# Rail Transit Roadway Worker Protection Rule: Training and Qualification Program Industry Practices

10/8/2025



# **Purpose and Agenda**



Purpose: To discuss 49 Code of Federal Regulations (CFR) Part 671 (the Rail Transit Roadway Worker Protection (RWP) rule) Training and Qualification requirements and share industry practices

#### Webinar Agenda:

- Overview & RWP Timeline
- RWP Roles & Requirements
- Effective Training Strategies
- Training Delivery Strategies
- Safety Culture



## **Important Notes**

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Throughout the presentation, specific regulatory requirements will include a citation to the RWP final rule.

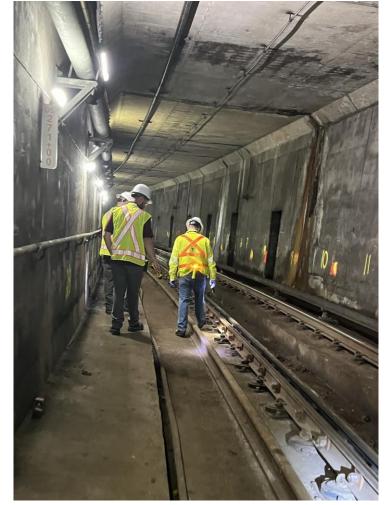
All additional information, including the examples, are intended to serve as technical assistance. Examples are intended to demonstrate how transit agencies may adopt the RWP requirements to unique operating environments.



#### What Is Part 671?

# Part 671 establishes minimum safety standards for rail transit RWP to:

- Ensure the safe operation of public transportation systems
- Prevent safety events, fatalities, and injuries to transit workers who access the roadway in performance of work



49 CFR part 671.3



# **To Whom Does Part 671 Apply?**

#### Part 671 applies to...



Rail transit agencies (RTAs) that receive Federal financial assistance authorized under 49 U.S.C. chapter 53



State Safety Oversight agencies (SSOAs) that oversee the safety of rail fixed guideway public transportation systems



Transit workers who access any rail fixed guideway public transportation system in the performance of work

#### Part 671 does not apply to:

Rail systems subject to the safety oversight of the Federal Railroad Administration (FRA)



# **RWP Key Requirements**

Develop and implement an RWP program, and receive SSOA approval

49 CFR part 671.11(a) & 671.25(a)

Must document RWP programs in a dedicated manual, which includes or incorporates a Track

Access Guide

49 CFR part 671.13(d)

Job Safety Briefings
49 CFR part 671.33



Prohibition of individual rail transit vehicle detection; implementation of risk-based redundant protections for workers

49 CFR part 671.21(a)(2) & 671.39

On-track safety and supervision requirements

49 CFR part 671.21(b) & 671.35(a)

Establishment of RWP training and qualification and RWP compliance monitoring activities

49 CFR part 671.41 & 671.43

Good-faith safety challenges and reporting unsafe acts and conditions and near-misses

49 CFR part 671.37 & 671.23(e)



# **Key Notes on Flexibility**

RWP plans should reflect the size and complexity of the rail transit system

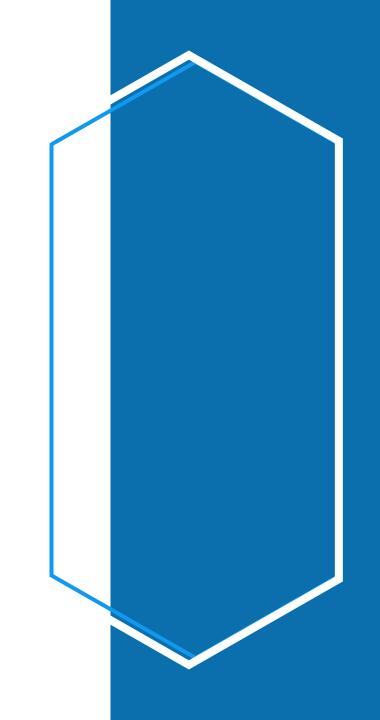
- 2 Agencies can build on or update existing RWP programs
- There are many acceptable approaches to meeting regulatory requirements
- SSOAs and RTAs can coordinate to identify creative solutions

