REPORT SERIES EQUITY IN APPRENTICESHIP



Case Study Equity from the Frontline

Worker Voice Leads to a Network of Accessible Apprenticeship Pathways 2018

EQUITY IN APPRENTICESHIP is a report series from COWS at UW-Madison. It highlights programs that extend occupational opportunity to historically marginalized groups, especially people of color and women. The series consists of four case studies and an overview document with policy and practice principles for equity in apprenticeship.

COWS BUILDING THE HIGH ROAD

ABOUT COWS

COWS is a nonprofit think-and-do tank, based at the University of Wisconsin-Madison, that promotes "high road" solutions to social problems. These treat shared growth and opportunity, environmental sustainability, and resilient democratic institutions as necessary and achievable complements in human development. Through our various projects, we work with cities around the country to promote innovation and the implementation of high road policy. COWS is nonpartisan but values-based. We seek a world of equal opportunity and security for all.

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Our four case studies of apprenticeship programs span the country and industries. The Worker Education and Resource Center (WERC) in Los Angeles has become highly adept at preparing health care workers who share a cultural affinity with LA's patient populations. The Industrial Manufacturing Technician (IMT) program is the product of collaboration between labor and management leaders in Milwaukee's manufacturing sector and has created a new rung in the ladder in production jobs. In California, The Joint Workforce Investment in the South Bay Valley Transportation Authority has developed a web of apprenticeships and advancement opportunities. Montana's Tribal College Apprenticeship case study offers a look at how apprenticeship plays out in rural areas and the key issues that new partnerships face as they take on equity. The series concludes with Policy and Practices for Equity in Apprenticeship which generalizes lessons for the field.

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ABOUT THIS CASE STUDY

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APPRENTICESHIP ROOTED IN PARTNERSHIP AND WORKER VOICE

Santa Clara County's nationally recognized pathway of transit apprenticeship programs began with a single idea: What if workers and management came together to better meet the transit needs of Silicon Valley's booming population? Tom Fink, a retired bus driver and former official of Amalgamated Transit Union Local 265 (ATU), posed this question in 2005. As transit demand and social inequities grew across the region so did the challenges facing bus drivers. Fink notes that "it became clear that the core challenge of being a bus driver was the totality of the environment: operational regulations, settling problems on the bus, keeping schedules, and managing your own life in the face of that stress. The industry assumed that your only challenge was driving the vehicle." Yet, training focused on driving the bus. Workers received little training or support on the service aspects of the job.

Tom knew from personal experience that the job was a killer. Transit operators have some of the highest occupational mortality rates.¹ Motivated by the need to help his fellow operators, he proposed a new approach adopting the skilled trades philosophy of craft. "I worked a lot with building trades. Their attitude to work was different. When you joined the profession, you were rolled into a brotherhood, a sisterhood centered around pride for the craft. We needed to discern which things are more properly in the province of skill development and training, as opposed to policy for collective bargaining," says Fink.

A workforce development expert, Deb Moy, advised that the building trades' success at skill development relied on labor management partnerships to unite union and contractor-partner resources for craft-focused apprenticeship programs. In 2005, the ATU approached Santa Clara Valley Transportation Authority (VTA) about forming a partnership to better prepare drivers for the entirety of their jobs.

After a facilitated process of frontline research and joint meetings, the ATU and VTA codified their partnership as the Joint Workforce Investment (JWI). Guided by three principles - Career Development, Public Service, and Workplace Solutions - JWI seeks to build a healthy work environment for all employees while enhancing the quality of service they deliver to the public. To best address the needs of bus operators, JWI agreed "to operate according to a worker-to-worker principle . . . all curriculum would be developed by workers themselves under the guidance and support of the program developer in alignment, of course, with VTA policies and procedures."²

Subsequent worker focus groups identified a need for mentors to assist new bus operators. New workers struggled to transition from the training environment to "the real world of driving the bus and handling customers," according to Harpreet Singh, Coach Operator Mentor. Workers also expressed concern about service workers on the fuel island. These overnight jobs cleaning and fueling buses had the worst shifts, lowest morale, and fewest advancement opportunities. An analysis of VTA's workforce data further highlighted the need for new workforce development systems. The agency required new skills from bus operators and maintenance workers as transit vehicles became increasingly reliant on computerized systems and new "green" propulsion technologies. Other high skill positions such as overhead line worker faced a difficult labor market with competition from private industry. Over the next ten years, the need for replacement workers across the agency would also increase as over forty percent of VTA employees reached retirement age.

This worker feedback first led to the creation of the JWI New Operator Mentor Program. Launched in 2008, veteran coach operators help novice drivers transition from the training environment to driving a route. The VTA and ATU jointly assess operators for the requisite background and knowledge to serve as a mentor. Mentors must have a history of assisting other operators, commit to being on-call for new drivers, and share relatable life experience. They understand that transit is a service profession.

"The community doesn't know about the full extent of service provided by operators. Often there are more bus drivers on the road than police or fire. They are trained to help distressed folks. They are the eyes and ears of the community." - Lisa Vickery, VTA Superintendent

Most mentoring work is volunteer, with mentors advising apprentices during the regular course of work. Both mentors and mentees are paid for attending the regular JWI apprenticeship classes and conducting on-the-job "ride alongs" that support the mentees during their first months of work. By January 2017, the Peer Mentor Program had grown to forty mentors. That year, JWI partnered with Mission College to provide mentors with formal leadership training and academic credit.

