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High-Speed Rail Expands Executive Team to Move Program Forward

By Annie Parker

As the California High-Speed Rail Authority continues to move from the planning to construction of the nation's first high-speed rail system, on January 16, the Authority's Board of Directors announced that it had selected Brian P. Kelly as the a new Chief Executive Officer to lead the organization. His first day on the program was February 1.

"Brian Kelly is a proven problem-solver and the leading expert on California's transportation sector. He has been a dynamic Transportation Secretary, leading strategic approaches to modernize the state's passenger and freight rail systems, and effectively dealing with natural disaster impacts on roads, bridges and highways," said Board Chair Dan Richard. "Brian has been a keen advocate for the development of high-speed rail as a core component of California's future transportation networks. As a respected leader and skilled manager, he will provide the right leadership as

the project moves into the delivery and commercialization phase."

"Brian has ably led the California State Transportation Agency since its inception and is uniquely qualified to move the nation's first high-speed rail project forward," said

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**Edmund G. Brown, Jr.
Governor of California**

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Governor Edmund G. Brown, Jr.

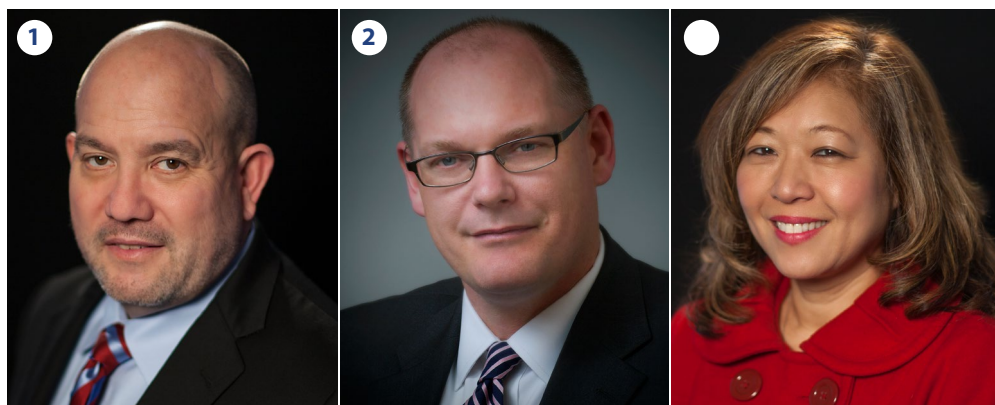
Kelly previously served as Secretary of the California State Transportation Agency (CalSTA) since the Agency was created in 2013. As Secretary, Kelly oversaw one of the largest portfolios in the State of California with more than 38,000 employees and a total budget of more than \$18 billion. Prior to his appointment to the Brown Administration, Kelly spent almost two decades at the center of major transportation policy decisions in the state of California by serving four successive Senate President pro Tempores.

Kelly expressed excitement about taking over the helm of the project. "In 23 years of working in transportation policy, I have never come across a project that can improve how Californians get around like high-speed rail can," he said. "High-speed rail will provide travel that is fast, clean and efficient, create jobs, connect our communities and expand our economy. Californians voted for and deserve these benefits. Like others, this mega-project has its challenges. I'm eager to get to work to address them and get this

project delivered."

The Governor also announced two other key Executive appointments. Joseph Hedges joined the high-speed rail program as Chief Operating Officer on February 12. He came from the Washington Department of Transportation where he was Program Administrator of the Alaskan Way Viaduct Replacement Program and has been an integral part of improving project performance and advancing its progress. Hedges has more than 35 years of experience in construction, engineering, and project management in both the private and public sector. He rose to the rank of Captain in the U.S. Navy Corps of Civil Engineers, where he served in several senior leadership capacities.

Pamela Mizukami was tapped as the program's Chief Deputy Director and has been tasked with overseeing internal and personnel operations. Previously, she had assisted the Authority and CalSTA with improving the program's administrative functions. Since 2006, Mizukami served in various roles at the California Department of



1. Joseph Hedges has been named as the Chief Operating Officer for the Authority. He has 35 years of experience in construction, engineering and project management.

2. Brian Kelly is the Authority's new CEO. He previously served as the Secretary the California State Transportation Agency (CalSTA).

3. Pamela Mizukami is the program's new Chief Deputy Director. She had been the Deputy Director of Administrative Services Division at the Department of Motor Vehicles.

Small Business Program

The Authority is committed to small businesses playing a major role in building the statewide high-speed rail system. The Small Business Program has an aggressive 30 percent goal for small business participation including Disadvantaged Business Enterprises (DBEs), Disabled Veteran Business Enterprises (DVBEs) and Micro-Businesses (MBs).



Motor Vehicles, including Deputy Director of the Administrative Services Division. Her first day with the program was February 12.

1. Chief Executive Officer **Brian Kelly** meeting with workers at the San Joaquin River Viaduct and Pergola.
2. Chief Operating Officer **Joe Hedges** introducing himself to workers at the San Joaquin River Viaduct and Pergola.



Governor Brown Doubles Down on High-Speed Rail

When Governor Edmund G. Brown, Jr. delivered his 16th - and final - State of the State address in January, he had a lot to say about the high-speed rail program. In his remarks, he asserted, "I make no bones about it. I like trains and I like high-speed trains even better."

Brown pointed out the U.S. lags behind 11 other countries that already have high-speed rail systems, but we're "actually building" a similar system in the Central Valley. He spoke of benefits being reaped during construction. "Already, more than 1,500 construction workers are on the job at 17 sites and hundreds of California businesses are providing services, generating thousands of job-years of employment," Brown stated. "As the global economy puts more Americans out of work and lowers wages, infrastructure projects like this will be a key source of well-paid California jobs."

"As the global economy puts more Americans out of work and lowers wages, infrastructure projects like this will be a key source of well-paid California jobs."

Edmund G. Brown, Jr.
Governor of California

Brown admitted that like the Bay Area Rapid Transit (BART) system, the Golden Gate Bridge and the Panama Canal, the California High-Speed Rail Program faces countless obstacles including lawsuits. But, he added, "California was built on dreams and perseverance, and the bolder path is still our way forward."

He surmised, "Yes, [high-speed rail] costs lots of money, but it is still cheaper and more convenient than expanding airports and building new freeways to meet the growing demand. It will be fast, quiet and powered by renewable electricity and last for a hundred years."



Governor **Edmund G. Brown, Jr.** spoke about the high-speed rail project in glowing terms during his State of the State address in January. Brown began his quest to build high-speed rail during his first two terms in office in the 1970's.

