

NATIONAL
ACADEMIES

Sciences
Engineering
Medicine

TRB TRANSPORTATION RESEARCH BOARD

TRB Webinar: Career Series #1 – The Future Transportation Workforce is Happening Now!

February 8, 2023

1:00 – 2:30 PM



TRB Webinar: Career Series

February 22, 2023

[TRB Webinar: Career Series #2 – Sustainable Mobility: New and Expanding Opportunities](#)

March 22, 2023

[TRB Webinar: Career Series #3 – Transportation Equity: Community-Building in Action](#)



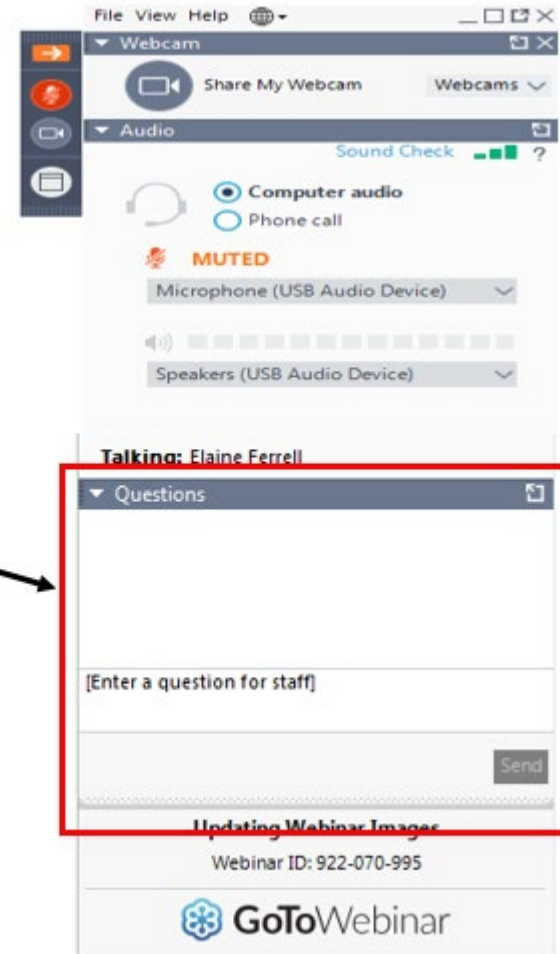
Learning Objectives

At the end of this webinar, you will be able to:

- Explain the current national transport sector workforce challenges and opportunities
- Understand how coordination and integration support the community-building connection between mobility and transport careers
- Better prepare for transportation and sustainable mobility careers by possessing useful industry resources

Questions and Answers

- Please type your questions into your webinar control panel
- We will read your questions out loud, and answer as many as time allows



Today's Presenters



Jannet Walker-Ford

Jannet.Walker-Ford@wsp.com

SR. VICE PRESIDENT WSP USA
BOARD CHAIR WTS INTERNATIONAL



Beverly Scott, Ph.D

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FOUNDER
INTRODUCING YOUTH
TO AMERICAN INFRASTRUCTURE



Jamaine Gibson

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DIRECTOR WORKFORCE
DEVELOPMENT
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Nathaniel P. Ford Sr.

nford@jtafla.com

CEO
JACKSONVILLE TRANSPORTATION
AUTHORITY

The Transportation Sector is Experiencing:

- *Major Change*
- *Rapid Transformation*
- *Uncertainty*

... presenting ALL of us with the opportunity to ...

**RE-Imagine and RE-WRITE an
“Equity-Centered” NEW Normal!**



MAJOR CHANGE, RAPID TRANSFORMATION & UNCERTAINTY ...

- NO “SILOES” – “LINKAGES” are Everywhere!
- PUBLIC BEHAVIOR & EXPECTATIONS
- GROWING INEQUALITY & UNREST
- UNPRECEDENTED CLIMATE CHANGE (Modern Times)
- WORKFORCE & WORKPLACE CHANGES
 - WHO?
 - WHERE?
 - WHAT?
 - HOW?
- MAJOR DISRUPTORS, i.e., Cybersecurity

