Clean Transportation Industry 101

Welcome attendees!

The webinar will begin momentarily.



Dr. Dina Humble Vice President of Instruction, San Bernardino Valley College



Vanessa Thomas Dean of Applied Technology, Transportation, and Culinary Arts, San Bernardino Valley College



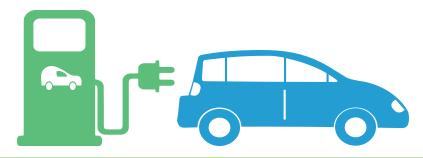
Dr. Beverly Scott Founder/CEO, Introducing Youth to American Infrastructure



Tony Sciarra Workforce Development & Education Programs Manager, Tesla



Jared Schnader Program Manager, CALSTART











- ✤ Webinar Introduction: Jared Schnader
- * CTE Pathways at San Bernardino Valley College: Dr. Dina Humble & Vanessa Thomas
- ✤ Introducing Youth to American Infrastructure (IYAI): Dr. Beverly Scott
- ✤ Tesla: Tony Sciarra
- Questions & Answers



San Bernardino Valley College



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CTE PATHWAYS @ SAN BERNARDINO VALLEY COLLEGE

"GETTING OUR STUDENTS GRADUATED AND OUT TO THE WORKFORCE"

Dr. Dina Humble, Vice President of Instruction Vanessa Thomas, Dean of Applied Technology, Transportation and Culinary Arts





CAREER PATHWAYS @ VALLEY COLLEGE

After Valley and Beyond

LOVE WHERE YOU WORK? STAY THERE AND MOVE UP! Upward Mobility for your career!

High School – NOW!

COMPLETE JOB READINESS CERTIFICATE Gain those crucial 'soft skills' NOW before you enter into internships. **@ Valley College**

REGISTER FOR VALLEY COLLEGE PROGRAM PATHWAY Start working now through one of our many 'direct to work' internship opportunities. \$\$\$

High School

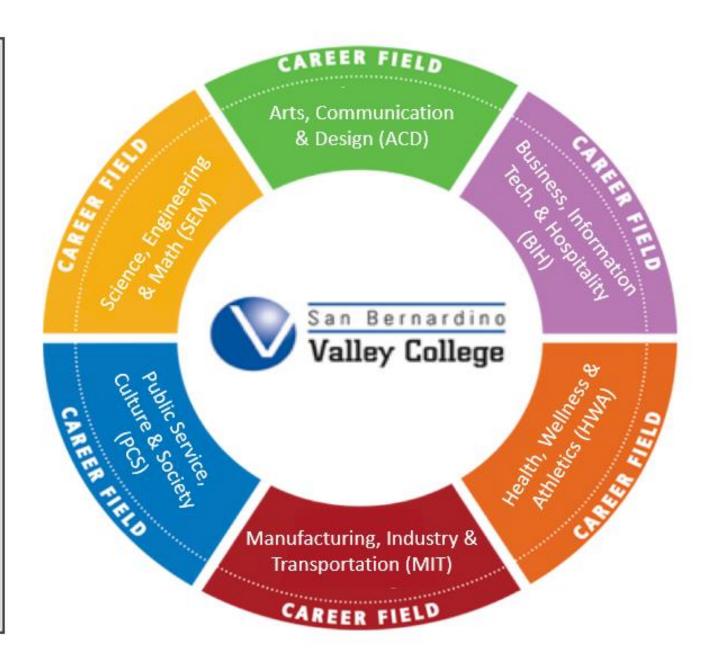
HIGH SCHOOL COURSES AND CAREER EXPLORATION Through Dual and Concurrent Enrollment

