



**Ohio Department of Transportation (ODOT)  
Rail Transit State Safety Oversight (SSO) Program**

**Safety Program Oversight – Training Plan**

**Office of Transit  
1980 West Broad Street  
Columbus, Ohio 43223**

**February 5, 2019  
Revision 7**

## Revision Log

Revision	Changes Made	Date
0	Initial release	8/31/2015
1	Minor revisions to Office of Transit staff information Added planned TSI training for contractor staff	10/14/2015
2	FTA needed an indication for each training category as to the SSOA staff status regarding each required competency (Completed, Planning, or Not Completed). Redundant information was provided within the training category listing, as requested. Resubmitted plan to FTA.	12/3/2015
3	Added NPRM for Part 672 Updated B. Kummerer becoming SSO program manager Revised training completed and planned Added details from GCRTA for SSO awareness training/TTP	5/13/2016
4	Minor revisions to reflect changes in training program Updates to training completed and planned	8/30/2016
5	Clarifications for FTA TSO review of Version 2. Added a description of an apprentice approach for SSOA staff. Also, addressing the use of equivalency in the curriculum as succession planning for the SSOA.	10/28/2016
6	Updates to training completed by the team and overall review of content. Added completion of the GCRTA TTP and material used for that training. Updated Appendix C to final outline for GCRTA TTP training.	3/13/2017
7	Updates to incorporate the final regulation Part 672, convert to the new SSO program manager, and update training records and plans	2/5/2019

## **Introduction**

This safety program oversight training plan applies to the Ohio Department of Transportation (ODOT) state safety oversight (SSO) program staff, including contractor staff. The requirements for this training plan are from the Federal Transit Administration's (FTA) Public Transportation Safety Certification Training Program, 49 CFR Part 672. This safety program oversight training plan addresses both an FTA required curriculum that includes transit-specific safety management system (SMS) awareness training and the Transit Safety and Security Program (TSSP) certificate program from the Transportation Safety Institute (TSI) as well as a Technical Training Plan (TTP) for awareness and understanding of each rail transit agency's (RTA) rail systems. For new safety oversight staff members, this training activity is to be accomplished in three years. All safety oversight staff members will receive biennial refresher training.

This safety program oversight training activity has been added to the ODOT SSO Program Rail Transit State Safety Oversight Program Standard (SSOPS) as Appendix C with procedures, tracking forms, and record-keeping forms to be used with this training activity. The TTP described in this plan focuses only on the Greater Cleveland Regional Transit Authority (GCRTA) rail systems, and does not currently cover the Southwest Ohio Regional Transit Authority (SORTA) and City of Cincinnati Streetcar operation. Additional TTP information that addresses the rail system in Cincinnati will be added to this plan once the available training becomes clear.

Both GCRTA and SORTA safety departments have started the required training for their appropriate staff (those who are directly responsible for safety oversight). The ODOT SSO Program will continue to monitor their progress at completing the FTA-required training (the SMS awareness and TSSP certificate program

This training plan provides a summary of the FTA training requirements for SSO agency staff, qualifications for ODOT SSO program staff (including contractor staff), a description of the current program staff focused on education and experience, a description of the training schedule and tracking of planned and completed training by person, and the planned approach to collecting training records, tracking progress, and any emerging needs for additional training and timing for refresher training.

## **SSO Program Oversight – Training Requirements**

The mandatory requirements of Part 672 apply to State Safety Oversight Agency (SSOA) personnel and contractors that conduct safety audits and examinations at RTAs not subject to regulations from the Federal Railroad Administration (FRA). This training includes FTA's transit-specific SMS and the TSSP certificate program. As already mentioned, this training is also required for RTA safety staff who are directly responsible for safety oversight. The FTA requirements for the Public Transportation Safety Certification Training Program are shown in the following text box.

**FTA Public Transportation Safety Certification Training Program Required Curriculum, Appendix A from Part 672**

FTA/SSOA personnel and contractor support, and rail transit agency personnel with direct responsibility for safety oversight of rail transit systems not subject to FRA regulation:

- One (1) hour course on SMS Awareness – e-learning delivery (all required participants)
- Two (2) hour course on Safety Assurance – e-learning delivery (all required participants)
- SMS Principles for Rail Transit (2-days – all required participants)
- SMS Principles for SSO Programs (2 days – FTA/SSOA/contractors)
- Revised TSSP with SMS Principles Integration (17.5 days for all other covered personnel)
  - Rail System Safety
  - Effectively Managing Transit Emergencies
  - Transit System Security (no longer required/optional)
  - Rail Incident Investigation

The FTA has further required that the SSOAs develop a TTP for designated personnel (including contractor personnel) who perform safety audits and examinations. This ODOT SSO program specific plan addresses the required GCRTA TTP submission to FTA for the ODOT SSO Program. FTA has provided the minimum requirements for the TTP as shown in the following text box.

**Technical Training Plan (TTP) Required Training Content, Appendix A from Part 672**

The TTP must describe the process for receiving technical training from the RTAs in the following competency areas appropriate for the specific rail transit systems for which safety audits and examinations are conducted:

- Agency organizational structure
- System Safety Program Plan and Security Program Plan
- Knowledge of agency
- Territory and revenue service schedules
- Current bulletins, general orders, and other associated directives that ensure safe operations
- Operations and maintenance rule books
- Safety rules
- Standard Operating Procedures (SOPs)
- Roadway [Right-of-Way] Worker Protection (RWP)
- Employee Hours of Service and Fatigue Management program
- Employee Observation and Testing Program (Efficiency Testing)
- Employee training and certification requirements
- Vehicle inspection and maintenance programs, schedules and records
- Track inspection and maintenance programs, schedules and records
- Tunnels, bridges, and other structures inspection and maintenance programs, schedules and records
- Traction power (substations, overhead catenary system, and third rail), load dispatching, inspection and maintenance programs, schedules and records
- Signal and train control inspection and maintenance programs, schedules and records

FTA provides additional requirements for the development and process to be implemented as part of TTPs and shown in the following text box.

**Technical Training Plan (TTP) Required Process, Appendix A from Part 672**

The SSOA will determine the length of time for the technical training based on the skill level of the covered personnel relative to the applicable RTA(s). Each SSOA TTP that is submitted to FTA for review will require covered personnel to successfully:

- Complete training that covers the skills and knowledge the covered personnel will need to effectively perform his or her tasks.
- Pass a written and/or oral examination covering the skills and knowledge required for the covered personnel to effectively perform his or her tasks.
- Demonstrate hands-on capability to perform his or her tasks to the satisfaction of the appropriate SSOA supervisor or designated instructor.
- Establish equivalencies or written and oral examinations to allow covered personnel to demonstrate that they possess the skill and qualification required to perform their tasks.
- Require biennial refresher training to maintain technical skills and abilities which includes classroom and hands-on training, as well as testing. Observation and evaluation of actual performance of duties may be used to meet the hands-on portion of this requirement, provided that such testing is documented.
- Require that training records be maintained to demonstrate the current qualification status of covered personnel assigned to carry out the oversight program. Records may be maintained either electronically or in writing and must be provided to FTA upon request.
- Ensure the qualification of contractors performing oversight activities. SSOAs may use demonstrations, previous training and education, and written and oral examinations to determine if contractors possess the skill and qualification required to perform their tasks.
- Periodically assess the effectiveness of the technical training. One method of validation and assessment could be through the use of efficiency tests or periodic review of employee performance.

In addition to the FTA requirements for SMS, TSSP certificate, and TTP training activities, the ODOT SSO program has determined that awareness training is also required for ODOT management and program staff. This training will provide an overview of the customized implementation of SSO for ODOT and the Ohio RTAs. A self-paced training document is envisioned (1 hour) and will be developed as part of this training activity.

### **Specific Overview of ODOT SSO Program**

- ODOT and Office of Transit, including organization charts
- Overview of ODOT Transit Responsibilities and Activities
- ODOT SSO Program design, including staff and contractors
- Ohio RTAs, Summary of rail systems
- SSOPS, including procedures and training activity
- Programmatic interactions with RTAs – roles and responsibilities, notifications, investigations, audits, communications, meetings, safety and security certification, and configuration management/system modification.
- Risk monitoring activities, including audits and inspections, and interactions with the Ohio RTAs for these activities
- FTA Required Activities, such as data and information submission

After the initial three-year implementation period is completed along with the required training, this ODOT SSO program specific training will be expanded and used to address the every 2 years refresher training requirement from FTA.

