

FDOT – Requirements for System Safety Program Plans and Triennial Bus System Safety and Security Review



DEVELOPING A SYSTEM SAFETY PROGRAM PLAN AND PREPARING FOR A TRIENNIAL BUS SYSTEM SAFETY AND SECURITY REVIEW



System Safety Program Plan - Goal

To identify, eliminate, minimize and control safety hazards and their risks by:

- Demonstrating the agency's safety culture and established policies, procedures, and programs that ensure compliance with Chapter 14-90, FAC
- Specifying lines of authority
- Defining levels of responsibility and accountability within the agency
- Establishing methods of documentation for the agency



Developing a System Safety Program Plan

The SSPP **must be adopted, dated and signed** by the Chief Executive Officer/General Manager of the Bus Transit System and must clearly comply with or exceed the established standards outlined in Rule 14-90, F.A.C.

Annual safety certification:

- Adoption of SSPP that meets or exceeds
- Compliance with the SSPP, including annual safety inspections on all buses operated



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

1. Safety policies and responsibilities
2. Vehicle and equipment standards and procurement criteria
3. Operational standards and procedures
4. Bus driver and employee selection
5. Driving requirements
6. Bus driver and employee training
7. Vehicle maintenance
8. Investigations of events
9. Hazard identification and resolution
10. Equipment for transporting wheelchairs
11. Safety data acquisition and analysis
12. Wireless communication plan and procedure
13. Policy on the use of agency issued wireless communication devices
14. Driver education program
15. Safety standards for private contractors



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

1. Safety policies and responsibilities

- Policies should clearly explain the authority and responsibility of the organization unit(s) to execute each safety and/or security task.
- The system description should briefly describe the system's characteristics in such a way that non-technical persons understand the system and its operations.
- An organizational chart should show the title of each position from General Manager/Director to operating employees.
- A diagram of the structure of the transit system's safety unit should identify the key positions, including the relationship and lines of communications between the safety unit and other units of the agency.
- The relationship of the system to local political jurisdictions should be displayed in a chart, diagram, or explanation.




**Quick
Note**

POLICIES, PROCEDURES, and OTHER DOCUMENTS

While you do not have to discuss in great detail all policies and procedures related to the required SSPP elements, you must:

1. Indicate that you do have a policy/procedure
2. Specifically identify the source document (specific policy or procedure and location in operator or employee manual) – in the SSPP
3. Present that document for review



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

2. **Vehicle and equipment standards and procurement criteria (Section 14-90.007, FAC)**
 - Every procured and operated bus must:
 - ✓ Have the strength and capability to carry the maximum allowed load and not exceed the gross vehicle weight rating, gross axle weighting, or tire rating.
 - ✓ Have structural integrity that mitigates or minimizes the adverse effects of collisions.
 - ✓ Follow Federal Motor Vehicle Safety Standards.
 - Proof of strength and structural integrity tests on new buses must be submitted to the department.



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

Every bus shall be equipped as follows:

- | | |
|-----------------------------|--|
| 1. Mirrors | 11. Steering and front axle |
| 2. Wiring and batteries | 12. Seat Belts |
| 3. Brake interlock system | 13. Safety equipment |
| 4. Standee line and warning | 14. Wheelchair lift/ramp safely installed to accommodate persons with disabilities |
| 5. Handrail and stanchions | 15. Maintained wheelchair lifts/ramps, securement devices, and restraints, including instructions for normal and emergency operation |
| 6. Flooring | |
| 7. Doors | |
| 8. Emergency exits | |
| 9. Tires and wheels | |
| 10. Suspension | |



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

3. Operational standards and procedures (Section 14-90.006(9-16), FAC)

- No passenger door shall be open while the bus is operated and doors must not be opened until the bus comes to a complete stop. A bus with any inoperable passenger door shall not be operated, except to move to a safe location.
- Interior lighting and lighting in stepwells shall be sufficient for passengers to enter and exit safely during darkness.
- Passengers must not be permitted in stepwells or forward of the standee line while bus is in motion.
- Passengers shall not be permitted to stand on buses not designed for that purpose.



