

# TABLE *of* EXPERTS

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“The exciting thing is we’re not talking about if, but how to build this.”

**JEFF MORALES,**  
California High-Speed Rail Authority

# Silicon Valley’s experts talk about California’s plan for high-speed rail

When California voters in 2008 approved Proposition 1A – nearly \$10 billion in bonds to construct the first phase of a high-speed rail system for California and improve the rail services that would connect to it – it was obvious that it would take years before anyone would ride one of the 200-mph trains from the Bay Area to Los Angeles.

Even after the California High-Speed Rail Authority announced last February that San Jose would be the northern terminus for the first operating segment, the 2025 service starting date still seemed like the distant future.

But the work to make that opening date a reality is under way now. Construction is under way in the Central Valley. Holes are being dug. Concrete is being poured. Bridges are being built. Part of a freeway in Fresno is being relocated.

In nine years, Diridon Station in Downtown San Jose will become the most important passenger train station west of Chicago. But the most important decisions about how that station will work and how it will shape the future of San Jose and Silicon Valley are being made now.

- ▶ Will the new station be above ground, at grade or below ground?
- ▶ Where will the tracks run that carry high-speed trains north and south of the station?
- ▶ How will the transfer of thousands of passengers every day among seven passenger railroads be handled, and how will this transportation hub affect the city where all these passengers arrive and depart?

Some of these questions will be answered by the end of this year.

The Silicon Valley Business Journal convened a panel July 26, bringing together the major decision-makers regarding high-speed rail and San Jose to answer questions developed by reporter Jody Meacham about one of California’s largest-ever infrastructure projects.

This book is the record of that discussion, moderated by Carl Guardino, head of the Silicon Valley Leadership Group and a nine-year member of the California Transportation Commission.

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### Introductory Remarks



**Rod Diridon Sr.**  
Executive Director Emeritus, Mineta Transportation Institute

From 1995 to 2014, Rod Diridon Sr. was executive director of the Mineta Transportation Institute, a transportation policy research center created in 1991 by Congress. He is known as the “father” of modern transit service in Silicon Valley and frequently provides legislative testimony on sustainable transportation issues. The region’s main train station was renamed the “San Jose Diridon Station” upon his retirement from public office. Diridon received a B.S. in accounting and MSBA in statistics in 1963 from San Jose State University.

View Rod Diridon’s full presentation online  
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### Panelists



**Nuria Fernandez**  
General Manager/CEO, Santa Clara Valley Transportation Authority

Nuria Fernandez, general manager and CEO of VTA, plans, organizes, directs and administers all functions of VTA, under policy direction of the board. Fernandez served as COO for the New York State Metropolitan Transportation Authority. She has provided policy and program expertise at the U.S. Department of Transportation, and managed the design and construction of multibillion-dollar rail expansion programs in Chicago and Washington, D.C. She has a B.S. in civil engineering from Bradley University and an MBA from Roosevelt University in Illinois.



**Jim Hartnett**  
Executive Director/CEO, San Mateo County Transit District

Jim Hartnett is the executive director/CEO for the San Mateo County Transit District. In addition to acting as the CEO and general manager for SamTrans, Hartnett is also executive director of Caltrain and the Transportation Authority. Hartnett has served on and chaired both the SamTrans and Caltrain boards of directors. He was appointed four years ago to the California High-Speed Rail Authority board of directors, where he served most recently as vice chair, resigning when he accepted his employment at SamTrans.



**Jeff Morales**  
CEO, California High-Speed Rail Authority

Jeff Morales is the chief executive officer of the California High-Speed Rail Authority. As the former director of the California Department of Transportation, Morales managed a \$10 billion program and more than 23,000 employees working to build, maintain and operate the largest state transportation system in the U.S. His experience at the federal level includes serving as a member of President-Elect Obama’s transition team focusing on transportation and the White House Commission on Aviation Safety and Security.



**Jim Ortbal**  
Director of Transportation, City of San Jose

Jim Ortbal has served with the city of San Jose in numerous professional and managerial positions since 1989, and is currently the director of transportation. As director of transportation, Ortbal oversees all city transportation functions including planning and project delivery, transportation operations, and parking and infrastructure maintenance. Ortbal earned his master’s degree in public administration from the University of Southern California and bachelor’s degree from San Jose State University. He is a member of the Institute of Transportation Engineers.

### Moderator



**Carl Guardino**  
President/CEO, Silicon Valley Leadership Group

Carl Guardino is president and CEO of the Silicon Valley Leadership Group. In February 2007, Gov. Arnold Schwarzenegger appointed Guardino to a four-year term on the California Transportation Commission and has been reappointed twice by Gov. Jerry Brown. In 2008, Guardino managed the successful Measure B (BART) campaign that authorized a ¼-cent sales tax for 30 years to fund a 16-mile Santa Clara County BART extension. He received his B.A. degree in political science from San Jose State University.