Through discussion of issues facing their mentees, JWI mentors began advising VTA on operational issues, potential solutions, and training needs. Mentors now hold meetings every other month to consider challenges facing operators across the transit system. "Listening to operators helped us solve problems because the operators are most knowledgeable, they are on the frontline, and can identify and prioritize what needs to be addressed," says Mike Hursh, former VTA Chief Operating Officer. VTA and ATU leadership also attend the bimonthly meetings to expedite solutions. All JWI meetings are subject to "The Vegas Rule:" what happens in a JWI meeting, stays in the JWI meeting. This rule enables honest communication about mistakes and problems without fear of punishment. Former VTA Assistant Superintendent, Steve Johnstone, explains that "management and labor are in the room with the mentors working on the apprenticeship and identifying challenges that affect operations. This approach is about relationship and trust building." The JWI New Operator Mentor Program has led to unanticipated benefits of deeper relationships among VTA's most experienced operators, more efficient problem solving, and faster organizational improvements.

With their extensive frontline experience, mentors helped ensure that JWI apprenticeships met the needs of VTA, its customers, and workers. The resulting programs are among the first in the country to professionalize transit job classifications from coach operator and track worker to overhead line. They also provide a path towards equity by extending opportunity from the most entry level occupations to the most in-demand and highest paid.

ARMANDO BARBOSA COACH OPERATOR APPRENTICESHIP GRADUATE

Armando Barbosa's mother discovered a career at VTA that enabled her to support her family in the 1980s. "Mom had been traditional Hispanic farm worker. She got a career job at VTA as an operator and it changed my family's life." At first, Armando didn't join the family business. He spent years working in criminal justice, mental health, and addiction prevention. Becoming a rehab counselor seemed the next logical step in his career.



Encouraged by his mother, Armando submitted his operator application during the annual one-week recruitment process.

"I came to VTA for the opportunity to grow. Benefits and financial opportunity. So many options for a career. I came to VTA because there is opportunity. June 1, 2016 was my start date. I was happy, relieved, and excited." Armando found the apprenticeship tough and demanding. The classroom training was specific and very technical. Apprentices had competency exams every Friday, and faced dismissal if they failed more than two tests. "You had to have two feet in. We were preparing for the big day. For the start of a career."

Despite the intense preparation of the classroom and field training, the first weeks as a coach operator proved the most stressful. Armando credits the mentorship program with helping him successfully complete probation. "You put your life on hold through probation because you're not sure of the career. My mentor drove the bus on my first day. It helped with the stress because I had the opportunity to ask questions and see how it should be done. Each situation is different from the next. I was very worried about crashing the bus for the first six months. The mentors were always there if you are ready to accept help." Armando's cohort provided additional support. The group established an online community to share experiences and lessons from the road.

Armando sees the VTA as a profession that benefits from his former community work. Driving the night shift, he sees many of the inequities facing Silicon Valley. "Transit is the pregame for homelessness. We see it first. I share resources with the homeless. Tell them where to find the mobile shower or a washer and dryer." He encourages students on his community college route to consider working at VTA. "I look for people who are ready to change their life. Who are eager to learn. They are already taking the bus to school and overcoming obstacles so I share information about the job." Armando knows that when the community sees bus drivers, they also see the company. He is considering a supervisory role to bring ideas from his experiences on the road back to VTA operations. "For those ATU members coming through as operator apprentices, we tell them that being a part of a registered apprenticeship defines their work as skilled and helps keep it their own." - John Courtney, Recording and Financial Secretary, ATU Local 265

COACH OPERATOR APPRENTICESHIP

JWI's first apprenticeship began as a mentorship strategy for new operators faced with increasing demand for transit service and pending experienced operator retirements. New hires were expected to transition quickly to the responsibilities of the position. Historically, operators completed a nineweek training and then had to "rely on their personal toolkit to get through on the job," notes Maurice Beard, VTA Bus Training Supervisor. This approach met state requirements, but many new operators found the reality of the job unsettling and stressful. They felt prepared for the technical aspects of driving a bus, but not for dealing with challenging customer



interactions and inconsistent schedules and routes. Using an apprenticeship model to restructure the operator training allowed JWI to create sustainable solutions to these issues.

"The ultimate goal is to provide skills for the job and to elevate the coach operator position to a profession." - Harpreet Singh, Coach Operator Mentor

JWI registered the program with the U.S. Department of Labor in 2015, and the California Department of Apprenticeship Standards in 2016. New hires now begin coach operator training as VTA employees (classified "coach operator trainee"), registered apprentices, and Mission College students.

VTA's human resources department handles recruitment of new operators. Selection is highly competitive with the agency receiving over six thousand applications in the one week per year that the position is open. One in seven applicants receives an interview and practical exam on a coach. Although the VTA does not specifically target non-traditional workers, a diverse panel of supervisors considers candidates with the goal of "having a workforce that reflects the diversity of Santa Clara County." The diversity of the candidate pool is helped by the demographics of Northern California, as well as VTA's word of mouth recruitment process. The first waves of diverse employees recruited in the 1980s have encouraged friends and family members to join the agency. Community and workforce development groups help diverse populations prepare for the VTA selection process. Given the unpublicized one-week application window, people with connections to the VTA tend to dominate the candidate pool.

