



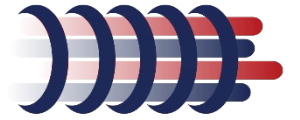
***TRANSIT  
WORKFORCE  
CENTER***



Federal Transit  
Administration

# Transit Workforce Center

National Technical Assistance Center  
for Transit Workforce Development



INTERNATIONAL  
TRANSPORTATION  
LEARNING CENTER

## ATTAIN

# Bus Maintenance Apprenticeship

June 26, 2024



**TWC • TRANSIT WORKFORCE CENTER**



# Transit Workforce Center – Mission

Operated by the ITLC, the **Transit Workforce Center (TWC)** is FTA’s 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.

Please enter your name, title, organization location in the chat box

# Welcome – Today's Agenda

- Starting an bus maintenance apprenticeship program
- Apprenticeship in Practice Panel
- Q&A
- Open Discussion

Please enter your name, title, organization location in the chat box

# Locations with Bus Maintenance Apprenticeship Programs

Valley Transit Authority  
San Jose, CA

Golden Gate Transit  
San Rafael, CA

Metro Transit  
Minneapolis, MN

KCATA  
Kansas City, MO

IndyGo  
Indianapolis, IN

GCRTA  
Cleveland, OH

AC Transit  
Oakland, CA

COTA  
Columbus, OH

CTtransit  
Hartford, CT

DART  
Des Moines, IO

Fairfax County Connector  
Fairfax, VA

Pierce Transit  
Takoma, WA

MARTA  
Atlanta, GA

SacRT  
Sacramento, CA

King County Metro  
Seattle, WA

UTA  
Salt Lake City, UT

TriMet  
Portland, OR

SDMTS  
San Diego, CA

Denver RTD  
Denver, CO

Maryland MTA  
Baltimore, MD

OmniTrans  
San Bernardino, CA

C-Tran  
Vancouver, WA

Community Transit  
Everett, WA

WeGo  
Nashville, TN



# What is Apprenticeship?

## A structured training program to acquire skills and master a craft

- Registered apprenticeship is a proven strategy to help get people trained while they earn money.
- Apprentices start as novices, progress to become expert, journey-level technicians
- Highly-skilled mentors pass on their skills
- Labor-management partnership essential – collaborative effort
- Vast majority of training (about 70%) is on-the-job learning – Learn by doing
- Related technical instruction (i.e., classroom) plays supporting role



# Benefits of Maintenance Apprenticeship/Mentorship

1

Ability to grow your own techs following agency procedures/practices

2

Apprentices gain increased confidence & morale

3

Funding available when registered, veteran benefits

4

Increased level of professional recognition for bus technicians

5

Less reliance on trying to find non-bus techs from the outside

6

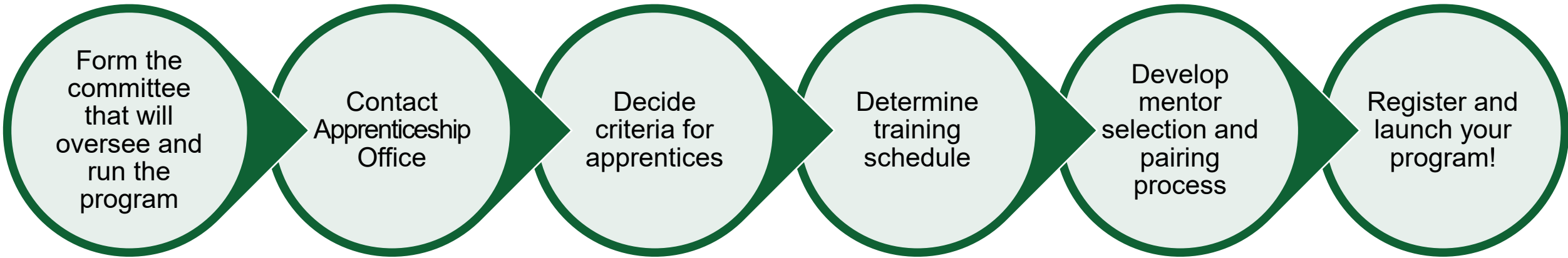
Reduced shop comebacks/ repeat failures through improved skills

7

Mentors gain satisfaction by passing on their skills & insights



# Developing your apprenticeship program!



- Entrance exam
- Incumbent or new employees

- Length of program
- Hours and topics of training
- Training provider





Form the committee that will oversee and run the program

Equal members from labor/frontline workforce and management

This committee will fill out and agree upon the Standards of Apprenticeship.

