

Internship and Apprenticeship Programs: Strategies, Stories and Successes

Moderator:

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2018 Bus & Paratransit Conference



SAFETY INSTRUCTIONS



- Note the location of the emergency exits; they may be behind you.
- In case of emergency, dial 911 and notify APTA staff.
- In an evacuation, calmly head to the nearest exit.
- If you require assistance, wait outside the doorway of your meeting room.
- Listen for all announcements via the facility's public address system and follow instructions.
- Security personnel and defibrillators are onsite.
- Notify any facility or APTA staff member if you see something suspicious.

Valley Metro Internships

A Two-Way Partnership

APTA Bus and Paratransit Conference
May 8, 2018

Carol L. Ketcherside, AICP
Deputy Director, Planning



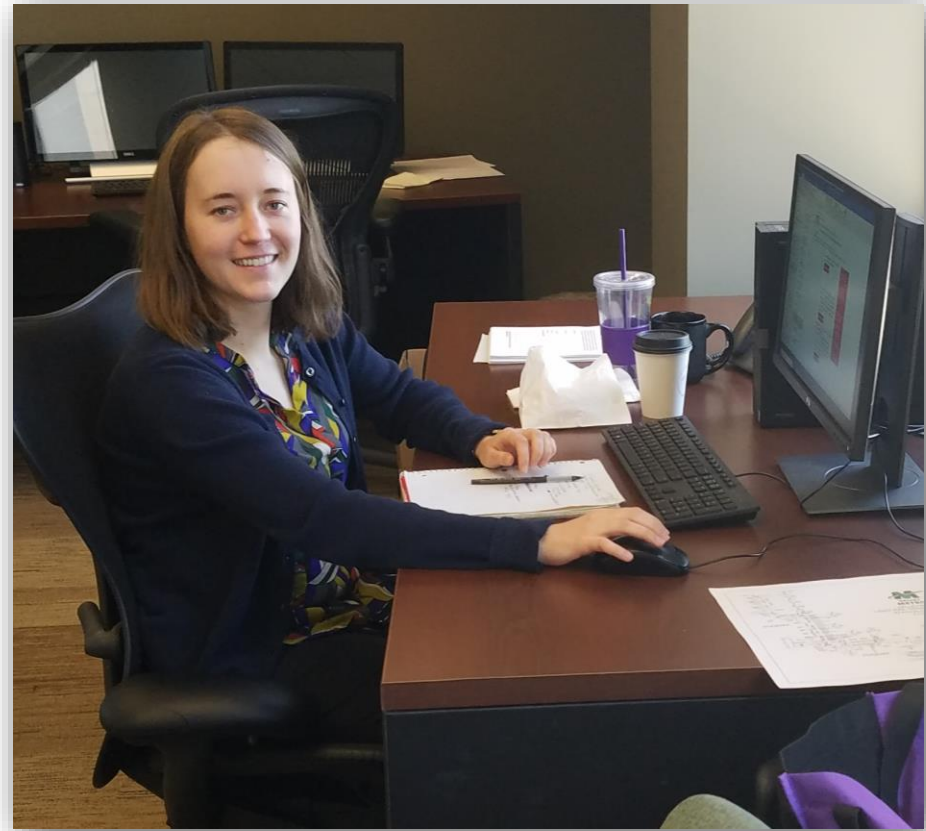
Valley Metro Overview

- Operate 365 days a year
- 61 local bus routes
- 20 Express/RAPID routes
- 21 circulator routes
- 26 miles of light rail
- 394 vanpools
- Fixed route & vanpool service – 42M revenue miles/year
- Paratransit – 479K revenue hours/year
- 95% of the fleet is alternatively fueled



Genesis of the Program

- **Difficulty finding qualified technical staff with transit experience**
- **Started with one unpaid position**



Growth of the Program

Year	#	Specialties	Paid/Unpaid	Hires
2010	1	Planning	Unpaid	
2011	1	Planning	Unpaid	1 hired by VM contractor
2012	1	Planning	Paid	1 hired by VM contractor
2013	2	Service Planning, Corridor Planning	Paid	1 hired by VM
2014	3	Service Planning, Corridor Planning, ITS	Paid	1 hired by VM
2015	3	Service Planning, Corridor Planning, ITS	Paid	1 hired by VM 1 hired by VM contractor
2016	3	Service Planning, Corridor Planning, Sustainability	Paid	2 hired by VM
2017	5	Service Planning, Corridor Planning, Sustainability, Design, Construction	Paid	TBD
2018	6	Service Planning, Corridor Planning, Sustainability, Design, Construction Community Relations	Paid	TBD

Why do we do it?

