the designing and construction of the project is taking less than seven years."

On the I-4 project, the benefits of a P3 include encouraging long-term efficiency and service quality, accelerating the construction schedule, providing a mechanism to finance project funding shortfalls and allowing FDOT and the traveling public to benefit from lifecycle cost optimization and technical innovation from the industry.

How the funding works

The P3 contract for Florida's I-4 Ultimate project is between FDOT and I-4 Mobility Partners, which is tasked with designing, constructing, financing, operating and maintaining the project for 40 years. The members of the I-4 Mobility Partners team include the following:

- Skanska Infrastructure Development Inc. (Equity Member)
- John Laing Investments Limited (Equity Member)
- Construction Joint Venture – Skanska USA (lead contractor), Granite Construction Company, and the Lane Construction Corp.

FDOT didn't have enough funding available for the I-4 Ultimate project for a traditionally procured project. In fact, FDOT had approximately half of the $2.3 billion needed for the project in 2014.

By using the P3 procurement method where I-4 Mobility Partners took on the responsibility for funding the project, FDOT could implement the project immediately. Instead of paying the cost upfront, FDOT will now pay for the cost of the project in installments called availability payments, starting from completion of construction and ending at the expiry of the concession term.

"I-4 Ultimate will be built through a 40-year public-private partnership with the concessionaire responsible for funding the design, construction and operation of the project," says Ericsson. "The concession company, I-4 Mobility Partners, will earn certain milestone payments during construction and at final completion and thereafter annual performance-based availability payments during the operations period. The P3 funding mechanism allows FDOT to share risks with the private investors in I-4 Mobility Partners."

Why should you get involved?

Whether Trump's $1 trillion infrastructure plan comes to fruition or not, P3s are a viable model for funding some highway projects. Ericsson sees a lot of upsides for asphalt contractors to get involved.

"These projects are usually large and extend over a period of years," he says. "Therefore, contractors can anticipate a steady stream of work for a significant period of time.

"In addition, they offer companies the ability to deploy best industry practices to solve complex and challenging problems and help the client by sharing and mitigating risks," he continues. "Because of the built-in mechanism for operations and maintenance, they offer a chance for continued work in the future, after the project is complete."

Ericsson says Skanska firmly believes the P3 model is an excellent tool for financing infrastructure projects – such as roads, bridges and tunnels – as well as social projects such as hospitals, schools, courthouses, government buildings - here in the United States and around the world.

"With a P3 model, the public sector also benefits from a fixed price, specific timelines and deadlines for delivery, and guaranteed operations and maintenance performance-based contracts," he concludes.

Ericsson offers some advice to asphalt contractors thinking of getting involved in P3s.

"Be prepared for a collaborative environment on projects that require continuous planning, and then updating of plans as needed," he says. "We expect our partners to find and keep the right people on their teams and to engage in a safe work environment. This allows us to maintain a brisk work rate while maintaining our high standards for worker safety."

I-4 Ultimate by the Numbers

The massive I-4 Ultimate project is needed as a crucial trans-Florida link connecting Tampa and Daytona Beach. This expanse becomes a sea of red brake lights during the Orlando area's rush hours, a situation worsened by the highway's outdated 1960s-era design.

"The real premise behind it is because of the congestion through the Orlando area," says Brook Brookhire, Skanska vice president. "We are taking the general use lanes that they have now, reconstruct, and move those three lanes to the outside. This will create space in the middle to put four express lanes which will use congestion tolling to better manage the traffic."

When the Skanska team completes construction in 2021, the Orlando stretch will be a better-functioning highway – with safer curves, improved access to connecting roads and all new driving surfaces – and a more aesthetically pleasing corridor through artful bridge design, lighting and landscaping.

To manage this extensive project, the Skanska team divided the 21 miles into four sections of four to six miles each: Attractions, Downtown, Ivanhoe and Altamonte. In each area, Skanska is establishing field offices staffed with 30 to 50 project management staff.

The project headquarters is in a 42,000-square-foot building along the route in Maitland, which will house approximately 160 people. All key project partners are co-located there, which promotes rapid and collaborative decision making.

SGL Constructors will have about 220 management staff, and at the project's peak there will be 1,500 to 2,000 craft employees (both direct hire and through trade contractors).

I-4 Ultimate requires a huge equipment fleet: 250 to 300 pieces of heavy equipment – including excavators, loaders, cranes and backhoes – and another 220 pick-ups and SUVs. The price tag for all this? An estimated $125 million. That doesn't include the 90 to 100 on-road dump trucks. Most of the equipment and vehicles will be new and acquired through strategic leasing methods.

With all this, the most impressive number might be the projected $56 million equipment fuel bill, plus even more for those dump trucks.