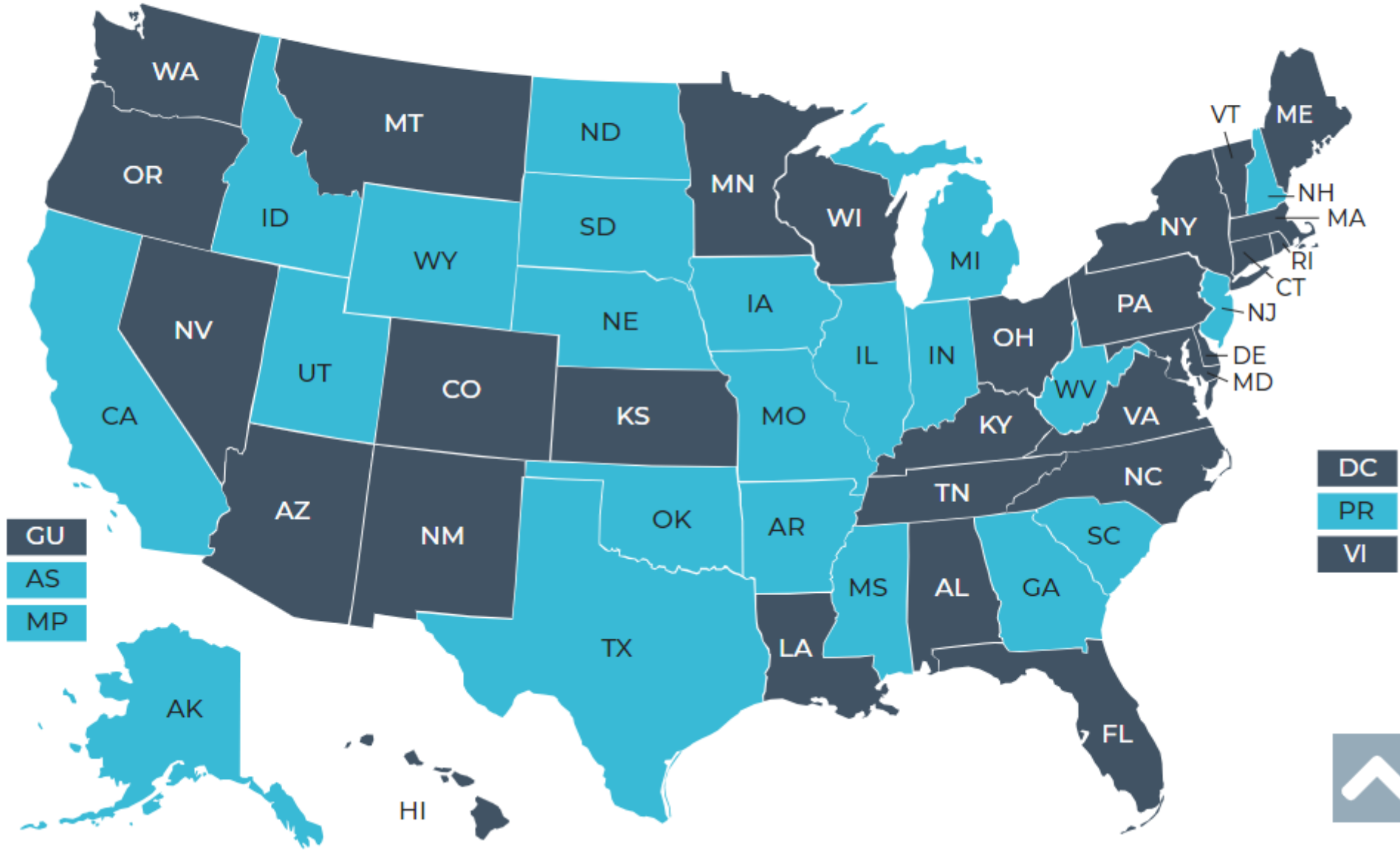
- Your Apprenticeship Office representative will guide you through process of filling out
- Should specify length of program, program type, wage progression