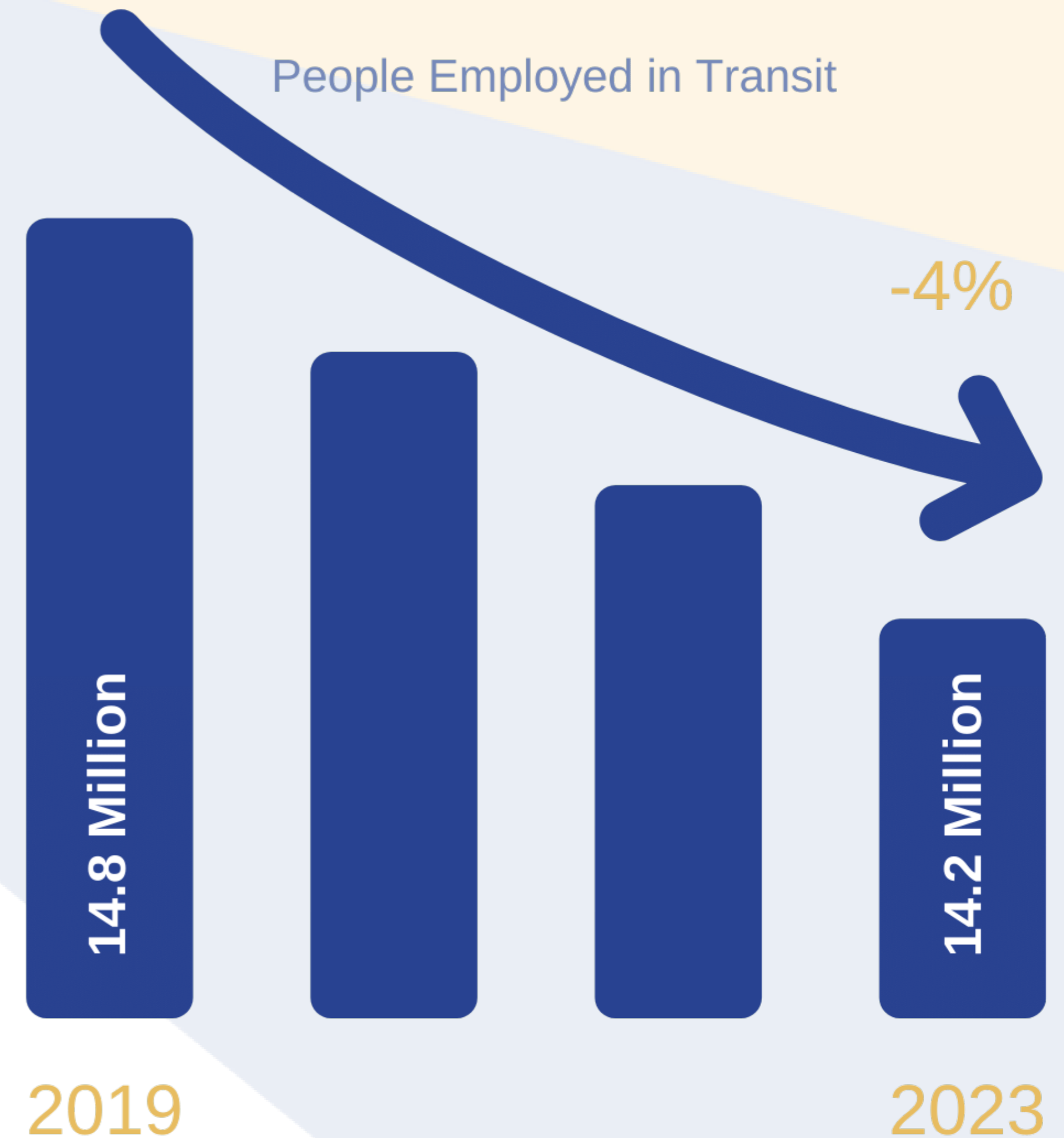
**ALL PRESENT OPPORTUNITIES
to build an “Equity-Centered”
NEW NORMAL!**



US TRANSPORT SECTOR WORKFORCE

AT-A-GLANCE *

- **14.2 million employed** (*10% of US workforce*)
 - Significant COVID impacts
 - 4.1% decline from 2019
- **Major Subsectors: Transit** (including passenger rail), **Aviation, Rail, Maritime, Trucking, Pipeline**
- **Bureau of Labor Statistics (BLS)** projects an **increase +5.9% by 2030**
 - +326,000 jobs

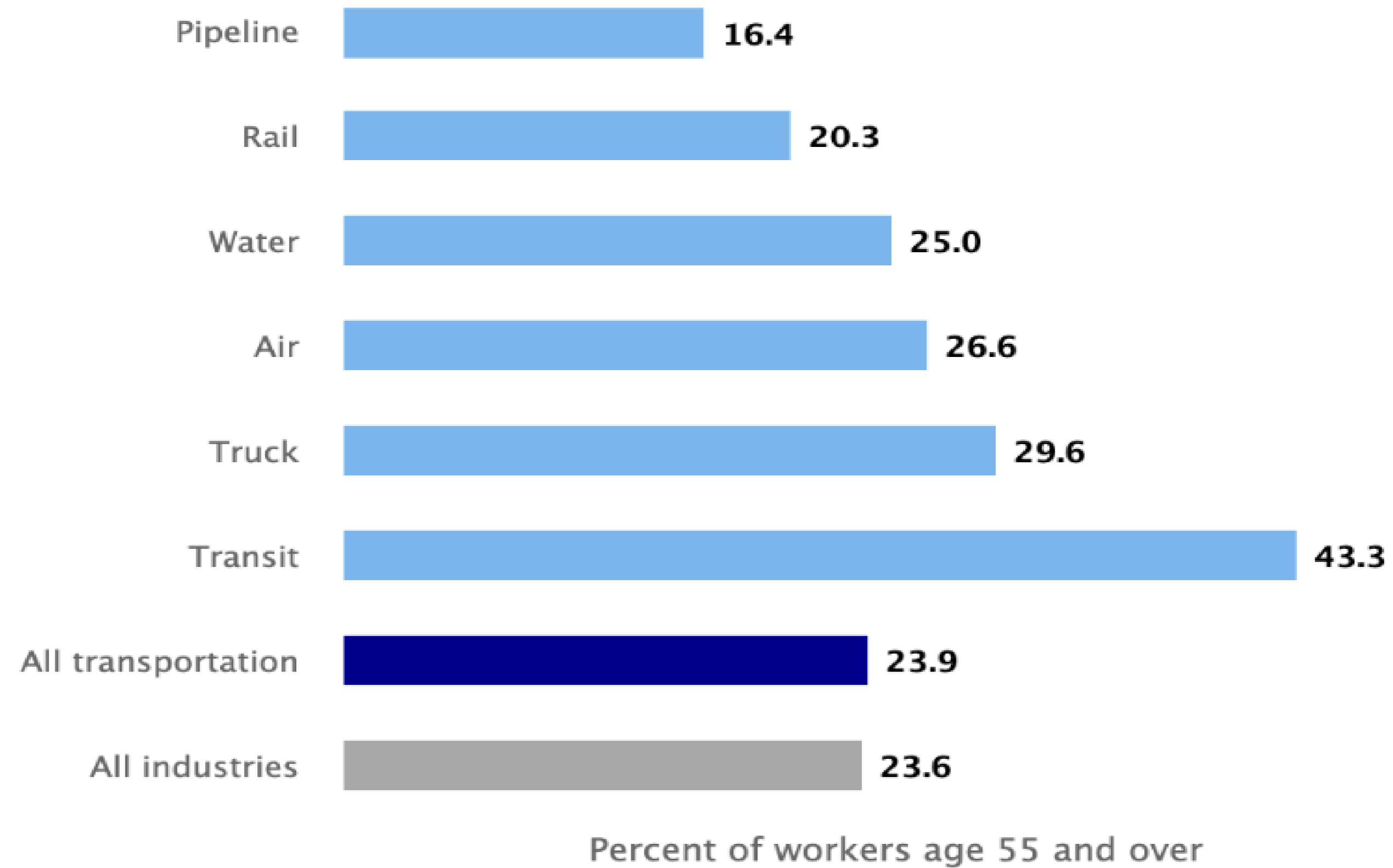


*BLS Transport sector data includes transportation, warehousing, and related industries.