LEGEND

- 1 BUFFER: TREES + G.C. OR TREES + SHRUB
- 2A CHILDREN PLAY GROUND: 2-5 YRS
- 2B CHILDREN PLAY GROUND: 5-12 YRS
- 3 PICNIC AREA WITH SHELTER
- 4 COMMUNITY GARDENS
- 5 OPEN PLAY AREAS
- 6 DOG PARK
- 7 BIOSWALE / BIO RETENTION
- 8 GARDENS
- 9 MULTI PURPOSE TRAIL
- 10 RAMP TO UNDERPASS
- 11 BIKE TRAIL LINKING EAST TO WEST & RAMP TO UNDERPASS
- 12 PEDESTRIAN/ JOGGING TRAIL
- 13 TERRACED SEATING
- 14 SLOPES ON EITHER SIDE OF RAMP

SoCal Company Plans Park Near High-Speed Rail

The City of Glendale is home to sprawling suburbs, bustling shopping centers and nearly 200,000 residents. When high-speed rail comes to Southern California, a local company wants to ensure there's a welcoming place where the traveling public can exercise or relax when they step out of the high-speed rail station. That's where Cornerstone Studios, Inc. (CSI), a landscape architecture firm, comes in. The certified Disadvantaged Business Enterprise (DBE), based in Santa Ana, is working on the Burbank to Los Angeles/Anaheim project section of high-speed rail as a subcontractor to regional consultant STV. CSI is tasked with identifying locations along the high-speed rail corridor for parks, recreation or open spaces.

Cornerstone owner Renie Wong said she and her staff proposed and designed a long, linear park on land that currently houses a storage facility near the Glendale Metrolink station.

Station and the proposed high-speed rail track alignment. "We designed the park in an environmentally sustainable way," Wong explained. "It contributes to the physical and mental health of the community. It has lots of goodies - a community garden for growing fresh fruits and vegetables, play areas, picnic areas, a dog park, an amphitheater and jogging and bike trails. And it's all connected to the Los Angeles River bike path which is right nearby."

After the initial design, residents weighed in on what they wanted. Wong said community comments and input help refine the park design. Then the California High-Speed Rail Authority will select the concept that best represents the community.

This isn't the first time CSI has designed a project with the community's help. The company has successfully completed over 40 school and park projects since the firm opened in 1996. Wong said, "Each project is

"It has lots of goodies - a community garden for growing fresh fruits and vegetables, play areas, picnic areas, a dog park, an amphitheater and jogging and bike trails."

Renie Wong
Owner
Cornerstone Studios, Inc. (CSI)

somewhat different, but all have sustainability elements in them." California's constant need to save water also shapes the designs. She said, "They included drought-tolerant or native plants, porous paving materials and recycled materials. They also have smart irrigation systems which use recycled water and the means to filter water runoff before it enters storm drains."

According to Wong, "Los Angeles is not as green as it can be. She hopes she'll be able to propose more parks and open spaces along the high-speed rail alignment. This will make the cities more livable and contribute to a more sustainable planet."

Karen Massie



CORNERSTONE STUDIOS
 LANDSCAPE ARCHITECTURE ■ URBAN DESIGN ■ PLANNING ■ RESOURCE ANALYSIS



2B TOT LOT, 4 COMMUNITY GARDENS, 6 DOGPARK, 7 BIOSWALE, 8 GARDENS, 9 11 12 TRAIL, 13 AMPHITHEATER, Renie Wong (upper right) owns Cornerstone Studios, the firm that's identifying sites for parks, recreation and open spaces near the high-speed rail corridor in the Burbank to Los Angeles/Anaheim project section. One of the parks (upper left) may be located near the Metrolink station and high-speed rail alignment in Glendale. It would feature play areas, gardens, a dog park, bike and jogging trails.

PROGRAM CONCEPT

Fresno Firm Moves a Mountain of Earth for High-Speed Rail

They say if what you want lies buried, keep digging until you find it. This motto holds true for Jennifer Foster – literally and figuratively.

Foster owns Mass X Inc., a Fresno-based general contracting firm, that's known for moving massive amounts of earth. She and her husband John launched their business during the beginning of the economic downturn. They started with a handful of employees working on a few small projects.

"John and I formed and incorporated Mass X Inc. in 2007 as general contractors, but we specialize in high-production earthwork," Jennifer Foster said. "We are a small company, but between Jim Leppo, our estimator and project manager, and my husband John, who is also our field superintendent, we have over 60 years combined experience in the industry."

While the economy struggled, their experience helped the company persevere. Certified as a Disadvantaged Business Enterprise (DBE) and woman-owned business, they took on more grading, paving and earthmoving projects, and it wasn't long before the company tripled in size.

Since October 2017, the company has been working on the high-speed rail project as a subcontractor to Dragados/Flatiron Joint Venture, the design-build team for Construction Package 2-3. Foster was awarded a contract worth almost \$863,000 to work on an embankment that's being built to carry high-speed trains in the Central Valley.

The embankment is huge. Standing about eight to ten feet high, it starts near American and Cedar Avenues just south of Fresno, and stretches about two and a half miles. "Ground surface preparation is critical," explained

Bjorn Nilsen, Procurement Manager and Small Business Officer for Dragados/Flatiron. "The ground has to be highly compacted and level. The top of the embankment also has to be level because we're going to have trains running on it at 200 miles an hour."

Mass X is preparing the foundation which supports millions of tons of earth. That involves scraping away top soil which has been plowed, aerated, turned over and planted for agriculture. Once work crews reach bedrock, fill dirt is spread over the top of what will become the base of the embankment.

Then compaction begins. That means pounding the air out of the ground underneath the embankment. "We've done multiple things on this job for subgrade compaction," Foster explained. "Sometimes they use smooth drum rollers. For small areas, we use a machine that's like a jackhammer with a flat edge. For large areas that need deeper compaction, workers use heavy rubber-tired tractors to rumble over the ground and mash down the soil. "Then, more dirt will be

"High-Speed Rail has been a good opportunity for our small business. It's keeping our employees working on a ground-breaking project that is local, and this may open the door for future work on the project."

Jennifer Foster
Owner
Mass X Inc.

trucked in to build up the embankment and Mass X will finish the project with grading work.

"Working with Mass X has been great," Nilsen said. "They've done everything they promised and they've done it on time."