- **Benefits to Valley Metro**

- Building the future workforce
 - Agency
 - Transit industry
- Creating ambassadors
- Economical

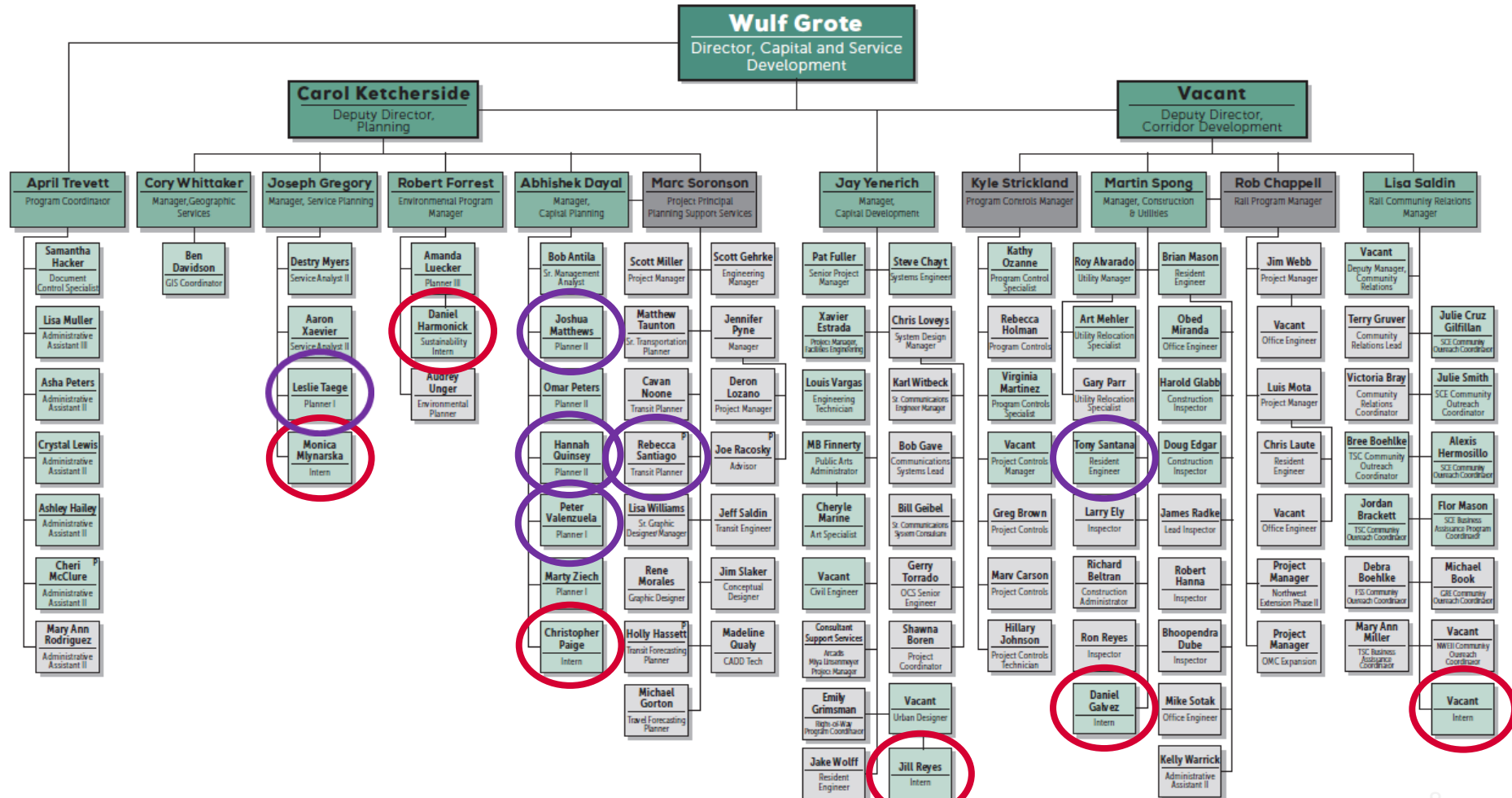
- **Benefits to students**

- School credit
- Experience for resume
- Networking
- Income



What's the program?