## TABLE of EXPERTS HIGH-SPEED RAIL

# High-speed rail's coming quicker than you think

BY JODY MEACHAM



Many of the decisions affecting high-speed rail and its connections at San Jose's Diridon Station – including whether trains will arrive on elevated, at-grade or tunnel tracks – will be made in the next 18 months, even though the fast trains are still a few years away. ¶ On July 26, 2016, the Silicon Valley Business Journal convened a panel of four officials who have key decision-making roles to answer

our questions about what the arrival of high-speed rail and its connectivity to local transit means for our region. ¶ Carl Guardino, president and CEO of the Silicon Valley Leadership Group, moderated the discussion.

**Q** Jeff Morales, you are sitting this morning in the Earth's center for innovation and we are used to showing an ROI. Give us, as if we were a group of venture capitalists, your 90-seconds-or-less elevator pitch on the three top reasons why extending high-speed rail into San Jose and Silicon Valley is in our enlightened self-interest.

**Jeff Morales, CEO of the California High-Speed Rail Authority:** Innovation really is the key. What this is another step for California to lead the way in the country and in the world because what we'll be building is world leading-edge, world-class technology. Clean. And pressing the issues that Rod (Diridon) talked about with climate change: Non-polluting, electric, 100 percent-

renewable power technology that will reinforce California's role as the sixth-leading economy in the world, as a leader in technology around this country and throughout the world.

But the most important thing this system will do is connect this state in ways that it never has been before, tying together all the economic population centers in the state, which has huge economic advantages for the state going forward. When you think about time, Silicon Valley to the Central Valley – a population of four to six million people, affordable housing, the job base – instead of a 3½- to 5-hour drive, which it is today, it will be a 45-minute train ride. When you think about connecting L.A. and San Francisco in 2½ hours, roughly 3 hours of productive time traveling, that's what this system's going to do. And that's what it's going to be in the future.

**Q** Completion of high-speed rail requires meeting numerous challenges including obtaining additional funding – which includes solidifying cap-and-trade revenue – building support in Congress and the state Legislature, winning lawsuits, defeating a fall ballot measure at the state level that could allow the public to halt the project, and reversing a public perception that the project is struggling. Jeff Morales, how would you rate the challenges from most to least significant?

**Morales:** You just described a typical day for us. I think one of the – and maybe the single biggest challenge for this program – is something I sometimes referred to as “stick-to-itiveness,” which is the ability to stay in something for



SVBJ's panel of experts gathered for a group portrait following their discussion at the San Jose Silicon Valley Chamber of Commerce.

VICKI THOMPSON

Back row (L-R): Jim Ortbal (City of San Jose), Jeff Morales (CEO, California High-Speed Rail Authority), Jim Hartnett (CEO, Caltrain), Nuria Fernandez (CEO, VTA). Front row (L-R): Carl Guardino (CEO, Silicon Valley Leadership Group), Rod Diridon (Mineta Transportation Institute).

*“This is an investment on a scale that this state hasn't seen, arguably ever.”*

**JEFF MORALES,**  
California High-Speed Rail Authority

the long haul. This is an investment on a scale that this state hasn't seen, arguably ever, but certainly in at least the last 50 to 60 years when the state highway system was built and the state water project. And that's a tough thing to do in this day and age of social media and other things where people want to see things happen overnight. And you just don't do something like this overnight.

One of the interesting challenges in the program is we're in multiple phases at the same time. In some places we're still in the planning and environmental approval process. At the same time, we're actually building in the Central Valley and dealing with everything from right-of-way acquisition to managing construction contracts. And dealing with the politics of infrastructure, which is an unfortunate development in this country. Infrastructure used to be a non-partisan issue. People

were fighting – it was very parochial – but not partisan. It's unfortunately become partisan, and that's not a good sign for us. Because look at how this country grew and this region grew – it grew in big, bold investments. You look at the history of what has shaped California and high-speed rail is the next step in that. But if you look historically at the domestic plan for higher education, which created the U.C. system and California State system as we know it today – San Jose State – which in turn created the world's premiere public research institutions, which helped create Silicon Valley. That passed by a single vote in the Legislature.

Imagine had it not passed. That's the same sort of situation we're in. We passed by a single vote the first time. We got two votes the next time, so we're on a new trajectory. But I think it's the reality of doing something really big in this environment that is the biggest challenge.



Jeff Morales responds to a question posed by Moderator Carl Guardino.

JODY MEACHAM

**Q** For Nuria Fernandez of the Valley Transportation Authority, Jim Hartnett with Caltrain and Jim Ortbal of the city of San Jose, your agencies are members of the interagency team working with the California High-Speed Rail Authority on what will happen in and around Diridon Station when high-speed rail arrives in 2025. Tell us in more detail what this team is doing and what each of your goals are for this effort.

