to change the mobility game

PROFILE OF NURIA FERNANDEZ, GENERAL MANAGER/CEO FOR VALLEY TRANSIT AUTHORITY (VTA) IN SAN JOSE, CA

Interview location: VTA Headquarters in San Jose, CA In one word, she describes herself as "fearless."

By Laura Lee Huttenbach



Nuria Fernandez in 2016. (Photo credit Laura Lee Huttenbach.)

When Nuria Fernandez was growing up in Panama, water was a big part of her world. In addition to living by the water, she spent a couple summers interning at one of the canal locks of the Panama Canal, a feat of engineering that her great-grandfather had helped to construct. "But for some reason I've always been in surface [transportation]," she says. "I've never thought of pursuing a career in the maritime field."

keeping the valley running

We are sitting in her office at the Santa Clara Valley Transportation Authority (VTA) in San Jose, California, the heart of Silicon Valley. Oracle has their headquarters here. Regional corporate neighbors include Google and LinkedIn in Mountain View, Facebook in Menlo Park, and Apple in Cupertino. We are at the center of the tech universe, a far cry from Nuria's Central American childhood. As the General Manager of VTA, she's responsible for keeping the Valley running.

Nuria is the middle child between two brothers. During her childhood in Panama, her family had only one car. "School didn't start until 7:30, but we had to be up at the crack of dawn," she recalls. Before dropping her off at school, her father had to drive her mother to work. It was easier when she was old enough to walk the mile to a main street, where she could catch a bus.

I ask what public transit was like in the Panama of her childhood. "Anyone that wanted to operate a bus could just buy one and then go to the government and get a license," she says. She notes that this was not an efficient system, "because as an independent owner you would always



Being interviewed by news media during the Stand Up for Transportation national campaign sponsored by APTA to encourage Congress to fund transportation needs. (Photo Credit: VTA)

choose the route that's going to give you the most profit." Consequently, many parts of the country were underserved or totally excluded from public mobility options. But Nuria concedes that this realization didn't come to her until college, when she went to study engineering at Bradley University in Peoria, Illinois. Growing up, "We thought it [the bus system in Panama] was great," she says, laughing. "We knew people who owned buses. Everyone was an entrepreneur."

When she saw public transit in Peoria, she was impressed. The buses looked the same and ran on a schedule. They didn't break down all the time. Drivers wore uniforms. There was a fare and a fare box, and she didn't have to haggle with a conductor over what to pay. All of it was new to her, but she says this is one great benefit of studying and traveling abroad: to witness how other systems work (or don't) and then to take that knowledge back home. "I thought, *You know what? There's a better way to do this.* I wouldn't have paid this much attention to bus service if I had not used it. And it wasn't looking at what was happening in Santo Domingo or Colombia, but all the way in the United States, in this small city."

After college, Nuria took jobs at Chicago Transit Authority, moving to the Washington Metropolitan Transit Authority, the U.S. Department of Transportation before eventually working in the private sector as a consultant in an Englewood, Colorado (Denver-area) engineering firm. In 2010, an assignment brought her home to Panama, to provide program management

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support to the Panama Canal Authority.

Additionally, the firm ended up working to help Panama update its public transportation system, and by the time Nuria returned to the United States, Panama had a transit plan for the country. Nuria emphasizes, however, that implementation of a new system has to be introduced sensitively. "When you have individuals that for generations have been running buses—you can't just turn that spigot off," she says, because, "their livelihood is put in jeopardy." Two years ago, Nuria is happy to report, Panama launched the country's first light rail system. "I wish my parents had been alive to experience it," she says. "We didn't have that growing up."

From the private sector, she transitioned back into public service, as Chief of Operations for the New York State Metropolitan Transportation Authority, before taking the helm at VTA in Silicon Valley. Respecting her high-level positions in both the private and public sectors, I ask her the main difference she's found between the two. "The great lesson of the public sector," she says, "is you make decisions that directly and indirectly impact many people that you will never get to know. So it's very important to be thoughtful and inclusive when making these decisions."

t's a lot of pressure to run a cutting edge transit agency in Silicon Valley. Private companies like Google and Facebook, whose young workforce prefers to live in a big city like San Francisco, have been coming up with their own ways to bring employees from home to the office. Often, these company shuttles are sleek, comfortable, and efficient, and come with wireless internet and laptop chargers.