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Guided Pathways

Career Fields at SBVC



Common Transferable Skills

<u>Skill Set</u>	<u>Description</u>	<u>Examples</u>
Basic skills	These are skills needed by almost all workers.	Learn new things, Listening, Math, Reading, Science, Speaking, Think critically, Writing
People skills	These are some of the most needed and wanted skills.	Be aware of others, Coordinate with others, Help others, Negotiate, Persuade, Teach others
Management skills	All workers need these skills, not just managers.	, Managing money, Managing people, Managing things, Managing time
Systems skills	Can you understand how parts and wholes work together? Then you have systems skills.	Evaluate a system, Evaluate an organization, Understand a system Make good decisions
Technical skills	Technology includes computers and equipment.	Choose tools, Control quality, Install equipment, Install programs, Maintain equipment, Check equipment, Operate equipment, Repair Troubleshooting

SOME CTE PROGRAMS @ VALLEY



Automotive Technology (Electric and Alternative Fuels) Aeronautics and Aviation **Electronics** Technology Green Technician HVAC Heavy Medium Duty Truck (Electric and Diesel) Machining Welding Zero Net Energy



FOR EXAMPLE: ELECTRONICS





SALARY FOR LIFE

Average Electrician Journeyman Hourly Pay



Avg. Base Hourly Rate (USD)

MEDIAN	90%
\$25.40	\$37.11

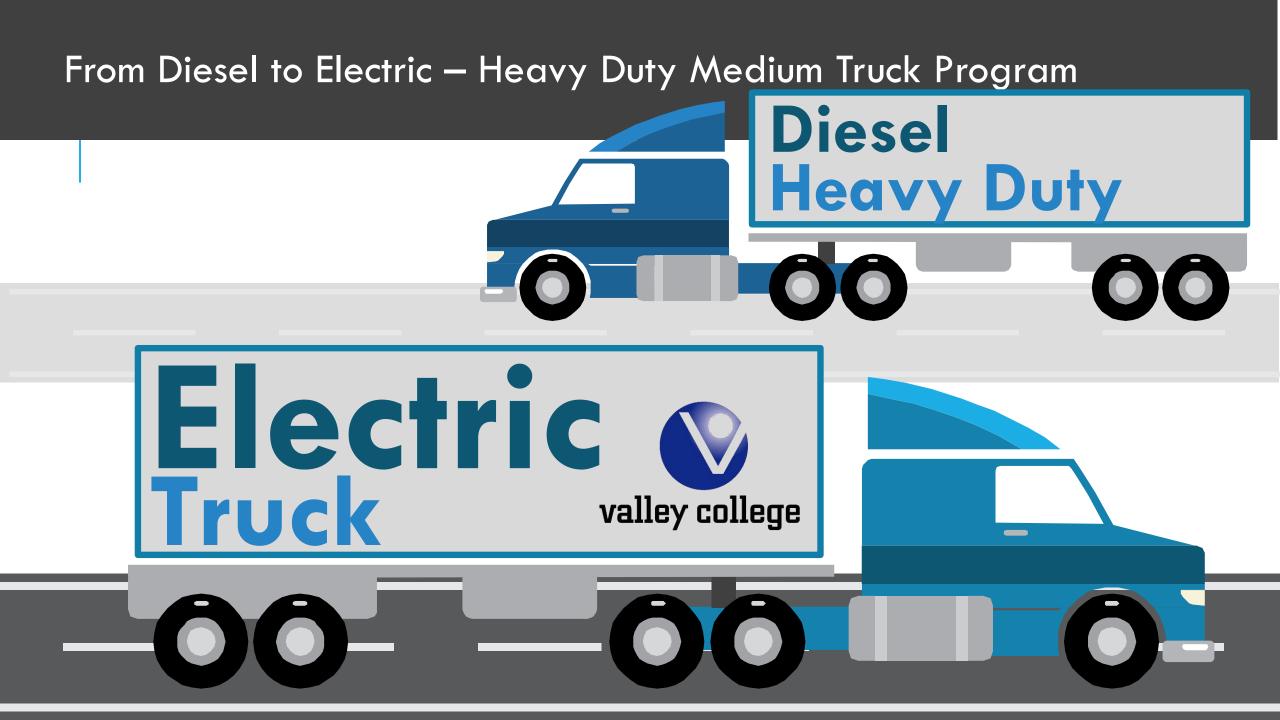
The average hourly pay for an Electrician Journeyman is \$25.40