Approximately 100 coach operator apprentices are selected each year. Apprentices complete nine weeks of technical training and six months of probation during the eighteen-month program. Apprentices are "told the game plan—instructors and mentors are lining you up to pass the DMV test from the first day," according to Armando Barbosa, former coach operator apprentice. Everyone works hard to help the apprentices succeed. The instructors are all former operators, and the mentors are welcoming of new hires into "the family." Apprentices spend a portion of their time in the classroom and the rest learning how to drive the bus. Classroom technical instructors and line instructors in the field work together to provide apprentices with mechanical knowledge, as well as "the practical, nuts & bolts of driving," says Beard.

Graduation from technical training is on a Wednesday, earning apprentices the title Coach Operator and a union card. Apprentices also become eligible to earn up to eighteen academic credit hours towards a California community college Certificate of Achievement.

Apprentices return the Thursday after graduation for supplementary JWI coursework. Delivered over the next six months a three-day series of JWI classes covers topics all new operators struggle with: customer service, health and wellness, stress management, and the nuts and bolts of navigating an often complex transit service delivery system.

"Because it's a service job you need to teach people how to deal with the difficult, even racist people. Also, cumulative and chronic social problems appear on the bus." - Lisa Vickery, VTA Superintendent

On Friday, mentors take new operators along their route, providing valuable insight into what it takes to operate a coach in revenue service. These mentor-led sessions provide new operator apprentices a crucial transition from technical training to actual service delivery on the street. They are also better able to handle the stresses of the job, and have developed a trusted relationship with seasoned operator mentors.

The most stressful phase of the apprenticeship, probation begins after apprentices begin their first work day and have completed two JWI class days. The mentors provide a critical safety net during this period. "The biggest challenge for anyone is operating safely. The cocoon of training has fallen away: safety, dealing with the public, dealing with the non-traditional schedules," says Beard. An apprentice can call their mentor anytime for guidance. They rely on mentors for help with issues on and off the road.

Most new operators do not receive a consistent route or work schedule. VTA assigns routes on an as-needed-basis. Facing a different work schedule and route daily, the apprentices find it hard to manage family obligations and maintain their health. Operator wellness is a key focus area for JWI and the mentors. They emphasize stress management, interpersonal skills, and maintaining good sleep and eating habits. "Health issues. Weight issues. Managing conflict. Operators need to figure out ways for dealing with the interpersonal stress. You get to a place where you don't let the stress of the road bother you. Or, else you take it home and it affects family life," says Singh.

Mentors also help apprentices navigate the ATU negotiated coach operator bidding system that allows operators to change their schedules or routes four times a year based on seniority. New operators can use this process to move into a consistent route and more family-friendly schedule. Mentors also advise apprentices on VTA's change of classification system, allowing employees to apply for any open position in the organization based on qualifications and seniority. Apprentices receive a detailed JWI "Careers at VTA" manual on how to navigate the ATU occupations along the pathway from coach operator. "Change of class" supports a varied occupational career pathway from coach operator. As a result, coach operator apprenticeship is a key gateway to most occupations at the VTA. The quickest route to administrative, clerical, rail, and maintenance positions begins with time as a coach operator.

"JWI apprentices have moved up into supervision and senior operations, and are carrying their knowledge of driving a bus forward as managers." - Diana Hermone, Former President, ATU Local 265

For those apprentices pursuing coach operations, the position's wage progression and substantial benefits (including a defined retirement plan and lifetime medical insurance after 10 years) ensure a family-sustaining career. After four years, coach operators reach the top of the occupational pay scale (\$33.62/hour in 2016).

SERVICE MECHANIC (MECHANIC HELPER) APPRENTICESHIP

Bus mechanic (transit mechanic) is another highly desirable, family-sustaining career position at VTA. In the past, pathways into this occupation were primarily limited to people who had trained outside of VTA at technical schools, in the military, or through mechanical repair shops or auto dealerships. Entry level facility workers – who clean and maintain VTA transit facilities -- had no clear pathway into skilled maintenance positions. They worked swing shifts, performing basic, repetitive tasks. Workers would take automotive courses during non-work hours trying to meet the qualifications for a mechanic position. Yet when a position eventually opened, they often lacked the detailed technical and electronics knowledge needed to succeed. Deb Moy, who has been central to the project since its inception, notes that "the service worker position was a dead-end. Morale was very bad because people felt stuck."

With VTA facing a lack of qualified diesel mechanics, veteran transit mechanics and senior service workers recommended developing a career pathway for service workers to learn mechanic skills. Created with local and state financial support,³ the "Mechanic Helper" pilot program sought to formalize a direct pathway from the maintenance entry level positions of Facility Worker and Service Worker to Service Mechanic. At the beginning, as Mike Hursh, former VTA Chief Operating Officer, describes, "we took vacant, mechanic positions and built an apprenticeship program for fuel island workers around them. We then used vacant fuel island positions to fill from the community. To provide access to union jobs with benefits, career jobs." In 2008, the program recruited ten "Mechanic Helpers" from the ranks of facility and service workers. To be eligible, a worker must have completed Evergreen College's Automotive Systems 102 (employer reimbursement for C or higher), passed a mechanical aptitude test, and demonstrated good job attendance and performance. Selection was then based upon seniority.