**Nuria Fernandez, general manager and CEO of the Santa Clara Valley Transportation Authority:** It is an unprecedented collaboration for transportation agencies that are responsible for moving people to come together and focus on what the benefits are for bringing an intermodal facility to San Jose and Silicon Valley.

Regarding our interagency cooperation, the Valley Transportation Authority jumped right on it. We put together a plan and strategy that included all of our partner agencies sitting here so that we could come up with an approach that would not only look at each of our individual needs coming into the Diridon facility but creating an iconic gateway into a thriving community, a thriving region. We are very pleased we've taken that first step. At the VTA, we're very interested in ensuring that both BART coming into Silicon Valley and our area in addition to the connectivity and the exponential value that high-speed rail would bring

to our valley are integrated into a network that make this a partnership with Caltrain, with the city of San Jose looking at how all of these transportation systems contribute to the economic development and prosperity, become a catalyst for development of an area that's going to become another "there there" for San Jose.

**Jim Hartnett, executive director of Caltrain:** I'd like to put a little context, as well. First of all, I always agree with Nuria because she's someone I look up to and admire tremendously. I agree with her about our joint planning efforts and our mutual interests.

I'd like to put a little bit in context for us in Caltrain: Where we are, where we'd like to be, and how important high-speed rail is to all of us. Caltrain is now providing about 19 million rides a year. We take about 400 million road miles off the road every year and that's growing due to the length of the trips on Caltrain. We have an interconnectivity to the region that is only going to grow because of high-speed rail and coming into and through San Jose.

At Diridon Station, we have not just Caltrain but Capitol Corridor, we have ACE, we have Amtrak and we have Union Pacific. It's a very busy station, and it's very important to all of us. With the connection with high-speed rail, the opportunities for all of us are going to be nothing but greater and we have to plan for that station to accommodate all of us, including BART, which is going to be a tremendous addition. We are going to be connected not just regionally, but statewide because of this. This is

part of a great statewide rail system.

So this couldn't be more important for all of us and the partnership that we have with high-speed rail, the blended system that will be coming, and this great statewide rail network that is going to be put together in our generation. It's really important to the quality of life for everyone in this state so I couldn't be more excited about all of it.

**Q** What I think I heard, to follow up, is that this multimodal station, the Diridon Station, would be a classic case of something greater than its individual parts. Is that true?

**Hartnett:** Absolutely. It's already our third-largest ridership station and it's been growing. And that's without all the things that we're looking for to come. We have riders coming from across the region to jump on at Diridon Station to take our service and others and that's only going to grow as we work together with BART and high-speed rail.

**Jim Ortbal, director of the city of San Jose Department of Transportation:** Our city has planned for this type of transformation for many years. Our general plan really saw the vision of our downtown and our Diridon Station and these types of major transformative projects coming into our city, connecting in our city and our downtown. Our general plan is clearing the way for this type

*"Fourteen million people living in Northern California are going to benefit from this massive network."*

**NURIA FERNANDEZ,**  
Santa Clara Valley Transportation Authority

of investment, this type of growth, and then we have the Diridon Station area plan that our City Council environmentally cleared in 2014 that really enables development to happen around the station and contemplates a major transformation of the Diridon Station.

So environmental processes can really slow things down and be a challenge, but we're already environmentally cleared in the Diridon area for the maximum amount of development possible. And with this type of investment, this type of integration, we just see great opportunity here in downtown San Jose and really look forward to continue to work the partnership with all of these agencies to really bring these projects to fruition by 2025.

**Fernandez:** I just wanted to add that with the help of a grant from high-speed rail we are in the process right now of issuing requests for proposals to get a qualified firm that would

help us think through what the physical constraints of the facility would be, the level of operations that would take place within that facility and provide us with some guidance that would help inform all of our partners as to what we need to take into consideration from an operating requirement perspective.

When we're thinking about public-private development, we're also looking to get input from that firm on how we need to be informing the funding plan for the actual reconstruction of the Diridon Station, which we're calling the Diridon Transportation Center. And most importantly is also looking at what some of the requirements would be to attract because, like I said before, it's really going to be the next "there there."

And the station itself is going to become a critical building block, the cornerstone for that area. It's going to attract development: Commercial, residential development and, of course, other types of amenities that would lead and continue to invigorate the city of San Jose and the region. Fourteen million people living in Northern California are going to benefit from this massive network. High-speed rail, BART, Caltrain, all of the other rail and bus services that come into this center point are going to get people around.

**Morales:** I just want to reinforce where Nuria was going. One of the really exciting things about when you talk about the station here, I just want to really stress that it's not just about the nuts and bolts of moving the trains through

and the buses, it's about the station as an economic center and what that's going to mean to this region and creating new opportunities as an anchor for development – for sustainable, compact development and activity.