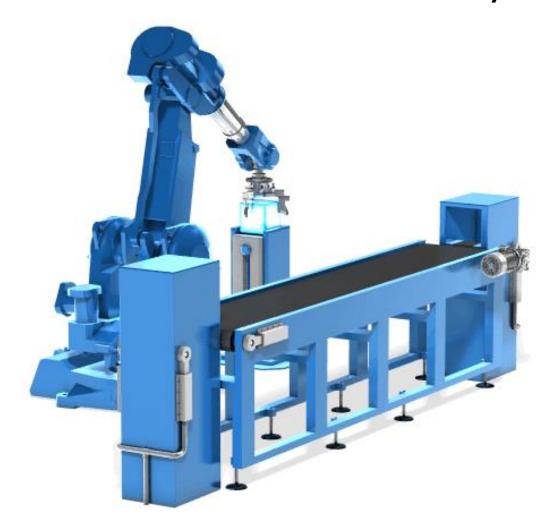
Based on 3,976 salary profiles (last updated Oct 01 2020)

Lifetime Potential Salary: \$1, 700,000





NOT JUST A JOB, BUT A CAREER For today and for the future.





VANESSA THOMAS, DEAN



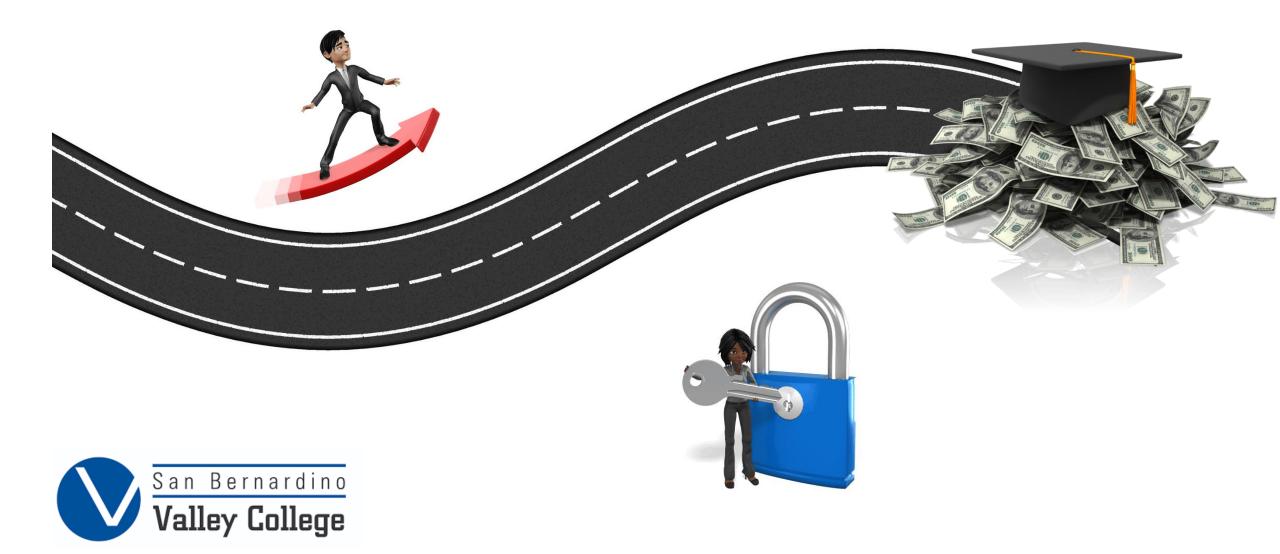


- ✓ Learn skills for your career.
- \checkmark Upward mobility.
- \checkmark Women in CTE.
- Learn while you earn at Valley College.





