

MAKING CONNECTIONS, MAKING A DIFFERENCE



• **Making Connections 2024**

• The National Transit Workforce Conference

• November 11 – 13, 2024 • Baltimore, MD •



Safety Briefing

- Note your location: Hilton Baltimore Inner Harbor, Floor 2.
- Identify your nearest exits.
- Automated system will alert attendees if we need to evacuate the building.
 - Use stairs, not elevators. Anyone unable to use the stairs will be assisted by fire department at the stairwell.
 - Our assembly point is Northwest Warehouse, 333 West Camden Street, just behind the Sports Legend Museum and adjacent to the ballpark.
- In the event of medical emergency, call 911 from a cell phone (if no cell phone, use house phone). Security (443-683-8801) will also assist. Hotel has qualified staff to perform first aid and operate CPR.
- To report emergencies to the hotel, dial 65 on a house phone.

Transit Workforce Center – Mission

Operated by the **ITLC**, the **Transit Workforce Center (TWC)** is **FTA's** first ever national technical assistance center for transit workforce development.



mission

The **TRANSIT WORKFORCE CENTER** is the Federal Transit Administration's first ever national technical assistance center for transit workforce development. Its mission is to help urban, suburban, tribal, and rural public transportation entities throughout the U.S. recruit, hire, train, and retain a diverse workforce for now and into the future.



Plan, Train, Succeed: Building your ZEV Workforce Transition Strategy

Making Connections 2024

Special Guests



Molly King

Deputy Associate Administrator for
Research, Demonstration and Innovation
FTA



Billy Terry


Director
National Transit Institute (NTI)



Jennifer Sweten

Director of Operations

Missoula Urban Transportation District (MT)

Mountain Line's BEB Transition



Jen Sweten
Director of Operations





Mountain Line provides over 1.2 million rides each year to a city of 80,000.



Our service area is ~70 square-miles.



Pulse System, 15 - 60-Minute Headways



30 – 35' Buses 16 – Light-duty Buses



Weather: Highs in the 100s and lows around -10 degrees, with modest snowfall in winter.

Pilot to Commitment

- **2019** – 6 Proterra BEBs
- **2020** – Board commits to Zero-Emissions Fleet by 2035
- **2021** – 6 BEBs (4 - Gillig & 2 - New Flyer) **40%**
- **2024** - Add Charge Management
- **2024** – 4 Gillig BEBs **55%**
- **2025** – 1 Battery Electric RT Trolley **57%**
- **2025** – Begin Construction of New Zero-emission MOAB facility
- **2025** – Begin Transition of Light-duty vehicles and add resiliency
- **2025** – 10 BEBs **90%**
- **2028** - 3 BEBs **100% ZEB Fixed-Route Fleet**
- **2028** – New Zero-Emission Facility Completed
- **2032** - **Zero-Emission Transit System!**





A ZEB Fleet Transition Affects All Employees, Throughout The Lifecycle

- Finance
- Planning
- Safety
- Facilities
- Maintenance
- Operations



A Bus Is A Bus? Yes, and also, No.

OPERATIONS

- New Employees begin training on BEBs exclusively.
- Will install a simulator to continue to shape operator behavior.
- Operator training with each new bus model.



A Bus Is A Bus? Yes, and also, No.

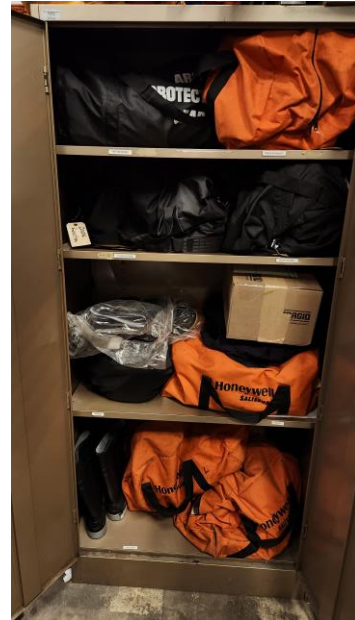
Maintenance

- Early training was limited to what the OEMs offered.
- The pandemic shaped our maintenance team's initial training.
- Most of our maintenance training is conducted in-house with OEM support.