But Nuria isn't fazed when I bring up the subject. She looks at what some people may see as her potential competition like this: "Every bus with 40 people in it is 40 fewer cars on our highway." VTA, she tells me, is responsible for providing funding and planning for cities to

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improve traffic, roads, and transportation in Santa Clara Valley. "We are the congestion management agency, in addition to providing transportation," she says. So full buses, whether they're owned by VTA or Google, mean fewer cars clogging the roads.

Nuria actively pursues relationships with technology companies to find out how VTA's routes can better serve their employees. "The bottom line," she says, "is this: there's enough room for public transportation and private buses to work and function within this space." Sometimes the private transportation companies are picking up employees that live beyond Santa Clara County, which Nuria sees as an obvious benefit: "We don't operate outside of Santa Clara County." The thing she wants to avoid is running the same routes at the same time. "Where there's a potential for duplication," she says, "then we want to have that conversation about what can we do to improve our own schedule or routes so that we can serve that ridership."

By the end of this year, she tells me, passenger service will begin for the first part of VTA's Silicon Valley extension of Bay Area Rapid Transit (BART), the popular transit agency that manages 109 miles of railway currently serving the cities of San Francisco and Oakland. Back in 2000, Santa Clara voters approved a measure designating a half-cent of their sales tax toward designing and building the extension. From the new Warm Springs Station south of Oakland (which is currently undergoing its last phase of pre-service testing), VTA is building a 16-mile extension in two phases to San Jose-the "South Bay." The first phase, which includes two new stations over ten miles, began construction in 2012 at a cost of \$2.5 billion. Nuria proudly reveals the project is ahead of schedule and under budget, with plans to open at the end of this year.

Last November, voters in Santa Clara overwhelmingly approved another half-cent sales tax to finish the last six miles of the extension, which takes passengers through East San Jose, downtown San Jose to the Santa Clara stop, right by Santa Clara University—and costs \$4.7 billion. "You're going to say, 'It's only six miles—why is it so much more?'" predicts Nuria, before explaining that the last six miles will be underground—San Jose's first subway and therefore is more expensive. To fund it, the voter-approved sales tax measure will provide



Nuria announces VTA "Hack My Ride" contest winners (a challenge to develop transportation related apps) (Photo credit VTA.)

\$1.5 billion, which improves the chances of attracting \$1.5 billion in federal grants. The rest of the funding will come from 2000 Measure A tax receipts, state funding and Cap and Trade proceeds.

Such big numbers have a tendency to overwhelm me. "It's a lot of money," says Nuria, "but I can tell you that this is going to be transformational. Bringing BART service all the way down to Santa Clara County is going to change the mobility game."

In order to cater to, and take advantage of, the sharp minds in Silicon Valley, VTA has also opened an Innovation Center, which creates a space for researchers to collaborate with transit professionals. "I reached out to our local

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universities—Stanford, San Jose State and to the major tech companies and said, 'If you are designing or researching anything on transportation, please use us as your test site,'' says Nuria "That's the call we've put out." And it's working. She says VTA has entered into partnerships with companies and research centers alike to pilot programs such as electric bikes and real time informational signage.

One such innovative experiment was a pilot to test the viability of an on-demand transit service and the software to support it. The program was intended to meet the challenges of first/last mile mobility. (The "first mile, last mile" refers to a passenger's distance from their home/work to a transit option, which the industry has been trying to solve for a while.) VTA developed an "on demand" service, called "FLEX" collaborating with the developers of a Smart Phone App, to allow a passenger to request a ride on a smaller "community bus" within a particular zone, combining rides along similar routes. Their credit card was charged two or three dollars (depending on time of day), and the passenger received a picture of the driver coming to pick them up, with a real time notification of when the driver would arrive. "It was not door to door," she says. "It was kind of like Uber or Lyft, only we used buses to allow more people to travel at the same time."

They had predicted ten riders per hour but during the pilot program had only 40 users a day. While the ridership fell short of initial goals, Nuria says the innovative project allowed her team to learn a great deal about opportunities that exist to customize technology to transit needs. Now they're surveying the people who registered to see how the Flex Program could be improved. "We know public transit can take advantage of technology to adapt to changing needs, said Nuria, "We just have to find the right recipe for Silicon Valley commuters. Ultimately, Nuria finds it exciting to be in Silicon Valley, rubbing elbows with tech superstars. "Personally, I don't see it as a threat," she says. "It's an opportunity." She wants the area's public transit to reflect the local community. "This is where creativity is changing not only our region but the world," she says. "When people come to Silicon Valley and get on our trains, that experience that they have is different from any other experience in the United States." I tell her that, based on my

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limited experience with public transit in San Jose, it appears that she is succeeding. Inside the white VTA light rail, the cars are quiet, comfortable, smooth, and clean—with free Wi-Fi.