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

- Buses shall not be refueled in a closed building and the refueling of buses while passengers are aboard shall be minimized.
- The driver is required to be properly secured to the driver's seat with a restraining belt at all times while the bus is in motion.
- Drivers shall not leave the bus unattended with passengers aboard for more than 15 minutes, and the parking or holding brake must device must be set if the bus is left unattended.
- Buses shall not be left unattended in an "unsafe condition" with passengers aboard at any time.

Unsafe condition – anything which endangers human life or property.



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

4. Bus driver and employee selection

- Policies must clearly outline job duties, qualifications, and procedure for driver selection
- Policy should indicate the education, experience, and licensing requirements in addition to required medical qualifications
- Policy shall dictate the levels and type of driving and criminal background checks required for new drivers, and include levels, types and frequency of checks for current drivers
- Policy should specify the type of license needed for each specific job and/or vehicle in addition to verification and documentation needed for all employees. Policy should also include frequency for current drivers.



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

5. Driving Requirements

- Must ensure that no bus driver is permitted to drive if their license has been suspended, cancelled, or revoked
- Must ensure that:
 - ✓ Drivers will not be permitted or required to drive more than 12 hours or drive after having been on duty 16 hours in a 24-hour period
 - ✓ Drivers will not be permitted to drive until the requirement of 8 consecutive hours off-duty.
 - ✓ Drivers will not be permitted or required to be on duty more than 72 hours in any period of 7 consecutive days.
- Must state that vehicles will be operated at all times in compliance with applicable traffic regulations, ordinances, and laws of the jurisdiction within which they operate.



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

6. Bus driver and employee training

- Must detail the training, tracking, length, and testing of bus operators to ensure adequate capabilities to safely operate each type of bus prior to permission to drive unsupervised.
- Must include a copy of initial training and refresher course syllabuses for training materials that show training and testing for the minimum required training elements identified in Rule Chapter 14-90, as well as additional new bus operator and refresher training that is required beyond these minimum topics.



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

Bus driver and employee training – minimum requirements

- Bus transit system safety and operational policies and procedures
- Operational bus and equipment inspections
- Bus equipment familiarization
- Basic operations and maneuvering
- Boarding and alighting passengers
- Operation of wheelchair lifts and other special equipment
- Defensive driving
- Passenger assistance and securement
- Handling and awareness of emergencies and security threats
- Driving conditions
- Hazards associated with wireless communication devices



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

7. Vehicle maintenance

- Rule 14-90.004(4), FAC: Bus transit systems shall establish a maintenance plan including procedures for preventative and routine maintenance for all operated buses.
- Rule 14-90.009(1), FAC: Each bus transit system shall require that all buses operated by such bus transit system and all buses operated by a private contract transit provider, be inspected at least annually in accordance with bus inspection procedures set forth in this rule.



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

8. Investigations of events (Rule 14-90.004(5)(6)(7), FAC)

- The system must have a formal policy understood by all personnel, explaining which events will be investigated, including predetermination of details such as:
 - ✓ Internal notifications
 - ✓ Thresholds for automatic activation of investigation
 - ✓ Guidelines on the timeline of investigation
 - ✓ Who is in charge of each specific level of investigation
 - ✓ Thresholds for external notifications to all necessary agencies such as FDOT, NTSB, and local regulatory agencies
- If agency has an accident review board or similar functioning unit, must identify the role of this body, membership, and authority



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

- The system must have a policy or procedure that describes the process that will be used to investigate any event involving a bus or taking place on agency controlled property resulting in a fatality, injury, or property damage as follows:
 - ✓ A fatality (within 30 days of related event), excluding suicides and deaths from illnesses.
 - ✓ Injuries requiring immediate medical attention away from the scene for two or more individuals
 - ✓ Property damage to system buses, non-system vehicles, other system property or facilities, or any other property at the discretion of agency in regards to any property damage less than \$1000
 - ✓ Evacuation of a bus due to imminent danger to passengers on the bus, excluding operational issues.



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

- Each investigation shall be documented in a final report which shall include a description of activities, causal factors, and any corrective action plan (CAP)
 - ✓ Each CAP shall identify the action to be taken and the schedule for its implementation
 - ✓ The agency shall track and monitor the implementation of each CAP
- Investigation reports, CAPs, and related supportive documentation must be maintained by the system for a minimum of four years from the date of investigation completion.