### **Part 671 Compliance Timeline**

10/31/23 12/2/2024 12/2/2025 After SSOA approves RWP program Part 671 Part 671 effective Deadline for RTAs As necessary: published Starts clock on to establish an RTAs update the RWP manual and track access guide after any change that conflicts with these materials SSOA-approved SSOA-approved RWP program RWP program Quarterly: development RTAs report to their SSOA on compliance with and sufficiency of RWP program Annually: RTAs brief Accountable Executive and Board of Directors, or equivalent entity, on RWP program performance SSOAs audit RTA compliance with RWP program We are Within two years of initial approval and every two years thereafter: here RTAs review and update RWP manual, submit to SSOA for review and approval

# Part 671 Training Requirements





# **Training Role: Rail Transit Agency (RTA)**



Must establish procedures to ensure all transit workers who enter that track zone to perform work understand and are qualified in the RWP program 671.21(a)(7)



Must adopt an RWP Training Program 671.41(a)



Must review and update the training program at least every 2 years and must provide an opportunity for roadway worker involvement in the RWP training program review and update process 671.21(e)

# **Training Role: Transit Worker**



Must follow the requirements of the RTA's RWP program by position and labor category 671.23(a)



Roadway Workers in Charge must be qualified under the RTA's training and qualification program 671.31(a)(1)



Lone Workers must be qualified as both lone workers and Roadway Workers in Charge 671.35(a)(1)

# Training Role: State Safety Oversight Agency (SSOA)



Must conduct an annual audit which includes a review of training and qualification records for transit workers who enter the track zone to perform work 671.23(c)





# **Training Requirement Highlights**

The RWP training program must:

Address all workers responsible for on-track safety by position

Include initial and refresher training by position

Occur at least every 2 years

Be reviewed and updated every 2 years\*

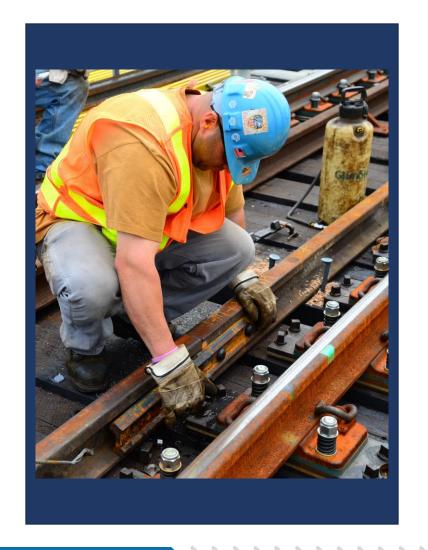
\*The RTA must provide an opportunity for roadway worker involvement in the RWP training program review and update process. § 671.41



# **Training Requirement Highlights §671.41(a)(2)**

The RWP training program must be completed **before** an RTA can assign a transit work to perform:

- Duties of a roadway worker
- To oversee or supervise access to the track zone from the operations control center
- To operate vehicles, on-track equipment and roadway maintenance machines on the rail transit system



# **Training Requirements: Structure**

#### ✓ Focus on Comprehension and Frequency

#### Required Criteria for Compliance:

- ✓ Provide interaction and opportunities to ask the RWP trainer questions and raise and discuss RWP issues.
- ✓ Include experience in a representative field setting.
- ✓ Include demonstrations and assessments to ensure the ability to comply with RWP instructions given by transit workers performing, or responsible for, ontrack safety and RWP functions.

Gagné, R. M., Wager, W. W., Golas, K., Keller, J. M. (2005). Principles of Instructional Design. United Kingdom: Thomson/Wadsworth.