Aging of the Transportation Workforce (2021)

2021

Percent of Workers Age 55 and Over, 2021



Citation: U.S. Department of Transportation, Bureau of Transportation Statistics, *Transportation Economic Trends*, available at www.bts.gov/product/transportation-economic-trends.

MAJOR WORKFORCE CHANGES, CHALLENGES & OPPORTUNITIES

- **ELEVATE & INTEGRATE “PEOPLE-PLANNING” (360 Degrees)**
 - Strategic Workforce Planning & Accountability (**“ALL”** major plans)
 - Accountability for “Performance” & “Results”
 - *FUND “People” Investment Like We Mean IT!*
- **“K -to- GRAY” EDUCATIONAL-CAREER READINESS CONTINUUM**
 - “Fact-Based” Competencies
 - “Continuous Learning” DNA
- An **“AGING”** Transport Sector Workforce – *exceeds the national average for Percent of Workers Age 55 and Over*
 - **TRANSIT “Tsunami” – 43%**
 - **TRUCKING – 30%**

MAJOR WORKFORCE CHANGES, CHALLENGES & OPPORTUNITIES

- PERSISTENT **“DIVERSITY & INCLUSION”** GAPS *
- **“ATTRACTION” & “RETENTION”**
- **IMAGE, IMPACT & LINKAGES**
 - *“We Make Normal Happen!”*
 - Shape Personal, Community, Societal Outcomes
- **LIMITED CAREERS AWARENESS**
 - Interdependencies, Portability
 - “Good” Jobs, Business Opportunities, Community Development
- **CLEAR CAREER PATHWAYS & ADVANCEMENT OPPORTUNITIES**
- **PROFESSIONAL DEVELOPMENT/SUCCESSION PLANNING**
 - “Job-Readiness”
 - Knowledge Transfer
- **COMPETITION & COMPETITIVENESS**
- **WORKPLACE CHALLENGES & CHANGE**



The education needed for a job in any of the critical infrastructure sectors is a never-ending continuum that requires lifetime investment and involves all levels of instruction, from early childhood to secondary or post-secondary education, as well as continuing on-the-job professional development. **This is best described as a “K to Gray” system.**



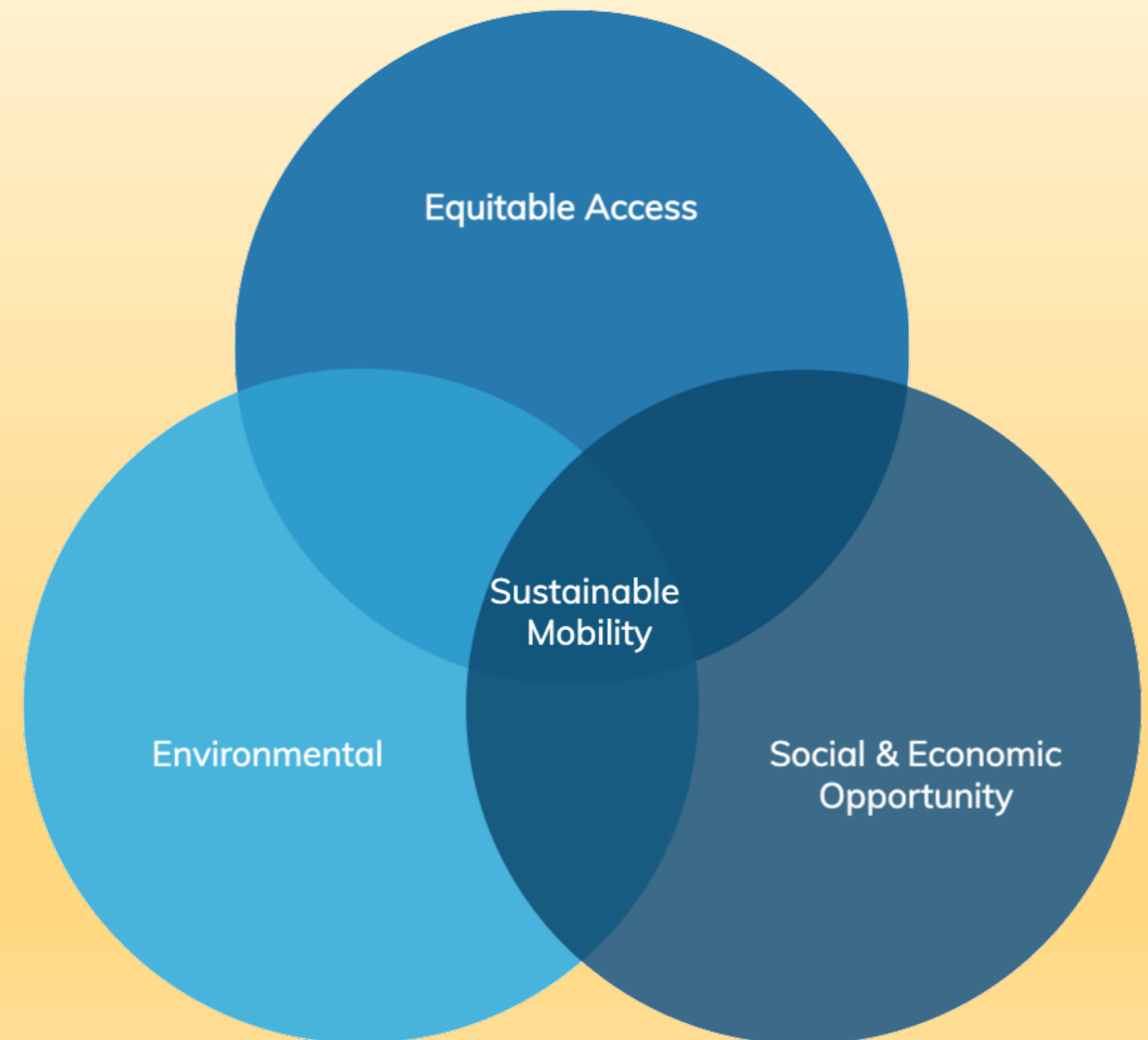
THE EDUCATION/CAREER-READINESS CONTINUUM

The pathway to a career in critical infrastructure is part of a lifelong educational continuum, with necessary skills for the work attained at all stops along the pipeline no matter which specific path a person takes.