- Determine whether your state is an OA field office or a recognized SAA
- Find contact information  
<https://www.apprenticeship.gov/about-us/apprenticeship-system>
- Reach out to get the necessary forms and boilerplate standards

# Map of OA and SAA States

■ Office of Apprenticeship (OA) ■ Recognized State Apprenticeship Agencies (SAA)





Decide criteria  
for apprentices

### Criteria can include:

- Incumbent or new employees
- Aptitude testing
- Prior work experience





## Determine length and type of apprenticeship:

- Time-based, competency-based, or hybrid

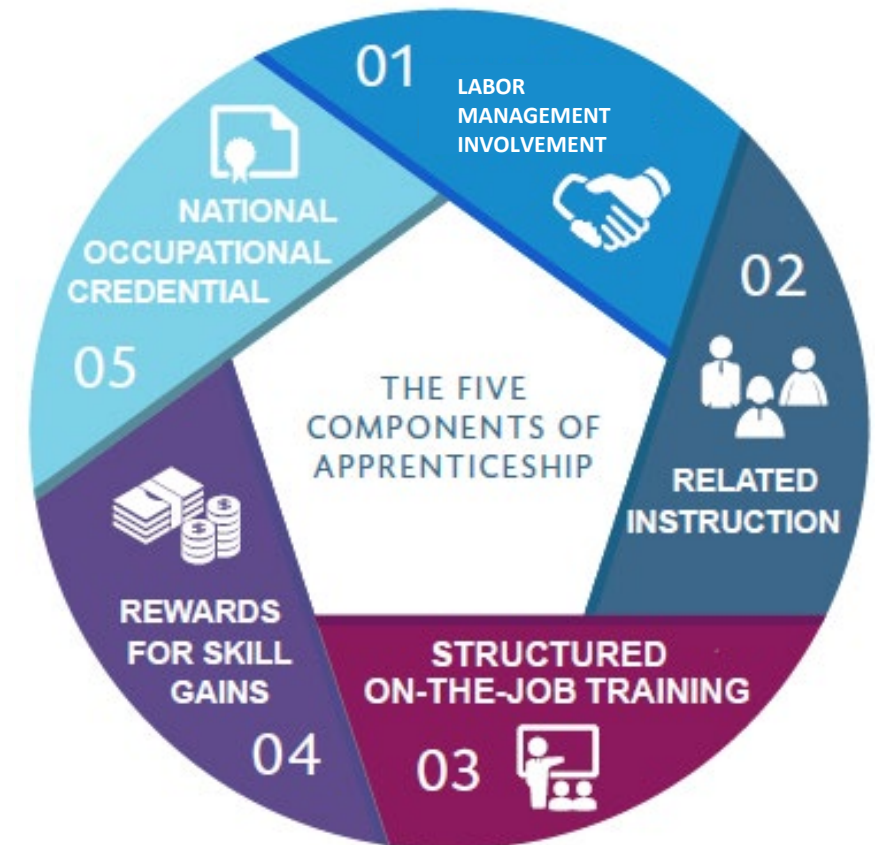
## Resources to get you started:

- Bus Maintenance Apprenticeship Framework
- Examples from other agencies
- Local training providers



# Overview of Registered Apprenticeship Model

- Min 2000 hours of OJL per year
- Minimum of 144 related technical instruction hours per year
  - In-house training
  - Community College
  - Online Courses
  - Career & Tech Centers





## Develop mentor selection and pairing process

- Mentors facilitate on-the-job learning for the apprentices.
- Apprentices should be paired with mentors to complement classroom training.
- Mentors generally receive a wage premium for time spent with apprentice. This is determined during collective bargaining.

