
A Cost-Effective Way to Rebuild 500 Bridges.

In leveraging public-private partnerships to replace many of its deficient bridges, Pennsylvania's new approach is realistic about the true costs of a transportation asset.

Pennsylvania's reign as the nation's leader in structurally deficient bridges will likely come to an end over the next few years, thanks to a 2012 state law that will dramatically boost infrastructure investment by authorizing public-private partnerships on a wide range of transportation projects.

About 18 percent of Pennsylvania's bridges are structurally deficient, which means deterioration of at least one component puts the bridge at risk for weight restriction and eventual closure. The national average is less than 8 percent.

But beginning next year, at least 500 of the Keystone State's more than 4,000 structurally deficient bridges will be rebuilt under the Pennsylvania P3 Act. Absent the act, the bridge replacements would take 15 to 20 years, according to Pennsylvania Department of Transportation (PennDOT) spokeswoman Erin Waters-Trasatt.

Since most of the new bridges will have similar designs and construction standards, PennDOT will save money by bundling the projects rather than designing and building them one at a time. And unlike traditional rebuilds, these projects won't be considered complete once the new bridges are built: Recognizing that operations and maintenance account for 80 to 90 percent of costs over the lifetime of a transportation asset, the private partners will also operate and maintain the bridges for as long as 40 years.

"With the requirement to take maintenance costs into consideration, the project team may decide it is more cost effective to build the bridges in a way that reduces the amount of anticipated maintenance in the future," Waters-Trasatt told the Pittsburgh Post-Gazette. "The department anticipates realizing value from this by reducing not just the construction cost but the whole lifecycle cost of the bridge," Payment will be based on the contractor's performance at limiting lifecycle costs.

The Pennsylvania P3 Act that expressly authorizes projects like the bridge replacement is expected to spark about $3.5 billion annually in additional transportation infrastructure investment without relying exclusively on tax revenue to fund it. PennDOT can give private partners the right to use or control an asset for up to 99 years. Operations, maintenance, collection of revenue and/or user fees and financing are among the things the law authorizes private partners to do.

Given the law's focus on long-term savings, it wisely calls for best value as the selection criteria. Under the traditional low-bid approach, saving a dollar on construction too often results in spending far more on operation and maintenance costs down the line.

Projects will be overseen by a Public-Private Transportation Partnership Board chaired by the state's secretary of transportation and including the budget secretary and five other members from both the public and private sectors. If the board determines that a state project would be more costeffectively administered or delivered by a private company, the appropriate transportation agency then can advertise a competitive RFP and enter into a contract with a company to completely or partially deliver the service or project.

There is no shortage of opinions about just how much transportation infrastructure investment our nation really needs. But the Pennsylvania P3 Act reflects a reality about which most observers do agree: Whatever the magnitude of the need, it’s unrealistic to expect it to be addressed with tax revenue alone.

BY CHARLES CHIEPPO | JANUARY 28, 2014