



APTA RT-OP-RP-028-21

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Operating Practices Working Group

# Managing Short- and Long-Term Changes Affecting Rail Operations

**Abstract:** This recommended practice provides guidance to rail transit agencies (RTAs) for the creation of processes that help ensure that changes to rail transit infrastructure, environment, operating practices or other elements are appropriately managed and communicated to affected rail operations employees.

**Keywords:** change, change control board, change management, management of change, operations, rail transit

**Summary:** Changes to RTAs come in many forms, and changes to infrastructure, vehicles, operating practices or other aspects of the rail operation have an impact on operator roles and responsibilities. The RTA should have processes in place to monitor changes; assess their impacts; document any changes to existing rules, procedures or other governing documents; and communicate them to all affected employees. This is necessary to ensure that impacts on operating practices are properly assessed and that new hazards are not introduced when a change is made. This document encourages RTAs to also evaluate real or potential hazards that could be further mitigated and/or eliminated by the proposed changes.

**Scope and purpose:** This RP focuses on managing changes affecting rail operations; under 49 CFR Part 673.27(c), the Federal Transit Administration (FTA) requires RTAs to develop formal management of change programs to assure the safety of the systems. This recommended practice covers all rail operations employees with knowledge of the RTA configuration and operating requirements, as well as the individuals responsible for ensuring that changes are properly assessed, managed and communicated to affected parties. It does not address change management; instead, its focus is on the appropriate management of various changes affecting rail operating practices. This document is intended to help RTAs establish a program or process, or to link existing processes, in a way such that changes are managed effectively and that the risk of errors due to a lack of knowledge of a change is minimized.

This document represents a common viewpoint of those parties concerned with its provisions, namely transit operating/planning agencies, manufacturers, consultants, engineers, and general interest groups. The application of any recommended practices or guidelines contained herein is voluntary. APTA standards are mandatory to the extent incorporated by an applicable statute or regulation. In some cases, federal and/or state regulations govern portions of a transit system's operations. In cases where this is a conflict or contradiction between an applicable law or regulation and this document, consult with a legal advisor to determine which document takes precedence

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## Introduction

This document provides guidance to RTAs to establish programs or processes to guide them in assessing the impacts of changes on rail operations, updating affected documentation and communicating changes to affected personnel. While many RTAs have processes in place—both formal and informal—to achieve this, this recommended practice serves as a baseline that RTAs may reference to ensure that they have considered a consistent set of factors in line with the rail transit industry and regulatory requirements and also that they have considered which if any of the processes for managing the change should be formalized.

This recommended practice offers guidance on how RTAs should ensure that all changes are assessed for their impacts on operating practices and that any changes to operating rules, procedures or practices are properly documented. It focuses on managing changes affecting rail operations; under 49 CFR Part 673.27(c), the FTA requires RTAs to develop formal management-of-change programs to ensure the safety of the systems.

APTA recommends the use of this document by:

- individuals or organizations that operate rail transit systems;
- individuals or organizations that contract with others for the operation of rail transit systems; and
- individuals or organizations that influence how rail transit systems are operated (including but not limited to consultants, designers and contractors).

# Managing Short- and Long-Term Changes Affecting Rail Operations

## 1. Rail operations infrastructure and operations changes

Rail transit agencies (RTAs) are dynamic organizations that undergo operational and systematic changes. When changes occur, it is critical that the RTA properly assess, manage, monitor, document and communicate the change to ensure that rail operations and operating practices reflect the new configuration, requirement or other element that is different. The purpose for managing these changes in a consistent manner is to ensure that rail operations are performed in accordance with RTA requirements and that employees are prepared and qualified for the current configuration of the systems and current RTA requirements.

Changes affecting rail operations may have a safety impact. In accordance with 49 CFR Part 673.27(c), RTAs are required to enact formal management-of-change processes. While this recommended practice focuses on effects on operations, the process should be integrated with any RTA efforts separately developed for management of change in compliance with the federal requirement.

## 2. Policy/procedures

The RTA should establish a policy that describes how operational and systematic changes in the rail operating environment are assessed and managed, such that they are communicated to affected employees and incorporated into all applicable documentation. The policy should also address how changes and/or mitigations are assessed for potential impacts on operating practices, safety or other aspects of the rail operating environment. The policy should include guidance on how changes are communicated to employees both at the time of the change and longer term through employee training and qualification programs. The RTA may also develop complementary procedures or control forms to support the policy's requirements.