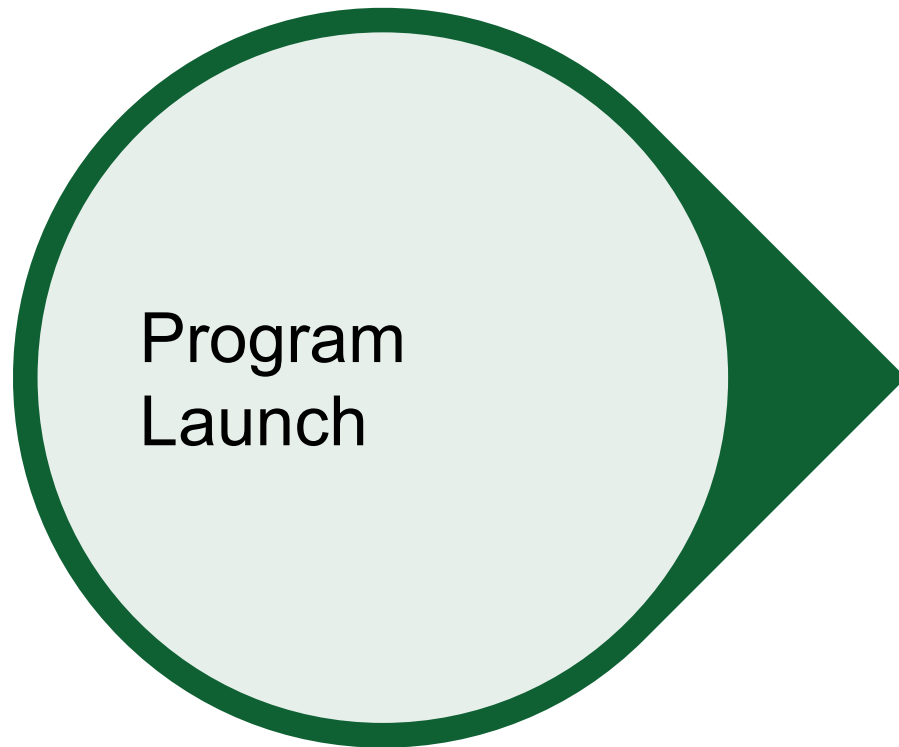


## Program Registration

- Record keeping
- Periodic review
- Funding opportunities







## Program Launch

- Mentors are notified and trained
- Program coordinator tracks apprentice progress and metrics that show program impacts





# Apprenticeship in Practice Panel



## **Andrew Boardman**

Recording Secretary/Assistant Business  
Agent  
ATU Local 1005  
Metro Transit

## **Tim Boden**

Assistant Manager of Maintenance  
Apprenticeship  
Metro Transit



# Apprenticeship in Practice Panel



**Theus Jones**  
Second Vice President  
ATU Local 689  
Fairfax County Connector

**Wajma Haidary**  
Transdev  
Fairfax County Connector

**Barry Goldman**  
Director of Maintenance  
Transdev  
Fairfax County Connector



Fairfax Connector

**Maintenance Apprenticeship Program**

***TWC***

June 2024

## About Transdev and our program

As the service provider to the Fairfax connector, Transdev, we've initiated a Maintenance Apprenticeship Program to tackle the scarcity of transit maintenance technicians. Our goal is to embrace apprentices from various backgrounds and age brackets, cultivating a team enriched with diverse viewpoints and innovative strategies.