Employee Resources





Training Resources Have Improved, But There Is Still Much to Do




Resources

- Transit Workforce Center
- APTA (American Public Transportation Association)
- CTAA (Community Transportation Association of America)
- NTI (National Transit Institute)
- ZEBRA (Zero-Emission Bus Resource Alliance)
- **Peer-to-Peer**

The screenshot shows a webpage titled "TWC Battery Electric Bus Familiarization Course". The page features a navigation menu with links for "ABOUT US", "NEWS & EVENTS", "INITIATIVES", "RESOURCES", "LEARNING", and "REQUEST HELP". The main content area includes a large image of an electric bus with a charging station. Below the image, the title "TWC Battery Electric Bus Familiarization Course" is displayed. The text describes the course as a two-day program providing an overview and familiarization to battery electric bus (BEB) basics, including internal functions, management systems, and maintenance tasks. It also mentions a follow-up module on electrical fundamentals and safety features.

The screenshot shows the AC Transit Zero Emission Bus University (ZEBU) webpage. The page features a navigation menu with links for "Getting Around", "Fares", "Customer Service", "Stay Connected", and "About Us". The main content area includes a large image of a group of people holding a certificate. Below the image, the title "Welcome to Zero Emission Bus University (ZEBU)" is displayed. The text describes ZEBU as AC Transit's renowned workforce development program, recognized by the state of California and the federal government for excellence in technical training, career development, and apprenticeships. It also mentions a partnership with Chabot College. A video player is embedded on the page, showing a video titled "AC Transit Launches Zero Emission Bus University".



Thank you!
Jen Sweten, WSO-CSSD
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Mark Finnicum

Chief Operating Officer,
Stark Area Regional Transit Authority
(SARTA – OH)



HYDROGEN FUEL CELL

The Energy of Tomorrow
Powering SARTA Today.



SARTA Hydrogen Fueling Station

- Designed in 2016, there is 9,000 gallons of gaseous storage capable of refueling the fleet of nineteen (19) hydrogen buses (14-40' Eldorado and 5 Ford Transit vehicles). This storage tank will be upgraded to 18,000 gallons in March 2025 to allow for the continued expansion of our hydrogen fleet and 10K PSI fueling opportunities for external fleets.