§ 671.41(b)



# **Training Requirements: Minimum Contents**

- √ Focus on Empowerment
- How to challenge and refuse assignments in good faith
- How to report unsafe acts, conditions and near misses



# **Training Requirements: Minimum Contents**

#### √ Focus on Roles and Responsibilities

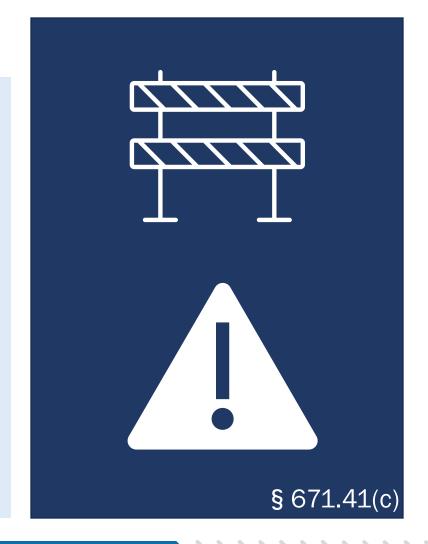


- How to use and interpret the RWP manual
- The functions and responsibilities of all transit workers involved in on-track safety, by position
- Rules and procedures for redundant protections identified under § 671.39 and how they are applied to RWP
- Requirements for safely crossing rail transit tracks in yards and on the mainline

# **Training Requirements: Minimum Contents**

#### √ Focus on Awareness

- Recognition of the track zone and understanding of the space around tracks within which on-track safety is required, including use of the track access guide
- Proper compliance with on-track safety instructions from workers who are responsible for on track safety
- Signals and directions from watchpersons, and procedures related to rail transit vehicle approach warnings from a watchperson
- Hazards associated with working on or near rail transit tracks (to include traction power)





# **Training Requirements: Additional Certifications**

#### √ Focus on Critical Positions

The RWP training program must include additional training for watchpersons, flag persons, lone workers, roadway workers in charge, and other transit workers with responsibilities for establishing, supervising, and monitoring on-track safety.

- (1) This training must cover **additional RWP program requirements** carried out by these positions and address the relevant physical characteristics of the RTA's system.
- (2) This training must include **demonstrations and assessments** to confirm the transit worker's ability to perform these responsibilities.
- (3) Refresher training on additional responsibilities for on-track safety, by position, must occur every two years at a minimum.

§ 671.41(d)



# **Training Requirements: Trainers**

#### √ Focus on Trainers

RTAs must ensure that transit workers providing RWP training are qualified and have active RWP certification at the RTA, and must consider:

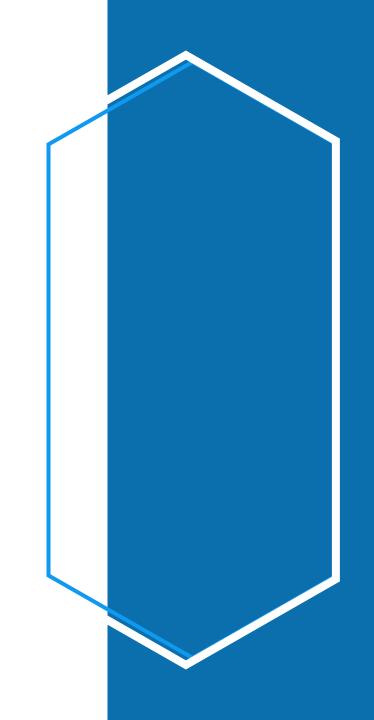
- (1) A trainer's **experience/ knowledge** of effective training techniques in the chosen learning environment
- (2) A trainer's experience with the RTA RWP program
- (3) A trainer's knowledge of the RTA RWP rules, operations, and operating environment
- (4) A trainer's knowledge of the training requirements specified in this part