Valley Metro Capital and Service Development Division



P - Part time
Consultant/ Contractor

What's the program?

- **Student in a related degree program**
- **Half-time position**
 - Flexible hours
- **12 month duration**
 - Provides opportunities for more students
 - Start at end of school year
 - More hours in the summer months



What's the program?

- **Six positions**
 - Service Planning
 - Capital Planning
 - Sustainability/
Environmental Planning
 - Design
 - Construction Management
 - Community Relations



How do we do it?

- **Process**

- Advertise: Feb / March
- Interviews: March/April
 - All disciplines at once
- Offers: early April
- Start: late May
- End of year presentation at staff meeting



- **Funding**

- Some funding assistance from WTS and ITS
- \$12/hour pay
- \$12,500 per intern annually

What the Students Like

- **Location, pay, and schedule flexibility**
 - Competitive with other internships
- **Mentorship and career guidance**
- **Full-time job opportunities**
- **Observing**
 - Everyday events in the workplace
 - Teamwork in action
 - Professional and inter-agency collaboration
 - Cross-Discipline Coordination
- **Seeing coworkers that enjoy their jobs**

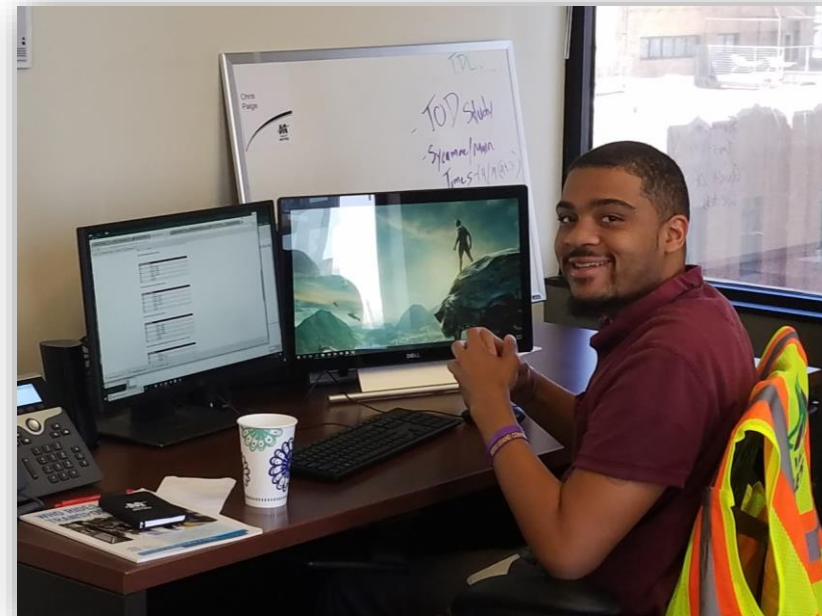
What the Students Like

- Working on innovative projects of interest
- Touring facilities
- Getting exposed to professional organizations
- Delivering a presentation



Students' Feedback Opportunities

- **Develop skills**
- **Gain industry knowledge not found in the classroom**
- **Establish professional relationships**
- **Improve confidences**
- **Networking**



Students' Feedback

- I learned how I could use my degree in public transportation — *Former Civil Engineering Student; Current Employee*



Students' Feedback

- The name plaque at my door was a welcoming and lovely surprise.
— *Planning and Design Student*