Source: Workforce and Talent Management Study, *The President's National Infrastructure Advisory Council*, https://www.cisa.gov/sites/default/files/publications/NIAC_Workforce%20and%20Talent%20Management%20Study_Final%20508.pdf

“SUSTAINABLE MOBILITY” Expands the TRANSPORT SECTOR’s **REACH, RELEVANCE, and CAREER OPPORTUNITIES ..**

- **EQUITABLE ACCESS** (“People”, “Goods”, “Information Networks”)
 - Safe and Secure
 - Reliable
 - Affordable
- **ENVIRONMENTAL**
- **SOCIAL & ECONOMIC OPPORTUNITY**
 - Employment
 - Education
 - Health/Medical
 - Housing/Land Use



SUSTAINABLE MOBILITY/TRANSPORT CAREERS ... MORE OPTIONS

Digitalization (Proficiency/Excellence)

Big Data Analytics/Cloud Computing

Artificial Intelligence (AI)

Machine Learning (ML)

Autonomous Vehicles (AV)

“Green” Transformation

“ESG”/Human Rights

Marine Health

Renewable Energy

Utility Worker

Housing Specialist

Electric Vehicle Maintenance

Community Health Advisor

Environmental Protection

Recycling/Waste Management

Advanced Manufacturing

Technicians, Installers

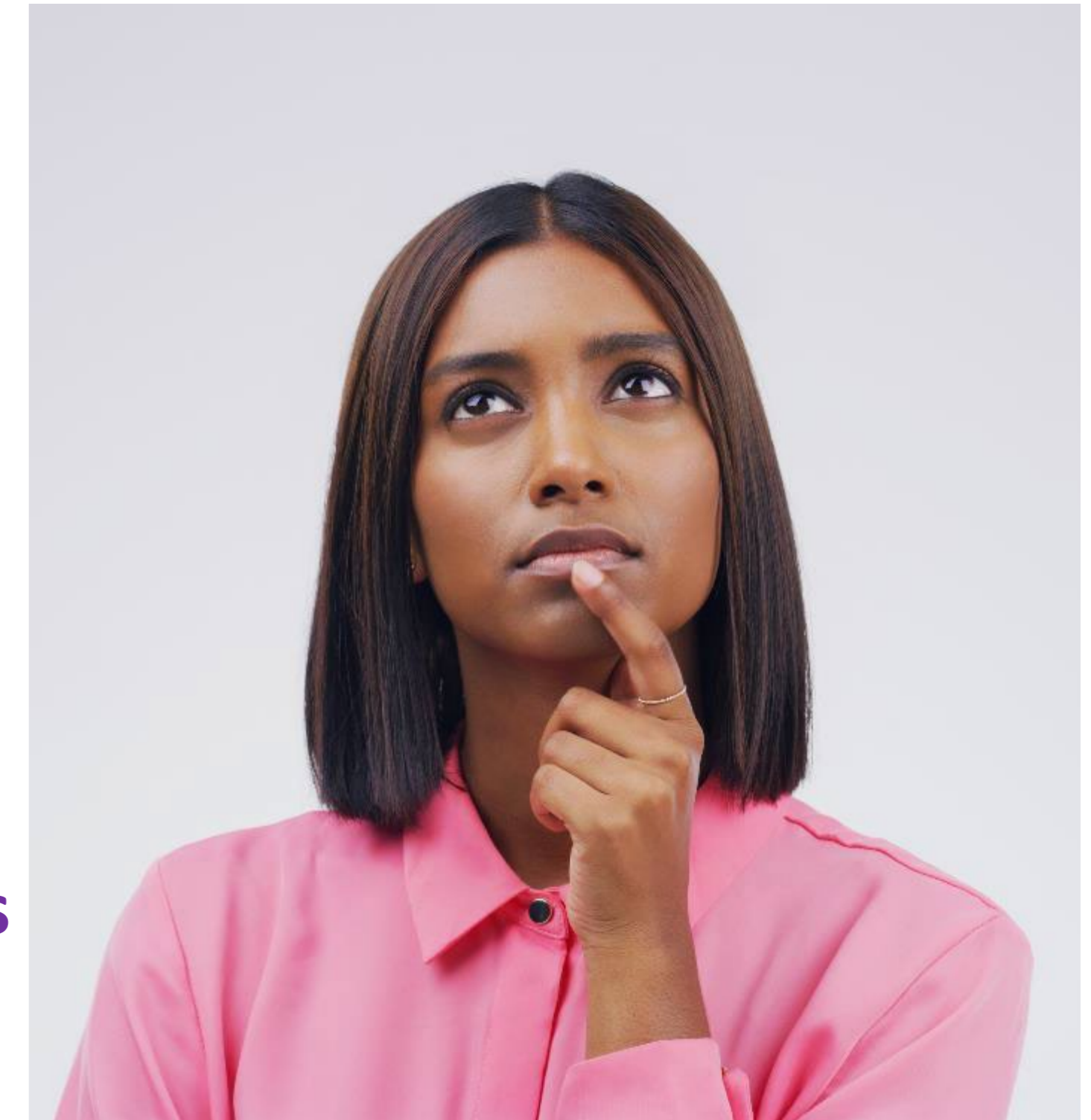
Sustainability/Resilience Offices

Environmental Sciences

Wind Turbine Service Technicians

Solar Photovoltaic Installers

Hydrologist



YOU OWN YOUR CAREER ...

