InfrastructureUSA

Guest on THE INFRA BLOG

Bill Peduto, Mayor of Pittsburgh

Conversation with Steve Anderson, Managing Director, InfrastructureUSA

Innovation on the Local Side

I think that what we've seen is a stalemate out of Washington, and when water's going down a river and it hits a rock it finds a way to go around that rock. If Washington has had difficulty passing transportation bills and is creating mandates on things such as combined sewer overflows but isn't providing funding for it, solutions are left to the local level to be able to resolve it. When they built the first railroads, everybody was running off different gauge and you couldn't get from one place to another, and then the federal government basically said "this is the gauge that all railroads should use," but it didn't stop the entrepreneurial spirit of creating your own railroads. So as long as there is some guidance from the federal government that all of this will be able to work and connect cities, I think it's absolutely exciting to have a competition between cities to say who can do it best. There's a long history, about 150 years, of innovation that's fueled the economy of western Pennsylvania. Where some would see it as steel, others would say it was Andrew Carnegie and the innovation of the Bessemer process, of how he produced steel. Others would see it as manufacturing, and some would say it was George Westinghouse in the innovation that he was creating through the patents to change this country. So there's always been a partnership between the ability to create and innovate and the ability to build—that's in our DNA. We went through a thirty-year recession/depression, and now we have re-emerged where we were before, which is with a new 21st-century model. When we look at our infrastructure, we have the opportunity to be innovative once again.

Autonomous Vehicles in Pittsburgh and Beyond

We now have the ability to look at transportation in a much different way than we did before, and you're starting to see it with things like sensors. The automobile industry has been experimenting with it for years, and now the idea of cars that can talk to each other, that can talk to public infrastructure, that have the ability to distance themselves and create safety, within the next few years will have the ability to communicate with traffic signals, and with real-time analysis be able to make traffic flow better. Cities around the world are partnering with private industry to make that happen now. Today there are two groups of autonomous vehicles driving on the streets of Pittsburgh: one led by Carnegie-Mellon University, that we partner with, and the other led by Uber, who has created their global autonomous vehicle center here in the city. So we want to be a leader in this industry; we want to be able to not only create the research for it, but the products as well, and we see it as an economic development engine, not simply a modernization of transportation. The changes happening within transportation through technology will be the same ones that will lead that industry for the next 20 years, and we want to be one of those cities.

The Energy Component: More Than Just Transportation
In the city of Pittsburgh we're building out a complete-streets model which takes into effect public transit, vehicle use, pedestrian, bike, but also technology that will be part of the next 20 years, including autonomous vehicles, and the structure around it. So when we look at multi-modal, we're looking at a combination between technology and all modes of transportation and then how they all can work together and what will be the options available to people 20 years from now. And there's one other component that we're adding into it, and it makes it a little bit different than most cities, and that's energy. As we redevelop transportation routes and corridors throughout the city, we're also creating microgrids through district energy plans to be able to power it right here within the city. And that would be the same power that will heat and will provide electricity to the buildings around it. I think it extends beyond just the sustainability to a full resiliency, so we won't be reliant upon energy from hundreds of miles away, or grid systems that haven't seen the needed upgrades in that infrastructure, but it will be energy that's provided on a local basis tied in directly to our transportation models through the use of technology. It's the bringing together of those three things: energy, infrastructure, and technology.

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