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

9. Hazard identification and resolution

- Hazard identification procedure
 - ✓ Describes the methods used to ensure as many hazards as possible are entered into a hazard resolution process prior to causing any problems
- Hazard categorization
 - ✓ A formal procedure should be in place with prior determinations as to which types of hazards must have which types of resolutions
 - ✓ Hazards are categorized in terms of severity and probability of occurrence
- Hazard resolution
 - ✓ The analysis and following actions taken by the bus transit system to reduce to the lowest practical level of risk associated with an identified hazard



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

11. Safety data acquisition and analysis

- This section should explain the collection, maintenance, and distribution of safety data relative to operation
- Trend analyses of data should be used to identify areas of concern and develop mitigation measures/policies and procedures to correct and monitor the effectiveness of these programs
- The responsibilities for providing, receiving, processing, and analyzing data should be listed here
- BTS should be clear pertaining to where this section is located in their safety and security plans
- Parts of this section may be contained in the investigation of events and the hazard identification and resolution sections



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

12. Wireless communication plan and procedure

- The BTS must have a formal plan that addresses the requirements in Rule 14-90.004(1)(a) 12, 13, 14
 - ✓ Policy must state that the use of personal wireless communication devices are prohibited while the transit vehicle is in motion
 - ✓ Policy must require all personal wireless communication devices be turned off with any earpieces removed from operator's ear while occupying the driver's seat



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

13. Policy on the use of wireless communication devices issued to the operator by the system

- Policy must address use of wireless communication device issued to the operator by the BTS for business related purposes
 - ✓ Must explain how and when the agency issued device can be used in emergency situations
 - ✓ Must ensure that the use of the agency issued wireless communications device does not interfere with the operator's safety related duties



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

14. Driver education program – Wireless Communication Devices

- The driver educational training program must include:
 - ✓ A section discussing the hazards associated with using a wireless communications device while driving
 - ✓ A section explaining the proper use of a wireless communications device issued by the BTS while in the performance of their safety related duties



SSPP Required Elements (Section 14-90.004(1)(a), FAC)

15. Safety standards for private contractors

In accordance with Rule 14-90.004(1)(a) 15:

- Must outline the established standards for private transportation operators that provide(s) continuous or recurring transportation services for compensation as a result of a contractual agreement with the bus transit system.



FDOT Triennial Review Process – Areas of Compliance

- Maintenance activities
- Single Agency Audit
- ADA
- DBE Program
- Title VI
- Procurement
- Charter and School Bus Program
- Reporting
- **Safety and Security**
- Drug and Alcohol



Preparing for a Triennial Bus System Safety/Security Review

- Authority
 - ✓ Section 14-90.012, FAC: “The Department or its contractors shall conduct inspections of bus transit systems to ascertain compliance with the provisions of this rule chapter.”
 - ✓ FDOT Procedure 725-303-009-j, Section 6.1: “The Department or its designee is authorized to conduct inspections of bus transit systems to verify compliance with the provisions of Rule Chapter 14-90, FAC.”
- Frequency
 - ✓ At least once every three years
- Who?
 - ✓ “Bus Transit Systems”



Preparing for a Triennial Bus System Safety/Security Review

Bus Transit System means

- A community transportation coordinator
- A public transit provider
- A private contract transit provider which owns, operates, leases, or controls buses or taxicabs where such transportation consists of continuous or recurring transportation under the same contract
- A privately owned or operated transit provider that receives operational or capital funding from the Department and owns, operates, leases, or controls buses, other than nonpublic sector buses that provide transportation services available for use by the general riding public



Preparing for a Triennial Bus System Safety/Security Review

▪ Notice

- ✓ You will be notified by your district FDOT office in writing at least three weeks prior to the review.
- ✓ District FDOT offices will coordinate scheduling with review team.
- ✓ Notice will establish what will be expected of you and the various documents that will need to be accessed by the review team – *including those items that must be provided to the team prior to the scheduled review.*



Pre-Review Documentation

- The current approved System Safety Program Plan
- The current approved Security Program Plan
- Safety policy and procedure documents
- Organizational chart
- Employee/Driver handbook(s)
- Dispatch policies and procedures
- Routes and service schedules
- Wireless communications policy/plan
- Vehicle inventory



Pre-Review Documentation

- Driver hours of service policies/procedures
- Bus driver selection policies/procedures
- Background check policies/procedures
- License check/MVR policies/procedures
- Bus driver and employee training manuals, policies/procedures, and manuals (include list of required courses for new hires and refresher and coordinated syllabi)
- Accident/incident policies and procedures
- Hazard identification and resolution process
- Maintenance plan



Onsite Review

- What to expect during onsite review:
 - Entrance meeting
 - Record checks
 - Bus inspections
 - Route reviews
 - Driver performance checks
 - Exit briefing

I HAVE NO IDEA
WHAT'S GOING
TO HAPPEN.



