Host

Hello and welcome to the Federal Highway Administration's or FHWA’s, R&T Now Interchanges. The host of today's audio cast is Craig Thor. Craig serves as the chief scientist in FHWA’s Office of Research, Development and Technology. Please welcome Craig Thor. Thanks.

Criag Thor

Today's session is a special R&D now interchanges conversation. We are speaking to the first female director of the Turner-Fairbank Highway Research Center. But today's session is also bittersweet because we are also saying goodbye. Joining us today is Doctor Kelly Regal, FHWA’s associate administrator for research, development and technology and the director of Federal Highways Turner-Fairbank Highway Research Center. Kelly joined Federal Highways in February 2020, but she is no stranger to transportation. She has worked in several modes within the Department of Transportation, including the Federal Aviation Administration, Research and Innovation, Technology Administration, and the Federal Motor Carrier Safety Administration.

Kelly holds a bachelor's degree in computer science from Seton Hall University, a master's degree in aeronautical science from Embry-Riddle Aeronautical University, and a PhD in transportation engineering from the New Jersey Institute of Technology. It's a pleasure to have an opportunity to talk to you today, Kelly.

Kelly Regal

Thanks for the introduction, Craig. I'm happy to be here today. As you just pointed out, I started my career in a research facility, and now I'm ending my career in a research facility.

Craig Thor

Yes. Let's talk about that a little bit more. Tell us what inspired you to get into transportation research in the first place?

Kelly Regal

Yeah, as a little girl growing up in the city of Newark, New Jersey, we took all forms of transportation to get around from my parents driving me somewhere to taking the bus uptown to go shopping, also the subway to head over and to New York City. I think it was that that just, you know, fascinated me and also, we live close to Newark Airport, where we could see the planes flying over pretty closely as they were either taking off or landing, depending on the pattern. So, I love to travel, and I always felt that, you know, these vessels, these vehicles will get me to places.

And so that just, you know, I think really inspired me and really gave me, the interest in wanting to work in transportation and really then learn more about it.

Craig Thor

Great. And so, over your career, what are some of the biggest changes you've seen in the world of transportation research?

Kelly Regal

Certainly, it's the technology and the way that people receive information. You know, with the with the introduction of the iPhones, using apps like Waze understand what's going on with the traffic situation, the technology in the vehicles themselves have really grown over the years and made traveling more safe for us. So, you know, those are the types of things that I've seen, you know, just in really the past 25 or 30 years that I think have, enabled us to move even a bit, not only safer, but more efficiently, too.

Craig Thor

So, let's talk about you a little bit more. And as you think about your career, whether it's at federal highways or any of the other areas of the Department of Transportation that you've worked in. What are the contributions that you think you've made to the field of transportation research that you're most proud of?

Kelly Regal

What I'm most proud of is prior to 9/11, I was working in the FAA's Explosive Weapons Detection Laboratory, and there were chemists and other scientists in there that were working on developing technologies on how to detect explosive weapons. I was asked to do detail there. I didn't know anything about really explosives and weapons and how to find them, mainly to understand what the software was doing in these systems and how they impact operations. So, I got to work with various different air carriers. They would give me data, information about how their passengers would arrive to the airport and I was able to study then the impact of any of our screening technology on airport and airline operations. So, I would say that's one thing I'm most proud of, is being able to have an impact on that industry. And like I said, you know, not only to make it safe, but also to make it efficient as well.

The other impact that I'm most proud of is really getting this position, being selected for this position as the first woman director of the Turner-Fairbank Highway Research Center. I mentioned earlier that, yeah, I started my career in a federal laboratory, which I experienced some of my most challenging assignments and rewarding assignments, and I wanted to end my career in some type of research facility or federal laboratory.

Being the first woman director of Turner-Fairbank, was really just more icing on the cake for that.

Criag Thor

So, you talked about how important it is to you to be the first female director of Turner-Fairbank Research Center. Can you describe why you think that's important and what kind of message you think that sends to other people in the transportation field?