# **Industry Practices for Training**





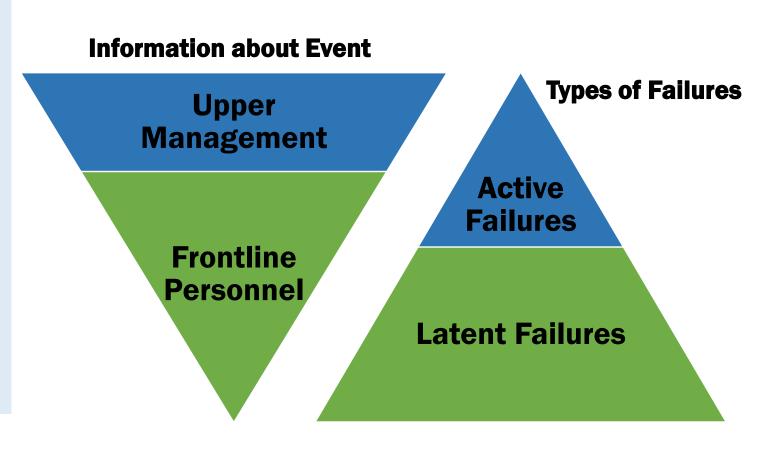
# **Understanding Safety Culture: Foundation for SMS & Training**

- What is Safety Culture?
- Why is Safety Culture important for organizations transitioning to SMS and conducting training?
- Building a positive safety culture is critical for adopting SMS and successfully training transit workers, ensuring safer workplaces and reducing incidents.



# **Building Safety Culture**

- Active Failures: errors or violations committed by individuals (e.g., pilots, nurses, operators) during their daily tasks.
- Latent Failures: conditions or weaknesses within the system that can remain hidden for extended periods, often contributing to active failures.



Reason J (2000). Human error: Models and management. The BMJ, 320(7237), 768–770.



# **Building a Safety Culture**

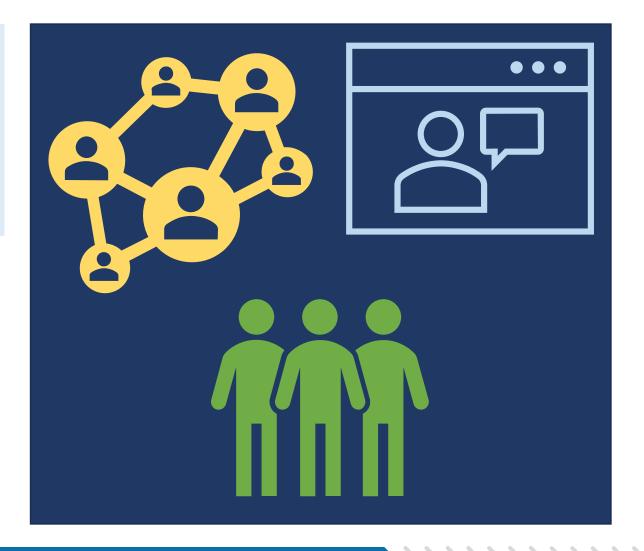


Reason, J. (1998). Achieving a safe culture: Theory and practice. Work & Stress, 12(3), 293–306.



## **Resources for Training Delivery**

- Your <u>State Safety Oversight Agency</u>
- Industry Associations
- Peer Rail Transit Agencies
- FTA Website



# **Training Delivery**

- Hearing, Seeing, and Doing are all important aspects of effective training
- The closer to the training environment is to the on-the-job environment the better
- The intent of FTA's requirement that initial training include experience in a "representative field setting" is to provide practical experience in environments similar to actual work conditions.

Trends and Issues in Instructional Design and Technology. (2024). United Kingdom: Taylor & Francis.

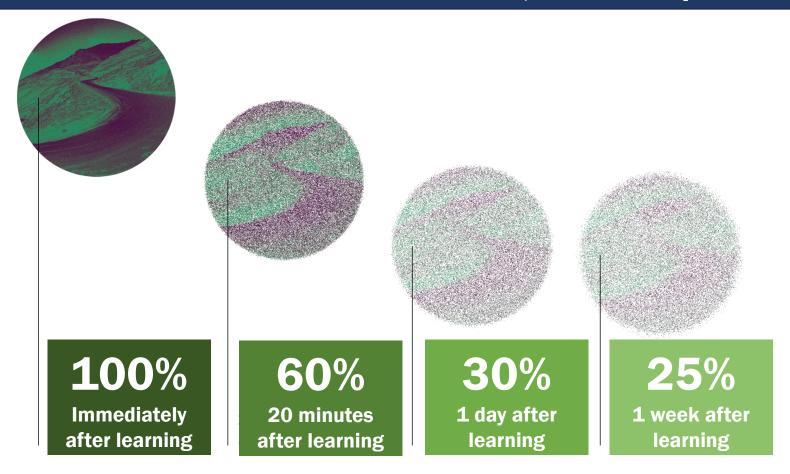


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### **Overcoming Retention Loss**