## General Qualifications for ODOT SSO Program Staff

The following description of general staff qualifications is provided here as the context for the ODOT SSO program staff qualifications and presented from general to specific -- Knowledge of and experience with:

- **Transit** – this category includes transit agencies, modes, and a broad understanding of how transit agencies are organized, managed, and operated as well as general knowledge of transit industry issues and current events. This category also includes FTA/Federal Highway Administration (FHWA), state, and metropolitan planning organization (MPO) roles in transit planning and grant funding.
- **Rail Transit Systems** – this category includes rail transit infrastructure, equipment, support facilities, variety of implementation, operations/command and control, maintenance (older and newer rail transit systems), and advanced technologies – automatic train control (ATC) and communication-based train control (CBTC). This category also includes an understanding of the differences with rail transit versus commuter rail/railroading requirements.
- **RTA All-hazards Programs** – this category is focused on the programmatic design for the safety and security programs in the rail transit environment including the system safety program plan (SSPP), system security plan (SSP), and emergency operations plan (EOP). This category also includes a transit-specific safety management system (SMS) and analysis tools such as hazard analysis and hazard management used for safety risk monitoring, assessment, and management.
- **SSO Program** – this category includes the national/FTA-level and state-level SSO programmatic requirements as well as the various state-level oversight implementations and processes, including FTA guidance and state-level program standards. This also includes required interactions between FTA (Safety and Oversight, Engineering/Projects, and Regional Offices), SSOAs, and RTAs. In addition, this category includes the evolving SSO program requirements and evolving expectations.
- **Implementation of the RTA Safety Program** – this category includes a detailed understanding of the safety program at each RTA, minimum standards for safety, interactions with safety, security, engineering, rail operations, command and control, rail maintenance, and management for oversight monitoring of risk assessment and management.
- **Detailed RTA Risk Environment** – this category is from a safety oversight perspective and includes event investigations, audits, mitigations/corrective action plans (CAPs), prioritization of resources, database of CAPs and risk-based, data-driven analyses. This category also includes assuring, from the safety oversight perspective, that known or observed risk and potential risk are appropriately controlled/mitigated and that those controls/mitigations are actually working at the RTAs. In addition, this category includes an understanding of the general safety culture and state of good repair at each RTA.

## Current ODOT SSO Program Staff

Based on the size and complexity of the two rail transit systems in the state of Ohio, the ODOT SSO program has been fully funded to a level that is between two and three full time equivalent (FTEs) employees (plus travel and expenses), with approximately two of those FTEs being provided by a contractor that performs as extended and expert (safety and rail transit) staff to ODOT. Currently, this program includes three ODOT staff members and three contractor staff from Vital Assurance Ltd. The ODOT staff include two staff members that are a part of the management for the Office of Transit. The third ODOT staff member is the SSO program manager (Ms. Jessyca Hates).

FTA's safety certification training requirements have been fully addressed within the ODOT SSO program. In order for ODOT SSO program staff to be fully qualified for all aspects of the program, they must complete the FTA required safety certification training (SMS and TSSP) and the TTP requirements for each of the Ohio RTAs. **At this time, the experienced ODOT and contractor staff are deemed fully qualified ODOT SSO program staff members based on that experience.** However, completion of the safety-related training in this plan is required for all designated staff as soon as time and resources allow.

This section provides a description of each of these ODOT SSO program staff members including their education and experience in safety and transit, as well as whether or not they have been determined to be designated personnel for the program. Appendix A shows training tracking forms for each of the six ODOT SSO program staff members along with a schedule and training coursework completion information.

### *ODOT Office of Transit*

**Mr. Chuck Dyer**, Office Administrator

Education: B.S., Construction Systems Management, The Ohio State University, 2004

Role in ODOT SSO Program: Management

Designated Personnel (Yes/No)? No

Years of Experience

- Safety – 4 years
- Transit – 7 years
- Rail Transit – 4 years
- SSO – 4 years

Planned Training: Only awareness training for the ODOT SSO program and FTA's transit-specific SMS.



**Mr. Dave Seech**, Transit Manager

Education: B.A., Urban Design, The Ohio State University, 1988

M.A., The Ohio State University, 1991

M.C.R.P., The Ohio State University, 1991

Role in ODOT SSO Program: Management

Designated Personnel (Yes/No)?: No (Fully Qualified, based on experience)

Years of Experience

- Safety – 17 years
- Transit – 23 years
- Rail Transit – 17 years
- SSO – 17 years

Planned Training: Although currently not a designated person, all training will be pursued as time and resources allow. At a minimum, the training for the ODOT SSO program and FTA's transit-specific SMS courses will be completed. All GCRTA TTP requirements have already been met by on-the-job training (OJT) activities.

**Ms. Jessyca Hayes**, Safety Coordinator

Education: B.A., History, Valdosta State University, 2012

B.A., Dance, Valdosta State University, 2012

M.C.R.P., The Ohio State University, 2016

M.S.W. (pending), The Ohio State University, 2019

Role in ODOT SSO Program: SSO Program Manager

Designated Personnel (Yes/No)?: Yes (In Training/Apprentice)

Years of Experience

- Safety – 9 months
- Transit – 3 years
- Rail Transit – 9 months
- SSO – 9 months

Planned Training: All training will be pursued as quickly as time and resources allow.

***Contractor: Vital Assurance Ltd.***

**Mr. Kevin Chandler**, Senior Transportation Systems Engineer

Education: B.S. Electrical Engineering, The Ohio State University, 1991

Role in ODOT SSO Program: Technical Lead and Investigator

Designated Personnel (Yes/No)?: Yes (Fully Qualified, based on experience)

Years of Experience

- Safety – 28 years
- Transit – 27 years
- Rail Transit – 17 years
- SSO – 11 years

Planned Training: All training will be pursued as time and resources allow. All GCRTA TTP requirements have already been met by on-the-job training (OJT) activities.

**Mr. Donald Eldredge**, Senior Transportation Systems Engineer

Education: B.A., Experimental Psychology/Economics, Northeastern University

Role in ODOT SSO Program: Lead Investigator

Designated Personnel (Yes/No)?: Yes (Fully Qualified, based on experience)

Years of Experience

- Safety – 38 years
- Transit – 14 years
- Rail Transit – 14 years
- SSO – 11 years

Planned Training: All training will be pursued as time and resources allow. All GCRTA TTP requirements have already been met by on-the-job training (OJT) activities.

**Mr. Joshua Gearhardt**, Transportation Program Manager

Education: B.A., Political Science, Wabash College, 2001

M.B.A., Bluffton University, 2008

Role in ODOT SSO Program: Investigator

Designated Personnel (Yes/No)?: Yes (Fully Qualified, based on experience and completion of the TSSP)

Years of Experience

- Safety – 10 years
- Transit – 17 years
- Rail Transit – 10 years
- SSO – 10 years

Planned Training: Mr. Gearhardt already has the TSSP certificate and SMS awareness courses. All GCRTA TTP requirements have already been met by on-the-job training (OJT) activities.

## Training Records and Tracking

FTA's training program for SSOA staff also includes requirements for training records as part of this ODOT SSO program training activity, as shown in the following text box.

### **FTA Training Records Requirements, Appendix A from Part 672**

Training records must include the following information concerning each covered personnel:

- Name
- The title and date each training course was completed and the proficiency test score(s) where applicable
- The content of each training course successfully completed
- A description of the covered personnel's hands-on performance applying the skills and knowledge required to perform the tasks that the employee will be responsible for performing and the factual basis supporting the determination
- The tasks the covered personnel is deemed qualified to perform
- Provide the date that the covered personnel's status as qualified to perform the tasks expires, and the date in which biennial refresher training is due.

Appendix B includes training record forms that have been developed to match the competency areas described later in this document.

## **ODOT SSO Program Specific TTP with GCRTA**

The ODOT SSO program training competencies are presented here and addressed based on oversight of the RTA Safety Program. This TTP is focused on ODOT and contractor SSO staff that are responsible for safety oversight audits, examinations, and/or inspections at GCRTA – SSOA Covered Personnel. Note that similar technical training will be developed and added to this document for Cincinnati Streetcar after start of service.

**The current SSOA designated personnel are granted equivalency for all of the technical training competencies.** However, as training is developed for this effort, all covered personnel will be required to attend the training. All on-the-job training (OJT) and document review training will continue in order to assure that all current and new staff are up-to-date. New SSOA staff will start all training as soon as reasonably possible. The ODOT SSO program will follow a two-year apprentice approach to staff new to SSO and/or the ODOT SSO program. All new/apprentice SSOA covered staff will be required to complete two years of participation in the ODOT SSO program plus one triennial audit (this is the required OJT) along with the SMS, TSSP, and TTP training.