Food For Thought

Greater Complexity
Dependencies
Interconnections
Multi-Sectoral
Interdisciplinary
“Stackable”
Portable
Outcomes

Good” Job
Self-Employed
Business Owner

Public
Private
Academia
Community-Based
Philanthropic/Non-
Profit

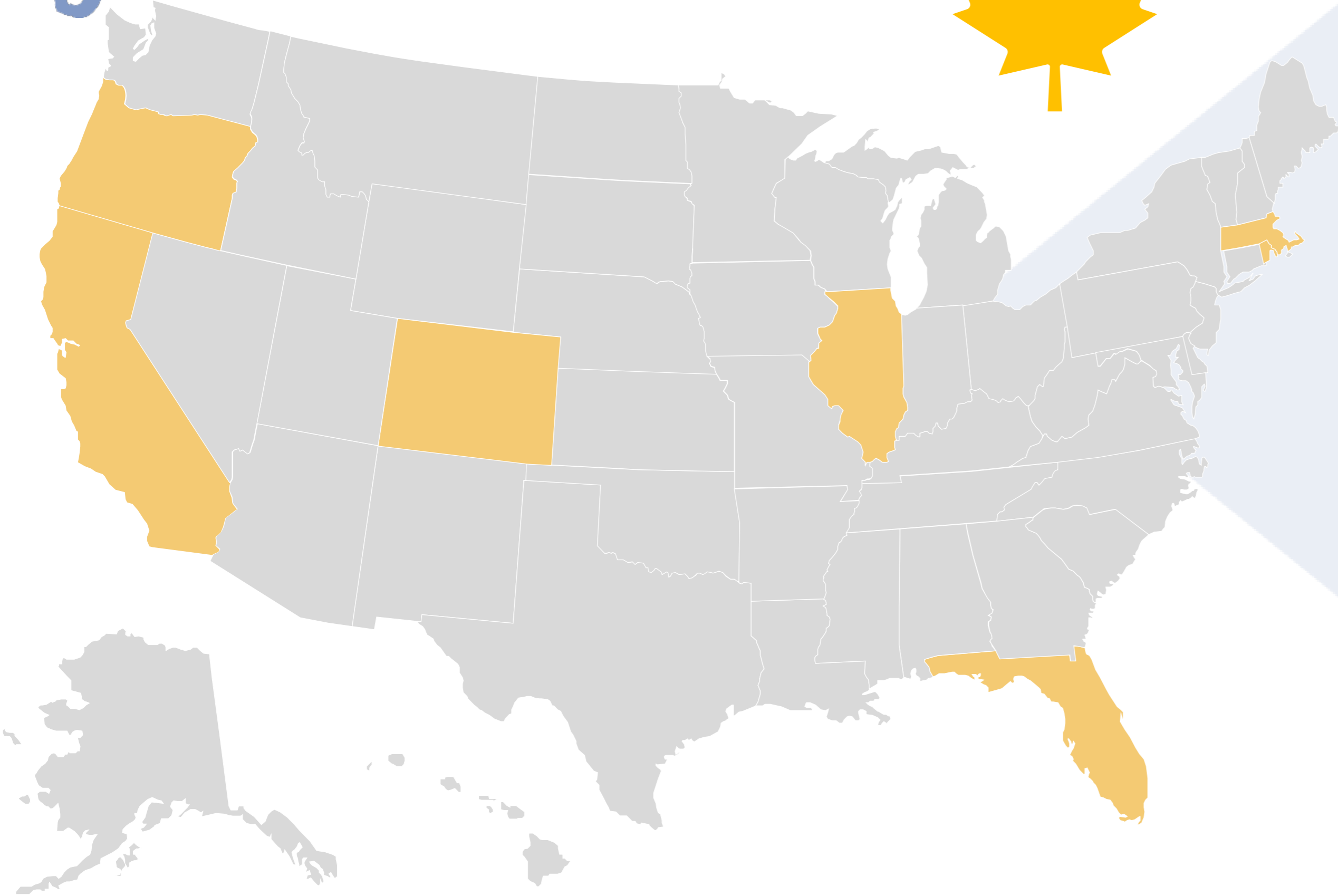
SUSTAINABLE MOBILITY/TRANSPORT CAREER AWARENESS & INNOVATION CHALLENGE

2023 Youth Program

- 18-25 years
- January – July 2023
- 11 Local Sponsor Locations
 - 20 Transport Systems
 - US and Canada
- 3 Core Program Elements
 - Career Awareness
 - Innovation Challenge
 - Youth/Industry “Critical Conversations”



LOCAL HOST ORGANIZERS



1. Boston
2. Denver
3. Illinois
4. Indianapolis
5. Inland Empire (San Bernardino, CA)
6. Jacksonville
7. Portland
8. Rhode Island
9. San Francisco/Oakland Bay Area Regional Consortium ("7" participating transport agencies)
10. Tampa
11. Toronto



A Transformative Justice Lens

- ★ ALL people can share in the wealth of the earth.
- ★ Poverty, hunger, and homelessness will NOT be tolerated because international standards of human decency will not allow it.
- ★ Racism and all forms of discrimination, bigotry, and prejudice will be replaced by an all-inclusive spirit of sisterhood and brotherhood.

The King Philosophy, The King Center (Atlanta, GA)





THANK YOU!