**We understand that building out our apprenticeship programs helps us to answer the long-term training needs for the future of our workforce.**

2022 Teamsters	6	(candidates)
2023 ATU	10	(candidates)
2024 ATU and Teamsters	6	(candidates)



# From the beginning,

## 1. We launched our program with framework support:

- We partnered with ITLC (International Transportation Learning Center) for framework assistance and program development.
- ITLC referred us to TWC for basic framework, which we then modified, scaled and adapted to our fleet, maintenance program and timeline.
- We then submitted our framework to the Department of Labor for official registration. All details were integrated into a 2000-hour program.

## 2. Our program achieved registration with the Department of Labor (DOL):

- Following the submission of our work process document and compliance with DOL training standards, our program received official registration, fulfilling all necessary criteria for a 2000-hour or one-year program.
- In accordance with DOL guidelines, after one year, we underwent an initial program review and obtained approval.
- DOL will conduct subsequent reviews every three years.

## 3. Curriculum Development:

1. We designed a comprehensive curriculum to encompass the content for the entire one-year program, focusing on all maintenance aspects.
2. Our curriculum was built by our program administrator and aims to prepare participants to successfully attain ASE H-8 certification upon completion of the 52-week program.

#### 4. Our Recruitment Approach:

- We focused primarily on high-school *auto tech students*, high-school students *with an interest in maintenance* while also advertising job openings to *the general public*.
- Candidates expressed a preference for practical, on-the-job maintenance learning over traditional classroom settings.
- Upon hiring, we administered the Bennett Mechanical Aptitude Test to assess apprentices' learning levels and their capacity to apply mechanical principles in problem-solving scenarios.

#### 5. Learning Approach:

- We strive to integrate teaching methods that align with the apprentices learning preferences, ensuring an enjoyable learning experience rather than a daunting challenge.

#### 6. Trainer Diversity:

- We have a program comprised with three diverse trainers with different backgrounds that assist our apprentices based on their learning needs.



# Our Program/Overview

## The training consists of:

- **80% hands-on experience, working alongside peers and mentors.**
  - *Mentors must hold Master or A-level technician status with over two years of experience and receive an additional \$1.25 per hour for their mentorship.*
  - *Mentors are rotated every 2 months within the 52-week program.*
  - *Minimum Mentor qualifications include zero safety infractions, accidents and good attendance*
- **20% classroom instruction covering all material necessary to pass the H8-ASE certification exam.**
- The program duration is up to one year (52 weeks). By the program's conclusion, apprentices should possess the skills and knowledge required to qualify as a C Technician.
- Our team has structured the program as outcomes-driven, leveraging a combination of on-the-job training, classroom learning, and ASE testing preparation support to ensure candidates meet success criteria."





# Keeping track and program oversight:

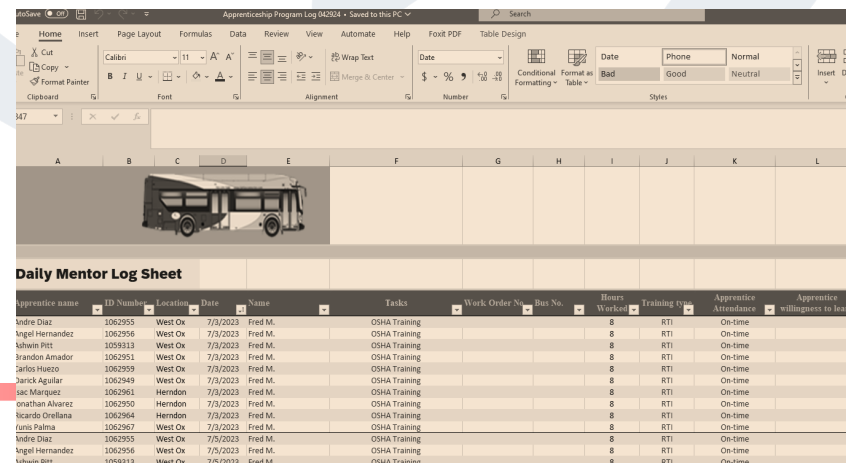
The program administrator tracks both On-The-Job (OTJ) and RTI (Related Technical Instruction) hours to analyze learning patterns, identify required assistance, and monitor apprentices' trained tasks.

