FTA

2019 Joint SSO and RTA Workshop

Risk-Based Inspection Program

Office of Transit Safety and Oversight
Federal Transit Administration

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U.S. Department of Transportation
**Federal Transit Administration**

Overview

- This presentation will present the 5 key activities that FTA recommends for developing a risk-based inspection program

- Recommendations will be presented for each activity

- Examples will be provided throughout the presentation to add context

- Questions and Comments will be taken following the presentation

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Risk-Based Inspection Program Overview

- Risk-based inspection (RBI) programs efficiently use limited inspection resources to maximize safety impact by identifying areas of higher safety risk and targeting inspections in these areas

  - Unlike frequency-based programs, RBI programs use qualitative **and** quantitative data sources to identify higher risk elements, activities, or processes

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Risk-Based Inspection Program Benefits

- Increased oversight of corrective action plan (CAP), Hazard, and Investigation programs

- Direct interaction with RTA front-line personnel

- Increased context on RTA safety issues

- Greater exposure to RTA policies and their implementation

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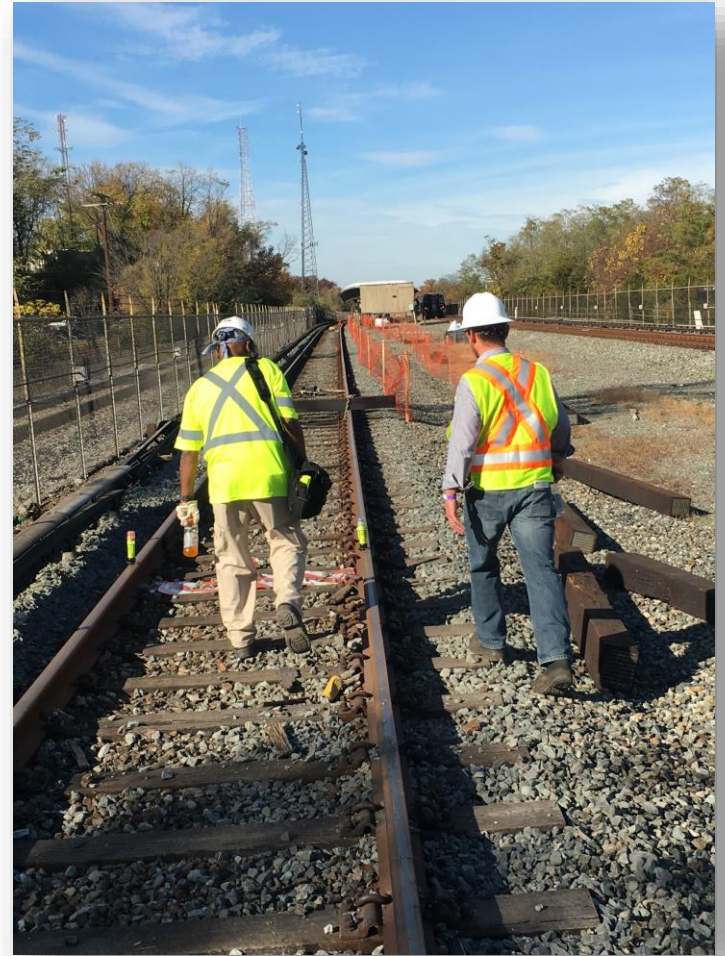
Elements of an RBI Program

1	Establishing Inspection Authority
2	Establishing a Risk-Based Inspection Program
3	Data Sources
4	Assessing Risk
5	Coordinating with the RTA

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Element 1

1 Establishing Inspection Authority

2 Establishing a Risk-Based Inspection Program

3 Data Sources

4 Assessing Risk

5 Coordinating with the RTA

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Establishing Inspection Authority

- States have primary and plenary responsibility for overseeing transit safety under the 49 U.S.C. § 5329(e)

- 49 C.F.R. § 674.37(a), states that the SSOA may, "monitor the RTA's progress in carrying out the CAP through unannounced, on-site inspections."

