POISED FOR EXPONENTIAL GROWTH

TRC's Doug Massih forecasts optimism as we look to the future of infrastructure

BY BARBARA BILLITZER

With the recent executive orders green-lighting the Keystone XL Pipeline and Dakota Access Pipeline, the future of infrastructure looks promising. So when we read about some key infrastructure predictions from TRC Companies, our interest was piqued.

TRC has decades of experience in the power, environmental, infrastructure and oil and gas markets. The firm has served commercial, industrial and government clients since the 1960s, and has a reputation for pioneering groundbreaking scientific and engineering developments, including seismic structural engineering for bridges in active earthquake zones.

Three Bold Predictions

The company made three bold infrastructure predictions for 2017. The first is to expect a big—and differently funded—push for infrastructure upgrades. The second is that we will see more alternative delivery methods to get projects built more quickly and less expensively. And third, hot technologies will heat up basic infrastructure management.

To get more insight into how these predictions will impact right of way projects in the coming year, we recently interviewed TRC's Senior Vice President and Infrastructure Sector Leader, Doug Massih. And according to Doug, the industry is poised for exponential growth.

In this interview, we discovered that Doug knows a thing or two about infrastructure. During his 30-year career, he has worked on transportation projects that have ranged in value up $2 billion. He was instrumental in transforming TRC's infrastructure business from a regional model to a nationally integrated practice. He also initiated and manages the Infrastructure Sector's Public-Private Partnership discipline, as well as the firm's project management training program, which has graduated more than 1,000 of the company's rising leaders.

Q: With the President's plan to spend $1 trillion on infrastructure over 10 years, how long before we feel a positive impact?

DOUG: Obviously, as soon as possible, we hope. We do see bipartisan interest in fixing our crumbling infrastructure by leaders of both parties. It can be funded many ways. Senate Democrats have a $1 trillion, 10-year plan that leverages government funding, and the White House plan focuses on private sector investment.

One idea that is getting a lot of attention now is a tax holiday on what's called the repatriation of overseas corporate profits. This means dropping the corporate tax rate from 35 percent to 10 percent on profits now sheltered abroad by U.S.-based corporations if they're willing to "repatriate" the profits to the U.S. How much money that would bring back to the U.S., we can only guess, but you see estimates as high as $2.4 trillion. If just half that much comes back in tax incentives, now you've got $120 billion in tax revenue that can be spent somewhere. Many are saying that we should use this one-time tax revenue for a one-time infrastructure boost.

Q: What kind of impact on staffing and personnel qualifications do you foresee?

DOUG: More spending on infrastructure almost certainly means hiring more people, both for right of way service providers and the corproate sector. Clearly, governmental agencies will see an increase in projects too. But given that it's only getting harder, not easier, to complete infrastructure upgrades in the 21st century, we won't need just more people, we will need people with deeper skills. That may include having technical expertise in everything from cutting-edge routing-optimization platforms, using drones for surveying and monitoring projects to best practices for avoiding sensitive or controversial areas. Some of these new right of way specialists may well come in from other sectors, like oil and gas pipeline development and electric transmission infrastructure routing.

Q: What are your thoughts about a national infrastructure bank?

DOUG: We think a national infrastructure bank (NIB) is an excellent idea, and you could fund and launch it with the proceeds of a repatriated-profits tax holiday. It would really function like any other bank, providing the initial funding that encourages other investors to step up. You could expect to see NIB loans matched by double or triple as much in private-sector investment, especially if NIB funds are (a) enhanced by tax incentives that lower private investors' tax liability or (b) used to knock down up-front costs of project development, assembling rights of way or parcels to expand a facility, to make the potential returns on finishing the project more attractive to private investors. We see a broad consensus that an NIB would be a job creator and good for our country.

Q: Where do you see the greatest need—in the repair and maintenance of existing infrastructure or in building new infrastructure to serve a growing need?

DOUG: Really, it depends on where you are talking about. It's a decision that needs to be made at the state and local level. What may make sense in Delaware may make no sense in Florida, and what may be great for New York may be awful for Dallas. Usually, it's a significant combination of repair and new

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construction. If you think about older areas of the country with aging infrastructure and slower or no population growth, obviously, repair and maintenance will be a bigger focus than they are in fast-growing areas where we needed to expand roads yesterday. In some places we really don't need to add to or expand our existing infrastructure, it just needs to be fixed. Bridges, if they were structurally sound, could support a better load. Or we can increase the capacity of existing infrastructure by making some changes like longer on- and off-ramps or collector-distributor roads within existing rights of way.

Q: With tax breaks for private-sector investors who back profitable construction projects, what about the desperately needed projects that are not attractive to private investors, such as municipal water-systems, road repairs and replacement of bridges that do not charge tolls?

DOUG: Certainly, to go back to your good question about a national infrastructure bank, an NIB plus tax incentives could definitely help there by better sharing the costs, risks, and returns on investing in a water or road project. We also back the concept of applying new tolls to existing infrastructure that needs costly upgrades or outright reconstruction, such as a bridge that needs to be rebuilt. We find that the public actually responds pretty favorably to a new toll if it is directly associated with a specific facility and they know that once the toll is approved and the work is done, they will get through there faster. Technology for electronic tolling at travel speeds makes this a non-issue for slowing traffic. What people don't like is putting a toll on a facility, and not using that money to maintain and improve the same facility.