## On-The-Job Training (OTJ):

Apprentices undergo rotation every two months among mentors possessing diverse skill sets to ensure comprehensive training. Each mentor documents the apprentice's daily tasks in a log, which is regularly collected and recorded by the program administrator.

## Related Technical Instruction (RTI):

In the classroom, we cover material based on the Preventative Maintenance Inspection content scheduled for that week. Quizzes, which include ASE questions, are administered every two weeks and are based on the previous lessons.



Apprentice name	ID Number	Location	Date	Name	Tasks	Work Order No.	Bus No.	Hours	Training type	Apprentice Attendance	Apprentice willingness to learn
Andre Diaz	1062955	West Ox	7/3/2023	Fred M.	OSHA Training			8	RTI	On-time	
Angel Hernandez	1062956	West Ox	7/3/2023	Fred M.	OSHA Training			8	RTI	On-time	
Shwin Pitt	1059313	West Ox	7/3/2023	Fred M.	OSHA Training			8	RTI	On-time	
Brandon Amador	1062951	West Ox	7/3/2023	Fred M.	OSHA Training			8	RTI	On-time	
Carlos Hueso	1062959	West Ox	7/3/2023	Fred M.	OSHA Training			8	RTI	On-time	
Jarick Aguilarr	1062949	West Ox	7/3/2023	Fred M.	OSHA Training			8	RTI	On-time	
Jac Marquez	1062961	Herndon	7/3/2023	Fred M.	OSHA Training			8	RTI	On-time	
Jonathan Alvarez	1062950	Herndon	7/3/2023	Fred M.	OSHA Training			8	RTI	On-time	
Isacris Onellana	1062964	Herndon	7/3/2023	Fred M.	OSHA Training			8	RTI	On-time	
Junis Palma	1062967	West Ox	7/3/2023	Fred M.	OSHA Training			8	RTI	On-time	
Andre Diaz	1062955	West Ox	7/3/2023	Fred M.	OSHA Training			8	RTI	On-time	
Angel Hernandez	1062956	West Ox	7/3/2023	Fred M.	OSHA Training			8	RTI	On-time	
Shwin Pitt	1059313	West Ox	7/3/2023	Fred M.	OSHA Training			8	RTI	On-time	

# Lessons we've learned

- Assess and appraise prospective Apprentice candidates using the *Bennett Mechanical Aptitude Test* as part of the pre-employment screening process.
- Importance of mentor training and their impact on their apprentices
- Reading and writing are not strong suits of these candidates
- Recognize that for many candidates, this might be their first job, requiring them to learn attendance and punctuality.



# Q&A



# Resources

- [American Transit Trainers and Apprenticeship Innovators Network \(ATTAIN\)](#)
- [Apprenticeship FAQs](#)
- [Training Framework](#)
- [Mentor Guide](#)
- [On-the-Job Learning Task Book](#)
- [Mentor Training](#)
- [Apprenticeship Funding Sources](#)



# Making Connections 2024

The National Transit Workforce Conference



MAKING CONNECTIONS, MAKING A DIFFERENCE

Attend in-depth, interactive sessions built around FTA's workforce development goals and industry needs:

- Strengthening Workforce Health and Safety
- Funding Workforce Development
- Enhancing Outreach and Recruitment
- Retaining a Strong and Diverse Workforce
- Advancing Skills, Careers, and Partnerships
- Utilizing Workforce Data and Metrics

Engage with a cross-section of transit stakeholders from:

- Agencies
- Labor
- Frontline Workforce
- Government
- Nonprofits
- Communities
- Education
- Workforce Development Organizations



Register Now! **November 11-13**  
**Hilton Inner Harbor, Baltimore, MD**

[www.TransitWorkforce.org/mc24](http://www.TransitWorkforce.org/mc24)





# Thank You!



[www.transitworkforce.org](http://www.transitworkforce.org)

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