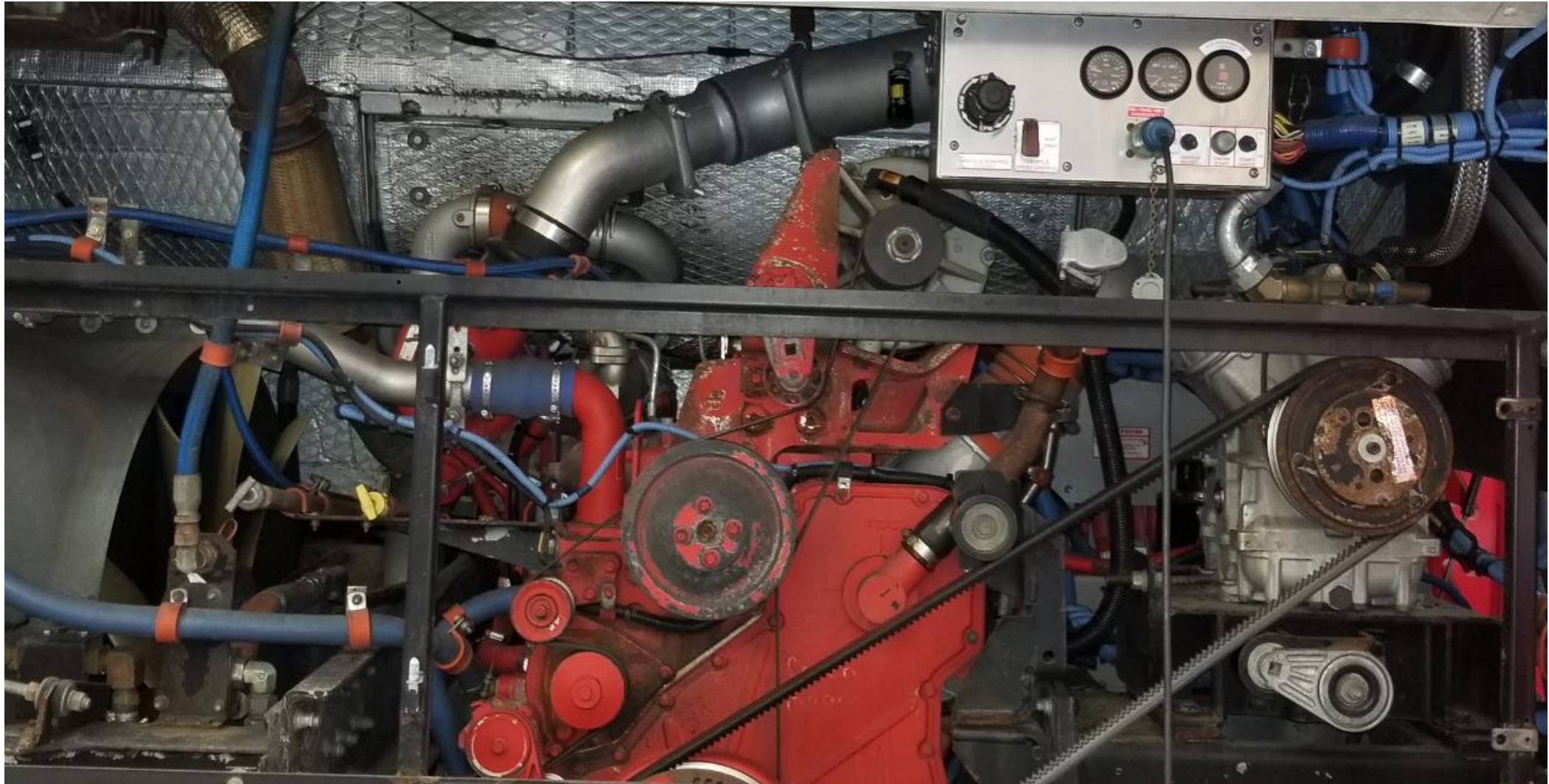
Why Canton, Ohio

- Ohio provides a true test of the fuel cell's ability to handle the extreme heat and humidity, below zero temperatures and cold. If the technology is going to be successful it needs to be able to work in every environment providing reliability to the agencies and comfort to the passengers.



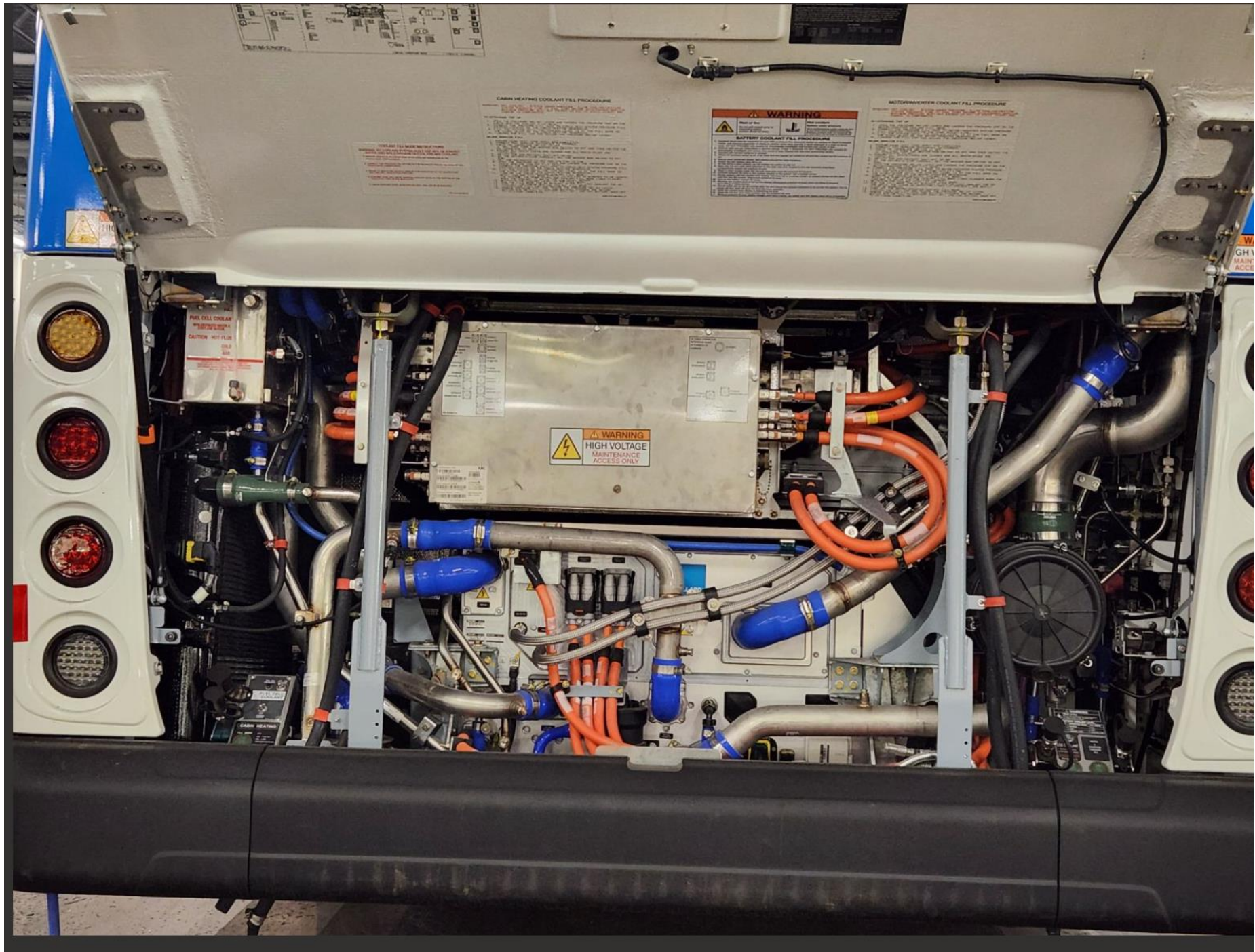
Educational demonstration for the House of Representatives and Senators at the Ohio State House. The need to continue educating those making decisions at the local, state and federal levels is essential.