Mass X has been involved in other public infrastructure projects, but for now, high-speed rail is the company's priority. Foster said, "High-speed rail has been a good opportunity for our small business. It's keeping our employees working on a ground-breaking project that is local, and this may open the door for future work on the project."

Cody Dixon/Karen Massie



1. Mass X Inc. crews move a massive amount of dirt and make sure it will support a two-and-a-half-mile-long embankment that will carry high-speed rail trains just south of Fresno near American and Cedar Avenues.
2. Mass X owner **Jennifer Foster** said, "High-speed rail has been a good opportunity for our small business. It's keeping our employees working on a ground-breaking project that is local, and this may open the door for future work on the project."

Vertical Mapping Resources: Survey the Land by Air

If you look up and notice a twin-engine plane flying at a low altitude over the high-speed rail corridor, it could very well be an aircraft commissioned by Vertical Mapping Resources (VMR) to conduct aerial surveying for the California High-Speed Rail Authority.

Since 2007, VMR – an integrated digital aerial mapping and geospatial land information company – has delivered topographic mapping and high-resolution imagery that aids engineers in identifying and designing potential routes and environmental issues for the high-speed rail program.

“We provide precision aerial photogrammetric mapping, color digital orthophotography and LiDAR (a type of laser) surface modeling services on the high-speed rail project,” said Kurt Okraski, co-founder of the company that has offices throughout the Western United States, including Auburn, Folsom and San Diego, California.

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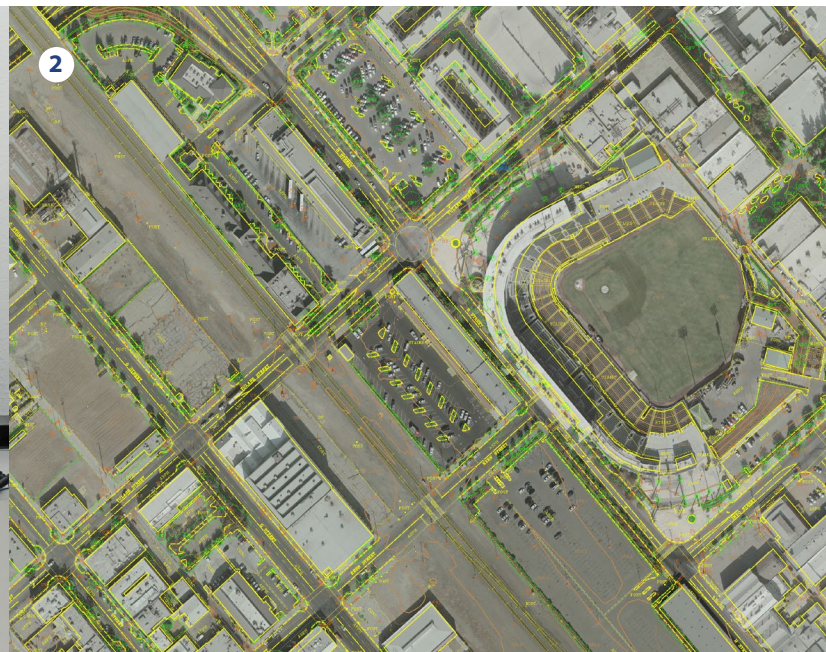
“The digital mapping and imagery products that VMR creates provide the basis for all rail planning and environmental studies involved with the high-speed rail project.”

VMR provides what is essentially a high-tech approach to modeling the land. The firm teams with ground-based land surveyors and works with survey crews to define the area of interest, create a project layout for mapping and direct the survey crews to provide ground control to supplement the aerial mapping.

The area of interest is then captured from the air with either a frame or digital camera equipped with Airborne GPS (global positioning system). While in flight, an on-board technician collects digital imagery and LiDAR

“The digital mapping and imagery products that [Vertical Mapping Resources] creates provide the basis for all rail planning and environmental studies involved with the high-speed rail project.”

Kurt Okraski
Co-Founder
Vertical Mapping Resources (VMR)



1. Aerial Mapping/UAV (drone) Specialist **Brandon Mathes** at Vertical Mapping Resources (VMR) uses special computer software that allows him to overlap images and see them in 3D. The special glasses he's wearing work in conjunction with the computer software.

2. VMR took aerial photos of downtown Fresno, which includes Chukchansi Park, home of the Fresno Grizzlies minor league baseball team. The photo is turned into an orthophoto which has distortions from camera tilt and ground relief removed so that it can be used as a map. The yellow overlay is topographic mapping which is delivered in 3D and helps engineers execute planning and designs for high-speed rail.



VERTICAL MAPPING RESOURCES
an evolution in land information

that will then be processed on workstations at VMR production locations. This is where the aerial imagery is combined with the above mentioned ground control, and digital maps and orthophotography are produced.

“Every project that we are contracted on is a custom flight,” Okraski said. “We provide our clients with an as-built lay of the land at the point in time that our photo acquisition is conducted. The project engineers will use our precision mapping and imagery as the basis for their work to be completed.”

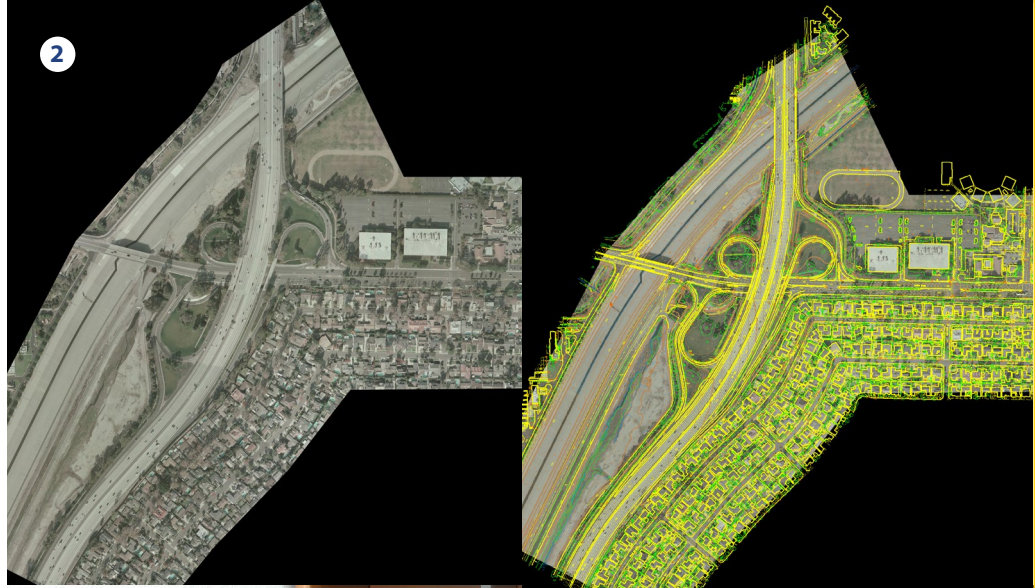
VMR is a certified small business with the State of California and has a long history with the high-speed rail project.