#### Retention of new information over time, without repetition



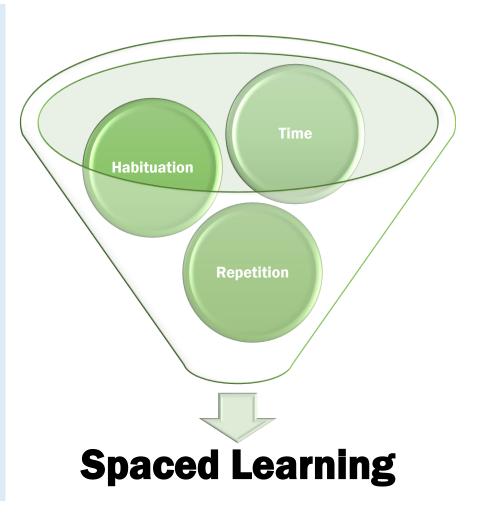
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# **Overcoming Retention Loss**

- Habituation
  - White Noise
- Repetition
  - Make sure it is strengthening the choices you want
  - Avoid exact repetition
- Spaced Learning distributing exposure to info at intervals over time

Dirksen, J. (2012). Design for how People Learn. Thailand: New Riders.





# **Support Deficits and Practical Drift**

**Lack of Support** 

- Engage Leadership
- Involvement and Ownership

**Practical Drift** 

Continuous Improvement



## **Region/Location-Specific Challenges**

"Why are we doing this?"

**Motivation** 

**Environment** 

"That wont work here!"

"Just another thing we're forced to do.."

Communication

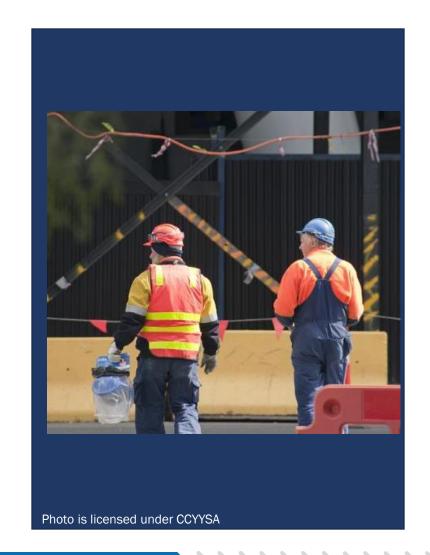
Dirksen, J. (2012). Design for how People Learn. Thailand: New Riders.



# **Leveraging Change through the Frontline**

#### Peer Instruction and Role Modeling

- Use experienced workers to demonstrate procedures
- Pair trainees for peer-to-peer teaching and feedback
- Facilitate open discussions on past safety experiences



Reference: Black, P., & Wiliam, D. (1998). Assessment and classroom learning. Assessment in Education: Principles, Policy & Practice, 5(1), 7–74.



#### **Evaluation & Feedback**

- Use short surveys and reflections after each module
- Provide real-time feedback during drills and practice
- Adjust training based on participant performance



Reference: Black, P., & Wiliam, D. (1998). Assessment and classroom learning. Assessment in Education: Principles, Policy & Practice, 5(1), 7–74.



# Question and Answer



#### Questions welcome via the chat

If we do not have the opportunity to respond to your question today, we will process remaining applicable questions after the webinar.

You can also email <u>FTASystemSafety@dot.gov</u> with further questions.



# Thank you!

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