

## Noopur Jain is riding history in on a rail for California and WTS



*Noopur Jain (WTS-LA Recognition and Student Outreach vice president), Photo © John Livzey, 2018*

It has never been done here. But the California High Speed Rail Authority (CHSRA) is putting shovel to ground and launching the first high-speed rail (HSR) line in the US. WTS-LA Recognition and Student Outreach vice president Noopur Jain is helping to write that history by serving as CHSRA statewide engineering manager. And she couldn't be happier.

"We are planning, building and designing 800 miles of HSR through California, and handling all of the challenges that come with that. I'm responsible for technical oversight, leadership, management, and delivery of all aspects of engineering for the HSR program statewide. Remember, California has all kinds of geologic variation, which most certainly adds to the challenge. But California also has unique seismic conditions. And we're looking at lot of tunneling and long and tall viaducts through seismic zones. In areas like the project section from Palmdale to Burbank, we'll be tunneling about 2,000 feet deep underground! So, the engineering challenges are quite significant. But my responsibility is not limited to the technical aspects of the work.



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"CHSRA is a very lean organization, so we have an extended team of consultant partners on the project. My role is also to oversee and manage that extended team as well. We also have many stakeholders including Metro and Metrolink (in Southern California) and many others statewide. So, in addition to the technical challenges there is a considerable management component. But make no mistake. This is most definitely a comprehensive engineering challenge. Essentially, what we're doing for California is what many people do for whole countries. It's a combination of technical expertise, management, and leadership skills to address the big picture, the overall vision, and the nuts and bolts of the engineering."

But in discussing those challenges, Ms. Jain is quick to point out the project's substantial and far-reaching benefits. Though the obvious beneficiaries will be Californians needing to travel within the state, Ms. Jain sees value well beyond that.

"California is the 6<sup>th</sup> largest economy in the world. Creating a mode to rapidly move people around the state will help transportation overall. But California is also a national and international tourist destination.



actually ride it.”

And that’s a significant source of revenue. When those tourists get here, they often want to travel across California. We need something that can connect everything together and move people around faster. So, HSR is not just for commuters; it’s for everyone. Also, once the line is running it will alleviate both vehicular and aviation traffic. High-speed Rail also provides a solution to California’s affordable housing problem by connecting all regions of California. So, the benefits of HSR extend well beyond those who

Ms. Jain also sees California as a role model for other state HSR programs. From train sets to procurement strategies to technical innovation, she believes California will blaze the trail for other states to follow. But that quality is exactly what drew her to the challenge in the first place. In fact, it fits a pattern she’s followed her entire life.

“When HSR came to my door, my first thought was actually whether it was challenging enough. But that goes back to my upbringing as a girl in India. For me, it was a very strict, conservative, and traditional society. Pursuing engineering as a career was not encouraged for a woman in India when I was growing up. But I was very determined and didn’t follow the norms that were imposed on me. As a result, I get bored if I’m not challenged. So, when the opportunity for HSR arose, I wanted to know more. And the more I learned about the project the more I understood how challenging it would be. I knew I’d never be bored. But an equally important driver was becoming part of history.”

Fitting her skillset and personality perfectly, the CHSRA statewide engineering manager position has also garnered attention for Ms. Jain. Last year, *Engineering News-Record* named her one of its inaugural “Top 20 Under 40,” a ranking that recognizes “the brightest on the national level,” citing her work on CHSRA and her insights into the future of engineering and construction. Though grateful, Ms. Jain focuses little time on rewards and recognition. Instead, she believes strongly in another principle, one that aligns perfectly with her work in WTS-LA.

“I believe in paying it forward. And the best way to do that is to make a difference with the next generation of the workforce, the students. That really speaks to my heart. If we want to make a change in the transportation industry, we must engage, train, and motivate the young people, particularly girls. That’s why we’re working so diligently to advance programs like Transportation YOU and the Scholarship program at WTS. With Transportation YOU we revamped the entire program last year. We have a fully loaded work plan that focuses comprehensively on high school girls. We want to train them, mentor them, have one-on-one meetings with them, etc. But we’ve also reshaped the college outreach in the chapter. It’s not that we have not been doing this and what was done earlier was bad in any way. But we want to focus more in depth on the students. We want to make WTS and WTS-LA the go-to place for female students in the region to help make them vital contributors to the transportation industry.”

Though still in its early stages, indications are that Ms. Jain’s strategy is working. All of the committees in her charge report significant advances as well as highly motivated participants on all sides. Of course, given her personality and propensity for accomplishment, that’s not the only role she plays in WTS-LA. Ms. Jain also represents WTS-LA in WTS International’s new regional structure scheme. And that’s no small assignment either.

“The Regional Council is in its infancy. WTS International is trying to decentralize operations. They’ve created a regional structure and one of the regions is the Pacific West Region, where WTS-LA belongs.

Other regions have been operating for some time. We're the last one to be implemented. The plan was to inaugurate it at the international conference in May. They're looking to create self-sustaining regions instead of having more centralized control. Local chapters will work together and create their own programs and conferences. WTS International wants to foster partnerships between chapters that are geographically close to each other. It's a big structural change."

But one thing won't change—the value of WTS.

"When I started my career in the US, I moved to Ohio, and I used to go to wonderful WTS programs there. But when I moved to Dallas, I got really involved. I was looking for networking opportunities because I was in a new place and I didn't know anyone. I had a colleague who was volunteering in the chapter and she inspired me to volunteer as well. She said that just going to meetings wasn't enough. You've got to get involved. She was right. That's when I started volunteering for WTS and I never stopped!

"My first role was as the Silent Auction chair for WTS Dallas. Then I took on a lot of committee chair roles, as well as secretary, and treasurer. Before joining WTS-LA I was on the executive board in WTS Puget Sound (Seattle). I've moved many places in my career and the quickest way to make great professional relationships has always been through WTS. And the same thing happened when I moved to Los Angeles. I didn't know anyone when I moved here. Actually, I knew one person and she introduced me to WTS-LA's executive board and now here I am."

High-speed rail has never been built in the US before. But if anyone can rise to the challenge and help write that history, it's Noopur Jain.