A lot of attention has been given to the size of the federal infrastructure package that was signed into law last month. Unfortunately, the total dollar amount is not the most important factor in revitalizing our infrastructure. The key metric should not be how much we spend, but how effectively and efficiently we spend it.

As chair of the New York State Thruway Authority (NYSTA) from 2011 through 2014, I led the procurement process to replace the Tappan Zee Bridge, 20 miles north of New York City. My expertise as a private builder helped complete this massive project ahead of schedule and approximately 40 percent under budget. It remains one of the largest public design-build projects in the country and offers lessons in the effective use of private sector procurement practices in public works.

At the outset, the U.S. Department of Transportation estimated the cost for construction of a new bridge at $5.4 billion, based on prior procurements. That was before adding in the usual delays, cost overruns and other factors that often double or triple the final costs of a project. That did not sound right to me and as we moved forward in the procurement, I realized we could create a new model for modernizing the nation’s infrastructure.

The historic design-build best value procurement process we developed was completed in less than one year by applying an entrepreneurial, private sector approach. Public sector bureaucracy often relies on the past to set benchmarks for future performance. The private sector, by contrast, looks at how things can be done better in the future. It requires asking the right questions, demanding answers, and rejecting business-as-usual. Here are some of the elements of private sector thinking we introduced to the public procurement process:

**Speed:** As a builder and developer, I knew that risk increases exponentially with time.

**Design-build contracting:** We introduced a procurement model in which a single consortium bidder is responsible for both designing and constructing the project. (Traditional procurements have bifurcated responsibility and sometimes divergent objectives.) As such, the bidder must think about time, complexity, and the total cost of construction during the design process, not after. As issues arise during construction, finger-pointing is replaced by problem solving in real time. It’s an integrated, efficient, and cost-effective process with proven results. But it requires legislation when applied to public works.

**Strict deadlines:** Once we selected the bidders, we worked hand-in-hand to establish the common goal of delivering a new bridge on-time and on-budget through integrated collaborative teams and positive working relationships. We incorporated the private-sector practice of strict deadline penalties and management requirements to remind the contractor that there are consequences – in some cases amounting to hundreds of thousands of dollars a day – for not finishing on schedule. Quality was assured with a 100-year guarantee from the contractor.

**Collaboration:** We did not simply issue a request for proposals (RFP) and wait for bids to come in. We made a conscious decision to draw on the knowledge and experience of the true experts: the bidders themselves. In this case,
there were four quality bidders with deep global experience in building major bridges. During the ten-week period when the bids were prepared, our engineering department met separately, every week, with each of the four teams and asked them important questions: If they were leading the process, how would they run it? What would they do differently? What changes would they make in the RFP and our thinking about how to build the new bridge?

We received three bids, with one priced at $3.14 billion, which was significantly less than the other two and more than $2 billion below the $5.4 billion projected by USDOT. NYSTA executives suggested we ask all bidders to go back to the drawing board and submit a “Best and Final Offer.” When I asked them why they would do that, their only answer was that this was the way things were always done. I told them not to seek additional bids for several reasons. For one, the low bidder might find out the other bids were much higher and raise their own. Unexpected economic events, like a stock market crash, recession, or natural disaster, could also throw the entire process into disarray. When you get the right offer, take it. Do not let process get in the way of results that are far better than expected.

Too often in public works, hard-working civil servants are conditioned to value exactly the wrong things. In this case, that was advocating for process over outcomes. The NYSTA team of highly qualified, seasoned professionals, struggled to function in a system that undervalued their work and disincentivized risk-taking and new thinking. The team needed recognition and incentives that could unleash their full talent. But the conventional procurement process was not about innovation and results.

The success of the Tappan Zee project is a testament to the power of smart planning and a culture of cooperation between public and private sectors. The procurement method we used can and should be replicated nationally. Doing so will promote the efficient and effective deployment of hundreds of billions of new federal funding. Let’s get true value with this taxpayer money by applying these lessons from the private sector.

Howard P. Milstein was Chairman of the New York State Thruway Authority from 2011 – 2014. He is currently Chairman of the Regional Plan Association’s Committee on Critical Infrastructure.