Prerequisites help ensure that apprentices have the foundational skills, initiative, and commitment to complete the program.

"I was on a mission to be a mechanic. Worked facility (maintenance) for three months then went to fuel island for three years because that was the way to Mechanic. As soon as I passed the test, I showed the training supervisor my results. Asked him every month about the apprenticeship. Still had to wait two years before they offered it." - Tai Lam, Mechanic Helper Apprentice

Service Mechanic apprentices spend a year completing eleven intensive educational modules on safety, terminology, mechanical/electrical theory, technical skills, and maintenance tasks. The modules use an on-the-job training hybrid learning module. One week (40 hours) per month is classroom instruction and the remaining three weeks (120 hours) are hands-on in the maintenance shop department. Reflecting industry trends, electronic control and vehicle electrical systems are key focus areas of the program. Transit coaches can have over fifty onboard computers and use seventeen different types of software. "From the second day, apprentices are doing electrical. Before the apprenticeship, it was hard for a person to get that experience. There is no hands-on with formal degree programs. The apprenticeship allows for practice. Now they don't have trouble with the practical aspects of the electrical test," explains Russell Anderson, Maintenance Training Supervisor. Transit Bus Technicians provide hands-on training and mentorship. They don't teach by simply showing apprentices the repair, but by allowing apprentices to practice fixing problems themselves. Through completion of the full eighteen-month apprenticeship program, Service Mechanic apprentices can earn up to thirty academic credits.

ELISEO ACOSTA SERVICE MECHANIC (MECHANIC HELPER) APPRENTICESHIP GRADUATE

For Eliseo Acosta, the Valley Transportation Authority "is like a family" both literally and figuratively. Both of his inlaws worked for the VTA. Eliseo joined the VTA in 1999 as a service worker. Yet not until the Service Mechanic (Mechanic Helper) pilot program did Eliseo truly feel a part of that family.

"It's a brotherhood, sisterhood. The program gave us that."

Eliseo became a service worker because it was an opportunity to work for the VTA, an agency known for family-sustaining, long-term careers. He soon experienced the low morale and stagnation of working on the fuel island.



Even with the union's negotiated biannual change of classification process, cleaning and fueling coaches on the 6:00 pm to 2:30 am shift did not provide the skills or opportunity to progress.

"It's hard to see a future on the fuel island. It's not the kind of job you can see yourself doing long-term."

The launch of JWI's Service Mechanic pilot allowed Eliseo to see a path forward. He completed the pre-requisite Automotive Systems 102, passed the mechanical aptitude test, and was offered a spot in the first cohort. The program started with the basics of "this is a wrench" and progressed trainees through computer and electro-mechanical systems. From the trainers, mentors, and his cohort, Eliseo found the program inclusive and supportive.

"Once you get in the program, it is welcoming regardless of your background. We had a mantra ten of us in ten of us out. We all made it through."

After completing the program, Eliseo returned to the night shift as a Service Mechanic "to learn the trade because there is more work and opportunity to learn on the swing shift. It's a trade because you are constantly learning, applying and practicing." All his efforts paid off. Eliseo advanced from Service Mechanic and now works as a certified Transit Maintenance Technician. He specialized further becoming a Heavy Engine Repair mechanic and spends his days rebuilding coach engines.

Eliseo often shares how the Service Mechanic program changed his life. "If there was no Mechanic Helper Apprenticeship, I probably would have left the company. We got paid to go to school for a year at our previous union wage. We also kept our seniority. That was really important." The success of this pilot paved the way for subsequent cohorts and formal apprenticeship status. After the initial one year training, a six-month probation places the apprentices in the maintenance bay fulltime as Service Mechanics. Tai Lam, Mechanic Helper Apprentice notes that mentors "provide tricks on actually doing the real work. The mentors have your back. They answer questions on how to do the job." Mentors also help apprentices with soft skills and adjusting to shop floor culture. Mechanics generally prefer to work on their own, prioritizing technical skills over interpersonal. Mentors teach a scenario-based course to establish work expectations and introduce strategies for effective teamwork. They also help apprentices identify the veteran mechanics interested in teaching others. Moy also notes, "mentors help make sure the shop floor folks work well together."

As with the Coach Operator Apprenticeship, the Service Mechanic cohort model provides peer support that endures through a worker's career. Former apprentices continue to share tricks of the trade and technical knowledge even after advancing to Transit Mechanic. They also maintain connection with the training staff, stopping by for a refresher or information on new technology.

"When we come across something difficult, we call Russell Anderson (Maintenance Training Supervisor) for more information. And, we still connect with the cohort. It's a group that has the same experience so you know you're not alone." - Eliseo Acosta, service mechanic apprenticeship graduate

The apprenticeship program has successfully advanced 30 apprentices through probation to Service Mechanic. These hybrid electric mechanics perform routine maintenance on VTA's 500 vehicle fleet. Entering the apprenticeship with specific career goals, such as Heavy Engine Repair, some apprentices have pursued certification as a Transit Maintenance Technician (Technical Mechanic). Acosta explains "as a Technical Mechanic, you should be able to fix anything on the coach from bumper to bumper." Service Mechanics with four years of experience are eligible for advancement to Transit Mechanic. Some apprentices with seniority and strong proficiency test scores have achieved the position in less time. Another graduate of the program, Carl Hart, observes, "now with the success of the Service (Worker) Mechanics, other workers can see that it's possible to move from the Fuel Island into a more professional position."