All non-qualified SSOA covered staff (according to this Training Plan) will be supervised by qualified SSOA staff. SSOA staff do not enter non-public RTA property unsupervised by RTA staff or without other SSOA staff, so inexperienced SSOA staff or external technical experts are not ever expected to be by themselves on non-public RTA property. In addition, all ODOT SSO program covered staff and external technical experts are expected to be qualified to the RTA Right-of-Way Worker Protection (RWP) program and supervised by RTA staff when on RTA property that needs assurance of following safety rules and right-of-way protection procedures.

FTA Office of Safety and Oversight (TSO) has indicated that an additional high priority is for this Training Plan/TTP scope to address the rail system expertise needed to perform independent investigations for all aspects of the rail operations and maintenance. This includes a focus on succession planning presuming that the ODOT SSO program may at some point need to develop expert staff for all rail safety oversight and investigation skills over again. This will be addressed in the “Equivalency” topic for each Competency Area described in this section.

In general, all rail system expertise for independent investigations are currently expected to be provided by the contractor staff, as described in the request for proposal (RFP) requirements. In addition, ODOT staff is working to develop an agreement, such as a memorandum of understanding (MOU), with existing state Federal Railroad Administration (FRA) track and rail system inspectors that are a part of the Public Utilities Commission of Ohio (PUCO). This planned agreement is intended to allow for use of these state FRA inspectors for the SSO program activities, as needed.

The ODOT SSO program staff will start the biennial refresher training process as soon as needed (planned by the end of 2018). Record-keeping for all SSOA training activities will start immediately. Note that Appendix A has a table for each ODOT SSO staff member that includes the required training, tracking of completion of that training, and the due/planned dates for completion of all required training.

## Summary of SSOA Staff Technical Training

All of the 19 competency areas have a program documentation and SOP portion that will be trained through review of that documentation and discussion with SSOA staff, which will be approved by SSOA senior staff. Some portions of this program documentation and SOP training will be completed in the field (on a train, at facilities, and/or on the ROW). As described below, competencies 5 through 9 and 18 are specifically addressed through use of a customized RTA rulebook training version with ROW access certification (at GCRTA, this is a 2-hour class). The competencies 11, 13 through 17 are planned to also be covered by customized awareness training provided by the appropriate GCRTA trainers. This training is planned as two 2-day classes at GCRTA to allow for interaction and question and answer time. The concern for this classwork is making all of the ODOT SSO program staff available to take this classwork in Cleveland. In addition, the Transportation Security Administration (TSA) at the Cleveland Airport have also indicated their interest in taking this classroom training. Appendix C provides the current outline of this GCRTA awareness training.

- **Competencies 1 through 4, 10 and 12** – these topics are awareness of this RTA’s documentation, safety program related documents, and the actual rail system. Training is completed through on-the-job training (OJT)/apprentice program working with more experienced SSOA staff and review of existing RTA safety and security program documentation.
- **Competencies 5 through 9 and 18** – these topics are focused on rulebook and a high-level review of this rail transit system related SOPs. Training is completed by an appropriate version of the RTA’s rulebook awareness training class. This specifically includes the RTA’s required ROW worker safety awareness training and certification to be safe on the ROW. However, for SSOA staff, all visits to the RTA ROW will be supervised by the appropriate RTA staff. This also includes a review of specific SOPs such as the Inspection and Maintenance (I&M) Manual, Integrated Communications Center (ICC) Train Control SOPs, Safety Rules, in addition to the Rail Operations Rulebook (RORB). Competency area 18 has been added to FTA’s required list so that command and control (dispatch) is included for control of operations and specifically for emergency operations leadership out on the rail system.
- **Competencies 11, 13 through 17** – these are topics specifically from the RTA’s SSPP, policies, and procedures (SOPs). Training is completed by review of the related RTA SSPP sections, policies, and procedures, as well as, a summary-level RTA awareness training course that covers all of these competency areas. Competency in these areas is also based on OJT/apprentice activities with other experienced SSOA and RTA staff over time.
- **Competency 19** – this is an emerging topic with the development of state of good repair and transit asset management. These topics are not owned by the RTA safety program, but are related and provide important information and tools for understanding the risk environment at the RTA. This topic has been added to the FTA required list of competencies. Training is completed with appropriate SSOA and RTA staff and a review of RTA documentation such as the RTA SSPP, configuration management plan, and/or asset management plan.

## 1. Rail Transit Agency (RTA) Organizational Structure

- **Requirement:** Maintain a working knowledge of the RTA organizational structure; Ability to determine if the organizational structure supports safety communication and the reporting and management of safety priorities and concerns; Ability to determine if a direct reporting relationship exists between Safety Director and CEO/GM.
- **Equivalency:** 2-years of experience at an SSOA; participation in conduct of review and approval of an RTA SSPP.
- **Training:** Review of current RTA SSPP document, specifically organization chart and description of RTA Safety Department roles and responsibilities, and GCRTA Rail SSPP Section 3.
- **Examination/Demonstration/Validation:** Follow-up discussion/review with SSOA supervisor or training instructor.
- **Refresher:** Biennial, Review current GCRTA Rail SSPP Section 3, **Validation:** Follow-up discussion/review with SSOA supervisor or training instructor.

## 2. RTA System Safety Program Plan

- **Requirement:** Maintain a working knowledge of the SSPP; Determine if it meets SSOA and federal requirements.
- **Equivalency:** TSI-TSSP and review of an RTA SSPP; TSI-Rail System Safety course and review of an RTA SSPP; 2 years of experience at an SSOA and participation in conduct of review and approval of an RTA SSPP, and participation in at least 1 three-year safety review of SSPP implementation at an RTA.
- **Training:** Review of a current RTA SSPP document, including review of current completed assessment checklist.
- **Examination/Demonstration/Validation:** Follow-up discussion/review with SSOA supervisor or training instructor.
- **Refresher:** Biennial, Review current RTA SSPP and completed checklist, **Validation:** Follow-up discussion/review with SSOA supervisor or training instructor.

## 3. RTA System Security Program Plan

- **Requirement:** Maintain a working knowledge of the RTA SSP; Determine if SSP meets SSOA and federal requirements. In addition, maintain a working knowledge of the RTA EOP or equivalent (may be part of the RTA SSP).
- **Equivalency:** TSI-TSSP and review of an RTA SSP; TSI-Rail System Security course and review of an RTA SSP; 2 years of experience at an SSOA and participation in conduct of review and approval of an RTA SSP, and participation in at least 1 three-year safety review of SSP implementation at an RTA.
- **Training:** Review of a current RTA SSP document, including review of current completed assessment checklist; and review of RTA EOP (if separate from the RTA SSP).

- **Examination/Demonstration/Validation:** Follow-up discussion/review with SSOA supervisor or training instructor.
- **Refresher:** Biennial, Review current RTA SSP and completed checklist, and RTA EOP, **Validation:** Follow-up discussion/review with SSOA supervisor or training instructor.

#### 4. Knowledge of Territory and Revenue Service Schedules

- **Requirement:** Maintain working knowledge of RTA territory (including lines, weekly service schedules, and facilities).
- **Equivalency:** Minimum 2 years of experience at this SSOA and line-by-line train ride with Operator, other RTA personnel (optional), and other SSOA staff.
- **Training:** Review of current RTA SSPP document, specifically GCRTA Rail SSPP Section 3 and GCRTA Rail System Map and Operations Supplement.
- **Examination/Demonstration/Validation:** Follow-up discussion/review with SSOA supervisor or training instructor.
- **Refresher:** Biennial, Review current RTA SSPP, specifically GCRTA Rail SSPP Section 3 and GCRTA Rail System Map and Operations Supplement, Annual line-by-line train ride, **Validation:** Follow-up discussion/review with SSOA supervisor or training instructor.

#### 5. Knowledge of Current Bulletins, General Orders, and Other Associated Directives that Ensure Safety of Operations

#### 6. Knowledge of Operations and Maintenance Rule Books

#### 7. Knowledge of Safety Rules

#### 8. Knowledge of Standard Operating Procedures

#### 9. Knowledge of Right-of-Way Worker Protection (RWP)

#### 18. Knowledge of Command and Control Approach and Implementation (SOPs)

- **Requirement:** Working knowledge of RTA bulletins, general orders and other directives; Understand how these documents relate to current rules; Ability to review bulletins, general orders and other directives and identify potential safety concerns; Ability to assess quality of rule books; Ability to observe practices and determine if practices are compliant with rule book; Ability to work in right-of-way (ROW) and observe if personnel are complying with RWP rules.
- **Equivalency:** Minimum 2 years SSOA experience and rulebook review with this RTA's Training; Engineering or related degree plus minimum of 1 year experience in successful review of this RTA's rulebook; Federal Railroad Administration (FRA) Certified Operating Practices Inspector.
- **Training:** RTA Rulebook awareness course for SSOA staff that includes perspective of all RTA staff and current RWP. Review of I&M Manual, ICC SOPs, Safety Rules, RORB, current bulletins and orders, Power & Way SOPs, and RWP.
- **Examination/Demonstration/Validation:** RTA Test for training awareness course; Follow-up discussion/review with SSOA supervisor or training instructor for various SOPs and rules.