Okraski said the company started providing aerial mapping services for the high-speed rail program in 2007, when VMR was initially hired as a subcontractor in the Southern California region. Since then, the firm has worked on the Palmdale to Burbank, Burbank to Los Angeles and Merced to Fresno project sections.

Okraski is looking forward to working on additional aerial mapping portions for high-speed rail. “We really fit in well with the requirements of these contracts,” he said. “The projects and experience they convey have been very beneficial to VMR.”

“They are very technical and complex,” he continued. “They bring value to the company, allow us to hire more personnel, and showcase our expertise and past performance to future clients.”

Ricci Graham



1. Vertical Mapping Resources (VMR) Office Manager **Amberlee Mills** uses a Zeiss/Intergraph PhotoScan film scanner to scan film for use in 3D digital feature collections. Film was used for the high-speed rail corridor when VMR began working on the project in 2007. Digital cameras have been used in recent years.

2. This is an example of what an aerial photo looks like (left) before it's converted into an orthophoto (right), with a yellow 3D overlay. Viewers can see the definition in the orthophoto, which can be used as a map because all the scale in the photo is uniform.

3. CEO **Kurt Okraski** is a co-founder of VMR. As a certified photogrammetrist and certified private pilot, he flies the missions to capture high-resolution aerial images that engineers use to identify environmental issues that must be considered to identify and design potential routes for high-speed rail.

Avison Construction Paves the Way



A childhood dream became reality when Louis Avila launched Avison Construction in 1992. "I pretty much decided what I wanted to do when I worked for my father," Avila recalled. "He was in agriculture and leveled land for farmers for irrigation. I was 10 when I started driving tractors for him."

By the time he was 28, Avila was an equipment operator who graded roads and pads for buildings. He was also ready to run his own company. He explained, "I bought a CAT

14G Motorgrader and had just the one piece of equipment before I had enough money to invest in a second one." He added some electronics to the second grader and rented it out.

It helped keep his company's doors open, but it wasn't easy. "I had a lot of sleepless nights. I always had financial challenges, but I worked hard," Avila said. "Everybody knew I was honest and fair." He was also selective about the people he would work for. Avila

laughed, "I worked for people who would pay."

In 2005, he obtained his contractor's license, and a year later he started buying more equipment and hiring operators. Today, the Disadvantaged Business Enterprise (DBE) based in Madera employs 50 to 60 people

"[My dad] reminded me about Highway 99, which started out as a two-lane road with a bunch of stop lights. Now it's a major highway, has lots of traffic and will be even more congested in ten years. My dad said when the time comes, a lot of people will take the train instead of driving in all that traffic on Highway 99."

Louis Avila
Owner
Avison Construction



1



2



3



4

1. When **Louis Avila** opened Avison Construction in 1992, he had one road grader. Today, he has enough equipment to employ 50 to 60 workers.
2. **Louis Avila** (3rd from right) says the key to his success is choosing a strong team, which includes his son **Christopher** (2nd from left) and his wife **Kelly** (3rd from left).
3. Avison Construction paved asphalt to connect both ends of the newly constructed Tuolumne Street Bridge to surface streets in downtown Fresno.
4. A steel wheel roller slowly trundles over hot asphalt to make sure the road surface is compact, smooth and level enough for cars to drive on it when it's sealed and cured.

including Avila's wife and four sons. "My children all started at the bottom and were treated the same," explained Avila. "I couldn't do it without them. I know they have my back."

In 2013, they bid on and won a \$21.7 million contract offered by Tutor Perini/Zachry/Parsons (TPZP) for Construction Package 1 for high-speed rail.

They paved asphalt to connect both ends of the newly constructed Tuolumne Street

Bridge to surface streets in downtown Fresno, and they just finished some work on Avenue 7 in Madera. Another contract with TPZP subcontractor Valverde and Sons is expected to bring them another \$150,000.

Avila mentioned talking to his 86-year-old father before joining the high-speed rail project. "He reminded me about Highway 99, which started out as a two-lane road with a bunch of stop lights. Now it's a major high-

way, has lots of traffic and will be even more congested in ten years," Avila said. "My dad said when the time comes, a lot of people will take the train instead of driving in all that traffic on Highway 99. So, high-speed rail makes a lot of sense when you think about it that way."

Karen Massie

Keeping the Dust Down

Tom Tutor thanks his father for being a business owner today. "When I was a teenager I worked with my dad all summer doing construction," he recalled. "I started driving heavy equipment when I was 12 – scrapers, water trucks and bulldozers."

At age 20, Tutor acquired an old used water truck and it was enough for him to open Tommy's Water Truck Rentals in Clovis. He said, "It was just me. I was the owner and the operator and I was happy to be working and bringing some money in."

Today, Tutor has 15 people working for him and all kinds of trucks – water trucks, bottom and end dump trucks, flatbed trucks and more. Four years ago, his certified microbusiness won an award to work on high-speed rail as a subcontractor to J. Kroeker, Inc., the small business tapped to do demolition for Construction Package 1.

Tutor proudly declared, "I'm the one that hauled off the Tuolumne Street Bridge. They knocked it down and piled it up. My workers and I hauled it off." He pointed out that construction waste gets recycled. "All the concrete is crushed up and turned into base rock for road beds. They recycle the steel and the copper wire goes to scrap yards."

Since then, Tutor has worked on all three high-speed rail construction packages in the Central Valley. He's won contracts with several other contractors, including the design-build teams.

"This is good for my employees," he said. "Instead of only making \$15 an hour, they make up to \$30 dollars an hour and that includes two of my sons."

They're hauling dirt in, out and around the construction site, moving heavy equipment and spraying water on the ground to control

dust. That's critical in the Central Valley where high-speed rail is being built. The U.S. Environmental Protection Agency declared it "has some of the nation's worst air quality." Dust control helps the Authority meet the Voluntary Emission Reductions Agreements (VERA), a deal with the San Joaquin Valley Air Pollution Control District that states the Authority will make every effort to cut back on greenhouse gas emissions associated with construction.