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beverly@iyai.org | brittany@iyai.org



WORKER VOICE -- MAKING NORMAL HAPPEN EVERY DAY

Jamaine Gibson

Director of Apprenticeship and
Workforce Development

Amalgamated Transit Union



Amalgamated Transit Union

- **The Amalgamated Transit Union (ATU)**
 - Over 200,000 members – the largest labor union representing transit and allied workers in the U.S. and Canada in this heavily unionized industry
 - Fighting for the interests of its hard-working members
 - Promoting mass transit and quality service to our communities.
- **ATU is setting the standard for transit apprenticeship and workforce development, with**
 - 77 apprenticeship and mentor programs offering great careers and opportunity for advancement
 - 13 different transit classifications registered with the Department of Labor
 - International President John Costa serving on the national Advisory Apprenticeship Committee
 - ATU selected as an Apprenticeship Ambassador for the Department of Labor



What Using and Listening to Worker Voice Can Accomplish: Workplace Training and Career Entry Programs

Strong workplace training and pre apprenticeship/pre-employment programs result when:

- Worker voice is a critical part of all important organizational decisions
- Frontline workers are recognized as subject matter experts and given a voice and a role in planning and implementation
- Mutual respect and honest and transparent communication between labor and management leads to buy-in and mutual commitment
- Workers' experience, expertise, and perspectives are valued and respected in all organizational contexts, and workers are part of ongoing organizational dialogue and connection with the community
- We respect and give value and weight to each other's voices, we understand that we are all in this together



Amalgamated Transit Union

- ATU works with its locals and in long established partnership with the [International Transportation Learning Center/Transit Workforce Center](#) (ITLC/TWC) to create career pathway and pipelines for young people and community members to enter the transit workforce, with a focus on frontline transit careers, like coach operator and technician, through:
 - Pre-apprenticeships
 - Job readiness programs, including Commercial Driver's License (CDL) preparation
 - Partnerships with
 - Community colleges
 - Career and Technical Education high schools
 - Community-based and national workforce development programs, including Iyai



Worker Voice in Practice: Workplace and Community Partnerships

ATU's work and our long-time partnership with [ITLC/TWC](#) has demonstrated that frontline worker voice is the critical foundation for:

- Quality careers and quality service to the community
- Peer mentoring programs and jointly administered apprenticeship programs that create the strongest training, retention, and career advancement programs
- Ensuring our workforces reflect and represent the community, as the [sample TWC recruitment flyer](#) to the right demonstrates
- Powerful and effective outreach to and conversations with youth and other community members through programs--**such as Iyai's work in Chicago, San Bernardino, and beyond**--built on workers speaking directly with and hearing from the community, especially the voices of youth.

• My Community Works Because I Work •

Join us February 31 for Job Fair 8 am - 1:00 pm
8402 Colesville Rd, Silver Spring, MD 10910
For more info call 123-456-7890

- Great starting salary
- Health and other benefits
- Retirement benefits
- Opportunities for advancement

+ Special perks +
+ Special perks +

your agency info here
your agency info here
your agency info here

ConnectingMyCommunity

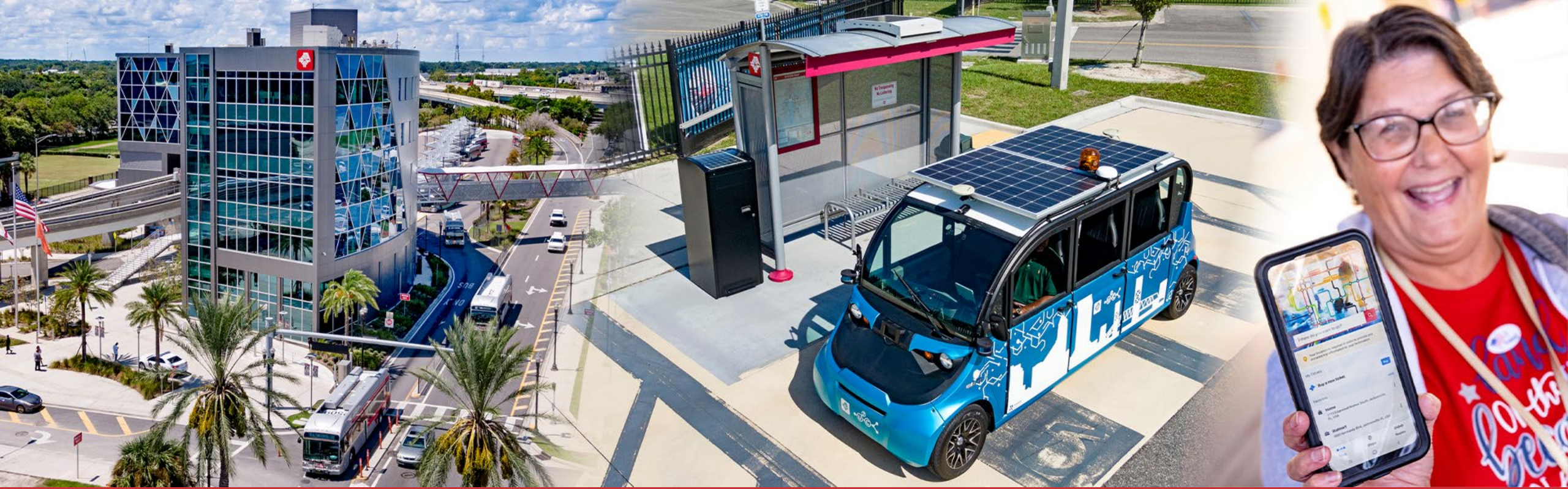
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As we hear each others' voices, we learn from each other, working together to strengthen our careers, our workplaces, our organizations, and our collective future.

THANK YOU!