- **Refresher:** Biennial, RTA Rulebook awareness course, Review of I&M Manual, ICC SOPs, Safety Rules, RORB, P&W SOPs, and RWP, **Validation:** RTA Test for training awareness course. Follow-up discussion/review with SSOA supervisor or training instructor for various SOPs and rules.

**Note:** SOPs for operations and maintenance are included here in general and covered in more detail by Rail department/group in Competencies 13-17.

## 10. Knowledge of Employee Hours of Service and Fatigue Management Program

- **Requirement:** Working knowledge of RTA hours of service rules and/or policies and fatigue management program; Ability to review worker schedules to determine compliance with rules or policies; Ability to analyze worker schedules during an incident or accident investigation.
- **Equivalency:** Minimum 2 years of SSOA experience plus review of this RTA's policies for hours of service and fatigue management ; Completion of Hours of Service and Fatigue Training Course offered or sponsored by FTA, National Transportation Safety Board (NTSB), FRA, University or other agency or association, as determined by SSOA; FRA Certified Operating Practices Inspector, Practices review.
- **Training:** Review of hours of service and fatigue management policy and discussion with rail management.
- **Examination/Demonstration/Validation:** Follow-up discussion/review with SSOA supervisor or training instructor.
- **Refresher:** Biennial, Review hours of service and fatigue management policy and discussion with rail management, **Validation:** Follow-up discussion/review with SSOA supervisor or training instructor.

## 11. Knowledge of Employee Observation and Testing Program [Efficiency Testing]

- **Requirement:** Working knowledge of RTA employee observation and training program; Ability to observe review and testing practices to determine if procedures are adequate to ensure safe and efficient operations; Ability to review employee efficiency testing records to determine compliance with procedures.
- **Equivalency:** Minimum of 2 years of SSOA experience plus observance of completed rules checks on train operators by this RTA's supervisor or instructor; Completion of FTA, FRA, University, or Association sponsored training course approved by SSOA; FRA Certified Operating Practices Inspector, Program review.
- **Training:** Review of current RTA SSPP document, specifically GCRTA Rail SSPP Section 13, and RTA/SSOA awareness training.
- **Examination/Demonstration/Validation:** Follow-up discussion/review with SSOA supervisor or training instructor and RTA/SSOA awareness training examination.
- **Refresher:** Biennial, Review RTA SSPP, specifically GCRTA Rail SSPP Section 13, and RTA/SSOA awareness training, **Validation:** Follow-up discussion/review with SSOA supervisor or training instructor and RTA/SSOA awareness training examination.



## 12. Knowledge of Employee Training and Certification Requirements

- **Requirement:** Working knowledge of the RTA employee training and certification requirements; Ability to review and assess employee training and certification program to ensure it meets the requirements of the RTA (and SSOA); Ability to assess employee training records to ensure training and certification program is being properly administered and documented.
- **Equivalency:** Minimum of 2 years of experience reviewing this RTA's training program and records or participation in 1 three-year review of this RTA's SSPP implementation; FRA Certified Operating Practices Inspector, Requirements review.
- **Training:** Review of current SSPP document, specifically GCRTA Rail SSPP Section 16.
- **Examination/Demonstration/Validation:** Follow-up discussion/review with SSOA supervisor or training instructor.
- **Refresher:** Biennial, Review RTA SSPP, specifically GCRTA Rail SSPP Section 16, **Validation:** Follow-up discussion/review with SSOA supervisor or training instructor.

## 13. Knowledge of Vehicle Inspection and Maintenance Programs, Schedules, and Records

## 14. Knowledge of Track Inspection and Maintenance Programs, Schedules, and Records

## 15. Knowledge of Tunnels, Bridges, and Other Structures Inspection and Maintenance Programs, Schedules, and Records

## 16. Knowledge of Traction Power (Substation, Overhead Catenary System, and Third Rail), Load Dispatching, Inspection, and Maintenance Programs, Schedules, and Records

## 17. Knowledge of Signal and Train Control Inspection and Maintenance Programs, Schedules, and Records

- **Requirement:** Working knowledge of RTA vehicle; track; tunnel, bridge, and other structures; traction power and load dispatching; signal and train control inspection and maintenance programs, schedules, and records; and command and control roles and responsibilities; Ability to observe practices and determine if procedures are being adequately followed (from a personnel and rail system safety perspective); Ability to review inspection and maintenance records and assess if procedures are adequate to support intended activities; Ability to participate in supervised inspections to identify potential safety concerns.
- **Equivalency:** Related engineering degree or minimum 2 years of rail system expertise in each discipline and SSOA experience (specifically in independent review of investigations and internal audits of SSPP Sections 13, 14, and 15 at this RTA), participation in at least 1 three-year review or other opportunity for at least 1 hands on observation of inspection and/or maintenance of each subsystem/discipline at this RTA; FRA Certified Inspector.

- **Training:** Review of current RTA SSPP document, specifically GCRTA Rail SSPP Sections 13, 14, and 15; RTA/SSOA awareness training for each of these subsystems/disciplines.
- **Examination/Demonstration/Validation:** RTA examination for awareness training.
- **Refresher:** Biennial, Review RTA SSPP document, specifically GCRTA Rail SSPP Sections 13, 14, and 15; RTA/SSOA awareness training for each of these subsystems/disciplines, **Validation:** RTA examination for awareness training.

## 19. Knowledge of Asset and Configuration Management

- **Requirement:** Working knowledge of an RTA's asset and configuration management (includes system modifications and safety and security certification) requirements; Ability to review and assess asset and configuration management to ensure it meets the requirements of the RTA (and SSOA); Ability to assess that these activities are being properly administered and documented.
- **Equivalency:** Minimum of 2 years of experience reviewing this RTA's asset or configuration management activity and records or participation in 1 three-year review of this RTA's SSPP implementation including system modification, configuration management, and/or asset management.
- **Training:** Review of current RTA SSPP document, specifically GCRTA Rail SSPP Sections 7, 8, and 17, and other related material such as the configuration management plan and asset management plan.
- **Examination/Demonstration/Validation:** Follow-up discussion/review with SSOA supervisor or training instructor
- **Refresher:** Biennial, Review RTA SSPP, specifically GCRTA Rail SSPP Sections 7, 8, and 17, **Validation:** Follow-up discussion/review with SSOA supervisor or training instructor.

## **Appendix A. Training Tracking by ODOT SSO Program Staff Member**

**ODOT SSO Program Staff Required Training**

**Staff Member:** Chuck Dyer, Management (ODOT)

**Designated Personnel (Yes/No):** No

Course	Equivalency	Scheduled	Completed	Record	Competencies
<b>Safety Certification Training (Interim Final Rule)</b>					
<b>Safety Management System (SMS)</b>					
SMS Awareness (1 hr., online)	None	2016			
SMS Principles for SSO Programs (2 days)	None	N/A			
SMS Safety Assurance (2 hrs, online)	None	N/A			
SMS Principles for Transit (2 days)	None	N/A			
<b>TSSP Certificate</b>					
Transit Rail System Safety	None	N/A			
Transit System Security	None	N/A			
Effectively Managing Transit Emergencies	None	N/A			
Transit Rail Incident Investigation	None	N/A			
SMS Gap Course for Existing TSSP Certificate Holders (2 hrs, online)	N/A	N/A			
<b>Technical Training Plan</b>					
Overview of RTA Safety and Security Programs	N/A	N/A			1, 2, 3, 4, 10, 12, 19
RTA Rule Book Awareness Training (2 hours)	N/A	N/A			5, 6, 7, 8, 9, 18
Review of specific RTA SOPs for operations, maintenance, dispatch, and safety.	N/A	N/A			5, 6, 7, 8, 9, 18 11, 13, 14, 15, 16, 17
RTA/SSOA Awareness Training (2 days) Pt 1	N/A	N/A			11, 13, 14, 15, 16, 17
RTA/SSOA Awareness Training (2 days) Pt 2	N/A	N/A			11, 13, 14, 15, 16, 17
<b>ODOT SSO Program Training</b>					
Overview of ODOT SSO Program Implementation (1 hr, self-paced)	All met OJT	2019			N/A

