

# Recommended Practice for Transit Bus Operator Training

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**APTA Bus Operations Training & Qualifications Working Group**

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**Abstract:** This recommended practice provides guidelines for training qualified bus operators.

**Keywords:** training, bus operator

## **Introduction**

(This introduction is not a part of APTA BT-RP-001-07, *Recommended Practice for Transit Bus Operator Training*)

This Recommended Practice for the Training & Qualification for Bus Operators reflects the consensus of the APTA Bus Standards Program members on the items, methods, and procedures that have provided the best performance record based on the experiences of those present and participating in meetings of the Program Task Forces and Working Groups. Recommended practices are voluntary, industry-developed, and consensus-based practices that assist transit agencies, transit providers, and training suppliers in the content and best delivery of bus operator training and qualifications. Recommended practices are non-exclusive and voluntary; they are intended to neither endorse nor discourage the use of any product or procedure. APTA recognizes that for certain applications, the practices, as implemented by operating agencies, may be either more or less restrictive than those given in this document.

This recommended practice provides guidelines for transit bus operator training and qualifications. APTA recommends the use of this recommended practice by:

- Individuals or organizations that operate transit vehicles
- Individuals or organizations that contract with others to operate transit vehicles
- Individuals or organizations that influence how transit vehicle operators are trained
- Individuals or organizations that develop transit vehicle operator training programs

## **Participants**

The American Public Transportation Association (APTA) greatly appreciates the contributions of the Bus Operator Training and Qualifications Working Group, who drafted *Recommended Practice for Transit Bus Operator Training*.

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# Recommended Practice for Transit Bus Operator Training

## 1. Overview

This recommended practice provides guidance for standardized transit operator training to assist in the development of professional bus operators resulting in quality service. Individual operating agencies can modify these guidelines to accommodate their specific training goals and operating modes.

### 1.1 Scope

This recommended practice covers guidelines for setting minimum standards in training of transit bus operators.

### 1.2 Purpose

The purpose of this recommended practice is to provide guidance to operating agencies in bus operator training.

- 1) Provide a process to create a qualified operator training program
- 2) Produce a Safe/Professional/Qualified Operator

The areas of importance are regulatory, agency specific requirements, customer service, technical competencies and safety.

## 2. References

This recommended practice should be used in conjunction with the following publications:

## 3. Definitions, abbreviations, and acronyms

For the purposes of this recommended practice, the following terms, definitions, abbreviations, and acronyms apply.

### 3.1 Definitions

**3.1.1 Operator:** a qualified person operating a transit vehicle in transit service.

**3.1.2 Bus:** a vehicle inclusive of all sizes and types providing public transportation.

**3.1.3 Transit:** service inclusive of paratransit and transit bus operations.

### 3.2 Abbreviations and acronyms

ADA	Americans with Disabilities Act
APTA	American Public Transportation Association
CDL	Commercial Driver License
CNG	Compressed Natural Gas
DOT	Department of Transportation
EAP	Employee Assistance Program
EEOC	Equal Employment Opportunity Commission
FLSA	Fair Labor Standards Act
FMLA	Family Medical Leave Act
FTA	Federal Transit Administration
HOV	High Occupancy Vehicle
LNG	Liquid Natural Gas
LPG	Liquid Petroleum Gas/Propane
NSC	National Safety Council
NTD	National Transit Database
NTI	National Transit Institute
OSHA	Occupational Safety and Health Act
TSA	Transportation Security Administration
TSI	Transportation Safety Institute
UAP	Unions Assistance Program

## 4. GOALS

The goals of this document are to:

- 1) Assist in creating an effective and efficient standardized training program
- 2) Provide recommendations on content, industry standards and best practices
- 3) Provide a tool to evaluate existing training programs

## 5. Program evaluation criteria

Each program needs to be evaluated on the individual needs of the agency while adhering to the industry standards that every program should be evaluated on:

- Legal and regulatory requirements
- Industry standards and best practices
- Effective and efficient return on investment
- Community requirements/standards

## 6. Content

A training program should include the following topics to develop a safe, professional, and qualified operator.

- Regulatory: federal, state and local regulations that impact transit operations.
- Agency Specific: local agency requirements that impact transit training.
- Customer Service: meeting the needs of the public and customers.
- Technical: operator skills needed to safely operate a transit vehicle.
- Safety and Security: includes all elements related to safety and security for the operator and the public.

## 7. Competencies/minimum qualifications

Transit operators trained utilizing the elements in this standard should develop the following competencies.

