

# BUSES & BUSES & BUSES

+ TECHNOLOGY + NETWORKING + EDUCATION



**SEPTEMBER 11-13, 2017**  
**INDIANA CONVENTION CENTER**  
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# SCRTTC

**Southern CA Regional Transit Training Consortium**

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**Shaping ZERO-Emission Workforce  
Development Training Standards**



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# Shaping ZERO-Emission Workforce Development Training Standards

- SCRTTC's Mission: Advancing the skills of our transit workforce...preparing for tomorrow
- Advancing Technologies: Yesterday's Tomorrow: Today
- 'Lessons Learned': Remember what you Forgot Before
- Stakeholder Collaboration: Key to Success



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# Shaping ZERO-Emission Workforce Development Training Standards

- Procurement Process:
  - Identify Vendor's definition of Training Standards
  - What vendor has vs. what you need/expect
  - Competition vs. Proprietary Knowledge
- Delivery Process
  - Hours, Instructor and Mechanism; On-line Resources
- Collaboration ensures standards are met

# Shaping ZERO-Emission Workforce Development Training Standards

- **Existing ZEB fleet hands-on training support**
  - Key component to deploy & increase performance of clean operating vehicles
  - Imperative to decreased fuel consumption and lower emissions
  - Requires computer science skills
  - Integration of ITS transit systems imperative

# Shaping ZERO-Emission Workforce Development Training Standards

- Shaping Workforce Development Standards
- Identify ZEB Skill Sets Needed
- Assess existing Human Resources & Determine Gaps
- Standards Applications = Factors of Time and Money
  - Existing/Foundational electrical course prerequisites
  - New high voltage Familiarization/Safety course development
  - Subject matter expertise
  - Redundant course delivery
  - Contingency for New Hires, Shift Changes, Promotions, Retirements
  - Start all over again

# Shaping ZERO-Emission Workforce Development Training Standards

- ZEB offers a myriad of training standard topics:
  - High Voltage
  - Batteries
  - Charging; stationary, in route, overhead, wireless
  - ZEB HVAC
    - Powered by batteries & all electric loads;
    - Largest single engine load; Impacts range
    - Approaches: Shut off vs adjust temperature
    - Conflicting Objectives require; Collaboration & Communication