BUILDING AN APPRENTICESHIP CAREER PATHWAY

Unlike many joint workforce efforts, the JWI starts apprenticeship programs in response to an operational challenge. With guidance from VTA front line operations workers, JWI identifies industry operational needs and barriers to advancement across transit operations. The Coach Operator and Service Mechanic apprenticeships have become models for simultaneously addressing increased transit demand, deployment of high technology "green" transit vehicles, impending massive workforce retirements, and the transit incumbent workforce with limited career access, training gaps, and low morale. JWI has followed the same approach to expand its apprenticeships to VTA's light rail operations.

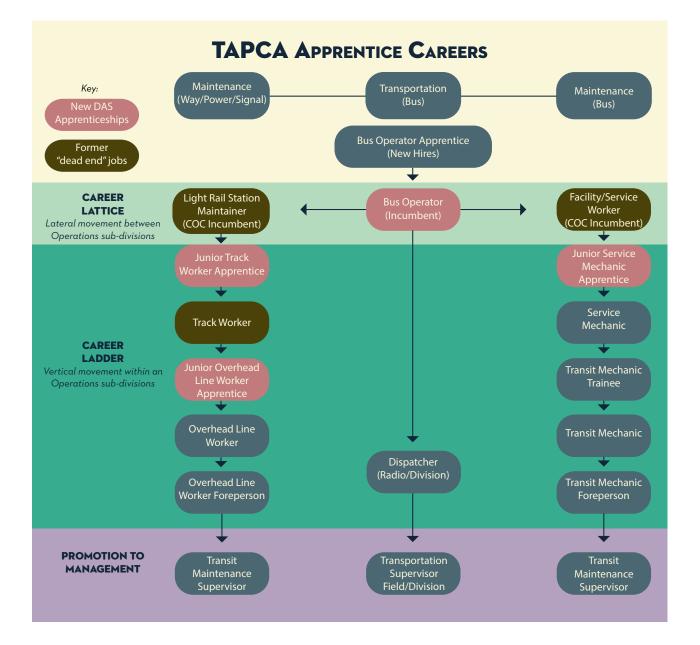
In 2016, JWI partnered with Mission College to create Transit Apprenticeships for Professional Career Advancement (TAPCA), funded by the California Community College Chancellor's Office. This innovative program created a "Career Lattice/Ladder" system that gave both new and incumbent workers the opportunity to grow their careers at VTA. In addition to the two apprenticeships described above, TAPCA includes a Track Worker Apprenticeship and an Overhead Line Worker apprenticeship. TAPCA is currently one of the top performing California Apprenticeship Initiatives (CAI) in the state.



The Track Worker Apprenticeship provides an advancement pathway for workers who maintain light rail stations. Like facility maintenance, cleaning light rail stations is another VTA entry-level occupation. Jess Martinez, a Service Mechanic Apprentice and former station maintainer, describes the job as "paying dues. It's been in the news how disgusting train elevators and escalators can get. We cleaned that." In 2016, VTA offered four Track Worker Apprenticeship positions to current station maintainers. Workers qualified for the eighteen-month apprenticeship by passing written and practical exams. Selection was then by seniority. Apprentices spent the first two months in the classroom taking courses in track maintenance and safety. The next ten months provide apprentices with hands-on training and mentorship. Trainers are unable to interrupt regularly scheduled rail service for training purposes, giving apprentices a very small window of two to three overnight hours for on-the-job training. Apprentices spend the last six months of the program performing regular Track Worker duties.

Started in 2017, the Overhead Line Apprenticeship provides track workers, electro-mechanics, and electronic technicians with access to the transit electrical power field. Transit overhead line workers are in high demand across the country and often draw six-figure compensation packages. The extremely high cost of living in Silicon Valley makes it even harder for the VTA to recruit. Veteran overhead line workers recognized that incumbent track workers are already familiar with the rail system, the working conditions, and living in the local area. They recommended creating an overhead line apprenticeship pathway for incumbent VTA track workers.

The Overhead Line Worker Apprenticeship establishes an advancement pathway for electromechanical maintenance workers and track workers. The pathway from electromechanical to overhead line is standard in the industry. Including track workers is more innovative, and incorporates a pre-apprenticeship program providing foundational electrical skills and knowledge. All Overhead Line apprenticeship candidates must pass a written electrical test, as well as a practical exam. Overhead Line Apprentices spend at least two months in the classroom, and at least a year training on-the-job with a mentor.



PATHWAYS TO EQUITY

JWI's system of apprenticeships has institutionalized pathways towards equity for non-traditional workers. Women, immigrants, and racially and ethnically diverse workers have all found success through the apprenticeship programs. The apprenticeship cohorts have near-perfect completion rates. Former operator apprentices are serving as mentors and others have advanced to management. Workers once "stuck on the Fuel Island" now work as certified mechanics.