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Establishing Inspection Authority

- Review existing authorities to determine whether the Program Standard includes applicable inspection authority(ies)

- Consider how the Program Standard could establish specific requirements and expectations for RTA assistance and/or cooperation with inspection activities as necessary and appropriate

1 Establishing Inspection Authority

Establishing Inspection Authority

- Consider how the Program Standard could establish requirements for RTA response to remedial actions, including timeframe and documentation

- Consider how the Program Standard could establish a procedure for RBIs to include the specific data sources giving rise to the inspection

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Element 2

1	Establishing Inspection Authority
2	**Establishing a Risk-Based Inspection Program**
3	Data Sources
4	Assessing Risk
5	Coordinating with the RTA

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Establishing an RBI Program

- Consider establishing a set of goals for the RBI program:

  – Identify the resources required to achieve those goals

  – Identify types of inspections that help monitor and meet those goals

- Consider developing procedures for conducting RBIs

- Consider developing an inspection form and data management system to document and track inspection results

2 Establishing an RBI Program

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Recommendations

- Consider establishing a set of goals for the SSOA RBI program that encompasses each technical discipline at the RTA

- Consider leveraging other State inspectors, such as state railroad or Occupational Safety and Health Administration inspectors

- Consider using the Technical Training Plan as a tool to support inspectors' professional development and to ensure that they remain up-to-date on RTA policies and procedures

2 Establishing an RBI Program

Recommendations

- Consider utilizing formal and informal training opportunities at the RTA.

- Consider focusing the inspection report on objective measurements and cite specific rules, procedures, or standards as appropriate.

2 Establishing an RBI Program

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Element 3

1	Establishing Inspection Authority

2	Establishing a Risk-Based Inspection Program

3	Data Sources

4	Assessing Risk

5	Coordinating with the RTA

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Data Sources

- Some data sources for risk assessments:

    1. RTA reporting to the SSOA, including details on events, CAPs, and hazards

    2. RTA reporting to the National Transit Database (NTD), including service, financial, asset inventory, and event data

    3. RTA data systems, including internal data such as inspection and maintenance records, event investigations, and CAP and hazard tracking

- SSOA may identify additional data sources

3 Data Sources

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Recommendations

- Consider expanding SSOA requirements for RTA reporting on elements of the SSO Annual Report

- Consider leveraging existing NTD data

- Consider utilizing existing RTA data in the SSOA RBI program

3 Data Sources

Element 4

1	Establishing Inspection Authority
2	Establishing a Risk-Based Inspection Program
3	Data Sources
4	**Assessing Risk**
5	Coordinating with the RTA

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Assessing Risk

- Using data gathered in Element 3, the SSOA can develop risk metrics and determine the risk rating for system groups

  - Operations or maintenance items are divided into groups to compare risk, for example, track can be grouped into the segments between stations

  - Risk metrics do not have to be the same for each group

  - Determining a risk rating for each group allows the SSOA to compare groups and determine the highest risk

4 Assessing Risk

Recommendation

- Consider establishing metrics for assessing risk with normalized data

4 Assessing Risk

Element 5

1	Establishing Inspection Authority
2	Establishing a Risk-Based Inspection Program
3	Data Sources
4	Assessing Risk
5	Coordinating with the RTA

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Coordinating with the RTA

- Consider socializing its established RBI program with the RTA

- Consider designating a single point of contact at the SSOA and RTA to coordinate activities and resolve any potential disputes

- Consider document requirements and expectations for safe and consistent access to RTA property and data systems

- Consider sharing inspection reports which document any identified defects, including photographs or other visual evidence, and how remedial actions should be resolved

5 Coordinating with the RTA

Recommendations

- Consider developing and executing a memorandum of understanding or similar document outlining the SSOA's and RTA's commitments and acknowledging the SSOA's access rights

- Consider maintaining consistent access to RTA data systems including remote login capabilities to relevant databases and/or filing systems

- Consider requiring SSOA inspectors to complete the highest level of roadway worker protection training offered at any RTA they may inspect prior to accessing the roadway

5 Coordinating with the RTA

Recommendations

- Consider requiring SSOA inspectors to access the roadway with an RTA escort and subject matter expert for the relevant discipline, as appropriate

- Consider establishing expectations for RTA response to inspection reports

5 Coordinating with the RTA

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Questions?

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