**ODOT SSO Program Staff Required Training**

**Staff Member:** Dave Seech, Transit Manager (ODOT)

**Designated Personnel (Yes/No):** No

Course	Equivalency	Scheduled	Completed	Record	Competencies
<b>Safety Certification Training (Interim Final Rule)</b>					
<b>Safety Management System (SMS)</b>					
SMS Awareness (1 hr., online)	None				
SMS Principles for SSO Programs (2 days)	None				
SMS Safety Assurance (2 hrs, online)	None				
SMS Principles for Transit (2 days)	None				
<b>TSSP Certificate</b>					
Transit Rail System Safety	None				
Transit System Security	None				
Effectively Managing Transit Emergencies	None				
Transit Rail Incident Investigation	None	N/A	7/16-21/2001	Certificate	
SMS Gap Course for Existing TSSP Certificate Holders (2 hrs, online)	None	N/A			
<b>Technical Training Plan</b>					
Overview of RTA Safety and Security Programs	All met OJT	2019			1, 2, 3, 4, 10, 12, 19
RTA Rule Book Awareness Training (2 hours)	All met OJT	2019			5, 6, 7, 8, 9, 18
Review of specific RTA SOPs for operations, maintenance, dispatch, and safety.	All met OJT	2019			5, 6, 7, 8, 9, 18 11, 13, 14, 15, 16, 17
RTA/SSOA Awareness Training (2 days) Pt 1	All met OJT	8/2-3/2016	Completed	Certificate	11, 13, 14, 15, 16, 17
RTA/SSOA Awareness Training (2 days) Pt 2	All met OJT	1/10-11/2017	Completed	Certificate	11, 13, 14, 15, 16, 17
<b>ODOT SSO Program Training</b>					
Overview of ODOT SSO Program Implementation (1 hr, self-paced)	All met OJT	2019			N/A

Note: Dave Seech is not planned as a designated person, but will be attempting to get safety certification and participate in the TTPs, as time allows in order to supplement/back-up Jessyca Hayes.

**ODOT SSO Program Staff Required Training**

**Staff Member:** Jessyca Hayes, SSO Program Manager (ODOT)

**Designated Personnel (Yes/No):** Yes

Course	Equivalency	Scheduled	Completed	Record	Competencies
<b>Safety Certification Training (Interim Final Rule)</b>					
<b>Safety Management System (SMS)</b>					
SMS Awareness (1 hr., online)	None	2016	6/27/2018	Certificate	
SMS Principles for SSO Programs (2 days)	None	2018	10/23/2018	Certificate	
SMS Safety Assurance (2 hrs, online)	None	2018	7/23/2018	Certificate	
SMS Principles for Transit (2 days)	None	2018	12/14/2018	Certificate	
Rail Nomenclature	None	2018	6/27/2018	Certificate	
<b>TSSP Certificate</b>					
Transit Rail System Safety	None			Certificate	
Transit System Security	None	7/9-13/2018	Completed	Certificate	
Effectively Managing Transit Emergencies	None			Certificate	
Transit Rail Incident Investigation	None			Certificate	
SMS Gap Course for Existing TSSP Certificate Holders (2 hrs, online)	N/A	N/A			
<b>Technical Training Plan</b>					
Overview of RTA Safety and Security Programs	None			Training Records	1, 2, 3, 4, 10, 12, 19
RTA Rule Book Awareness Training (2 hours)	None	Triennial	Sep 2018	Card	5, 6, 7, 8, 9, 18
Review of specific RTA SOPs for operations, maintenance, dispatch, and safety.	None			Training Records	5, 6, 7, 8, 9, 18 11, 13, 14, 15, 16, 17
RTA/SSOA Awareness Training (2 days) Pt 1	None			Certificate	11, 13, 14, 15, 16, 17
RTA/SSOA Awareness Training (2 days) Pt 2	None			Certificate	11, 13, 14, 15, 16, 17
<b>ODOT SSO Program Training</b>					
Overview of ODOT SSO Program Implementation (1 hr, self-paced)	None	2019			N/A

Other training:

- FEMA ICS-100, 1/11/2019

### ODOT SSO Program Staff Required Training

Staff Member: Kevin Chandler, Technical Lead and Investigator (Contractor: Vital Assurance)

Designated Personnel (Yes/No): Yes

Course	Equivalency	Scheduled	Completed	Record	Competencies
<b>Safety Certification Training (Interim Final Rule)</b>					
<b>Safety Management System (SMS)</b>					
SMS Awareness (1 hr., online)	None	December 2015	Completed	Print FTA website	
SMS Principles for SSO Programs (2 days)	None	2018	Completed	Certificate	
SMS Safety Assurance (2 hrs, online)	None	7/27/2016	Completed	Certificate	
SMS Principles for Transit (2 days)	None	March 2016	Completed	Certificate	
<b>TSSP Certificate</b>			<b>8/26/2016</b>	<b>Certificate</b>	
Transit Rail System Safety	None	February 2016	Completed	Certificate	
Transit System Security	None	8/22-26/2016	Completed	Certificate	
Effectively Managing Transit Emergencies	None	December 2015	Completed	Certificate	
Transit Rail Incident Investigation	None	6/28-7/1/2016	Completed	Certificate	
SMS Gap Course for Existing TSSP Certificate Holders (2 hrs, online)	N/A	N/A			
<b>Technical Training Plan</b>					
Overview of RTA Safety and Security Programs	All met OJT	2016	10/19/2016	Training Records	1, 2, 3, 4, 10, 12, 19
RTA Rule Book Awareness Training (1 day)	All met OJT	2018	Sep 2018	Card	5, 6, 7, 8, 9, 18
Review of specific RTA SOPs for operations, maintenance, dispatch, and safety.	All met OJT	2016	10/19/2016	Training Records	5, 6, 7, 8, 9, 18 11, 13, 14, 15, 16, 17
RTA/SSOA Awareness Training (2 days) Pt 1	All met OJT	8/2-3/2016	Completed	Certificate	11, 13, 14, 15, 16, 17
RTA/SSOA Awareness Training (2 days) Pt 2	All met OJT	1/10-11/2017	Completed	Certificate	11, 13, 14, 15, 16, 17
<b>ODOT SSO Program Training</b>					
Overview of ODOT SSO Program Implementation (1 hr, self-paced)	All met OJT	2019			N/A

### ODOT SSO Program Staff Required Training

Staff Member: Don Eldredge, Lead Investigator (Contractor: Vital Assurance)

Designated Personnel (Yes/No): Yes

Course	Equivalency	Scheduled	Completed	Record	Competencies
<b>Safety Certification Training (Interim Final Rule)</b>					
<b>Safety Management System (SMS)</b>					
SMS Awareness (1 hr., online)	None	2016	Completed	Printout from web	
SMS Principles for SSO Programs (2 days)	None	2019			Not available yet
SMS Safety Assurance (2 hrs, online)	None	2019	Completed	Certificate	
SMS Principles for Transit (2 days)	None	March 2016	Completed	Certificate	
<b>TSSP Certificate</b>			<b>8/26/2016</b>	<b>Certificate</b>	
Transit Rail System Safety	None	February 2016	Completed	Certificate	
Transit System Security	None	8/22-26/2016	Completed	Certificate	
Effectively Managing Transit Emergencies	None	December 2015	Completed	Certificate	
Transit Rail Incident Investigation	None	6/28-7/1/2016	Completed	Certificate	
SMS Gap Course for Existing TSSP Certificate Holders (2 hrs, online)	N/A	N/A			
<b>Technical Training Plan</b>					
Overview of RTA Safety and Security Programs	All met OJT	2016	10/19/2016	Training Records	1, 2, 3, 4, 10, 12, 19
RTA Rule Book Awareness Training (2 hours)	All met OJT	2018	Sep 2018	Card	5, 6, 7, 8, 9, 18
Review of specific RTA SOPs for operations, maintenance, dispatch, and safety.	All met OJT	2016	10/19/2016	Training Records	5, 6, 7, 8, 9, 18 11, 13, 14, 15, 16, 17
RTA/SSOA Awareness Training (2 days) Pt 1	All met OJT	8/2-3/2016	Completed	Certificate	11, 13, 14, 15, 16, 17
RTA/SSOA Awareness Training (2 days) Pt 2	All met OJT	1/10-11/2017	Completed	Certificate	11, 13, 14, 15, 16, 17
<b>ODOT SSO Program Training</b>					
Overview of ODOT SSO Program Implementation (1 hr, self-paced)	All met OJT	2019			N/A