"One woman from the first cohort is now a Service Mechanic who started out afraid to go under the bus and now loves what she's doing. Another woman has become a Technical Mechanic." - Carl Hart, Program Graduate

With people of color and women dominating VTA's entry-level cleaning occupations, the Service Mechanic and Track Worker Apprenticeship Programs represent game-changers in removing systemic inequities. Maintenance Training Supervisor, Russell Anderson explains, "People were trying to get into the maintenance field from the fuel islands but they didn't have the background. These career ladder apprenticeships provide folks with a way to get into Fleet maintenance." The programs provided women with the opportunity to identify and hone technical aptitude through its focus on electrical skills. With mentors who believed in their ability to learn technical skills, many apprentices from non-traditional backgrounds experienced their first professional successes on VTA's shop-floor. "It's tougher for women initially on the mechanical aspects because they often don't have any experience with it. They struggle to get going but they all get to a point of figuring it out. We know they can do it," notes Anderson.

The apprenticeship model with its "learn and earn" approach also allowed more workers to access the opportunity for skill development. An entry-level wage in Silicon Valley rarely supports living expenses. People working the fuel island and facilities/station maintenance could not afford the time or expense of furthering their education. Apprentices retain their VTA seniority level and pay rate during the program.

"Where else can you make money while you learn? Provide for your family as you learn? That brings loyalty." - Jess Martinez, Service Mechanic Apprentice and former station maintainer

The apprenticeships have turned what was once a dead-end position into a professional gateway. People with limited skills but mechanical interest can enter VTA as an operator; transfer to service, station or facilities worker; and work their way into a mechanic or track worker apprenticeship. "These jobs now lead to a career, benefits, and better schedule," states Carl Hart, Program Graduate. Beyond better pay, the apprenticeships have delivered hope and respect. Apprentices routinely share stories of how the program has changed not only their lives, but also the lives of their family members. They have pride in their job and feel the respect of their children. "The apprenticeship gave me the ability to be proud around my family. My daughter asked me to present at her school career day. Because of the program and where it's taken me, I felt good about presenting. I was up there with doctors, but the kids liked that I worked on engines, really big engines." - Eliseo Acosta, service mechanic apprenticeship graduate

EQUITY FROM THE START

JWI developed its apprenticeship programs within a culture that values diversity, inclusion, and equity. VTA and ATU have worked for over twenty years to build a transit workforce that reflects the highly diverse community of Silicon Valley. There are over 140 languages spoken in the Bay Area with vibrant immigrant and ethnically diverse communities.

Workers and management acknowledge that building and maintaining an inclusive community takes work. "In the past, there were challenges for minority workers at VTA. My mother came in with the first generation of women, immigrant, and minority operators. It wasn't easy," notes Assistant Superintendent, Steve Jovel. VTA transitioned the culture through formal and informal practices. The organization adopted formal diversity and inclusion initiatives. Human resources established equitable hiring processes including recruitment through community groups and diverse interview and selection panels. More recently, executive leadership has diversified its ranks with women of color serving as Chief Executive Officer and Chief Operations Officer as well as other senior agency roles.⁴

"Our whole mission is to be equitable. Transit promotes equity in the community by providing a way for people to access opportunity. Extend that to our own workers, with all of transit operations being diverse and with jobs that provide a family-sustaining wage, full benefits, and a career." - Moy

These formal mechanisms led to an organization where diversity extends to immigration status, sexual orientation, and gender identity. Workers readily describe the work environment as familial. "It's all family here. We are supposed to make it better for everybody. We have people who don't speak English very well, but people listen and try to understand where they are coming from," says Diana Hermone, Former President, ATU Local 265.

HARPREET SINGH COACH OPERATOR APPRENTICE MENTOR

Harpreet Singh has worked as a coach operator at the VTA for over nine years. Like many of the VTA personnel, Harpreet was introduced to the VTA through a family member. He applied while in college, and waited over a year for an operator class to begin. Harpreet's willingness to help others on the job made him a perfect fit for the mentorship program. Although mentors volunteer their offduty time, Harpreet has mentored as many as five apprentices a year for the past four years.



"Every apprentice is different. There is no one template, or set rules on how to be a mentor. It changes based on the apprentice."

JWI Coach Operator Apprenticeship Mentors

Having a mentor helps apprentices transition from the training environment to the responsibilities and logistics of operating a coach in population-dense Silicon Valley. Harpreet has guided apprentices through training, probation, and the realities of the job.

"The first couple of weeks we get a lot of calls about basic logistics. About where to show up for the run, scheduling issues, family constraints, and how to get paid. especially about starting on the routes. We also get asked about how to deal with the customer service aspect. Every interaction is on stage because passengers are watching."

Based on the operator apprenticeship's success, Harpreet suggests using the apprenticeship model for other in-demand VTA occupations. There are positions that sit so long on the recruitment board that they get pulled. Having an apprenticeship for people to learn these jobs would help the VTA and people who have already shown their commitment to the agency.

LEARNING FROM A DIVERSE WORKFORCE

JWI expanded upon this infrastructure of diversity and inclusion to advance equity through apprenticeship. From the beginning, VTA and ATU sought the guidance of its diverse front-line workforce. Having workers at the table revealed the opportunities for creating sustained equitable outcomes for workers. Worker voice is now part of the daily VTA Operations culture. Operators identified the need for peer support from veteran drivers. They recommended peers with cultural appreciation and shared lived experience, noting the importance of rapport and applicable guidance. The mentorship program, in turn, observed and shared opportunities to improve outcomes for entry-level workers. According to former VTA Assistant Superintendent, Steve Johnstone, "VTA supervisors and mentors met together to come up with solutions. Supervisors and trainers worked together to design programs based on the responses of veteran operators. Apprenticeship was the step, the infrastructure, for opportunity and advancement."