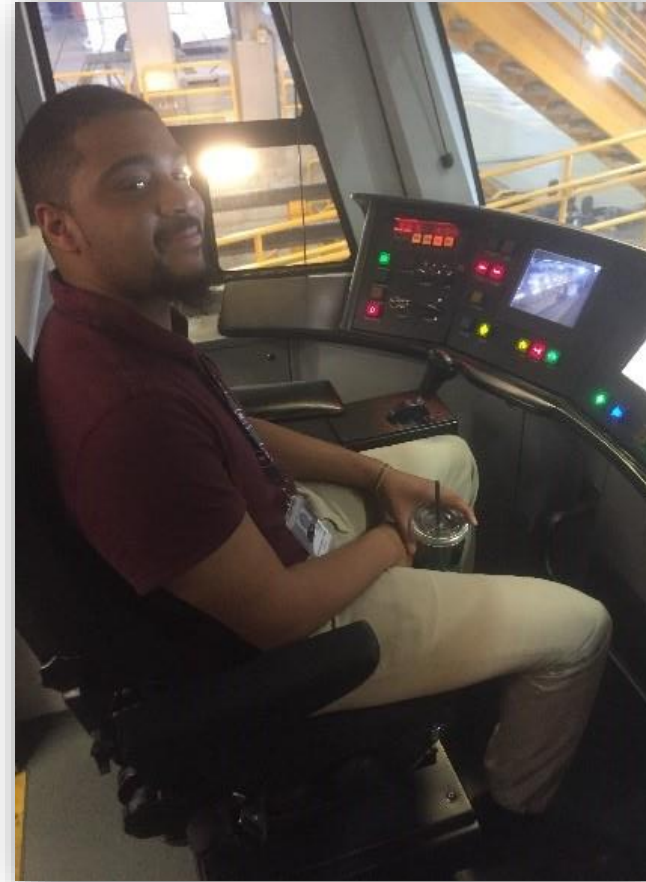


Students' Suggestions

- **Rotation to different divisions**
 - Finance, community relations, operations/safety, etc.)
 - An understanding of what the other departments do is valuable
- **More regularly scheduled check-ins with the assigned supervisor**
 - Better structure the internship
 - Keep the intern engaged

Managers' Feedback

- Also an opportunity to learn what you don't like
- Provide more structured mentorship
- Orient students to agency/contractor relationships – differing opportunities between public and private sector



Managers' Feedback

- **The program instills the culture of the Agency for a potential entry level employee**
 - If the employee comes to work for us, it's with pre-knowledge of the culture.
 - Result: engaged, happy, motivated and committed members of our team.



Tit

SUB

WELCOME

HOME,

INTERNS.

NOW PLEASE GET TO WORK.



Thank You



Upward Mobility and Apprenticeship Program for Better Bus Maintenance

Presented By:
David Varner
Director of Bus Maintenance
Maryland Transit Administration



Our Mission

Working together to provide safe, efficient and reliable transit across Maryland with world-class customer service.

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Goals for Better Bus Maintenance

Mechanical

- Improve mean distance between failures
- Decrease the number of major road calls
- Provide better oversight of data input and collection
- Further develop scheduled maintenance plans
- Manpower to support Better Maintenance Programs

Non-Mechanical

- Fill vacancies with well qualified staff
- Reduce employee turnover
- Reduce overtime costs through targeted job planning and labor compliance (Maximo)
- Drive internal promotion and development of current/future management staff
- Cross-trained professionals able to service MTA as internal customers

Purpose

The Upward Mobility and Apprenticeship Program for MDOT MTA Bus Maintenance will serve to address issues regarding: recruitment, promotion, training, and retention of well qualified individuals to provide better bus maintenance.

There are two tracks for this program:

- **Upward Mobility** - Promotion and development of current “in-house” talent
- **Apprenticeship**- recruitment and development of new employees through on the job training (OJT).

Joint Apprenticeship Council

In order to address the needs of MTA Bus Maintenance while satisfying the terms set in the Collective Bargaining Agreement a joint apprenticeship council (JAC) was formed. The council consists of four (4) representatives from both the Amalgamated Transit Union and MTA Bus Maintenance; and is supported by the Transportation Learning Center.