SKATE THROUGH AND UNLOCK YOUR FUTURE

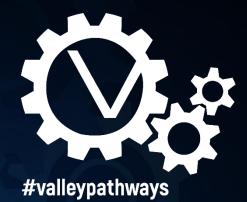




Thank you

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Introducing Youth to American Infrastructure (IYAI)



Dr. Beverly Scott Founder/CEO, Introducing Youth to American Infrastructure



introducing youth to AMERICAN infrastructure

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Motivating Today's Youth to Become Tomorrow's Infrastructure Leaders, Skilled Workforce, Innovators, Entrepreneurs

Community Builders

"Why" and "What" Infrastructure?



iuai+

BACKBONE of Our Daily Lives and Communities

Decision-Making with GENERATIONAL IMPACTS – "People", "Communities", "Society"

Systemic UNDER-REPRESENTATION of "People of Color" and "Women"

Major OPPORTUNITIES – Community-Building, Careers, Business Development

MAKING A DIFFERENCE – "YOUR" LEARNED EXPERIENCE, "YOUR" VOICE, "YOUR" JOURNEY!



"Based on the pending retirements of older workers in our infrastructure sectors, our nation currently needs <u>more than</u> <u>14 million workers</u> just to keep current systems running. An infrastructure investment of \$1 trillion dollars would require <u>an additional 11 million skilled workers.</u>"

Andy Van Kleunen, CEO, National Skills Council



Poll: What is Critical National Infrastructure?

ENERGY
TRANSPORTATION
WATER
COMMUNICATIONS
MANUFACTURING
HEALTHCARE
PUBLIC HEALTH
FOOD/AGRICULTURE
DEFENSE
DAMS

CHEMICAL NUCLEAR REACTORS INFORMATION TECHNOLOGY EMERGENCY SERVICES FINANCIAL/BANKING COMMERCIAL FACILITIES GOVERNMENT FACILITIES

Infrastructure is <u>all</u> <u>around us</u> – often "hidden" in plain sight.

Uggl-Approach

"Start by <u>Looking</u>, <u>Planning</u> & <u>Working</u> in Your Own Backyard!"





The Transportation Learning Center

The Transportation Learning Center is a **nonprofit** organization dedicated **to improving public transportation** at the **national** level and within **communities**. To accomplish this mission, the Center builds **labor-management training and apprenticeship partnerships** that improve organizational performance, expand **workforce knowledge**, **skills** and **abilities**, and promote **career advancement**.



Opportunities to Work with Green Technology

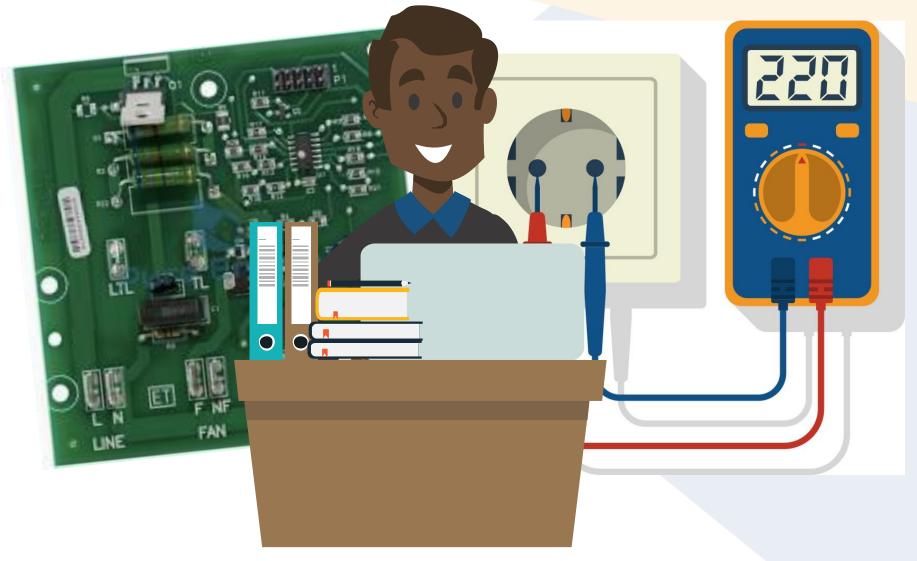
Protecting the environment through expanding use of green alternatives Hybrid buses Fully electric buses Natural gas buses Diesel buses Solar-powered facilities (Source: http://www.nextstopstl.org/) Regenerative braking

Undi+

Battery electric buses will be the norm in the industry. Technicians need the skills to maintain them!