Tutor said he looks forward to going to work every day. "For one thing, the contractors at high-speed rail know what they're doing so it makes my job easier," he said. "Plus, they keep calling me or coming up to me and asking me to take on more jobs. So, I guess I must be doing something right."

Karen Massie

1. A water truck sprays concrete that crews removed from a high-speed rail construction site in Fresno and took to a recycling yard.

2. Since 2013, Tommy's Water Truck Rentals owner **Tom Tutor** has been hauling debris, dirt and heavy equipment for high-speed rail and spraying construction sites with water to control dust. He and his workers hauled off the Tuolumne Street Bridge after it was torn down. Tutor said, "All the concrete is crushed up and turned into base rock for road beds. They recycle the steel and the copper wire goes to scrap yards."



They Work Hard for the Money

California High-Speed Rail is the nation's largest infrastructure project and it's making good on promises to put people to work. "It's a good opportunity. I'm learning a lot and I'm growing," said Rene Gomez.

The 33-year-old carpenter



"I have two little girls. I want them to know they can do anything they want to. Even though it's a man's world I come out here and I do an awesome job. There are no boundaries."

Claudia Chavez
Third-year Apprentice
State Route 99 Realignment

is among more than 1,500 workers who have been dispatched to 17 high-speed rail construction sites in the Central Valley.

Before joining the high-speed rail workforce, Gomez was a laborer. His former employer sponsored him so he could get on-the-job training and join an apprenticeship training program. He graduated with a bridge carpentry certificate. "When I went to the (union) hall, they said high-speed rail was the place to be," he recalled. "I checked to see where the jobs were and kept bugging them for work."

Last August, Gomez went to work on the San Joaquin River Viaduct in North Fresno. As a second-year apprentice, he makes about \$25 an hour – enough to pay down debts and focus on a major goal. He explained, "I have a wife and two little girls - a 12-year-old and a 15-year-old. I'm buying a house right now. This is my first house."

Third-year apprentice Claudia Chavez is working on the State Route 99 Realignment, a project that will move State Route 99 in Fresno to make way for the high-speed rail. "I've

always liked construction," Chavez declared. "I tried the office but it wasn't for me."

Chavez' employer, AC Electric Company, is installing duct boxes and wiring for underground utilities. The work, which includes digging trenches, can be tough but Chavez doesn't mind. "You get to work alongside great people," she said. "They take care of you because you're a female, but they know I can keep up with the boys so they can throw me anywhere I need to go."

The mother of two said her children are also watching her. "I have two little girls," she said. "I want them to know they can do anything they want to. Even though it's a man's world, I come out here and I do an awesome job. There are no boundaries."



1. & 3. Third-year apprentice **Claudia Chavez** (above) is helping to install duct boxes and underground wiring on the State Route 99 Realignment. As a role model for her two young daughters she said, "I want them to know they can do anything they want to."

2. Carpenter **Rene Gomez** is a second-year apprentice making about \$25 an hour on the San Joaquin River Viaduct. He said it's enough to enable him to buy his first house for his family.

2



"It's a good opportunity. I'm learning a lot and I'm growing. I have a wife and two little girls - a 12-year-old and a 15-year-old. I'm buying a house right now. This is my first house."

Rene Gomez
Carpenter
San Joaquin River Viaduct

“I’m laying some pipe, digging, doing a lot of excavation and trench shoring. How this process goes is kind of eye opening for me.”

Jose Rodriguez
Mason
Golden State Boulevard Realignment



Not far away, Jose Rodriguez is assigned to the Golden State Boulevard Realignment project, which will replace the existing roadway. Rodriguez is glad he’s working close to home. “My company is out on the (Pacific) coast, if I had stayed (on that job), I would have been out there for almost a year and a half,” he explained. Instead he’s home with his family. “I’ve got my son, he’s six, and my daughter is about to be one. I’m a soccer coach for my son’s team.”

Rodriguez has worked in construction for nearly 8 years and admits he’s still learning new things on the job. “I’m laying some pipe, digging, doing a lot of excavation and trench shoring,” he explained. “How this process goes is kind of eye opening for me.”

Pile Drivers Local 34 in Oakland dispatched Robert Davis to the Fresno Trench project, a two-mile section of high-speed rail which will run through Fresno below ground. “It’s great, man. I love working out here,” he declared. “I’m a certified welder. We do all the false work so guys can get up (on structures) and safely to do their tasks. And then we remove it. We keep the river from flooding so workers can put in the bridge footings.”

He said the consistent work has helped his family. Davis said, “Without companies like Tutor Perini paying us all top dollar, we would never be able to achieve our own personal goals and put food on the table.”



“Without companies like Tutor Perini paying us all top dollar, we would never be able to achieve our own personal goals and put food on the table.”

Robert Davis
Welder
Fresno Trench Project

The veteran construction worker has served as a foreman, ironworker and welder on previous jobs, but said this job is different. “I have a retirement and a pension. I’m living the American dream. I live on a 5-acre ranch up by Tahoe and have multiple vehicles. Before this, I wasn’t able to achieve the type

1. **Jose Rodriguez** is assigned to the Golden State Boulevard Realignment Project. If this job hadn’t come through, he believes he would be working on California’s coast instead of closer to home and family in Fresno.

2. **Robert Davis** said consistent work on the high-speed rail project has improved his family’s lifestyle. He added it’s also helping him sock money away for his retirement.

of lifestyle I was looking for.”

Like the other workers, Davis is aware high-speed rail is a historical infrastructure project, the first of its kind in the nation. He maintains he and other workers are glad to be a part of it. He said, “When you see high-speed rail moving forward and getting built you know it’s not about just one person. There are thousands and thousands of people coming out here (to work). We have great big fat paychecks to show for it. We’re a number one nation and we need more projects like this in all 50 states, not just California.”