Her dream project, however, has yet to be realized. Ideally, she'd like VTA to develop an app that lets the user point her smartphone toward a bus shelter and have the transit information automatically beamed to her screen. "Wouldn't it be nice if there were this beacon and you could go like this," she says, pointing an imaginary cell phone toward the window. "From right across the street! And then you know, 'Okay, I can go and grab a coffee because the bus won't be here for another ten minutes.' We're not quite there yet," she says. "But that's where we need to be." hen she started out in engineering at Bradley University, Nuria was one of four female students in her class. It could've been an isolating experience, but she says she was used to being outnumbered as the only daughter in her family and competing with her brothers in school. "That was not alien to me," she says. "I felt very comfortable asking questions and challenging my classmates. I never once questioned why I was there or if I would succeed as a woman . . . It was like, *I'm here. I'm gonna get a degree. And I'm gonna find a job.*"

Now, she says, she's proud that she's one of many female professionals in transportation doing big things. As a nearly three-decade member of Women's Transportation Seminar (WTS) she is able to inspire and be inspired. Through WTS, she participates in mentorship programs, which she thinks is more important now than ever. "About 40 per cent of our employees [in the public transit sector] could retire today," she says. If the wisdom and know-how of these veterans isn't passed down to newer employees, men and women, it will be lost.



Nuria speaking at the Stand Up for Transportation event at VTA. (Photo credit VTA.)

I ask where her confidence came from, and she doesn't hesitate. "My mother," she says. Her mother was the eldest of twelve, and one of only five to graduate from college. She went on to become an accountant. Her influence made Nuria believe that she could do anything she set her mind to doing. For the last two years, she has participated in "Mentorship Day," an event sponsored by the Silicon Valley Business Journal which she describes as "kind of like speed dating." On Mentorship Day, Nuria sits in front of ten different young people who are seeking advice on career advancement or professional development. "It's give and take," she says. "Not only am I able to share my own knowledge but I'm able to learn so much about what people are doing." She tells me about one young lady who wanted to start her own business. "What a brave woman," recalls Nuria. "She was fearless, and I was like, 'You know what? That's the attitude, because if you don't ask the question, the answer will always be no."

The role of a mentor, she says, is not "to design something and say, 'Here, this is the trajectory you should follow and call me when it's done.'" Instead, she hopes that she can encourage her mentees to "put down on paper what they would like to do and where they would like to be." From there, they can work together to create a plan that will help them realize these goals.

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When people come to Silicon Valley and get on our trains, that experience that they have is different from any other experience in the United States. As we wrap up, I ask Nuria to walk me through her office, which contains many tangible reminders of her professional successes. On the wall hangs a poem Nuria wrote, entitled, "The Great Equalizer." The words came to her while riding the New York subway on her way to work as COO of the New York State Metropolitan Transportation Authority:

Rich,

Poor,

or short of cash

Heading uptown, downtown, or on a shuttle dash You are bound to be crammed, shoved, and elbowed in the side On a New York City subway ride!

A framed picture shows Nuria when she was serving as Deputy Administrator of the Federal Transit Administration (FTA). Alongside her stand five colleagues—all administrators of multi-modal agencies at the Department of Transportation, and all women. In another photo, she is standing next to former Secretary of Transportation Norm Mineta, whose Board at the Mineta Transportation Institute she currently chairs. She is most proud of the frame containing a certificate of the Elizabeth Cady Stanton Award for Amazing Women, which she received in 1999 at the White House, when she was working at the FTA. "Even though I have never run for office," she says, "I want to get women excited about it."

When we finish at the office, Nuria walks me to the nearest light rail stop. In the



Nuria leads the "VTA Bike Train" to VTA headquarters on National Bike to Work Day 2015. (she rides her bike regularly, but not usually to the office.) (Photo Credit VTA).

parking lot, she mentions her dream app again. "From here, I wish I could just point my phone there," she says, nodding to the tracks, "and know exactly when your train is arriving. She smiles broadly. Wouldn't that be cool?"



Writer Laura Lee Huttenbach's first book is "The Boy is Gone: Conversations with a Mau Mau General" (Ohio University Press, 2015). Her website is www.LLHuttenbach.com.

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