**ODOT SSO Program Staff Required Training**

**Staff Member:** Josh Gearhardt, Investigator (Contractor: Vital Assurance)

**Covered Personnel (Yes/No):** Yes

Course	Equivalency	Scheduled	Completed	Record	Competencies
<b>Safety Certification Training (Interim Final Rule)</b>					
<b>Safety Management System (SMS)</b>					
SMS Awareness (1 hr., online)	None	2015	Completed Dec 2015	Screenshot FTA website	
SMS Principles for SSO Programs (2 days)	None	2019			Not available yet
SMS Safety Assurance (2 hrs, online)	None	7/27/2016	Completed	Certificate	
SMS Principles for Transit (2 days)	None	2016	Completed Mar 2016	Certificate	
<b>TSSP Certificate</b>			<b>9/17/2010</b>	<b>Certificate</b>	
Transit Rail System Safety	None	N/A	August 25-29, 2008	Certificate	
Transit Industrial Safety Management	None	N/A	May 3-7, 2010	Certificate	
Transit System Security	None	N/A	April 13-17, 2009	Certificate	
Effectively Managing Transit Emergencies	None	N/A	July 13-16, 2009	Certificate	
Transit Rail Incident Investigation	None	N/A	September 13-17, 2010	Certificate	
Advanced Rail Incident Investigation	None	N/A	August 27-31, 2012	Certificate	
SMS Gap Course for Existing TSSP Certificate Holders (2 hrs, online)	None	2019			Not available yet
<b>Technical Training Plan</b>					
Overview of RTA Safety and Security Programs	All met OJT	2016	10/19/2016	Training Records	1, 2, 3, 4, 10, 12, 19
RTA Rule Book Awareness Training (2 hours)	All met OJT	2018	Sep 2018	Card	5, 6, 7, 8, 9, 18
Review of specific RTA SOPs for operations, maintenance, dispatch, and safety.	All met OJT	2016	10/19/2016	Training Records	5, 6, 7, 8, 9, 18 11, 13, 14, 15, 16, 17
RTA/SSOA Awareness Training (2 days) Pt 1	All met OJT	8/2-3/2016	Completed	Certificate	11, 13, 14, 15, 16, 17
RTA/SSOA Awareness Training (2 days) Pt 2	All met OJT	1/10-11/2017	Completed	Certificate	11, 13, 14, 15, 16, 17
<b>ODOT SSO Program Training</b>					
Overview of ODOT SSO Program Implementation (1 hr, self-paced)	All met OJT	2019			N/A

**Other Training:**

- FEMA IS 800 National Response Framework- April 15, 2016
- FEMA IS-546, COOP Awareness, July 22, 2009, IS-547a- Introduction to COOP-March 29, 2016, IS-548, COOP Manager-March 31, 2016
- FEMA IS-907, Active Shooter Training, March 28, 2016
- FEMA IS-700 and IS-100, NIMS (May 2, 2006) and ICS (April 25, 2006)

- SERTC Training, SSO Program Rail Transit Orientation Training, May 10-11, 2011, SSO Program Technical Assistance Workshop, May 22-23, 2012
- TSI Substance Abuse Management and Program Compliance, July 19-21, 2011

## **Appendix B. Training Record Forms**

# **ODOT SSO Program Staff Training Records**

## **1. Rail Transit Agency (RTA) Organizational Structure**

### **General Description of Training:**

Maintain a working knowledge of the RTA organizational structure; Ability to determine if the organizational structure supports safety communication and the reporting and management of safety priorities and concerns; Ability to determine if a direct reporting relationship exists between Safety Director and CEO/GM.

Review of current RTA SSPP document, specifically organization chart and description of RTA Safety Department roles and responsibilities, and GCRTA Rail SSPP Section 3.

**Hands-on Performance:** N/A

**Tasks Qualified:** (1) Support for annual update review of SSPP and SSP; (2) Support for update of the program standard

**Covered Person:** \_\_\_\_\_

**Date Completed:** \_\_\_\_\_

**Expiration Date (2 years after completion):** \_\_\_\_\_

**SSOA Witness/Supervisor:** \_\_\_\_\_

**ODOT SSO Program  
Staff Training Records**

**2. RTA System Safety Program Plan**

**General Description of Training:**

Maintain a working knowledge of the SSPP; Determine if it meets SSOA and federal requirements.

Review of a current RTA SSPP document, including review of current completed assessment checklist.

**Hands-on Performance:** N/A

**Tasks Qualified:** (1) Support for or lead annual update review of SSPP; (2) Support for update of the program standard

**Covered Person:** \_\_\_\_\_

**Date Completed:** \_\_\_\_\_

**Expiration Date (2 years after completion):** \_\_\_\_\_

**SSOA Witness/Supervisor:** \_\_\_\_\_

# ODOT SSO Program Staff Training Records

## 3. RTA System Security Program Plan

### General Description of Training:

Maintain a working knowledge of the RTA SSP; Determine if SSP meets SSOA and federal requirements. In addition, maintain a working knowledge of the RTA EOP or equivalent (may be part of the RTA SSP).

Review of a current RTA SSP document, including review of current completed assessment checklist; and review of RTA EOP (if separate from the RTA SSP).

**Hands-on Performance:** N/A

**Tasks Qualified:** (1) Support for or lead annual update review of SSP; (2) Support for update of the program standard

**Covered Person:** \_\_\_\_\_

**Date Completed:** \_\_\_\_\_

**Expiration Date (2 years after completion):** \_\_\_\_\_

**SSOA Witness/Supervisor:** \_\_\_\_\_

# ODOT SSO Program Staff Training Records

## 4. Knowledge of Territory and Revenue Service Schedules

### General Description of Training:

Maintain working knowledge of RTA territory (including lines, weekly service schedules, and facilities).

Review of current RTA SSPP document, specifically GCRTA Rail SSPP Section 3 and GCRTA Rail System Map and Operations Supplement. Catenary pole number and location book.

### Hands-on Performance:

Ride the rail system annually.

- Heavy Rail Red Line – Airport to Tower City: \_\_\_\_\_
- Heavy Rail Red Line – Tower City to Windermere: \_\_\_\_\_
- Light Rail Blue Line – Tower City to Warrensville: \_\_\_\_\_
- Light Rail Green Line – Tower City to Green Road: \_\_\_\_\_
- Light Rail Waterfront Line: \_\_\_\_\_
- Cincinnati Streetcar Route: \_\_\_\_\_

**Tasks Qualified:** (1) Support for annual update review of SSPP and SSP; (2) Support for update of the program standard; (3) Support for development of triennial review; (4) Support for investigation, audits and CAPs reviews.

**Covered Person:** \_\_\_\_\_

**Date Completed:** \_\_\_\_\_

**Expiration Date (2 years after completion):** \_\_\_\_\_

**SSOA Witness/Supervisor:** \_\_\_\_\_

**ODOT SSO Program  
Staff Training Records**

- 5. Knowledge of Current Bulletins, General Orders, and Other Associated Directives that Ensure Safety of Operations**
- 6. Knowledge of Operations and Maintenance Rule Books**
- 7. Knowledge of Safety Rules**
- 8. Knowledge of Standard Operating Procedures**
- 9. Knowledge of Right-of-Way Worker Protection (RWP)**
- 18. Knowledge of Command and Control Approach and Implementation (SOPs)**

**General Description of Training:**

Working knowledge of RTA bulletins, general orders and other directives; Understand how these documents relate to current rules; Ability to review bulletins, general orders and other directives and identify potential safety concerns; Ability to assess quality of rule books; Ability to observe practices and determine if practices are compliant with rule book; Ability to work in right-of-way (ROW) and observe if personnel are complying with RWP rules.

RTA Rulebook awareness course for SSOA staff that includes perspective of all RTA staff and current RWP. Review of I&M Manual, ICC Train Control SOPs, Safety Rules, RORB, and RWP.

**Hands-on Performance:** N/A

**Tasks Qualified:** (1) Support or lead for accident investigation review; (2) Support or lead for internal audit review; (3) Support for development of triennial reviews

**Covered Person:** \_\_\_\_\_

**Rulebook Training:** \_\_\_\_\_

**SOPs and Rules:** \_\_\_\_\_

**Expiration Date (2 years after completion):** \_\_\_\_\_

**SSOA Witness/Supervisor:** \_\_\_\_\_



**ODOT SSO Program  
Staff Training Records**

**10. Knowledge of Employee Hours of Service and Fatigue Management Program**

**General Description of Training:**

Working knowledge of RTA hours of service rules and/or policies and fatigue management program; Ability to review worker schedules to determine compliance with rules or policies; Ability to analyze worker schedules during an incident or accident investigation.

Review of hours of service and fatigue management policy and discussion with rail management.