You look around the world at major rail stations – typically about half of the people coming into the stations don't ever actually get on the train. They're shopping, they're eating, they're picking people up, they're meeting. And you see them becoming major centers of economic activity. Across the country, Denver has just gone through a tremendous change with its station. Union Station in Washington, Penn Station in New York and Union Station in Chicago. L.A. is going through a major plan to develop there. And that's what we're going to see here in San Jose at this station. The confluence of all the different systems coming together is just going to create a tremendous amount of economic activity that's going to be a boom to this city and this region.

**Q** The most contentious issue in San Jose is the route that high-speed rail will use to reach Diridon Station from the south because the impact of this decision will have on nearby residents and the businesses. The High-Speed Rail Authority has said it will choose from among three options: At grade, aerial or in a tunnel. What are the strengths and weaknesses of each of these three alternatives?



A rendering of what San Jose's Diridon Station could look like after the arrival of high-speed rail.

COURTESY OF THE CALIFORNIA HIGH-SPEED RAIL AUTHORITY

*"Once the blended system is fully implemented, I think the sky is the limit."*

**JIM HARTNETT,**  
executive director of Caltrain

**Morales:** The exciting thing is we're not talking about if, but how to build this. That's a huge transition in the phase of this program. You said there are three options and in looking at all of them, it's really striking the right balance of looking at the cost of building, looking at the impacts of building on businesses, on neighborhoods, on residences, looking at the efficiencies, looking at the interactions with the existing rail services – all those things have to come together in a way to optimize the situation.

At grade would in many ways would be ideal in terms of just keeping everything at the same level, trying to stay within the existing right of way as much as possible, minimiz-

ing the impact. But it creates complications operationally with the existing Caltrain operations and with ACE and Amtrak, UP (Union Pacific Railroad). All of those things have to be dealt with at grade within a tight envelope. But we're looking at that.

Underground, tunneling is not in and of itself a problem. The issue there is there's an aquifer right under the station and the question of having a very large underground structure in an aquifer is a challenge. We're looking at that.

And then aerial is the other option and that has some cost implications, but it also could get us out of the way of the existing operations. All of those things will be looked at and our target is to make a preliminary selection right around the end of this year and then make a final determination by the end of next year in order to get final environmental clearance and move to the construction phase.

**Hartnett:** I'd like to build on what Jeff said. It is really exciting to look at the potential of the station and what it could be part of a statewide rail system. We already have in Caltrain 92 trains that stop at the Diridon Station. It is a busy station. With electrification, that should

get up to 114. Our tenants have 30 trains that there are growth opportunities there as well. And so it's a very busy station. It's a very busy part of our corridor and I think what Jeff said was exactly right, is as we plan we have to balance the operational needs with the physical availability and see what works best for everyone.

And at the same time for the station we have to make sure that people can get there. And one of the issues of getting there are the how-tos. There is walking, biking, public transit or by car. All of these things – together with the economic development in the area where people are going to be coming there not just to take the public transit but because it's a destination itself – actually is going to be really, really exciting.

**Q Jim, what's the city's perspective on the route options?**

**Ortbal:** We're looking at it in a couple of different respects. One, when we look at the valley, Silicon Valley, the Silicon Valley segment, this first operating segment that high-speed rail is moving forward with, it's 21

miles in the city of San Jose. So it's the longest segment of any city on this initial operating segment.

It's a major decision point for us in San Jose. We'll do it in collaboration with high-speed rail. Clearly, we want to do it in an approach where we both see it the same way and really this is the best way to do high-speed rail through San Jose.

The one good thing we have going is really the alignment through San Jose is really largely set from the standpoint that we have the UP corridor – the Monterey corridor – coming out of the south. That's largely set. And as you approach downtown past the Tamien Station and then into downtown San Jose, the Caltrain or the aerial alignment roughly follows that same alignment.

We're fortunate that we kind of have that right of way generally set aside. We planned for it in our general plans so we should have no surprises there. We largely know where we're going with high-speed rail. There isn't going to be a huge amount of land acquisition, so from that standpoint we feel very fortunate.

I was down in Fresno a couple months ago visiting colleagues in the city of Fresno and they have a very different situation where

*"We want a developer that will partner with us building a public station, the public infrastructure, along with private development."*

**JIM ORTBAL,**  
San Jose Department of Transportation

they're doing a significant amount of land acquisition. They didn't quite have the corridor lined up like we do through San Jose, so from that standpoint we know where it's coming into San Jose, where it's going through.

Obviously we have the aerial, at-grade, underground decision to make, and there's work to be done in terms of the blended system and seeing how at-grade works. We're awaiting the result of that analysis that we'll see this fall. Based upon that and other information and technical work that high-speed rail is doing, we'll be working with high-speed rail in bringing that in front of our council to make the best decision possible.