- Establishes policies and procedures for the program
- Decide on candidate selection criteria
- Track and monitor apprentices while they matriculate through the program

Qualifications and Selection

All applicants applying for the program must meet the following qualifications:

At least 18 years old

A high school diploma or GED equivalent

Complete Department of Transportation (DOT) Physical

Pass all required aptitude tests

Obtain commercial drivers license

Veterans and Recruitment

- Regular attendance at veterans recruitment events
- We have been able to transfer Military specialties to civilian job descriptions.
- Rank compared to job title and responsibility level.
- Military style recruitment – follow potential employees step by step

Training and Mentoring

Proposed training and mentoring component will:

- Include a probationary period
- Set number of required hours to complete in OJT
- Each apprentice will be paired with a SME/mentor (subject matter expert)
- Management involvement to ensure shop floor training is performed efficiently and appropriately

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Apprenticeship Track



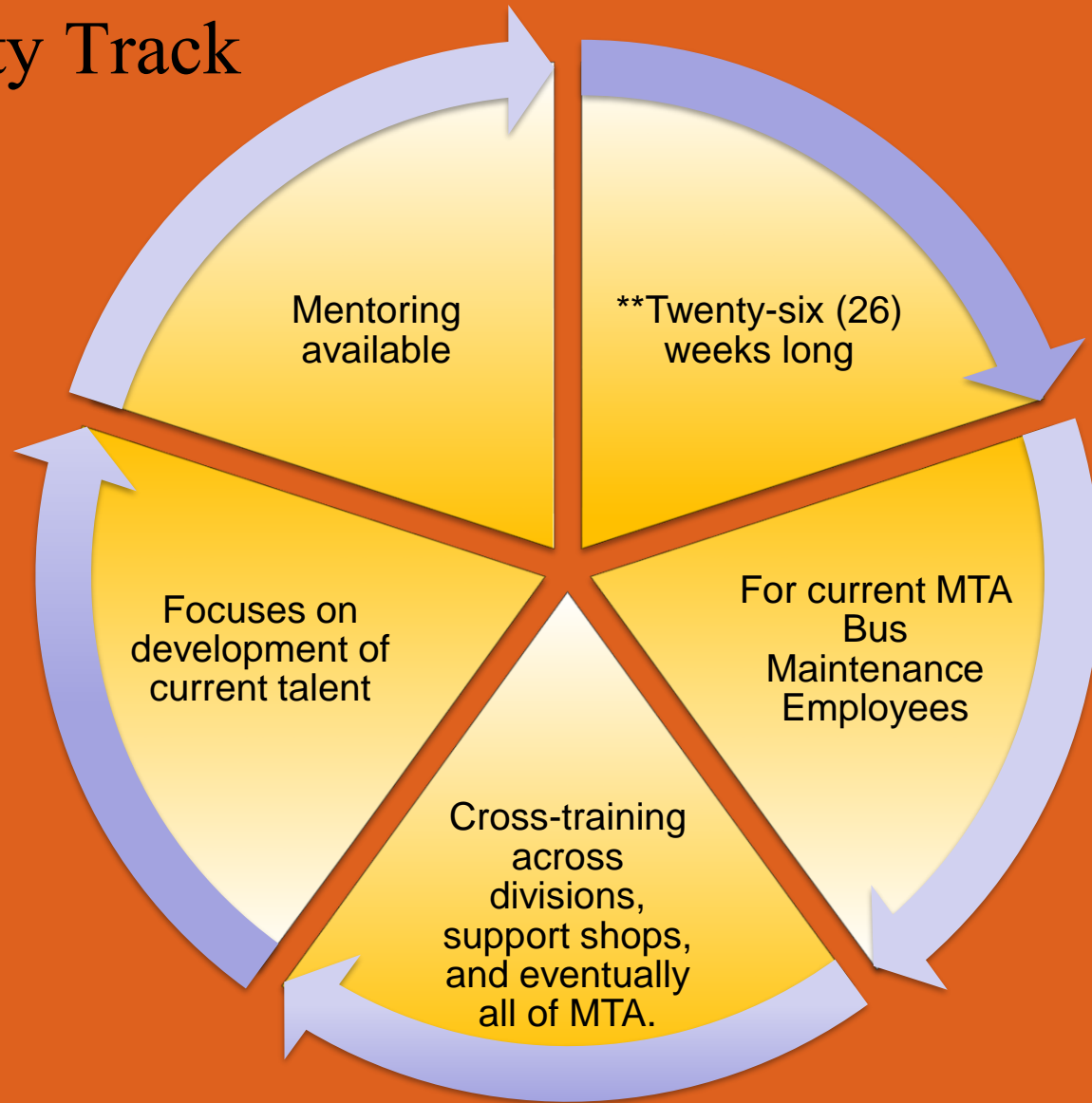
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YEAR ONE:

Persons with no experience as a Maryland Transit Administration Bus Maintenance Repairman begin here

Schedule	Hours	Location	Program Description
Week 1 - 6	240 Hours	OTD Washington Blvd. Bay #3 Training Lab	Shop Routine - Follow MTA Training/Development Plan for New Employee. Topics include: <ul style="list-style-type: none">• MTA Rules & Procedures• Shop Safety• Fire Extinguisher• Personal Protection Equipment• Power Tool Safety• Compressed Air Safety• Lock Out/Tag Out Procedures• Mechanical Guard Safety• Respiratory Protection• Back Injury Prevention• Slips, Trips, & Falls• Hearing Conservation• Inspection Forms & Procedures• Major Inspections (A/C, Brakes)• Fluid Changes• House Keeping• Welding Safety• CPR/AED• Equipment Overview• Job Expectations Overview• Amerex Fire Suppression Familiarization• Hazard Communication• Forklift Certification
Week 7-8	80 Hours	OTD Washington Blvd. Bay #3 Training Lab	Brake Training. Topics include: <ul style="list-style-type: none">• Adjusting, re-lining, rebuilding Wedge and "S" cam pneumatic brake systems• Relay Valves• Familiarization/Diagnostics

Upward Mobility Track



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	Hours	Location	Program Description
Week 1 - 6	240 Hours	OTD Washington Blvd. Bay #3 Training Lab	<p>Shop Routine - Follow MTA Training/Development Plan for New Employee. Topics include:</p> <ul style="list-style-type: none"> • MTA Rules & Procedures • Shop Safety • Fire Extinguisher • Personal Protection Equipment • Power Tool Safety • Compressed Air Safety • Lock Out/Tag Out Procedures • Mechanical Guard Safety • Respiratory Protection • Back Injury Prevention • Slips, Trips, & Falls • Hearing Conservation • Inspection Forms & Procedures • Major Inspections (A/C, Brakes) • Fluid Changes • House Keeping • Welding Safety • CPR/AED • Equipment Overview • Job Expectations Overview • Amerex Fire Suppression Familiarization • Hazard Communication • Forklift Certification • MAXIMO Basics
Week 7	40 Hours	OTD Washington Blvd. Bay #3 Training Lab	<p>Bus Inspection Routines</p> <ul style="list-style-type: none"> • Basics for when Bus enters shop including Axle Alignment, Wheelchair systems (U-Lift & Ricon Ramp), Wheelchair securement. <p>OJT MAXIMO training (work order will be established for each student to track MAXIMO usage. Training will be conducted by mentor daily when accessing work orders)</p>
Week 8	40 Hours	OTD Washington Blvd. Bay #3 Training Lab	<p>Bus Inspection Routines</p> <ul style="list-style-type: none"> • Components and integration, troubleshooting/diagnostics for: <ul style="list-style-type: none"> ○ Bus Engines ○ Mechanical ○ Electrical ○ Emission Controls

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Challenges

- Support and buy in from union: non-union workers performing union work during training
- Current promotional structure for union -“bidding”
- Independent, self-paced study is required
- Selecting mentors and determining compensation
- Support from other MTA departments for cross-training

CONTACT US

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Metro Transit Technician Program