Karen Massie

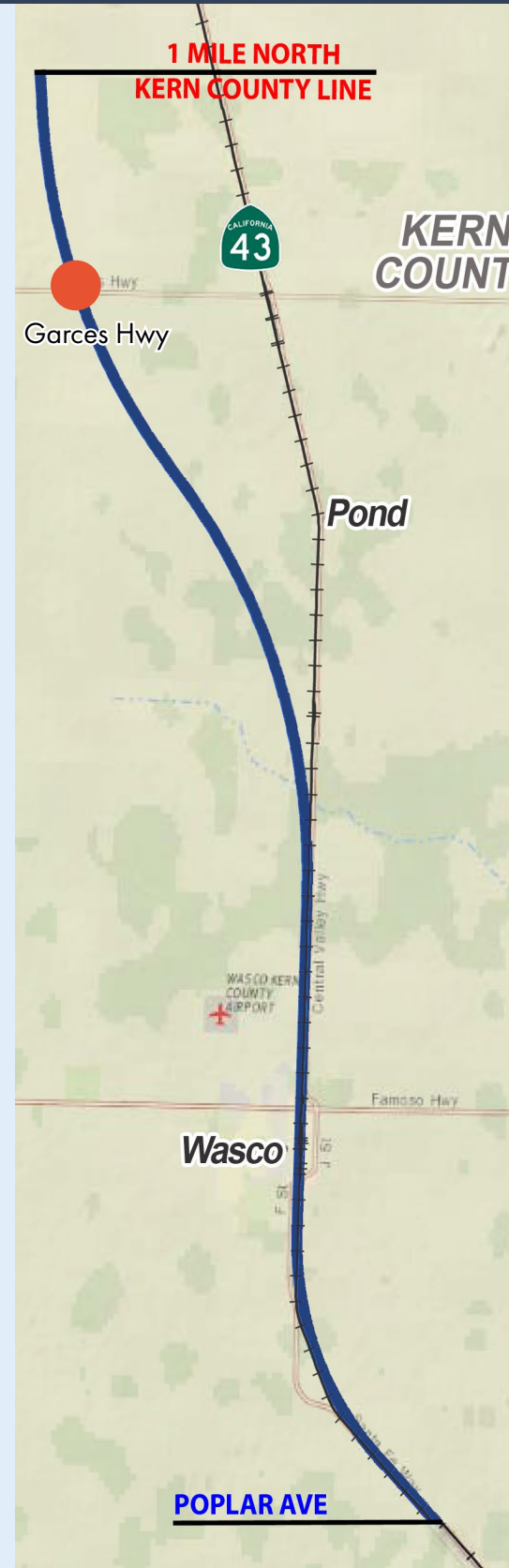


*New
Project*

WORK BEGINS IN CP 4

FIRST CONSTRUCTION IN CP 4 BEGINS AT GARCES HIGHWAY

With the start of the New Year comes new construction in the South Valley for Construction Package 4 (CP4). Though utility relocation and clearing and grubbing have been underway, the first construction activity began recently with geotechnical testing at Garces Highway in Kern County. At right, a blue drill rig is boring a shaft about 70 feet deep. Below that, crews can be seen constructing the rebar cage that will be lowered into the shaft and covered with concrete. Crews are testing the soil conditions for future construction of a viaduct that will carry high-speed trains over the Garces Highway.



1 MILE NORTH
KERN COUNTY LINE

CALIFORNIA
43

KERN
COUNTY

Garces Hwy

Pond

WASCO KERN
COUNTY
AIRPORT

Wasco

POPLAR AVE



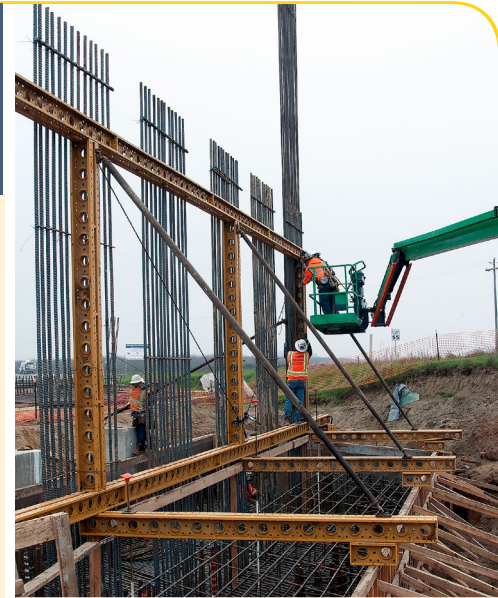
GRADE SEPARATION PROJECTS

Madera County



AVENUE 11

Abutment construction is beginning for the overcrossing at Avenue 11 in Madera County. The embankment work is largely complete, foundations have been poured for the abutments and crews have begun installing rebar for the abutment walls. The work has closed Avenue 11 between Road 30 1/2 and 33 1/2 as crews construct a single span overcrossing that will take traffic over the high-speed rail line.



AVENUE 7

New Project

Crews install rebar at one of the abutments for the alignment and crossing for Avenue 7. The roadway is being realigned at the point where it will cross over the high-speed rail line. Utility and irrigation relocation work have also begun in the area, which is important for the eventual realignment of Road 33 and future dirt embankment work for the overcrossing.



AVENUE 15

New Project

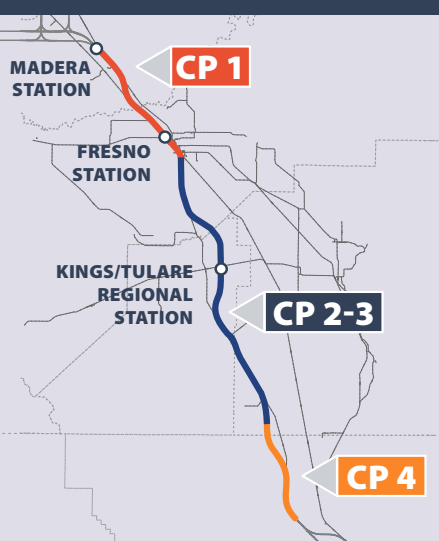
At Avenue 15 in Madera County, crews have closed the road and removed the existing pavement in preparation for the construction of another overcrossing. The contractor is now moving utility lines out of the way to begin the structures and embankment work. The crossing will take Avenue 15 traffic over high-speed rail lines and existing freight lines.



AVENUE 12

Construction of the abutments for the high-speed rail crossing progresses alongside Avenue 12 in Madera County. The overpass structure will carry traffic over the high-speed rail line and existing freight tracks. In January, rebar was installed for the western abutment wall and 615 cubic yards of concrete was poured. Next, forms will be removed and installed on the eastern abutment wall to pour the other side of the bridge.