**Q For Santa Clara County, the Valley Transportation Authority is also in charge of the BART extension, which is scheduled to reach downtown and the Diridon Station in 2025 if the November Traffic Relief and Road Repair ballot measure passes. How will adding high-speed rail to what will be your most important South Bay BART station, not to mention a hub for your light rail and bus service, impact the VTA?**

**Fernandez:** When the November ballot measure passes, there's going to be tremendous opportunity for this region. High-speed rail is a game-changer. We're talking about a new transportation service that's very different. BART is an extension of an existing service, we have Caltrain, which currently provides service to Diridon as well as the underground commuter rails. But high-speed rail truly is going to be something that not only is going to be bringing a different type of service, but it's going to exponentially increase the attractiveness of coming to Diridon to not only use that service but transfer from that service onto the other modes.

So clearly, we have a responsibility as not only as a transportation management agency but as the public transit system to take a look at our infrastructure and start to modify our infrastructure to accept all of these new activities, these new services coming in. And we're starting now. 2025 is going to be an important year. Not only is that the year that's the goal for completing high-speed rail into San Jose, but it's also when we're going to be completing the second phase of BART service into San Jose. So with that convergence of two new services into that one location, a number of infrastructure changes to our existing light rail (must be made) so that we can accommodate that movement as I mentioned before.

It's all a part of the network and for high-speed rail to be successful, for BART to be successful, we need to improve our existing network and we're doing just that. We're going

through a process right now where we are re-engineering our transit service. We're taking a look at our bus network and making sure that we are not only looking at coverage but we're also looking at improving speed. For high-speed rail to be successful, and BART, we want to make sure that all of the other feeder systems that are going to be either feeding from or to the Diridon Station are on par. That requires investment, and that's why it's so important that in November everyone who is registered to vote on this.

**Q The rail corridor the Caltrain currently owns and operates – which we call Market Street to Market Street – will change in terms of trains, speed, capacity and overall usefulness with the addition of blended service with high-speed rail. What infrastructure changes will be needed?**

**Hartnett:** Some of it we don't know for sure yet. We do know with full electrification – what we have budget for now and what we need to work on in the future – that we can almost double the capacity of Caltrain from Market Street to Market Street. We do that without specific consideration of the blended system, which is going to, itself, expand capacity beyond that from my perspective. High-speed rail's investment in electrification is the key to us being able to do electrification. We have put together a variety of sources of funds but we could not do this without high-speed rail.

Once the blended system is fully implemented, I think the sky is the limit. I can't tell you what the ridership figures will be, but I can tell you that they will be better than what we have projected in terms of doubling our capacity. The infrastructure improvements I don't think are going to be that great over time. There are things that will need to be done to fully implement the blended system but I think in the broad scheme of things they're actually minor investments in what will be a world-class corridor.

**Q What are the local business opportunities as well as challenges San Jose would expect high-speed rail to create? At least in the short term?**

**Ortbal:** Our city economic team is very much trying to position the Diridon Station area for the opportunities that are going to come with high-speed rail, BART investment and Caltrain electrification. The area's ready to go. It's environmentally cleared, we're actively kind of marketing the area to really try and attract business opportunities into the area. So that's one of the things that our team is doing. As part of the interagency task force that Nuria mentioned, we will be issuing some type of request for interest, request for proposal for master developers. We've got to figure out the right timing of that.

We want a developer that will partner with us building a public station, the public infrastructure, along with private development. Jeff referenced stations all over the world have a unique blend of public transportation services along with private, commercial ventures and other opportunities there. So our economic development team is really kind of leading that planning with the interagency team to really

market that opportunity. We really see it as a great one.

In terms of the second part of your question, kind of the challenges that we see in the area, there are so many things going on. We recognize that in 2019, with the successful measure in the fall and high-speed rail moving forward, that we're going to have a tremendous number of projects happening in that area and we really need to prepare for that.

We need to make sure that people can still access the area because we're going to have a functioning station. It's going to be carrying thousands of passengers a day. We need to keep that running and keep kind of the economy humming so people can circulate and move about our area.

So it's really setting up the area, being ready for construction so the area can still function well during that period of construction, keep the economy going, and then in 2025 really have a transformed area. That's one of the most focused challenges we're looking at now.

**Q** Nuria, many people in Britain voted for Brexit without fully understanding what it meant if it passed. While it's currently polling in the positive, what happens if the November Traffic Relief Measure does not pass?

**Fernandez:** If we do not get the vote, that 67 percent that we need in November, nothing will happen and something major will happen. Nothing from the perspective that the \$6.5 billion of potential infrastructure and transit service improvements – 75 percent of which are safety-related – would not be available. And that would be a travesty.

What would happen is that we will continue to experience congestion, given that this region has such a big draw. We're seeing an increase not only in jobs and opportunities but also increasing population, higher demand for housing and better transportation, mobility and networks. So clearly it would be really unfortunate if we did not get the vote.

Recognizing that that \$6.5 billion investment includes BART, having high-speed rail coming into San Jose and this county without that BART connection I think would be a missed opportunity.

We're thinking about with BART coming into Santa Clara County, that's a 25 percent increase in ridership for this region. That means less cars, more people on another mobility choice. The plan is to have what we're calling our "super bikeway" planned, which would remove 1.6 million trips off of roads and onto bikes.