USING MENTORSHIP TO DRIVE EQUITY

JWI not only designed for equity, but also remained intentional about inclusion and equity at every stage of apprenticeship. Lisa Vickery, VTA Superintendent, notes that "mentorship and the apprenticeship programs can be used to do things in a different way. How do we make this community feel like home to all employees? It is happening throughout VTA. JWI makes it clear that it's ok to talk about diversity and equity issues and work on them. People at all levels ask the questions to start setting the stage. It helps make the program more real for people to talk genuinely about bias or disparity." Mentors provide a safe space for discussing and resolving equity issues. They are diverse in age, gender, and ethnic background. JWI also selects for breadth of experience on the job and in life. Apprentices receive a mentor likely to understand the specific issues they may face on the job.

"We always kept our eye on making the mentor program diverse. We wanted the program to be an accurate reflection of our membership. One of the considerations for mentors was the demographics of the operator apprenticeship program." - Tom Fink, retired bus driver and former official of Amalgamated Transit Union Local 265 (ATU)

Women often deal with sexism on the bus, with passengers seeing them as "someone you can push around." Male operators can face machismo and aggression. Operators who are new to this country may experience communication and cultural barriers. "The real advantage of having the mentor is having someone you can lean on and bring issues to who isn't management," says Maurice Beard, VTA Bus Training Supervisor. The mentorship program also shows what is possible. "It helps to see that people like you are being treated with respect and given the authority to lead people," says Vickery.

A FRAMEWORK FOR APPRENTICESHIP INNOVATION

JWI's success points to a framework for tailored adoption of proven workforce training models, including apprenticeship. The effort did not begin with a goal of starting apprenticeship programs. Rather, VTA and ATU invested in an experienced intermediary to guide an investigative process of identifying shared challenges and potential solutions.

"This is not a slick marketing roll-out. These are people's lives, hopes, and dreams. They want something that is going to be a career for them. It's very easy to forget how important work is to people, their sense of selves. This should be held at the forefront." - Lisa Vickery, VTA Superintendent

This commitment to finding common ground helped establish trust among the partners and a willingness to work differently. Workers were included at all stages of the process. Management and labor developed trust-based feedback systems for gathering information from the field, including bimonthly mentor meetings and the Vegas Rule. These improvements created the conditions for determining if and how apprenticeship could address the challenges facing VTA's workforce.

Organizations interested in apprenticeship "need an approach that is about asking questions of the workers. There is no checklist or template. Everything needs to start from the workers. All of our programs started because workers pointed out what was needed. They have the power to say "This is our work. This is what it means to be a professional." Most recently, the overhead line folks said to train track workers to move into the job because they already know about working on the track," notes Moy. Yet, the JWI collaborative model goes beyond worker voice. JWI's approach embeds the equity concept of shared power to address common industry challenges. Veteran operators received training and authority to help their peers navigate the job. VTA has also supported the capacity of mentors to resolve problems and advance organizational improvements. According to Vickery, "it has provided a new playing field to address workplace issues between management and labor. VTA has consciously adopted the idea that the mentorship program is flat with supervisors and mentors at the same level for the purpose of the program. Sharing the power has allowed for more genuine and useful conversations." Mentors are expected to not only raise issues, but to also propose a solution. A VTA Assistant Superintendent serves as the designated VTA JWI Coordinator, charged with ensuring a timely response to issues raised by the mentors. VTA senior management also maintains and oversees a log of outstanding issues. "We work with the union to solve problems identified by workers. It's very important that we show there is followup if you bring up an issue. That management follows through," says Inez Evans, Chief Operating Officer.

VTA's willingness to work differently has yielded significant benefits. Apprenticeship's professionalized training and mentoring is evident on the road and in the maintenance bay. Absenteeism is less of a problem when people feel good at their job. VTA learned this lesson when a lack of resources placed the mentorship program on hold for a year. The agency experienced a return to high levels of absenteeism and complaints.

"People get to standard quicker than in the past when operators were put on the bus and then relied on experience driving to learn the job. The JWI program sped up the process by which people understood the skills and power of the position. As a Superintendent, I see that even if they don't." - Lisa Vickery, VTA Superintendent

The apprenticeship has also improved morale and retention. On the fuel island, workers "obviously have some interest in being with the company and now they are first to have an opportunity to advance," says Eliseo Acosta, service mechanic apprenticeship graduate. Creating deep relationships between seasoned veterans and new operators and mechanics, mentorship has lasting impacts on morale. Workers now have an outlet for the daily stress of delivering quality service in a time-pressured environment. Hursh further notes, "it started to payoff with attendance and morale getting better, we also saw fewer customer complaints."

The mentor-driven culture of problem solving has also embedded an expectation that workers will move beyond stressful events to issue identification and resolution. With recent knowledge of current electro-mechanical systems, Service Mechanic apprentices have delivered improved efficiencies to the shop floor. Workers have also helped identify "key working condition changes that made things more efficient and safer for everyone," according to Diana Hermone, Former President, ATU Local 265. Giving operators and mechanics more control over their working conditions has yielded a strong commitment to the job.