For more information, please visit ATU.org



Innovation: New and Emerging Trends at the JTA

Transportation Research Board Panel
February 8, 2023

Today's Agenda

1. JTA at a Glance
2. Timeline: Innovation at the JTA
3. What's Ahead for JTA





JTA at a Glance

JTA at a Glance



About JTA

- State agency & independent special district
- Road and bridge builder
- Mobility Works
- Multiple TODs
- Serves largest city by landmass in continental U.S.
- Largest BRT system in Southeast
- 350 vehicles
- ~1000 employees



Service Lines

- Fixed Route Bus
- First Coast Flyer BRT
- U²C
- Connexion/Connexion+
- St. Johns River Ferry
- ReadiRide
- Express Select (3 counties)
- Clay Community Transportation
- Sponsored services: Go Tuk'N, Beaches Dial-a-Ride & Beach Buggy, Jacksonville Water Taxis
- Door2Store (tackling food deserts)



Innovation at the JTA

JTA, Beep & NAVYA Autonomous Shuttles Help Transport COVID-19 Tests Collected at Mayo Clinic Drive-Thru Site in Jacksonville

PRESS RELEASE PR Newswire
 © Apr. 2, 2020, 04:00 PM

SHARE

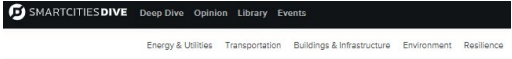
JACKSONVILLE, Fla., April 2, 2020 /PRNewswire/ -- For the first time in the United States, autonomous vehicles are being used to transport medical supplies and COVID-19 tests at Mayo Clinic in Florida.



HOME | ALT. MOBILITY | AUTONOMOUS VEHICLES

JTA, Beep, NAVYA help transport COVID-19 tests collected at Mayo Clinic drive-thru site

The group partnered with Mayo Clinic to transport COVID-19 samples on the Jacksonville Campus.



BRIEF
AVs in Jacksonville, FL are shipping COVID-19 tests to the lab

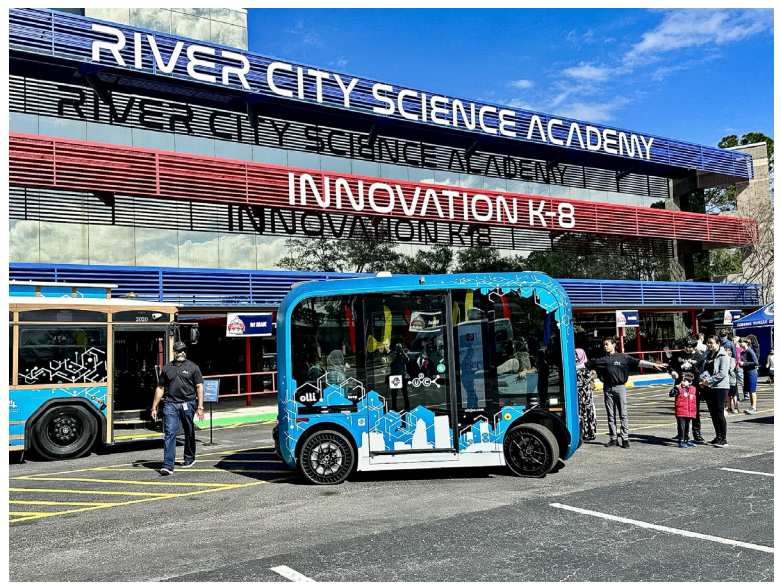


HEALTH CARE

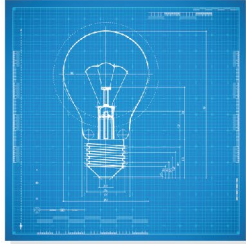
Autonomous vehicles will help transport medical supplies and COVID-19 tests at the Mayo Clinic Campus in Jacksonville.



JAX DAILY RECORD THURSDAY, APR. 2, 2020 11:34 AM EST
Mayo Clinic, JTA to autonomously shuttle COVID-19 tests

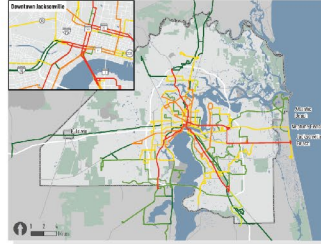


2012 - 2017: Innovation at the JTA



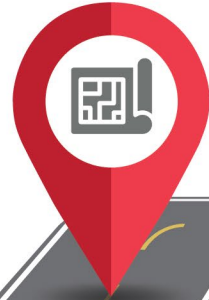
2014

BLUEPRINT FOR
TRANSPORTATION
EXCELLENCE
ESTABLISHED



2014

FIRST SYSTEM
REDESIGN IN 30 YEARS



2017

JRTC GROUNDBREAKING,
U²C ESTABLISHED,
AV TEST & LEARN
FACILITY LAUNCHED



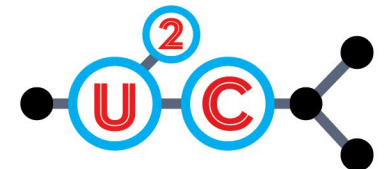
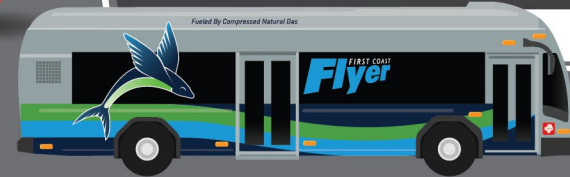
December
2012

FORD BECOMES CEO



2015

MYJTA MOBILE APP
LAUNCHED, FCF LAUNCHED



2018 - Present: Innovation at the JTA



Bay St Innovation Corridor

The Bay Street Innovation Corridor (BSIC) is a transformative project integrating innovation and emerging technologies into public transportation service delivery. This will demonstrate a national model for the deployment of autonomous transit vehicles with advanced sensors and technologies that will support big data analytics.

The Jacksonville Transportation Authority is poised to begin service on the first phase of the project, known as the Bay Street Innovation Corridor, in early 2025. This program has gained world acclaim, and multiple awards, for the mobility innovation it represents, from esteemed organizations such as the ITS World Congress.

COLLABORATE. INNOVATE. PROSPER.

Ride JTA to get your COVID-19 Vaccinations

15 hours and on-demand services provide safe, convenient and affordable access to COVID-19 vaccination sites in Jacksonville.

JTA's customers and employees are our top priority. All services are vehicles are cleaned and sanitized regularly. Masks and social distancing required on all JTA vehicles and facilities.