Q: If new public/private partnerships are needed to create infrastructure, how do you envision the new P3s be different and address the public's opposition to tolls and other user fees?

DOUG: Well, as previously mentioned, we see that the public is not actually always opposed to tolls and user fees—just the ones where they perceive a disconnect between what they're paying and how they're benefiting. As a country, it's fair to say we really haven't tapped into the potential for P3's as much as we could. We've seen multiple projects in states like Texas and Florida and Virginia. Every state has a different way of trying to do it. If we could increase the speed to market and project inception, we could see an increased interest from private partners. There is a lot of money looking for projects—but they don't want to wait around for 10 years before they get the green light to make it happen. We also see a lot of opportunity for not just one-off P3's, but bundling of lots of projects, or a private-sector concession for a corridor-improvement area. We're working on a P3 in Pennsylvania where the Pennsylvania Department of Transportation is replacing 558 bridges. Bundling 558 bridges into a billion-dollar project garnered tremendous interest from the private sector.

Q: Many see rebuilding our infrastructure as a state issue, rather than federal. What are your thoughts?

DOUG: It's been both for a long time and still is, even if the mix of state and federal funding, initiatives and leadership changes over time. Today, roughly half our highway infrastructure work is paid for by the federal gas tax, which is collected at the state level. Some states might get back just 80 percent of what they paid in, while others might get 100 percent or even 110 percent. Regardless, there's still a major federal role. Like a lot of people, I do wish the federal government would give the states more autonomy to do what they want with state investments. Some federal officials clearly want states to have more autonomy, but in other places, because of regulations and requirements, their hands are tied. And then you're also seeing in places like New Jersey, states saying, "We're willing to act on our own now and raise our state gas tax to generate more revenues to address our infrastructure needs." As gas prices remain relatively stable and the economy begins to improve, we might just see more gas tax modifications at the state level.

Q: What do you see as the best mid-to-long-range funding plan for infrastructure, replacing the gas tax?

DOUG: A user fee. If I don't use the infrastructure, I shouldn't have to pay for it. If I do use it, I pay according to how much I use it. It could be a toll, or it could be a mileage-based system like Vehicle Miles Traveled (VMT), which is being tested in a lot of areas. We can address people's concerns about privacy. I don't care where you've been, all I want to know is how far you've travelled. If you've travelled 100 miles this month, here's what you're going to pay. Think about this: I may have a vehicle that gets 6 miles a gallon, while someone else might have a same-sized vehicle that gets 40 miles a gallon. But if we travel the same amount and do the same amount of damage to the roads and bridges, we should pay the same amount. Now, it's hard to flip a switch and make it happen. We need to make sure the technology works. We need to make sure we're being fair and equitable. But "you pay for what you use" is a principle that makes the most sense in every realm, including infrastructure.

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Q: Given our burdensome permitting processes, what would you like to see happen with regulatory reform?

DOUG: Pretty much everyone would prefer to see today's permitting process compressed from what it currently is. With our projects, we have seen how the permitting process can take a long time because of how multiple agencies have to get involved in the review. If we could get agencies to review things concurrently—and encourage greater collaboration among agencies during those reviews—that might help speed up the process. I know a lot of project developers would love a system that commits to a deadline for approvals.

Q: In light of increased environmental activism and resistance to nearly all projects that involve new infrastructure, how can we overcome societal opposition?

DOUG: We have learned that the more community interactions you can have—and the more you work to engage with those who have a stake in a project—the more you can identify and defuse opposition. Often people react from a fear of the unknown. So getting the right information to as many people as you can, as early as you can, is key. You also need to recognize when you are dealing with a very loud minority versus a quiet majority. You're never going to keep everybody completely happy. Are there ways to satisfy as many people as possible?

Finally, we encourage project developers to understand the context of what a given community's highest priorities are. For example, let's say you are rebuilding a roadway that passes through a community where there's strong interest in expanding recreational walking and biking paths. The roadway project, the impacts and the traffic may be controversial. But if you can expand the scope of rebuilding the roadway to include a new path or a new footbridge connection for the community, you may now be able to make the project more popular and increase buy-in. You've gone from just rebuilding a road to fulfilling a community's highest aspirations.

Q: Environmental rules are almost certain to be gutted in the name of accelerating projects. Are there any risks associated?

DOUG: So, first of all, we would dispute "gutted." That's a bit strong. Clearly, environmental regulations are there for a purpose, and they're inherently a good idea. People, wildlife, habitat, and natural and historical resources all deserve and need protection. From our perspective, we just think it would be a good thing if we could streamline and accelerate the process of complying with those worthy regulations. It's always worth scrutinizing environmental rules to make sure they make sense and are actually delivering the protections and benefits we want from them, and cost-effectively. That said, when you're working on infrastructure upgrades, you're often talking about projects that will improve a community, or literally save people's lives by bringing deficient and obsolete roads and bridges to today's safety standards. We absolutely need to identify how we can accelerate the process of complying with those rules. That will help us to accelerate the completion of those projects and accelerate the benefits to people and society. ✪

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