And then, as significant, is just looking at the pollution and the opportunity for reducing greenhouse gases. So the whole sustainability that comes from an updated, modernized infrastructure system that allows individuals to make decisions as to which mobility choice they feel would be the best to satisfy their needs, it will be missed. So I think failure is not an option.

**Hartnett:** I think Nuria hit it on the head and I really couldn't add too much more than what she said other than to say that it's important to have momentum, and one election makes a difference, not just for what is going on at that election, but for what's to come.

Positive momentum by a successful ballot measure for Santa Clara County helps San Mateo County, it helps San Francisco. It shows that

*"Having high-speed rail coming into San Jose and this county without that BART connection I think would be a missed opportunity."*

**NURIA FERNANDEZ,**  
Santa Clara Valley Transportation Authority

there is public support for what we all do, which is reduce miles driven on the road, attempting to do so in an environmentally sensitive way and reducing the pollution. We're all in this together so each one of our successes helps the other.

**Morales:** It's really critical to see these investors go forward to create the network that we're talking about.

Our system is primarily designed to get people inter-regionally, you know, from point-to-point, and we've got to get people around within the region. And that's what these investments will do.

One thing that's really important for people to keep in mind is these needs don't go away. There's history to point to. You look at Los Angeles. Because of some early controversy, there was an initiative back in the early '90s to stop subway construction. Well, they're back. They've now got a ballot measure that'll generate – is it \$120 billion with a half-cent sales tax? – to build the very same things they could have built 20 years ago for probably half that price. So I think the important lesson is these investments have to be made and the sooner we get about making them, the sooner you enjoy the benefits and the less it'll cost and then each region will benefit.

**Ortbal:** I think the impacts of the successful measure are just almost unmeasurable. We are obviously doing planning for BART to downtown San Jose and Silicon Valley for the commuters and high-speed rail for commuters. But now we have an opportunity to do them at the same time and build the area out at the same time and minimize the disruption and have the transformation come together in 2025. If you get this ballot measure passed, that's half of that process. The other half is putting down high-speed rail.

But the opportunity to do this in an aligned and integrated way is right in front of us and we just have to seize it in November.

From a local perspective, many of you know we've not been able to invest in our local roads like we have needed to over the years and this November measure will allocate funds back to the cities to do basic road repairs.

In San Jose, we have a large unfunded amount of road repairs to do. If this measure passes, a significant investment will come to all the cities so we can take care of the roads before they deteriorate, saving us money over the long term. So it's important for the local cities as well as the region.

**Q** The current high-speed rail business plan says that the authority hopes to obtain an additional \$2.9 billion so that the initial operating segment would run San Francisco to Bakersfield by 2025, which would

add more than 50 percent to expected passenger loads and revenue. What is your strategy for getting this extra money and how important is the longer initial operating segment to the initial financial success of the system?

**Morales:** There are two sides to that question, the cost side and the funding side, and we're working on both.

We're constantly looking at doing something which is kind of shocking in the world of infrastructure, which is bring down the cost of building stuff. We've had very good success in our first contract. So in the Central Valley where we're building – and I'd point out that that in my involvement in our big infrastructure projects around the state and around the country, I've never been around one where you have \$3 billion worth of work underway nobody thinks this is happening yet – those three contracts are significantly below our estimates.

We're taking advantage of what we're learning in the design-build process there to apply cost-saving techniques to the rest of the infrastructure. So we've actually brought down costs over the last few years. And we're going to continue to look to reduce the cost as we build.

At the same time, we are looking on the finance side. We've got a strong, strong commitment from the state, the governor and the Legislature for not only the initial bond funds but for an ongoing share of cap-and-trade revenues. That's really the basis for moving forward. But we're going to continue to explore other things like development rights around stations and how that can contribute to the funding, as well.

And while we're not counting on it right now, I also believe over the long run there will be additional federal funding for this, as well. Historically, the federal government has paid for at least 50 percent of the major infrastructure investments. The Interstate Highway System was built with 90 percent federal money. Right now if we built out a full system as we're planning without any new federal money, that (federal) share would be about 5 percent. That doesn't make sense when you're talking about what California means to the national economy. This is an investment the federal government wants to be involved in.

**Hartnett:** The state is so clearly committed to high-speed rail and I want to acknowledge the state's commitment to the electrification program, as well.

We had worked very closely with Secretary (Brian P.) Kelly and his office and they provide tremendous support, as has the federal government. We have great federal support, and we know it's not just because of electrification. It's because of the context within which we're doing it.

Electrification on its own has tremendous merit, but as we've discussed today, what happens with Diridon Station with high-speed rail creates a tremendous dynamic as part of a statewide rail system.