CONSTRUCTION PACKAGE 1 - 4 MAP



JOB NUMBERS AS OF DECEMBER 31

| | | |
|----------------------------------------------------|---------|-------------------------|
| CONSTRUCTION LABOR WORKERS ↑ 1648 | CP 1: | ↑ INCREASED 1215 |
| | CP 2-3: | ↑ INCREASED 305 |
| | CP 4: | ↑ INCREASED 120 |

SMALL BUSINESS NUMBERS AS OF OCTOBER 31

| | PAID TO SMALL BUSINESSES | SMALL BUSINESSES WORKING |
|---------|------------------------------|--------------------------|
| CP 1: | ↑ INCREASED \$143.5 M | 120 |
| CP 2-3: | ↑ INCREASED \$13 M | ↑ INCREASED 86 |
| CP 4: | ↑ INCREASED \$4.3 M | ↑ INCREASED 26 |



BUILDHSR.COM

Wilson Ihrig Makes Sound Decisions About High-Speed Rail



WILSON
IHRIG

ACOUSTICS, NOISE & VIBRATION

When a high-speed rail train zips by at 100 miles per hour, what does it sound like? How about when trains barrel down the track full speed at 220 miles per hour? A lot of people wonder about that.

To get some answers, the Authority awarded a contract to Wilson Ihrig, a certified Microbusiness (MB) based in Emeryville. Having worked on over 400 transit projects throughout the world since its formation in 1966, the firm is an industry leader in rail noise and vibration prediction, impact assessment, and control.

Wilson Ihrig has a long and successful history with the Authority. Since 2002, the company has conducted studies on high-speed rail throughout the state.

“We served as the noise and vibration consultant on all the project sections and conducted the analysis for the regional, environmental noise and vibration impact studies for the California High-Speed Rail Authority Statewide Programmatic EIR [Environmental Impact Report],” said Derek Watry, Principal and CEO of the firm that employs 25 people, including 20 experts in the field of acoustics, noise and vibration.

“The analyses determined potential impacts to sensitive land along 700 miles of the proposed [high-speed rail] corridor,” Watry added. The team also studied high-speed

rail alternatives – improving highways and airports.

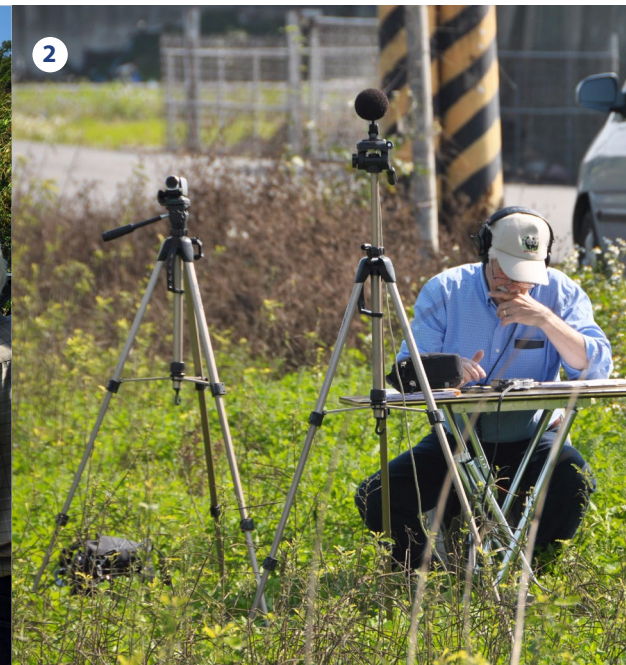
The firm’s approach to noise and vibration impacts is outlined by Federal Railroad Administration (FRA) guidelines, Watry said, parts of which were developed by the staff of Wilson Ihrig in the 1970s and 1980s when the company worked for the U.S. Department of Transportation. This approach requires the collection of field data for the study, which must also be included in environmental reviews for each project section.

To gather data, Tim Johnson, a Wilson Ihrig Senior Consultant and Project Manager, said the company dispatches a team of up to 10 experts. The crew fans out and measures existing noise and vibration conditions at sensitive locations along the project sections.

Workers calculate distances between the train tracks and listeners. Account for types of ground surfaces, including ambient noise generated in the area. The end result is an analysis that helps determine whether nearby buildings, sound barriers or earthen berms will adequately deflect or absorb noise generated by high-speed rail. They also study what engineering and design elements will minimize vibration.

“We look at the projections of future conditions with the high-speed rail project and any changes to the exist-

1. Wilson Ihrig, a small business based in Emeryville, is one of the companies that’s been on the high-speed rail project the longest. It’s been doing research for the Authority since 2002.
2. Researchers study how much noise and vibration will be emitted by high-speed rail trains and what the impact will be.



ing conditions that may go along with that,” said Johnson. “The FRA methodology gives us potential impact criteria that are based on a comparison of those existing conditions to those future projections.”

Presently, Wilson Ihrig is working on studies for the San Francisco to San Jose and San Jose to Merced project sections for ICF, the environmental firm that is preparing the Environmental Impact Report (EIR) for HNTB, the primary contractor handling preliminary environmental and engineering for those sections.

“Most of the time we spent on the project in 2017 has been analysis and the impact assessment,” Johnson said of the work on the Bay Area to Central Valley corridor. “It was quite extensive. There were times when we had to go back out to conduct additional measurements to supplement different areas based on preliminary results.”

With the high-speed rail project transitioning from planning to construction, Watry believes Wilson Ihrig has positioned itself to continue its longstanding relationship with the Authority – and any other states that are working on building high-speed rail systems.

“In terms of contract size and significance and importance, it’s one of our marquee projects,” Watry said. “This [is] the first high-speed rail project in the country. Having the opportunity to work on it adds to our already long list of significant rail projects dating back to the 1960s.”

“We expect our experience with the Authority in California to provide us an excellent foundation for securing future work with high-speed rail and projects in other cities across the United States and around the world.”

Ricci Graham

“In terms of contract size and significance and importance, it’s one of our marquee projects. This [is] the first high-speed rail project in the country. Having the opportunity to work on it adds to our already long list of significant rail projects dating back to the 1960s.”

Derek Watry
Principal and CEO
Wilson Ihrig



Using existing buildings, ground surfaces, tracks and research on high-speed rail in Europe, Wilson Ihrig sound engineers can predict how much noise and vibration will come from high-speed rail trains when they began operations in California. Sound barriers and earthen berms can deflect and absorb noise and vibrations. Some of the newer high-speed rail trains are so quiet that the noise they emit has very little impact on listeners in urban areas.

La Raza Roundtable: A Force to Be Reckoned With

For more than 30 years, La Raza Roundtable de California has worked to create a positive change for Latinos living in California. The non-profit advocacy organization, based in San Jose, identifies a problem that needs to be addressed and then works on resolutions and improvements. And it gets the job done without spending a lot of money.