Kelly Regal

When I started my career, it was very male dominated. I didn't have very many female role models. So, to me, that's why it's important to be that role model for a lot of our young female engineers here at Turner-Fairbank and anyone interested in working in the transportation industry.

Craig Thor

And so, thinking about someone who's entering or thinking about entering the transportation research field, what advice would you give them based on your many years of experience in different parts of this field?

Kelly Regal

The vice that I always give is, no matter what you're interested in, what discipline you're interested in, whether, you know, you're interested in accounting, engineering, human factors, there is a place for you in the transportation industry. We need all those types of skill sets. And not only is it something we need here in the United States, but transportation problems and challenges are worldwide.

It's an industry that actually you can, you know, go all over the world and, and have an impact work on some, you know, pretty significant challenges.

Criag Thor

And so now that you are retiring and the position of associate administrator for RT&D at Federal Highways will be open, and I'm sure it'll be lots of interest in this position. What advice would you give to the next AA for RD&T?

Kelly Regal

Let's see, the advice I would give is that, get to know the people here at Turner-Fairbank. This is very much a family-oriented facility. When one staff’s, you know, child sneezes everyone knows about it. Everyone is truly, genuinely concerned. And we're all here to support each other and lift each other up. That's the really, I think, the first advice I would give it truly is a very family-oriented community.

And the other advice is… learn about the research needs because Turner-Fairbank is a world class facility. Our challenges are always evolving. We want to make sure that we have the skill set and the tools needed to address those challenges. And so, we need to work with the group, understand what their needs are so that, you know, we can make sure that we either buy those new research tools or technologies that we need for any one of the labs.

For example, you know, we did a ribbon cutting ceremony on the pavement test facility that Secretary Buttigieg came out and did that for us. It's a world class, facility now, and what was needed to get to that point was having the foresight of: there's new challenges coming, durable pavement materials, and we need a facility that can be able to do that type of research.

So having that foresight and to be able in invest in these type of tools and capabilities, I think is, extremely important that the next center director understand and keep moving forward with.

Craig Thor

Great. And so, switching from your career to what you have coming. So, you're going into retirement. You've earned the right to do what you want now in retirement. And I know you have big plans. So, talk a little about what you think you will be doing in the next few months, in the next few years.

Kelly Regal

So even in retirement, I have a transportation theme going on there, ready to get on my sailboat. It's a 47ft island packet model 439, and I hope to take the sailboat, all over the world. That's the plan. The first plan is to head south, spend some time in the Caribbean, hone my skills, and then once I feel comfortable enough, I would really like to do a transatlantic crossing. I figure I got a good ten years in me to do some serious sailing, which is, you know, been a dream, I think, all my life.

After that, I may trade it in for a Land Cruiser instead. That's typically what all cruisers do after they're done sailing. So those are my, plans. I have been to all seven continents. And the reason for that really is a part of, you know, the work I've done the past 30 years. It's taken me all over the world.

And I hope to continue that on my sailboat to travel all over the world with it and continue to experience great cultures, different cultures, and just, you know, see the world again.

Craig Thor

Well, as someone who grew up around the water and on boats, I am truly jealous of your adventures that you have coming. So maybe someday I can get a sailboat and do a transatlantic crossing as well, although I'm not sure my wife would be on board with that.

Kelly Regal

I'm always looking for crew. I have a long list of crew now. All volunteers.

Craig Thor

So, thank you for joining us today, Kelly. We appreciate your years of service to federal highways, the Department of Transportation, and the American public. I wish you well in retirement and the new adventures you have coming your way. That's all the time we have for now. Thanks for tuning in to this episode of R&T Now Interchanges.

Host

Thanks, and we'll be back soon. Want to see a topic covered in a future episode? Please send an email to FHWA-Now@dot.gov. To download new episodes of our conversations. Go to our R&T Now Interchanges web page. Take care everyone. Until next time.