## 3. Examples of changes

Changes that should be communicated come as the result of various actions at an RTA, including, but not limited to the following:

- opening of a new rail line
- introduction of a new fleet or new equipment
- modification to the system infrastructure or equipment configuration or setup, including system modifications and field changes
- updates or changes to procedures/processes
- updates or changes to operating practices, schedules, etc.
- updates or changes to regulations
- changes resulting from an audit or investigation finding
- any other change that should be documented as determined by the RTA or regulatory authorities

## **4. Actions to take to support changes**

Changes often involve multiple factors. For example, new infrastructure may require changes to existing rules, procedures, training or other documents or actions of the RTA. Examples of rail operation instructions, documentation and other elements that may be affected by change and should be considered by the RTA for update may include, but are not limited to, the following:

- rulebook
- policy/procedure
- service plans/schedules/new service (e.g., extension)
- training
- physical elements on right-of-way (ROW), in stations or involving other rail infrastructure
- equipment configuration
- vehicle configuration
- maintenance practices and/or procedures
- technology (software/hardware)
- as-built drawings
- safety and security protocols

Other RTA considerations include the following:

- communication of temporary versus permanent information
- impacts changes have on staffing level requirements
- impacts changes have on staffing qualification requirements
- communication changes (e.g., ICS, communications practices, communications procedures)

## **5. Committee involvement for management of change**

The RTA should identify any type of committee involvement in management of change, which may be through an existing change control board or management-of-change committee, or as a change process established as a part of other RTA operating committees. RTAs should consider all types of changes in an organization, not just major changes handled by a change control board, and how they may be incorporated into different committees or working groups.

Any committees involved in managing changes should have consistent means of administration and documentation, including but not limited to agendas, minutes, sign-in sheets and a participant list.

For an RTA with a management-of-change committee, it should include a designated subject matter expert in rail operations whose objective is to determine if the changes affect any rules, policies or procedures, and other potentially impacted areas outlined in Section 4 of this recommended practice.

The management-of-change committee meeting materials should include consistent documentation of all changes made at the RTA, as well as changes to the affected rules, policies and procedures.

## **6. Responsibilities for identifying and communicating change**

The RTA should identify who is responsible for different aspects of assessing, managing, monitoring, documenting and communicating change to appropriate stakeholders, departments and affected employees. Responsibilities may rest on individual positions and/or committees. The RTA should identify its requirements for all impacted employee acknowledgment of changes.

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The RTA should ensure that processes are in place and documented so that existing rules, procedures, work instructions or other documents are fully updated and distributed across the RTA, with out-of-date materials archived and replaced in accordance with the RTA's document retention policy.

The RTA should ensure that processes exist for managing temporary changes and ensure that any impacts on approved, current documents are accounted for.

## **7. Change communication process**

The change communication process should be such that it ensures that the employees understand the change and the areas impacted by the change.

The RTA should identify requirements that may be established for employees receiving information about change. Requirements for distribution may include some or all of the following:

- signed acknowledgment of receipt and understanding
- electronic acknowledgment
- posting on bulletin board
- posting on RTA intranet site
- verbal instruction/communication and acknowledgment
- internally generated documents (e.g., train orders, general notices, bulletins)

The RTA should identify requirements that may be established in relation to external communications needs.

## **8. Hazard management**

The RTA should identify how changes are incorporated into the hazard assessment/management process for potential changes in risk profile (safety risk management).

The RTA should identify how the safety department is incorporated into rail operations change assessments that raise potential hazards.

## **9. Employee suggestions**

Any employee suggestion processes at the RTA should be integrated into the management-of-change process. In order to encourage employee engagement and sharing of ideas, any changes implemented as a result of an employee suggestion should be identified as such when changes are communicated throughout the RTA.

## **10. Training**

The RTA should ensure that all changes are evaluated for impacts on existing training curricula and materials and that individuals responsible for developing and delivering training are appropriately engaged in the management-of-change process. The RTA should have a process for ensuring that all training materials are updated to reflect the changes and are communicated to both new and existing employees who are affected by the changes.

## **11. Recordkeeping**

The RTA should establish a process to consistently track changes and document that changes are completely communicated to all required employees and that changes are incorporated into all necessary documentation. (For example, RTAs may use templates, forms or checklists to manage the process.)



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The RTA should establish a process to ensure that all information is appropriately updated or replaced, whether it is electronic or print.

## **12. Community outreach and stakeholder notification**

The RTA should identify how changes to rail operations may have impacts on patrons and/or the general public. Examples of changes that may require notification of outside parties include but are not limited to the following:

- road users at grade crossings
- berthing point changes affecting boarding areas
- ADA community needs
- system changes

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## References

Code of Federal Regulations, 49 CFR Parts 673 and 674

## Definitions

**change management:** A collective term for all approaches to prepare, support and help individuals, teams and organizations in making organizational changes.

**management of change:** A best practice used to ensure that safety, health and environmental risks and hazards are properly controlled when an organization makes changes to its facilities, operations or personnel.

## Abbreviations and acronyms

<b>APTA</b>	American Public Transportation Association
<b>FTA</b>	Federal Transit Administration
<b>ICS</b>	industrial control system
<b>NATSA</b>	North American Transportation Services Association
<b>ROW</b>	right-of-way
<b>PTASP</b>	public transportation agency safety plan
<b>RTA</b>	rail transit agency
<b>SMS</b>	safety management system

## Summary of document changes

### Document history

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First published	April 18, 2021	July 9, 2021	August 3, 2021	Sept. 9, 2021	Sept. 28, 2021
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