APTA Bus & Paratransit Conference

Tuesday May 8, 2018

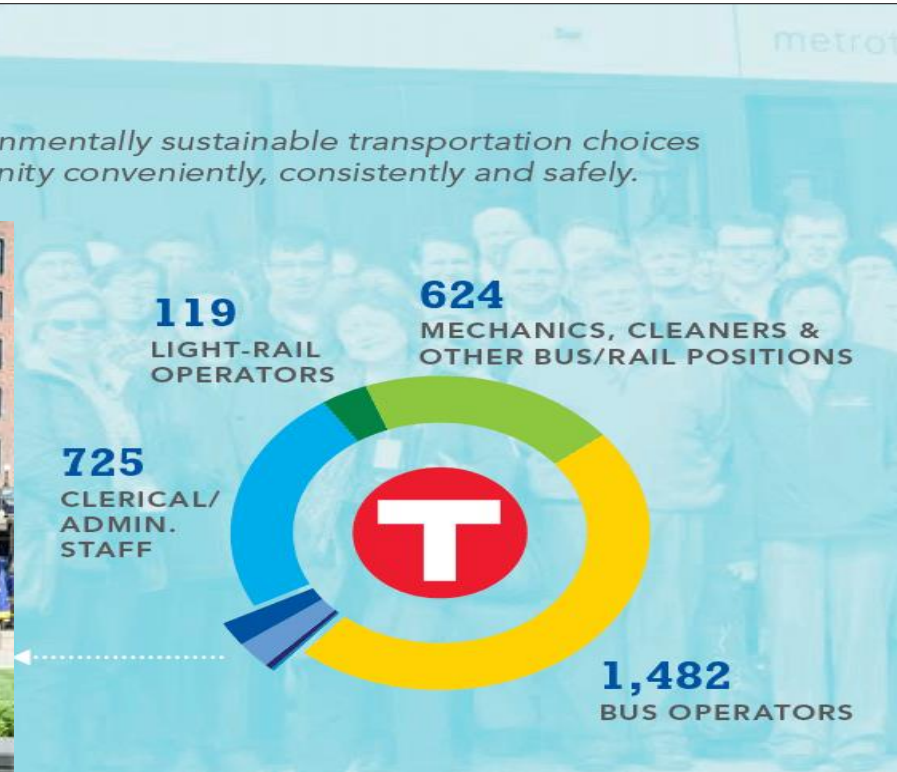




Metro Transit

OUR PEOPLE

We at Metro Transit deliver environmentally sustainable transportation choices that link people, jobs and community conveniently, consistently and safely.



Workforce Challenges

- 267 Mechanics Positions
- 10% Mechanics Vacancy
- 55% Mechanics over 50 years of age
- 80+ Mechanic Positions needed by 2022



Metro Transit Technician Program

Creates a pipeline from area communities to build diverse Metro Transit Mechanic workforce of the future

- Partnership with community agencies
- Aptitude and academic testing
- No prior mechanical experience required
- Income qualification
- External applicants only



Metro Transit Technician Program

- Strategic partners
 - **Twin Cities Rise! (TCR!)**
 - Successful Metro area workforce readiness program.
 - **Hennepin Technical College**
 - Develop and deliver customized introductory course
- Transit Team
 - Bus Maintenance, Training Department, Office of Equal Opportunity, ATU 1005, Human Resources, Office of General Counsel, Workforce Development



Hennepin Technical College™



Metro Transit Technician Program

	Phase I	Phase II	Phase III	Phase IV
Program Phase	Outreach & Assessment	Participant Readiness	Customized Training & Internship	Degree Program & Internship
Time Period	3 Months	6 Months	5 Months	2 Years
	400	40	20	20

Metro Transit Technician Program

- Cohort 1
2016 Bus Technicians – 19 Participants
- Cohort 2
2017 Rail Technicians – 10 Participants
- Cohort 3
2018 Bus Technicians – 19 Participants



Outreach & Assessment

- Multi-tactic strategy:
 - Transit Open house events at various garages
 - Recruitment events at community centers
 - Current Operators serve as recruiters
- Selection criteria:
 - Reading and spatial awareness testing



Participant Readiness

Prepare participants for a successful internship and rigors of 2 yr. degree program

- Community Partner - Twin Cities Rise!
 - Personal Empowerment
 - Life Coaching and navigational support
- Academic tutoring
 - Prepares participants for Accuplacer exam.



Custom Training & Internship

Introduce mechanical concepts through customized course as well as provide on the job experience through a paid internship.

- Hennepin Technical College delivers electrical training course
- Bus Maintenance Training delivers Bus / Rail specific mechanical concepts
- 15 hrs. per week paid internship shadowing current Technicians.



Thank you

Gary Courtney

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