"We don't have any staff that gets paid. We're all volunteers," explained La Raza Board Chairman Victor Garza. "We bring in residents,

community and business leaders, elected officials, retired professionals and many others. We ask everybody what their expertise is and let them work in that area. We've been very successful."

Garza said he co-founded La Raza in 1987 when another organization that worked in the Latino community folded after its leader retired. The group's demise left a vacuum and Garza noticed that issues that interested his community were being left to fester. So he organized some meetings, which included the late state lawmaker John Vasconcellos, who represented the Santa Clara area for 38 years. According to Garza, "Because Vasconcellos would attend all our meetings, more people started coming."

Today, the organization boasts about 1,000 members who serve as advocates for ethnic communities. La Raza partners with the Black Chamber of Commerce, the Hispanic Chamber of Commerce and other

minority groups in the Silicon Valley and San Jose area to tackle various issues concerning interaction with law enforcement, education, housing, transportation and small business. "The biggest obstacle facing people of color with businesses is bureaucracy," said Garza. "They have trouble getting permits from the city or county which restricts the hours they can be open. Many restaurants lose business because they can't be open at certain hours. They also have to pay more money than others to get their permits."

Garza said La Raza, its partner organizations and business owners meet with San Jose and Santa Clara County officials to hammer out solutions. "The businesses agree not to let lights and noise disturb their neighbors and we're able to help them get their permits," he said.

La Raza also meets with the Santa Clara Valley Transportation Authority and has seats on Caltrans' Small Business Council and the Authority's Business Advisory Council. According to Garza, being at the table where transportation alignment decisions are made will improve access for people of color who want to use transit systems.



1. In January, La Raza Roundtable Board Chairman **Victor Garza** (left), former Assemblyman **Joe Coto** (second from left), State Senator **Ricardo Lara** (third from left) and San Jose City Vice Mayor **Magdalena Carrasco** attended a community meeting in San Jose.

2. State Senator **Ricardo Lara** speaks at a La Raza Roundtable community meeting. The organization holds meetings to tackle a variety of issues, including law enforcement, education, housing, transportation and small business.



"Right now, many of the [San Jose area] workers live 30 to 45 minutes away in bedroom communities. High-speed rail will mean people who live up to two hours away can come to work and they won't be getting in accidents and clogging the freeway."

Victor Garza
Board Chairman
La Raza Roundtable de California

He believes high-speed rail can reduce commute times and keep commuters safe. "I support high-speed rail which will come into San Jose and the Silicon Valley," Garza said. "Right now, many of the workers live 30 to 45 minutes away in bedroom communities. High-speed rail will mean people who live up to two hours away can come to work and they won't be getting in accidents and clogging the freeway."

Garza is proud of the work La Raza has done on behalf of its constituents and is making sure it will continue to be a driving force in the future. "Many of us are getting older, so we're getting younger people to help us," he said. "We're bringing in college students and recent graduates and developing their leadership skills and teaching them how to work with the community." They can also get paid internships with the city and county through the Victor Garza Institute for Public Affairs. "They learn the inner workings of the government and get paid," Garza said proudly. "It's our way of building a group of activists who will take over after we leave."

Karen Massie

Small Business Program

State Honors Small Business Unit for Hard Work



The Small Business team didn't come home empty-handed at the State Agency Recognition Awards (SARA). Small Business Outreach Coordinator Ivor Newman was acknowledged as a finalist for Advocate of the Year. The Authority was also honored for meeting the State's annual goal of 25 percent for purchasing and contracting with Small Businesses (SB) and a three percent goal of contracting with Disabled Veteran Business Enterprises (DVBE).

Every year, the Department of General Services (DGS) honors state agencies for their work with Small Businesses (SB) and Disabled Veteran Business Enterprises (DVBE).

The California High-Speed Rail Program has an aggressive Small Business Program with a 30 percent goal for Small Business participation. It includes a 10 percent participation goal for Disadvantaged Business Enterprises (DBE) and a 3 percent goal for Disabled Veteran Business Enterprises (DVBE).



Interested in doing business with High-Speed Rail?

www.ConnectHSR.com

SMALL BUSINESS PARTICIPATION OF DECEMBER 31, 2017

427 Certified Small Businesses working on the high-speed rail program statewide

139 Certified Disadvantaged Business Enterprises
51 Certified Disabled Veteran Business Enterprises

NORTHERN CALIFORNIA:
161 Certified Small Businesses

CENTRAL VALLEY:
117 Certified Small Businesses

SOUTHERN CALIFORNIA:
136 Certified Small Businesses

OUTSIDE OF CALIFORNIA:
13 Certified Small Businesses



Calendar of Upcoming Events

Meeting dates, times and locations are subject to change.

| EVENTS | DATE | TIME | ADDRESS |
|--------------------------------------|--------------------|-------------------|--------------------------------------------------------------------------------------------------------------|
| Business Advisory Council Meeting | February 27, 2018 | 1:00 pm – 4:00 pm | Elihu M. Harris Building 1515 Clay Street, Room 11 Oakland, CA |
| Authority Board of Directors Meeting | March 20, 2018 | TBD | TBD |
| Authority Board of Directors Meeting | April 17, 2018 | TBD | TBD |
| Business Advisory Council Meeting | May 8, 2018 | 1:00 pm – 4:00 pm | California Department of General Services East End Complex 1500 Capitol Avenue Sacramento, CA 95814 |
| Authority Board of Directors Meeting | May 15, 2018 | TBD | TBD |
| Authority Board of Directors Meeting | July 17, 2018 | TBD | TBD |
| Business Advisory Council Meeting | August 7, 2018 | 1:00 pm – 4:00 pm | California Department of General Services East End Complex 1500 Capitol Avenue Sacramento, CA 95814 |
| Authority Board of Directors Meeting | August 21, 2018 | TBD | TBD |
| Authority Board of Directors Meeting | September 13, 2018 | TBD | TBD |



1. More than 100 small business owners attended a Meet the Primes event hosted by the Authority in Modesto. They heard from Deputy Director of External Affairs **Alice Rodriguez** (left), design-build contractors Tutor Perini/Zachry/Parsons, Dragados Flatiron and California Rail Builders and certified small business O'Dell Engineering on how to join the high-speed rail project.

2. Small Business Outreach Coordinator **Ivor Newman** explains how small businesses can find specific high-speed rail contracts. Currently, more than 420 small businesses have been awarded contracts to perform services on the project.