"Not just the worker has the benefit, VTA has the benefit too. It creates a sense of belonging. People are not going to go anywhere." - Tai Lam, Mechanic Helper Apprentice

Successful apprenticeship programs have the capacity to not only deliver for the employer, but also to create an environment suited to innovative program design. The JWI partners – employer, labor, and educator -- understand and trust their respective roles. The VTA has a reliable educational partner in Mission College and values ATU's capacity to deliver a high-quality, professionalized workforce. Maurice Beard, VTA Bus Training Supervisor, describes "eleven years into program, the biggest piece is trust. JWI has helped immensely with the competition for labor. We used to wait forever to get some positions filled such as overhead line worker. When you look at the numbers—morale, retention rate, stress, sick time— that is the benefit to the employer. Now management can rely on something. We rely on the benefits that the apprenticeship provides on the job."

PLANS FOR THE FUTURE

JWI continues to push the role of equity in apprenticeship. The partnership is expanding its apprenticeship programs to new occupational categories. Having launched the Track Worker and Overhead Line apprenticeship programs, JWI plans to further develop the light rail apprenticeship pathway with a Light Rail Operator Apprenticeship. The VTA expects significant equipment advances as well as line expansion in coming years. To meet the increased demand for skilled light rail operators, the new apprenticeship program will target both entry level and incumbent workers.

Expansion of the mentor program is also planned. To extend the leadership opportunity, JWI is piloting a new mentor process that allows operators interested in becoming mentors to apply. They must also pass a written and in person interview, receive mentor training, and complete a probationary period. According to Mike Hursh, former VTA Chief Operating Officer, "there are still opportunities for increasing equity. We need to get out into the community and share the value of a professional driving career — what the job is, the living wage and benefits, and the opportunity to serve your community. We have a lot of operators who came from the community. They grew up riding the bus. They know what public transportation means to people as they pursue opportunities for education and employment. They understand first hand our role in advancing equity."

GENERALIZING FROM TRANSIT

Other industries and occupations can learn from JWI's career lattice/ladder model of apprenticeships. Trust and commitment among partners are of foremost importance. A shared, neutral objective helps to tie the partners together. Fully engaging workers keeps solutions responsive to conditions on the frontline.

"Focus on what is good for everyone. Focus on a solution. Understand that employers and workers need each other. Power comes from being a team, moving forward, and making things better together." - Diana Hermone, Former President, ATU Local 265

JWI demonstrates how a champion and an experienced intermediary can lay the foundation for effective collaboration. Twelve years ago, Tom Fink leveraged his experience as a coach operator and union official to unite management and labor around a vision of collaborative problem solving to benefit VTA, workers, and the communities that they serve. Respected by management and labor, Tom could bridge the gap and encourage a new way of doing business.

"The experience of the solidarity of work percolated down through the operators in a profound way. Aside from the workforce issues addressed, we were dealing with the very meaning of work. We talked about making work about more than just a paycheck. We recognized and defined the work as a craft. There was a certain pride that went into being a bus operator." - Tom Fink, retired bus driver and former official of Amalgamated Transit Union Local 265 (ATU)

Hiring an experienced workforce intermediary added facilitation skills, creditable curriculum design, apprenticeship expertise, and a venue for collaboration.

JWI further models how union and employer work together on shared goals outside the bargaining context. Vickery notes, "it is not for the faint of heart because it's labor management on another level. You must keep negotiations separate. Employers must be willing to be vulnerable with the union. Be willing to be wrong." The union faces its own challenges. It must trust management to follow through on non-negotiated items. In addition, members who didn't have the opportunity to participate in apprenticeship need to see its value and provide their support.

Confronting these challenges openly and honestly over JWI's decade-long partnership has produced champions throughout VTA and ATU. Former operator apprentices have advanced to supervisory and executive management roles. Diana Hermone, Former President, ATU Local 265, describes, "one of our former operators served as a union shop steward for six years and union executive board member for three years. Then he decided to move into management as an assistant superintendent so that he could affect change through the whole system. He is actively involved with the JWI but now as the JWI coordinator responsible for helping resolve issues from the VTA side. This former apprentice is now the JWI Coordinator responsible for helping the Union resolve issues and moving the program forward in a positive direction for all."

"Workers once stuck in entry-level cleaning positions express the deepest appreciation for the value of JWI, the mentorship program, and the apprenticeship career ladder. People can now see that it's possible to move from the Fuel Island into a more professional position." - Carl Hart, Program Graduate

ENDNOTES

- 1. "Developing Best-Practice Guidelines for Improving Bus Operator Health and Retention," Transit Cooperative Research Program, p. 141 & 154, <u>http://www.trb.org/Publications/Blurbs/171189.aspx</u>.
- 2. Tom Fink, "Joint Workforce Investment: A Narrative History and Personal Perspective of its Founder."
- 3. JWI developed the Mechanic Helper program with assistance from the California Office of the Governor, Discretionary Workforce Investment Act grant process; California Labor Federation, Workforce and Economic Development Department; and a California Community College Chancellor's Office JDIF grant (through San Jose City College). "VTA/ATU Joint Workforce Investment - Mechanic Helper - Voices," YouTube video, 10:04, posted by "SCVTA," February 5, 2014, https://www.youtube.com/watch?v=U8lln-01BQQ&feature=youtu.be.
- 4. "Organizational Structure," Transportation Authority, Santa Clara Valley, December 2017, http://www.vta.org/sfc/servlet. shepherd/document/download/069A000001e12yIAA.