**Hands-on Performance:** N/A

**Tasks Qualified:** (1) Support for accident investigation review; (2) Support for internal audit review; (3) Support for development of triennial reviews

**Covered Person:** \_\_\_\_\_

**Date Completed:** \_\_\_\_\_

**Expiration Date (2 years after completion):** \_\_\_\_\_

**SSOA Witness/Supervisor:** \_\_\_\_\_

# **ODOT SSO Program Staff Training Records**

## **12. Knowledge of Employee Training and Certification Requirements**

### **General Description of Training:**

Working knowledge of the RTA employee training and certification requirements; Ability to review and assess employee training and certification program to ensure it meets the requirements of the RTA (and SSOA); Ability to assess employee training records to ensure training and certification program is being properly administered and documented.

Review of current SSPP document, specifically GCRTA Rail SSPP Section 16.

**Hands-on Performance:** N/A

**Tasks Qualified:** (1) Support for accident investigation review; (2) Support for internal audit review; (3) Support for development of triennial reviews

**Covered Person:** \_\_\_\_\_

**Date Completed:** \_\_\_\_\_

**Expiration Date (2 years after completion):** \_\_\_\_\_

**SSOA Witness/Supervisor:** \_\_\_\_\_

## **ODOT SSO Program Staff Training Records**

- 11. Knowledge of Employee Observation and Testing Program [Efficiency Testing]**
- 13. Knowledge of Vehicle Inspection and Maintenance Programs, Schedules, and Records**
- 14. Knowledge of Track Inspection and Maintenance Programs, Schedules, and Records**
- 15. Knowledge of Tunnels, Bridges, and Other Structures Inspection and Maintenance Programs, Schedules, and Records**
- 16. Knowledge of Traction Power (Substation, Overhead Catenary System, and Third Rail), Load Dispatching, Inspection, and Maintenance Programs, Schedules, and Records**
- 17. Knowledge of Signal and Train Control Inspection and Maintenance Programs, Schedules, and Records**

### **General Description of Training:**

Working knowledge of RTA employee observation and training program; Ability to observe review and testing practices to determine if procedures are adequate to ensure safe and efficient operations; Ability to review employee efficiency testing records to determine compliance with procedures. Working knowledge of RTA vehicle; track; tunnel, bridge, and other structures; traction power and load dispatching; signal and train control inspection and maintenance programs, schedules, and records; and command and control roles and responsibilities; Ability to observe practices and determine if procedures are being adequately followed (from a personnel and rail system safety perspective); Ability to review inspection and maintenance records and assess if procedures are adequate to support intended activities; Ability to participate in supervised inspections to identify potential safety concerns.

Review of current RTA SSPP document, specifically GCRTA Rail SSPP Sections 13, 14, and 15; RTA/SSOA awareness training for each of these subsystems/disciplines.

**Hands-on Performance:** As part of the GCRTA Awareness Training. Hands-on experience is generally achieved outside of this training activity and covered as part of the two-year apprentice process.

**Tasks Qualified:** (1) Support for accident investigation review; (2) Support for internal audit review; (3) Support for development of triennial reviews

**Covered Person:** \_\_\_\_\_

**GCRTA Subsystems/Disciplines Awareness Training:** \_\_\_\_\_

**SOPs Reviews and SSPP Sections 13, 14, and 15:** \_\_\_\_\_

**Expiration Date (2 years after completion):** \_\_\_\_\_

**SSOA Witness/Supervisor:** \_\_\_\_\_

**ODOT SSO Program  
Staff Training Records**

**18. Knowledge of Asset and Configuration Management**

**General Description of Training:**

Working knowledge of an RTA's asset and configuration management (includes system modifications and safety and security certification) requirements; Ability to review and assess asset and configuration management to ensure it meets the requirements of the RTA (and SSOA); Ability to assess that these activities are being properly administered and documented.

Review of current RTA SSPP document, specifically GCRTA Rail SSPP Sections 7, 8, and 17, and other related material such as the configuration management plan and asset management plan.

**Hands-on Performance:** N/A

**Tasks Qualified:** (1) Support for accident investigation review; (2) Support for internal audit review; (3) Support for development of triennial reviews

**Covered Person:** \_\_\_\_\_

**Date Completed:** \_\_\_\_\_

**Expiration Date (2 years after completion):** \_\_\_\_\_

**SSOA Witness/Supervisor:** \_\_\_\_\_

# **ODOT SSO Program Staff Training Records**

## **Overview of the ODOT SSO Program**

### **General Description of Training:**

Working knowledge of the ODOT SSO program, its history, and interactions with the Ohio RTAs – GCRTA and SORTA. Complete self-paced presentation material giving an introduction to the ODOT SSO program.

Review of current ODOT SSO Program Rail Transit SSOPS.

**Hands-on Performance:** N/A

**Tasks Qualified:** (1) Support for accident investigation review; (2) Support for internal audit review; (3) Support for development of triennial reviews

**Covered Person:** \_\_\_\_\_

**Date Completed:** \_\_\_\_\_

**Expiration Date (2 years after completion):** \_\_\_\_\_

**SSOA Witness/Supervisor:** \_\_\_\_\_

**Appendix C. GCRTA System Awareness Training Program Outline  
(Draft: 07/21/2016)**

**Introduction to RTA and Safety Overview**  
**Estimated Time: Four (4) hours**

- I. Introduction
  - A. Welcome and Introductions-RTA
  - B. Instructor/Trainer
  - C. Student
- II. Introduction to RTA's Rail System
- III. Regulatory Requirements
  - A. 49 CFR Part 659
  - B. SSPP
  - C. Oversight
  - D. APTA
  - E. FRA
  - F. FTA
- IV. Intro to Rail Division and subsections
  - A. Power and Way
  - B. Substation
  - C. Line
  - D. Track
  - E. Signals
  - F. CRMF
  - G. Facilities Maintenance and Janitorial
  - H. Operations
- V. Safety Protocol and Related Training
  - A. Training and Certification Requirements
  - B. Right of Way Worker Protection (RWP)
  - C. Rulebook
  - D. Flag
  - E. ROWWP Plan
  - F. OSHA
    - 1. OSHA 10 Hour Class
    - 2. Confined Spaces
    - 3. Fall Protection
    - 4. Ladder Safety
    - 5. Hot Work
    - 6. Respiratory Protection Plan and Respirator Fit Testing
    - 7. NFPA 70E (High Voltage Safety)
  - G. FTA
    - 1. Substance Abuse Training
    - 2. Reasonable Suspicion for Supervision
  - H. EPA
    - 1. CFR 206, 261, 262 Resource Conservation and Recovery Act
    - 2. RTA Spill Procedures
  - I. GCRTA Specific Requirements

1. Situational Awareness
  2. Industrial Accident Investigation and Procedures
  3. TSI Fatigue Awareness
  4. Terrorist Awareness Recognition and Reaction (TARR)
  5. Active Shooter
  6. CPR/AED Training
- J. Contractor Training
1. Rulebook C (Contractors)
  2. Flag Certification Training

## **Substation & Overhead Catenary System Overview**

### **Estimated Time: Four (4) hours**

- I. Introduction
  - A. Welcome and Introductions
    1. Instructor / Trainer (Bill Abbott)
    2. Evacuation routes / Rally point
    3. Restroom / Vending machine location
    4. GCRTA'S smoking policy
  - B. Course Objectives
- II. Substation operation overview
  - A. Substation equipment
  - B. Substation safety for employees
  - C. Overhead Catenary system overview
  - D. Overhead Catenary system components
  - E. Overhead Catenary system safety for employees
  - F. Interaction of these two departments
- III. Electrical basics
  - A. Differences of AC and DC current
  - B. Rectification of AC to DC
  - C. Converting 34,500 volts AC to 600 volts DC
  - D. LOTO
  - E. Electrical potential (what cause a person to receive a shock)
  - F. What training a Qualified person will receive
  - G. Definitions of common electrical terms
  - H. NFPA70E approach boundaries
  - I. Arc flash / Arc blast hazards
- IV. PPE
  - A. Selection
  - B. Using NFPA standards
  - C. Care
  - D. Cleaning
  - E. Storage
  - F. Handling
  - G. Testing requirements



- V. Substation overview
  - A. Components and operation
  - B. Number and location
  - C. Difference between substations
  - D. Components of each type of substation
  - E. Power flow through a substation
  - F. Substation maintenance (Station blow out, Thermography)
  - G. Substation grounding issues
- VI. Overhead Catenary System (OCS) overview
  - A. OCS components
  - B. OCS special tools
  - C. OCS specialized equipment
  - D. OCS terms and definitions
  - E. OCS inspection requirements
  - F. The types of section insulators
  - G. Problems caused by age / corrosion
- VII. Line department specialized training
  - A. Overview of ten day level one Line department training
  - B. SCADA system overview
  - C. Worldview overview
- VIII. Power outage procedures
  - A. Interaction of departments including ICC interacting with both Line and substation departments
  - B. How we handle a substation off line
  - C. Reenergizing after shutdown including built in safety measures
  - D. Question and answer session
  - E. Final testing for understanding
- IX. Closing remarks