And for our part, full electrification will take far longer than 2020, it'll be a while after that before we get 114 trains. Our first revenue service for electric trains will probably be in 2021, though we'll have electric cars before then. But everything that's going on here at Diridon Station and on our corridor just presents a tremendous opportunity for the entire state and as a model for the country.

Transcribed by Speechpad

## CALIFORNIA HIGH-SPEED RAIL STATEWIDE SYSTEM

Proposed Statewide Alignment



**LEGEND**

- Phase 1
- Phase 2
- Proposed Station

SUBJECT TO CHANGE – MAY 2016

COURTESY OF THE CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# Q&A

Now for some questions from the audience ...

## Q For Caltrain, what is the connection between electrification and expanded capacity?

**Hartnett:** The connection between electrification and expanding capacity is that we will be able to have our trains go more quickly. Not faster, but more quickly because it will stop and start much faster, which means we can run to more stations and more often. And we hope to add additional train set in, as well, which will increase capacity. And then with the electrification and with the additional infrastructure and improvements we'll be able to add cars and we'll ultimately have to lengthen our platform so we can support those cars. But overall, it's the quickness that really helps and then ultimately being able to add cars and additional services.

**Morales:** Just to amplify Jim's point, if you've ever driven an electric car, you know how quickly you take off. It's the same phenomenon with an electric train. It's the acceleration and deceleration. It has an astounding impact on operations.

But another thing I wanted to mention, which we haven't talked about in this, is the benefit of the partnership that we have between high-speed rail and Caltrain are the safety improvements that we'll see on the corridor.

This corridor, unfortunately, every year has far too many incidents of people trespassing on the right-of-way getting struck and fatalities. And one of the big benefits of our combined efforts on this corridor is going to be a dramatic safety improvement with quad gates to prevent people from getting onto the tracks and fencing for the entire system. Something I just wanted to make sure people knew that that's another very important element running trains up and down here, especially as we run more of them, that we also pay attention to dealing with safety issues.

**Fernandez:** I just wanted to add on the safety aspect that in the November ballot we have funding identified for grade crossing improvements, as well. So that ties into safety and also provides for an opportunity of speed or quality in the experience of the riders coming to our cities and I think it's important that grade separation happens.

## Q History shows that large infrastructure projects are much more popular when completed versus conception, planning and construction. How does high-speed rail rise above that trend? Or, if it cannot, how does it cope?

**Morales:** That reality is how I get through every day on this project. But it's absolutely true, though. History shows that big things like this are very controversial at the time. I

always point to the Golden Gate Bridge, which in many ways is the symbol of California. People don't remember that there were 2,000 lawsuits filed against the bridge when it was being planned. None other than Ansel Adams opposed the bridge for what he thought it would do to the beauty of the Bay. It's just hard to even conceive of that as controversial today.

That's true of almost any big investment. And it's something that I'm absolutely convinced 25, 50 years from now people will look back and find it hard to imagine that high-speed rail didn't exist and they wondered why it took so long getting it done as opposed to what we're dealing with today. It's a challenge.

As we go forward with the program and as we're building, we are very aggressive. If you look at our website, you'll see we've got videos, we've got all sorts of things to show the progress and what it means in the near term for people with construction opportunities, jobs, economic activities so that they feel the benefits of the progress as we go along.

**Fernandez:** Let me just say that in my experience with large infrastructure projects, it is very difficult not only to convince people that it's going to happen, but being as minimally disruptive as possible while it's happening.

I like to say that there are three phases to every major project: The ground-breaking – that attracts a lot of folks and everyone's happy; and then you have that intervening period where things can go wrong and everyone wants to disassociate themselves from the project; and then you have the opening and everyone wants to once again embrace it.

So if we could just come together, coalesce and understand that there is a cycle and that there is light at the end of the tunnel, we will be much more supportive. The infrastructure needs to be improved, infrastructure needs to be added to a network so that we can provide that mobility that is so essential for the economic prosperity and vitality of our community.

## Q What is being done to assure that the multimodal station at Diridon will not only be functional but iconic?

**Ortbal:** I think the Diridon Station – it has so much history to it, but it has so much potential, as well. And we're approaching this kind of inter-agency approach to Diridon both to make it the most functional station possible, really analyzing what a great opportunity we have to pull in the private sector, all of our partners, and really looking to do something world class.

I think we will really search out the best opportunities, the best designers, and the best for the community. I think our community can play a major role in helping us really identify what we want our station to be and how it will really it will really recognize San Jose and Silicon Valley as a premier area of our country.

**Morales:** I think it's a really important part because stations can't just be turnstiles and platforms. They have to be a statement about what the city, what the region is about. We're working to do that across the system. It's going to be different in different cities.

In Fresno, the station's going to be the anchor for a whole new base of development. Fresno has, over the last few decades, consumed 50,000 acres of farmland in sprawl. Part of what they're looking to do now is to reorient that growth inward and around using the station area as an anchor. And so that station, literally, will be a magnet there. We've already seen an iconic station go up in Anaheim. We're seeing one up the road here in San Francisco, the Transbay Center, and this one's got to be really a symbol of what this region is about and we're working with our partners to make sure that's the case.