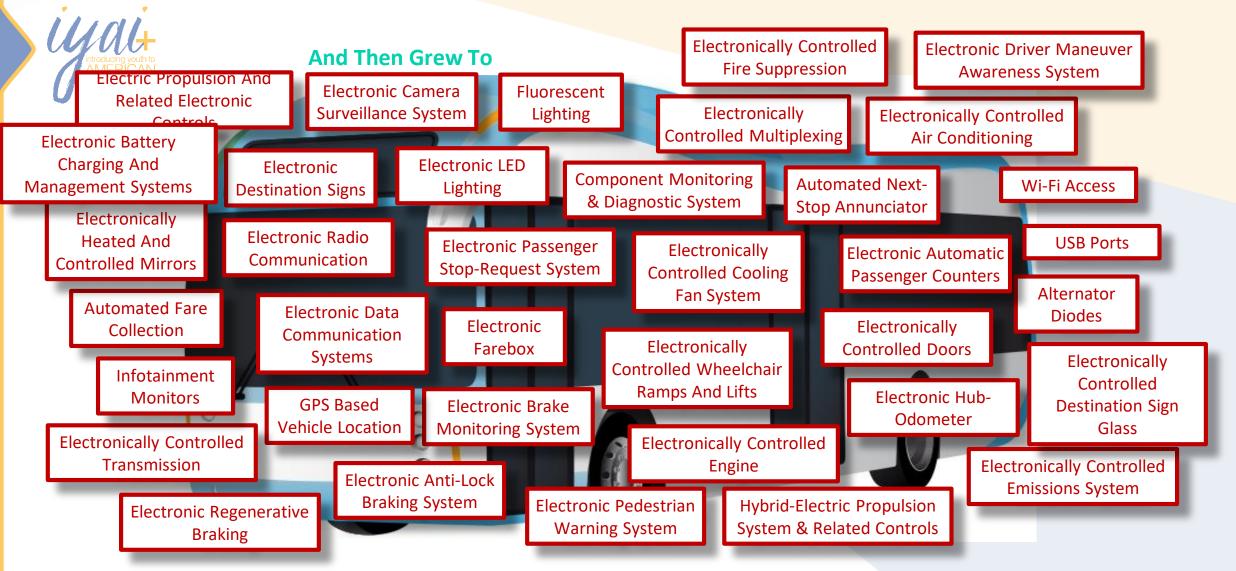
Impending Zero-Emission Mandates



Source: Transportation Learning Center, 2020

Expansion of Bus Electronics







Beverly A. Scott, Ph.D., Founder/CEO Beverly@iyai.org www.iyai.org







Tony Sciarra Workforce Development & Education Programs Manager, Tesla



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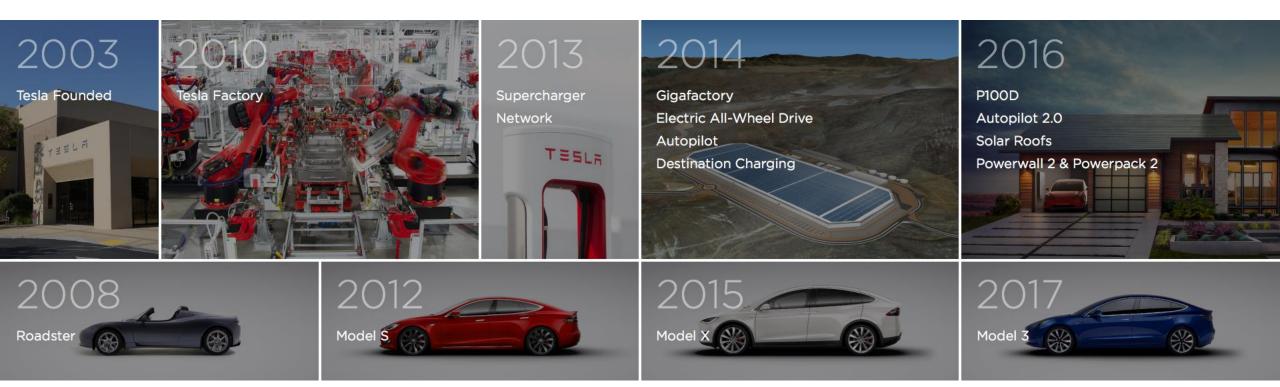
TONY SCIARRA – WORKFORCE DEVELOPMENT



