# InfrastructureUSA

# **Guest on THE INFRA BLOG**

Terry Bennett, Senior Industry Program Manager, Civil Engineering & Planning, Autodesk

Conversation with Steve Anderson, Managing Director, InfrastructureUSA

# **Holding the Public's Attention**

The last time we had a true infrastructure vision for the U.S. that got the American people's attention, and held it, was back when Eisenhower did the highway system. Since then we have never really updated that vision. We never made it part of the national narrative. People over that time, because of that lack of constant reminding, thought of infrastructure as a disposable commodity, something that was always going to be there. Something that didn't require any maintenance cost, that you build it once and then you can just leave it alone forever. And until you have a water main break that shuts down a city or road, until you have a bridge that fails, it doesn't become part of the national attention; it gets lost in the message. I think the connection between the fact that you really can't have a first-class society without first-class infrastructure is lost on a lot of people. They don't make the connection between the economic engine that drives the country and the infrastructure of high quality that makes it happen.

# Focusing on the Solution, Not the Problem

The real driver is that, for many years, we've been hearing about how bad the infrastructure was: bridges, water systems, dams, levees, and the grade that ASCE has always given has been a D+. So a lot of the focus has been around two different things: one has been how bad each segment was, and two, treating them each as siloed sets of infrastructure. After numerous discussions with other company executives at various meetings, we decided to focus around providing answers rather than the problem itself, and let's look at how to look at infrastructure holistically as a system, not as a series of individual components, because at the end of the day all of our infrastructure systems are interrelated. So we decided to embark on a process of looking at how to redo the way we do infrastructure. How do we think about planning and delivering it differently? What policies could help make that happen? And then create a set of recommendations to start that process.

# Making the Grade Report: A Blueprint for the Future

It was not trying to focus on just a road or a bridge but come up with an approach that could be replayed at a local, state, or federal level. An approach that could work for all types of infrastructure so that we had a blueprint for how to do all these projects, how to make them drive economic change, how to get the U.S. back to #1 in the world in infrastructure quality and not #14. We've lost the connection between how having this first-class infrastructure drives a first-class economy, which creates first-class jobs. It was a comprehensive approach not to focus on one funding source for one particular

infrastructure type for one state, but a blueprint that every state can use for all their various infrastructure so that we start getting synergies between these processes and not just one-offs every single time, kind of a band-aid approach.

# **Using the Report to Increase Public Involvement**

We have a commitment from all the contributing firms that they're going to take this and use this report as part of their day-to-day engagement with their clients and the people they work with and their ecosystem. We're going to be doing a series of presentations at upcoming conferences to continue this conversation onward. It's one of the things to make sure we keep the drum beat going about the need to update this, and that's both in the public sector, that's both with policy makers, it's also with congress to get people to bring back sort of the core of what we can do when everybody's aligned behind an idea. And things about having good infrastructure to build good cities and economically and wisely managing their natural resources doesn't cross any boundaries, everybody agrees it's the right way. And I think today with a combination of technology that allows you to create and visualize and simulate future conditions virtually and share these ideas across a wide range of demographics. Allow people to plan their communities and their infrastructure on the computer first, see what it looks like, share ideas, crowdsource planning, and then be able to make those ideas and pass them out to those that will build the next generation of infrastructure, and then you don't get a surprise look at the end of "this is not what I thought I really wanted." We can simulate a lot of this now, so we can answer a lot of the questions through a lot of this engagement. I think continuously to do that and improve best practices, change standards, and make sure we're using the latest tools, technology, and infrastructure-financing approaches, essentially do the six things that are in the plan, provides us the foundation to make that happen.

#### **Technology: Making Civic Engagement Possible**

We know that design has, for a long time, been the driver and shaper of human change, and now with the advent of things like cloud mobile and social computing the ability to get information out in real time allows the American people, not just the select few of the engineers and designers, to become active in the planning process, to understand and provide input into what their communities look like in the future, what their cities look like, and to really start a public service campaign of such to educate today's stakeholders on the vital role that infrastructure plays in their lives and how to re-imagine what they want their cities of the future to look like and what it does for everyone else. It provides a vision and a strategy to have a renewed commitment to betterment of everything through contribution as a society and not just, "we'll leave it up to a select few politicians and designers," because today we can have everybody's input and take that in stride to plan and design our future cities that we pass off to the next generation.

# **Bringing Infrastructure Back into the National Dialogue**

In general, we all believe that many of the answers will be found by reconnecting the American people with the many economic, social, and even environmental aspects of

infrastructure and its investment. Today's challenge is really about renewing our vision for how to balance natural and man-made infrastructure, and how to leverage both to enhance our future condition, and find synergies between our socially and environmentally connected worlds. That's always been a balance to connect those two, and going forward it will be even more important to make sure they are in balance and connected, and we learn and leverage best practices, not to repeat the mistakes, but to take the things that work really well and democratize them.

# Taking a Beginner's Approach

One of the people who worked on this with us, a strategist, his point was that in the mind of the beginner there are few opinions; in an expert their are many, and all the innovations really come from the beginner's mind because they are open to doing things differently. And that was one of the key things out of this report. Let's take a beginner's mind, look at all of the things around us, and then figure out the best and the most opportune way to get to where we want to go. And then really think the possible. I mean that's one of the key things that we certainly do from the artist's side: our tools are used for people to imagine, design, and create. And that's exactly what we need to do, is rethink where we're going and don't just extend where we've been but really take a hard look at where we want to go and we may have to take some turns that we didn't foresee 10 years ago.

www.InfrastructureUSA.org 212.414.9220 info@infrastructureusa.org