**Ortbal:** Hold us accountable for that. I mean this is something we need, for this community to hold us accountable to do stuff that is great for San Jose and Silicon Valley. So I think that's important that we understand what our community wants and needs in this area and we need to deliver on that.

## Q How supportive have other local jurisdictions been outside San Jose?

**Ortbal:** I don't want to speak for other cities too much. We see the way we approach these types of projects is really from a partnership standpoint. You can fight it, but we recognize the last time we were in a fighting mode, (high-speed rail) made a decision to head toward the L.A. Basin. We don't want that type of situation.

These projects have to be done well, they have to consider what local communities, local residents need and how they can be done well, minimizing disruption. But they have to be done in a partnership way and we really encourage other cities in the area to work closely and collaborate. I can say high-speed rail, VTA are absolutely trying to do that with the local cities.

**Fernandez:** I'll just add very quickly that every project has an influence that goes beyond just the area where it's built. And recognizing that high-speed rail, even if it's not in your backyard, is going to create such great benefits for those of you who live several miles away. And that benefit is in providing more choices for mobility throughout the region. You're opening up other channels of opportunity for those who prefer to drive.

**Morales:** This whole area of cooperation is really critical to the success of the program and it's why we have entered into planning grants with each of the cities where it'll have stations so that we can work collaboratively to plan for how connecting services will work, how flow

will work, but also how things develop around the stations. We've seen there's no question over the last year or two as the program has become more and more real to people so, too, has the reality of what that's going to mean to those cities.

For a long time there was still this kind of abstract concept, nobody was sure it was really going to happen. There's been a real awakening in the last few years. We're getting great interest and cooperation all over the state. Here we have a great partnership with the city and the local agencies. We've got that in Gilroy, where we're going to have another station and throughout Bakersfield, Palmdale – all over the state. We're really committed to making sure that we work with local entities to make this work and function the way we all envision it.

**Hartnett:** Well, I think there are several elements. At first, I think the station and the corridor have to work operationally. We are not just a local system anymore; we're a regional and state system. So we have to build upon that as we look toward an iconic station that provides a great customer experience and provides a great benefit for the community.

We have to always get back to, however, if it doesn't work operationally, it doesn't work for customer experience, it doesn't work for the community. To me, I always keep coming back to that.

That being said, a grand station, to me, is like a grand downtown. It makes people feel good whether or not they use it and I think that's an important element of planning, as well.

## Q The current street and highway layout will not facilitate the larger number of people, cars, bikes, etc. that will eventually use the Diridon Station. What is the city doing to plan for this demand? What are the new street layouts, for instance?

**Ortbal:** The planning grant that high-speed rail funded for us has an infrastructure component to it. So as part of that planning grant we're looking at having access to the station, walking, biking, trails, streets, and I think equally as important, the kind of transit connectivity. We expect to bring most people into that station through connections, whether it be from BART, light rail, the bus system, the new VRT system that will end in Diridon Station ultimately, as well.

We're in that planning phase now, really identifying how we can get people there through the great, rich transit network that we have today – will have in the future – but we're also planning for the needed infrastructure improvements that we'll need for 2025 and beyond.

**Fernandez:** I just wanted to add that the BART Phase II project is also going to be bringing some elements of improvements to the existing roadway network in addition to providing additional queuing areas for taxis and ride-sharing, for bus and shuttle loading, and for parking for both vehicles and bicycles. So there will be an added funding available to the city as part of that larger planning.

## Q What do you see as impacts to the mobility revolution such as self-driving cars, Uber, Lyft, ride-sharing has on mass transit in the plan in Diridon Station and the surrounding area?

**Fernandez:** I think that the on-demand services that are available today – ride-sharing services – are just a complement to things in the larger mobility network. We at the Valley Transportation Authority believe they are also great opportunities for first-mile, last-mile connections. But when we look at the broader context of all of these mobility options coming in and converging at Diridon, it does require a very methodic approach to planning how the access and exit from what is a busy area that is surrounded by residential and some commercial, what that's going to look like in the future. But there is an opportunity for all of us to coexist within the footprint of the Diridon area, and I think the more options that people have for mobility – other than their single-occupancy vehicles – the better.

**Morales:** In building on Nuria's first point, we're still in the early stages of planning, but what we envision in the corridor is really picking and tapping into what companies do here. Because, you know, you won't be buying a ticket in the future the way you traditionally you bought a ticket. You will use your phone or whatever to do it and the total trip will be covered in that. So it could be the Uber ride from your home to the station, then getting on the train. It could be the connection to the airport in San Francisco. All of those things will be interconnected. And so we absolutely are looking at all of these things and how they fit together and how we can really make travel as simple and easy for people as possible.



JODY MEACHAM