How do you train a technician from the current ICE technology to the technologies of the future?



The engine bay of a Hydrogen Fuel Cell bus which includes the Fuel Cell, PIM, APU and PCM and **NO** mechanical components.

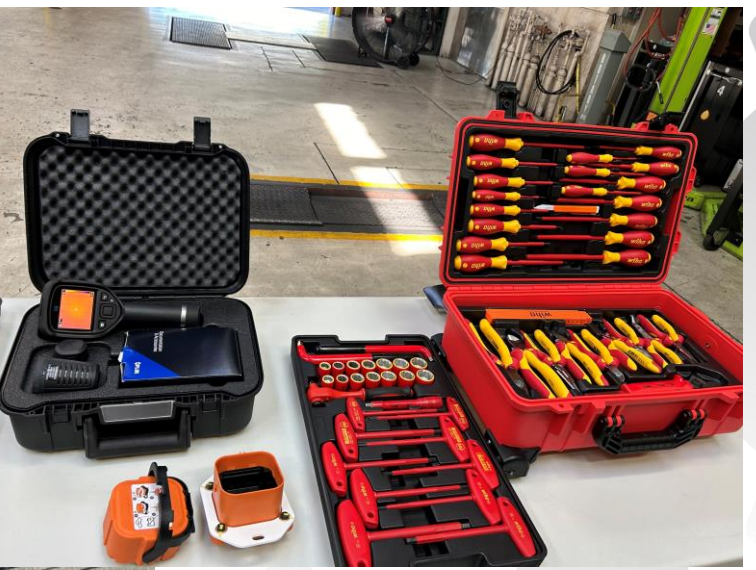
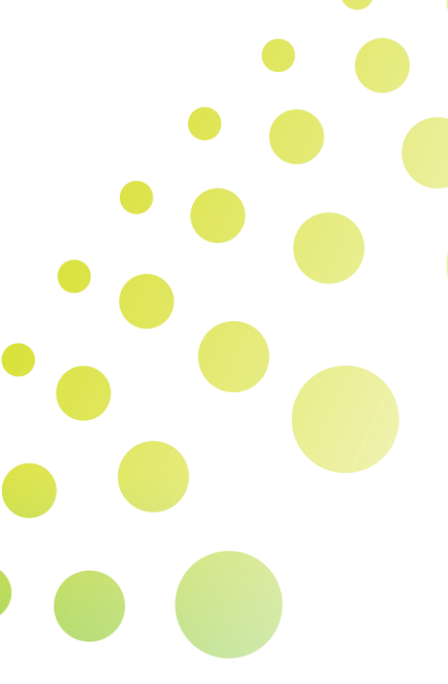






Eliseo Acosta Jr.

Workforce Development Coordinator,
ATU International





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