Ride TO HEALTH

2021

RIDE TO HEALTH, JTA SUSTAINABILITY ACTION PLAN ADOPTED, FCF ORANGE LINE



2022

MOVE2027 STRATEGIC PLAN APPROVED, MYJTA APP ENHANCEMENTS UNVEILED



MOVE 20 27

FIVE-YEAR STRATEGIC PLAN FY2023-FY2027

Version 1.0

My JTA

2018

MOVE STRATEGIC PLAN, BAY STREET INNOVATION CORRIDOR



Blueprint 2020

Transforming Transportation for a Robust Future

2018

BLUEPRINT 2020 - JRTC OPENS, JTA AV FLEET SUPPORTS MAYO CLINIC WITH COVID-19 TESTING TRANSPORT





What's Ahead for JTA

What's Ahead for JTA (2023 and Beyond)



U²C Implementation



Strategic Plan



Commuter Rail



Learn More



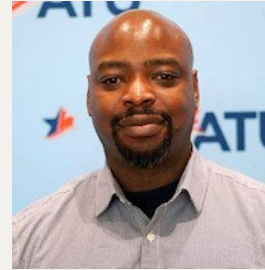
Thank You.



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*Introducing Youth to American
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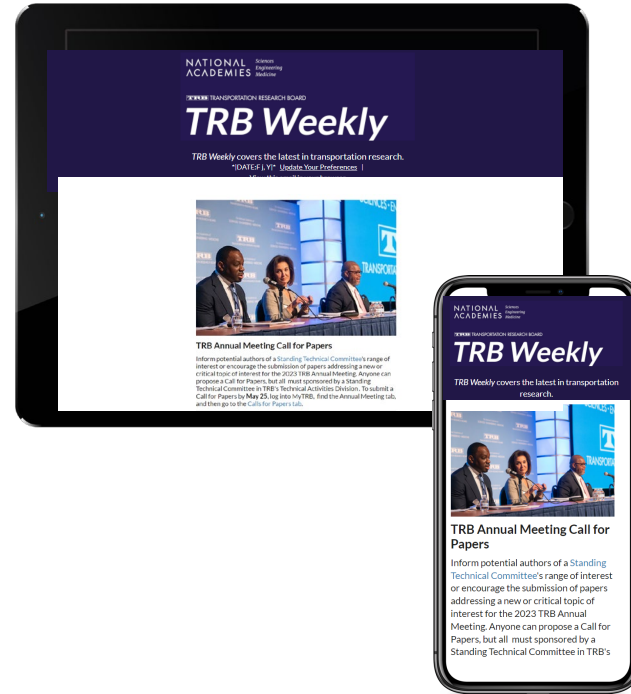


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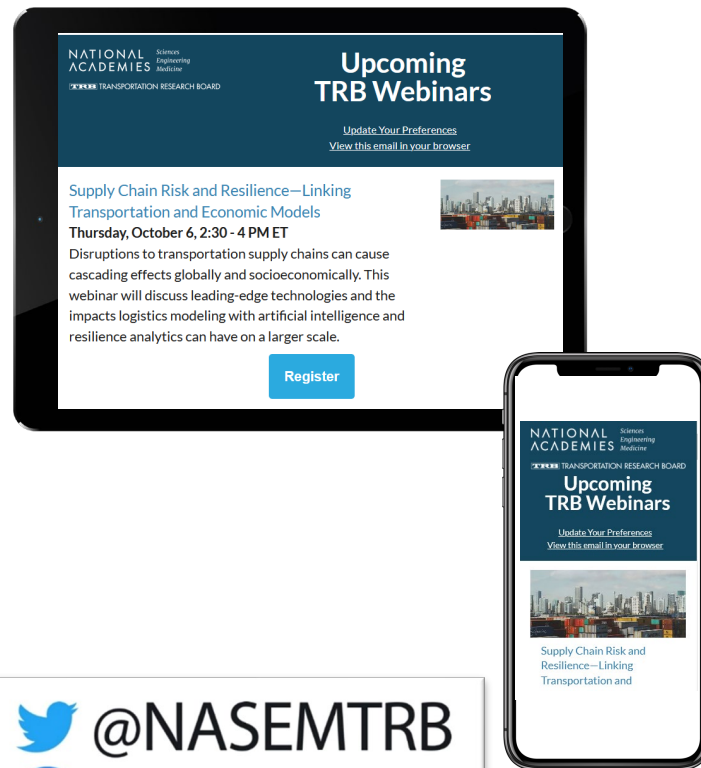
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Get involved

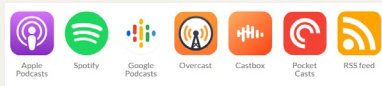
<https://www.nationalacademies.org/trb/get-involved>

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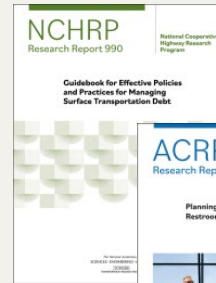
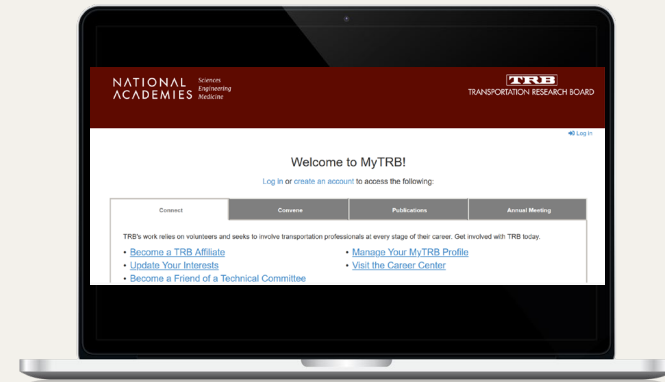
Network and pursue a path to Standing Committee membership

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- **Listen to our podcast**



<https://www.nationalacademies.org/podcasts/trb>



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