AND I LOVE IT.



Onsite Review

- Entrance meeting
 - ✓ Finalize review schedule and answer preliminary questions
 - ✓ Introduce review team and agency personnel
 - ✓ Review and adjust agenda, if needed
 - ✓ Outline review areas and process



Onsite Review

Record checks

- Records are selected at random and cover 30% (30 driver minimum) of all BTS drivers over the past three years.
 - ✓ Driver licenses – ensuring they are current and the process identified in SSPP and policies/procedures is being followed
 - ✓ Medical certification – Verify expiration date and completion of form including signatures. Ensure agency is following standard identified in SSPP.



Onsite Review

Record checks

- Hours of service – Rule 14-90.006(3), FAC: Drivers are not permitted to drive more than 12-hours in a 24-hour period, or drive following 16-hours of duty in a 24-hour period. A driver must have 8 consecutive hours off duty prior to resuming driver duties once these limits are met.
- Driver event investigation records
- Hazard investigation records



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Onsite Review

Bus inspections

Each bus shall be inspected for operable equipment and devices including, but not limited to:

1. Horn
2. Windshield wipers
3. Mirrors
4. Wiring and batteries
5. Service and parking brakes
6. Warning devices
7. Directional signals
8. Hazard and warning signals
9. Lighting systems and signaling devices
10. Handrails and stanchions



Onsite Review

11. Standee line and warning
12. Doors and brake interlock devices
13. Stepwells and flooring
14. Emergency exits
15. Tires and wheels
16. Suspension system
17. Steering system
18. Exhaust system
19. Seat belts
20. Safety equipment
21. Equipment for transporting wheelchairs
22. Working speedometer



Onsite Review

- One of the most important components of the review process is riding the bus route (one-hour minimum) to review route and driver performance
- Route Checks include, but not limited to:
 - Coverage area
 - Bus stop locations – safe/accessible
 - Driver observations



Onsite Review – Driver Observations

Prior to first run of the day, a pre-trip inspection form should be completed checking each of the items outlined in Rule 14-90.006(8)(a)FAC:

1. Parking brakes
2. Tires and wheels
3. Service brakes
4. Steering
5. Horn
6. Lighting devices
7. Windshield wipers
8. Rear vision mirrors
9. Passenger doors
10. Exhaust system
11. Equipment for transporting wheelchairs
12. Safety, security, and emergency equipment



Onsite Review – Driver Observations

- Not impaired, fatigued or ill
- Adjusts mirrors prior to starting their route
- Wears seat belt correctly and is not slouching in seat
- Drives with both hands on the steering wheel
- Appears observant of road conditions continuously
- Drives with caution including using signals, not speeding or stomping on brakes, keeping proper distance, etc.
- When required, driver safely attaches tie down straps into floor tracks, and use the four-point tie down on wheelchairs.
- Removes tie downs after each use and stores straps in their proper place



Onsite Review – Driver Observations

- Uses correct language under ADA guidelines and acts courteously
- Attends to all passengers requesting or requiring assistance
- Does not use personal wireless communications devices
- Answers radio properly, using proper language and 10-codes, where applicable
- Ensures bus is at a complete stop before doors are opened and does not operate bus with any passenger doors open
- Makes sure passengers are seated or properly positioned behind the standee line before proceeding
- Monitors passengers and reports misbehavior



Onsite Review – Exit Briefing

- Ensure system is presented with all results, both positive and negative
- Provide a summary of findings and any immediate need for corrective action including any additional documents needed