## **Track Department Overview**

### **Estimated Time: Three (3) hours**

- I. Introduction
  - A. Welcome and Introductions
  - B. Evacuation routes / Rally point
  - C. Instructor / Trainer (Bill Abbott)
  - D. Restroom / Vending machine location
  - E. GCRTA'S smoking policy
- II. Course Objectives
- III. Overview of our rail system
  - A. Overview of our yard and loop tracks
  - B. Types of equipment used to perform track maintenance
- IV. An Overview of Track Maintenance
  - A. A look at our track maintenance program
  - B. A look at some of the types of track maintenance that has been subcontracted
  - C. Projects currently planned
  - D. Projects currently being performed
  - E. What do we see in the future [ identify needs and plan solutions ]
- V. Training our track employees receive

- A. An overview of our track equipment training
- B. Equipment Operator certification program
- VI. Our Inspection and Maintenance manual
  - A. Reasoning for the development of our own set of track standards
  - B. Overview of the manual
  - C. Sample comparisons of our I&M manual to FRA and FTA standards
  - D. How do your Track maintainers use this manual in their daily jobs
- VII. Our rail system overview
  - A. Main line
    - 1. History of our mainline
    - 2. Where are today
  - B. Yard and loop track
    - 1. Locations
    - 2. Size
    - 3. Use
- VIII. Track maintenance program
  - A. How are areas needing repairs identified
    - 1. Our inspection program
    - 2. How are special measurements taken
  - B. How are areas needing repair prioritized
  - C. Factors effecting the competition of these repairs
  - D. Emergency repairs
    - 1. Sun kinks
    - 2. Pull a-parts
  - E. Documentation
- IX. Inspections
  - A. Normal repairs
  - B. Emergency repairs
  - C. Any other special forms / record keeping used
- X. Projects
  - A. Recently completed
  - B. Planned projects
  - C. Needed projects
- XI. Contractors
  - A. The role Contractors play in our track maintenance plans
- XII. Track maintenance equipment
  - A. Our track equipment training and certification program
  - B. Where we want to be with our equipment training
- XIII. Question and answer session
- XIV. Final testing for understanding
- XV. Closing remarks

## **Rail Equipment Overview**

### **Estimated Time: Three (3) Hours**

- I. HRV/LRV
  - A. General Overview
    - 1. Layout of Cars
    - 2. Basic Operation
    - 3. Training Requirements
- II. Shop Movements & Equipment Usage
  - A. Shop Familiarization
  - B. Blue Flag Protection
  - C. Rail Car Drop Off / Release For Service
- III. Inspections
  - A. A Level Inspection
  - B. B Level Inspection
    - 1. Air
    - 2. Motor
    - 3. Truck
    - 4. Electrical
    - 5. HVAC
    - 6. Body
- IV. Defects
  - A. HRV Line Breaker
  - B. HRV Doors
  - C. HRV Brake Microprocessor
  - D. LRV Pre – Exciter
  - E. LRV Ground Brushes
- V. Tracking
  - A. CITME
  - B. Daily Car Status Report

## **Signal Department Overview**

### **Estimated Time: Two (2) hours**

- I. Introduction
  - A. Instructor / Trainer (Bill Abbott)
  - B. Evacuation routes / Rally point
  - C. Restroom / Vending machine location
  - D. GCRTA'S smoking policy
  - E. Course Objectives
- II. An overview of railroad signal system
  - A. Cab signal territory operations
  - B. Non- cab signal area operations
- III. Overview of our signal system
  - A. The types of signals used in our system
  - B. Documentation / record keeping

- IV. Railroad signal system overview
  - A. Railroad signal system history
  - B. Aspect and indication of your signal system
  - C. Types of signals used on our system [ ie - block, dwarf ]
  - D. Cab signal territory
  - E. Dark territory
- V. Training
  - A. Training Required of our Signal System
  - B. Initial Training
  - C. Review the training a signal maintainer will receive
  - D. Reoccurring training
  - E. Discuss the required reoccurring training [ ie – NFPA70E ]
  - F. Retraining
    - 1. Possible reasons for retraining
    - 2. What would be included in retraining
    - 3. Documentation of retraining
- VI. Maintenance
  - A. Our preventive maintenance program
  - B. Record keeping or preventive maintenance
  - C. For trouble calls
  - D. Improvement plans
- VII. Question and answer session
- VIII. Final testing for understanding
- IX. Closing remarks

## **Facilities Maintenance Overview**

### **Estimated Time: Two (2) hours**

- I. Introduction
  - A. Welcome and Introductions
  - B. Instructor / Trainer (Bill Abbott)
  - C. Evacuation routes / Rally point
  - D. Restroom / Vending machine location
  - E. GCRTA'S smoking policy
  - F. Course Objectives
- II. Discover the diversity of GCRTA'S proprieties
  - A. Review the types of work our people are responsible for
  - B. Review the types of work that is contracted out
  - C. Look at the types of tools and equipment needed
  - D. Examine the types of backgrounds these employees come from
  - E. Review the training these employees receive
  - F. Enter into discussion on the operating budget of this department
- III. GCRTA's properties
  - A. Differences of GCRTA'S proprieties
  - B. Number and size of GCRTA's proprieties
  - C. Overview of what it takes to maintain just one of these proprieties
  - D. In depth look at snow removal for a sample property
  - E. The preventive maintenance needed for our sample property
  - F. Future plans [replacement or remodel]
- IV. Types of work needed

- A. Employees
- B. What types of repairs / maintenance our employees perform
- VI. Contractors
  - A. What types of repairs / maintenance we subcontract out
  - B. How are those contractors chosen
  - C. Who oversees their work
- VII. Tools and equipment overview
  - A. Types and numbers of major pieces of equipment [ ie snowplows ]
  - B. Types of specialty tools and equipment [ ie HVAC tools ]
  - C. Types of common tools needed
- VIII. Employees
  - A. The backgrounds of some of our employee's
  - B. The training our employee's receive
  - C. Tools and/or equipment the employee is expected to provide
  - D. PPE requirements for employees
- IX. Operating expense
  - A. The yearly budget of this department
  - B. Average yearly repair costs per propriety
  - C. Average yearly money budgeted for major projects.
- X. Question and answer session
- XI. Final testing for understanding
- XII. Closing remarks

## **Integrated Control Center Overview**

### **Estimated Time: Three (3) hours**

- I. Integrated Control Center Supervisor
  - A. Command and Control
  - B. Supervisory Control
- II. Load Dispatching
- III. Plate Blocking
- IV. Data Acquisition
- V. Verbal Authority
  - A. Active vs Passive Communication
  - B. Governing Documents
- VI. Train Control SOP
  - A. Rail Rule Book
  - B. Administrative Procedures
  - C. Current bulletins, general operating orders and other associated directives that ensure safe operations
- VII. Reporting & Notification
- VIII. Electronic Log
- IX. Critical Timelines
- X. Supervisor Observation Reports
  - A. Incident Reports
- XI. Emergencies
  - A. Emergency Operations
  - B. Coordination of Emergencies
  - C. Transit Police Involvement

- D. Incident Command and Response
- E. National Incident Management System (NIMS) Integration
- F. Inter-Agency Communication
- G. Intra-Departmental Communication

## **ODOT Rail Operator Training Program Overview**

### **Estimated Time: Eight (8) hours**

- I. Introduction Trainer/Student
  - A. Welcome and Introductions Trainer/Students
  - B. Overall Expected Outcome
- II. Rail Operations Overview
  - A. Territories and Schedules/Overview from operator perspective
- III. Retraining (Signal Violations, Accidents, Emergencies)
  - A. When and how retraining is conducted
  - B. Post-Accident/Incident Retraining
  - C. Most common retraining
  - D. Right Hand Operation/Exceptions (Student Operator Training)
  - E. Birthing Markers/ADA Ramps
  - F. Areas of Concern
  - G. Communications (ICC Protocol, 3 Emergency Broadcast Procedure)
  - H. Forms and Reports (Pretrip, Defect Card, Hazard, Incident, Accident)
- IV. How Student Operators are trained
- V. Proper form writing/practice forms
- VI. Operator Training Certification and Medical Requirements
- VII. Injuries at The Workplace (Slips, Trips and Falls)
- VIII. Drug and Alcohol Policies and Testing
- IX. Summary and Review
- X. Final Exam