OUR MISSION

Accelerate the world's transition to sustainable energy

HISTORY OF TESLA



THE FUTURE WE WANT



Generation

Storage

Transport

TESLA START

Tesla START is a 12-week intensive, technical training program, equipping future technicians with the skills and expertise to be successful technicians and grow their careers within Tesla. Upon graduation, successful students have the opportunity to become mid-level technicians in our rapidly expanding network of Tesla Service Centers and Mobile Service Units.





The Program

Locations

Results

FIND YOUR PLACE

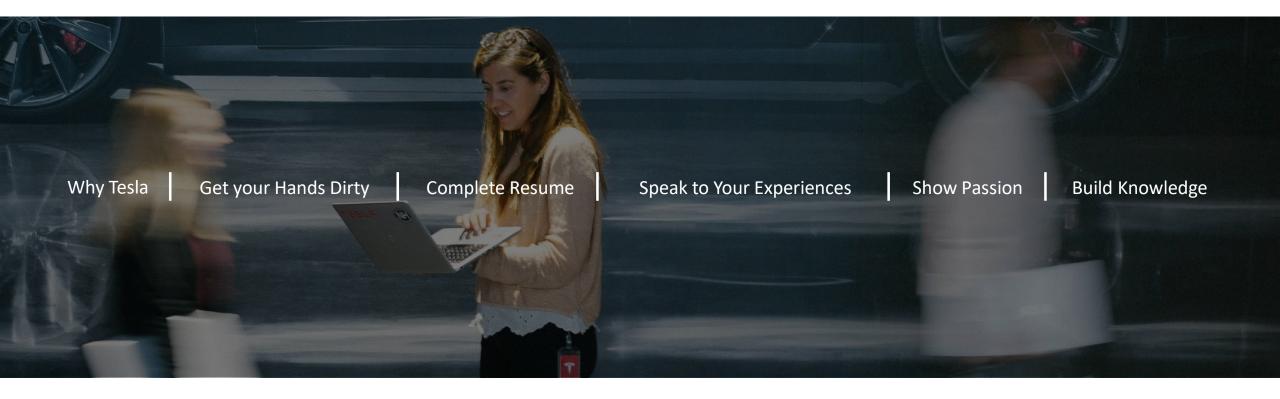
TRANSPORT

ENERGY STORAGE

SOLAR

Energy Products Engineering Firmware Low Voltage Testing **Powertrain Manufacturing** Sales and Service Research & Development Interior Engineering Power Electronics Hardware Development Test & Analysis New Programs Engineering Autopilot Software & UI Quality Engineering Supercharger Solar Homologation Vehicle Test Tesla Glass Exterior Engineering **Digital Engineering** Manufacturing Operations **Reliability Engineering** Noise, Vibration, and Harshness **Supply Chain Data Analytics** Material Flow Engineering **Production Control** Infotainment **Battery Engineering Materials Engineering** Design **Global Manufacturing Planning** Packaging Dimensional Engineering **Drive Systems Engineering** Service Engineering **Castings and CNC Machining** Accounting / Finance Workplace Prototype Engineering IT Infrastructure Engineering EHS Legal Semi-Truck Program **Cell Engineering Remanufacturing Engineering Engineering Services Automation Controls Connected Systems** Security **IT Software Engineering** InfoSec Manufacturing Human Resources Communications **Global Facilities IT** Operations Manufacturing Introduction

INCREASE YOUR ODDS



THANK YOU



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Thank you!

We will now open it up for a Q&A session.

Contact Today's Speakers

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