Categorization of Findings

- Deficiency:
 - ✓ Does not comply with Rule 14-90, FAC
 - ✓ If it is determined that the bus transit system has a deficiency that is considered an area of non-compliance, the District will provide a Corrective Action Plan (CAP) and implementation schedule and provide to the bus transit system.
- Areas of Concern:
 - ✓ Weakness in implementation of SSP or SPP and/or weakness in conformance with Rule 14-90, FAC
 - ✓ The bus transit system is required to develop and submit to the District a CAP and implementation schedule for each area of concern.
- Observation/ Recommendation:
 - ✓ An offered suggestion, view, or comment regarding safety and security performance, even when no deficiency or area of concern exists



Review Report

- Final report is issued within 30-calendar days of completion of the onsite review and submitted to the person directly responsible for management of the bus transit system
- Final review report:
 - ✓ Will describe the review process
 - ✓ Will identify findings (deficiencies, areas of concern, and observations/recommendations)
 - ✓ Will require the bus transit system to develop and submit a corrective action plan (CAP) and implementation schedule for identified deficiencies and areas of concern within 30-calendar days from date of the final report.



Review Report – Corrective Actions

- District must notify bus transit system of approval or rejection of each corrective action and implementation schedule within 15-calendar days of receiving the plan
- District office must submit a Corrective Action Plan (CAP) close-out letter within 30-calendar days of completion and implementation of all corrective actions resulting from the review



Review Report – Corrective Actions

- Rule 14-90.012, FAC: If the district finds any unsafe condition which poses an immediate danger or threat to public safety they are required to:
 - ✓ Immediately notify BTS of the condition (the normal 30-day window is not required)
 - ✓ Immediately notify the transit system of the immediate corrective action required
 - ✓ Conduct an onsite review of the system to verify the correction
 - ✓ Suspend affected passenger service operations if the bus transit system fails to correct the deficiency

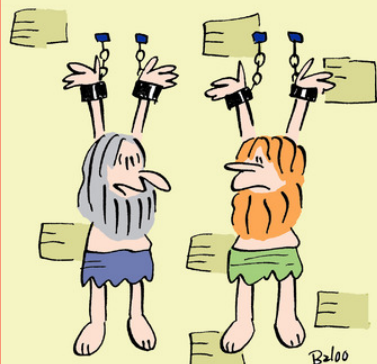


Common Bus System Safety and Security Review Findings

- The execution of minimum training standards identified in SSPP cannot be confirmed through the examination of driver files.
- Medical Examination Certificates (MECs) are not current.
- The medical examination standard identified in the SSPP (FDOT form versus USDOT form) is not consistently observed in the driver files.
- Drivers' licenses are not current.
- No demonstrated tracking or analysis of incidents.
- SSPP and/or SPP are out of date.
- Drivers are not consistently completing pre-trip inspection forms or are not following pre-trip inspection procedure.
- Drug/alcohol documentation found in common driver personnel files.

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"I'VE BEEN HERE SO LONG I DON'T REMEMBER WHAT I DID, BUT IT HAD SOMETHING TO DO WITH NON-COMPLIANCE."



There will be no manacles or thumb screws.

There are:

- Resources available
- Technical assistance
- Training



FLORIDA STATE UNIVERSITY
COLLEGE OF BUSINESS
Institute for Applied Business Research

Resources

- Maintenance compliance
 - Rule Chapter 14-90, Florida Administrative Code
 - Assistance provided through the Preventive Maintenance Planning, Training and Technical Assistance Program – contact Bob Westbrook at 850-414-4533
- Title VI compliance
 - Training is available – contact Liz Stutts at 850-414-4530
- Procurement compliance
 - Procurement Handbook and Procurement Policy template
 - Training and technical assistance is available – contact Erin Schepers at 850-414-4526



Resources

- Safety and security compliance
 - System Safety Program Plan and Security Plan templates available
 - System Safety Review Process (SSP 100)
 - Rule Chapter 14-90, Florida Administrative Code
 - Technical assistance and oversight monitoring assistance is available – contact Victor Wiley at 850-414-4525
- Drug and alcohol program compliance
 - Training and technical assistance is available through the Substance Abuse Management Oversight and Technical Assistance Program – contact Victor Wiley at 850-414-4525 or Diana Byrnes at 813-426-6980



FDOT Technical Assistance and Training

- Initial regional training on requirements
- New training curriculum and delivery along priority transit safety issue areas as identified during Triennial Reviews
- On-site technical assistance when needed



Contact information - FDOT

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