- Technical skills
  - Equipment familiarization
  - Vehicle maneuvering and equipment operation
  - Pre-trip/post-trip inspections

- Scheduling
- Route training
- Licensing
  - Endorsements
- Safety and security
  - Safe vehicle operation
  - Defensive driving
  - Hazard recognition
  - Emergency procedures
- Customer service
  - Communication skills
  - ADA/sensitivity training
  - Customer/community relations
- Policies & procedures
  - Fare policies
  - Documentation
  - Reporting for duty
  - Physical fitness
  - Appearance
  - Code of conduct
  - Employee/operator handbook

## **8. Regulatory**

### **8.1 Federal and state regulations**

#### **8.1.1 Federal Regulations**

- Drug/Alcohol – FTA – 49 CFR, Part 655
  - Testing
  - Awareness
  - Compliance
  - Administration

- CDL
  - Federal mandate
  - Train to obtain permit & maintain CDL
  - Medical requirements
- OSHA
  - Hazard communication
  - Blood borne pathogens
- ADA
  - Compliance & responsibility
  - Stop/route announcement procedures
  - Boarding/alighting & securement
  - Signage (communication)
  - Engineering & design
- FLSA
  - Wages and hours
- FMLA
  - Complinace and responsibility
- EEOC
  - Sexual harassment
  - Discrimination
- NTD
  - Required passenger counting

### 8.1.2 State regulation

Below are listed some examples of state regulated practices that may or may not apply to individual transit agencies. Please contact your appropriate state agency for additional information.

- DOT CDL
- Hours of service/work
- State Mandated OSHA training/requirements
- Periodic training hours
- Re-certification
- Periodic review
- Periodic defensive driving
- Periodic onboard observation
- Periodic state equipment inspections
- Periodic training audits
- FMLA
- Medical requirements



## 9. Agency specific/local

Below are listed some examples of local practices that may or may not apply to individual transit agencies. Please contact your appropriate local agency for additional information.

- Labor contracts policies and procedures
- City/county ordinances
- Agency policies and procedures:
  - Organization
  - Strategic plan
  - History
  - Payroll
  - Benefits
  - Return to work/light duty programs
  - Mentor program
  - Alternate languages
  - Performance standards
  - EAP/UAP
  - System safety program plan
  - Hazard identification and resolution process.
  - Violence in the work place
  - Employee work rules
  - Disciplinary policies
  - Employee code of conduct
  - Periodic re-enforcement (ride checks, road observations)
  - Required safety meetings
  - Periodic training
  - Re-certification program
  - Periodic review of operator's performance
  - Periodic defensive driving program
  - On going skills training/behind the wheel/minimum standard of road observations.
  - Scheduled outside agency training: TSI, NTI and other training programs.
  - Documentation and reporting
  - Security awareness
  - Emergency procedures
  - Policies and procedures related to customers with special needs (i.e. all wheelchair positions are full)
  - Local partnerships (i.e. Safe Place)
  - Policies related to children (i.e. strollers, minimum age for riding alone)
  - New hire orientation
  - Drug awareness

## **10. Customer service training:**

### **10.1 Role of professional transit operator**

1. Understanding the role of mass transit in meeting the individual customer needs.
  - Transit dependent
  - Discretionary rider
  - Modal choices
2. Come to work ready to work
  - Attitude
  - Appearance
  - Fitness for duty

### **10.2 Customer basics**

1. Who is the customer?
  - Riders and non-riders
  - Internal and external
  - Customers as voters
2. Customer service policy/performance expectations
3. Who are the riders?
  - Different levels of abilities
    - Cognitive
    - Physical
  - Socio-economic status
  - Local or visitor
  - Age
  - Cultural issues/diversity
4. Customer behavior (acceptable vs. un-acceptable)
5. Customer feedback process

### **10.3 Communications**

- Attitude matters
  - Operator sets the tone
  - Be courteous and patient
  - You have a choice
- Active listening skills
- Body language
- Tone of voice
- Make eye contact
- Treat all people with respect, dignity and empathy.
- Communicating with people with special needs

- Alternate communications/Passenger Assistance Cards
- Cultural/Language Awareness

## 10.4 Difficult situations

- 1) Conflict resolution
- 2) Understanding emotional/personal 'hot buttons'
- 3) Common triggers:
  - Fare collection
  - Food or drink
  - Intoxicated/under the influence
  - Stop requests
  - Seurement
  - Customer to customer conflicts
  - Lost passengers
  - Bus off route
  - Inflammatory language
  - Pass-up/flagging
  - Service interruptions
  - Priority seating

## 10.5 Customers with disabilities

- 1) Understand disability from first person experience
- 2) Importance of using kneeler and wheel chair lift/ramp
- 3) Customer assistance
- 4) Language sensitivity (politically correct)
- 5) Communicating with people with disabilities ex. ADA announcements

## 11. Technical

### 11.1 Safe operations

#### 11.1.1 Vehicle familiarization

- 1) Differences, interior and exterior, between a bus and a car
- 2) Variety of equipment
- 3) Operator's compartment – instruments and layout (includes farebox)
- 4) Passenger area
- 5) Safety & security technology

#### 11.1.2 Energy sources

- 1) Different fuels
  - Diesel
  - CNG/LNG -compressed natural gas/liquefied natural gas

- Electric (battery, hybrid, overhead wires)
  - Gasoline
  - Hybrids
  - LPG - Liquefied petroleum gas/propane
  - Other alternate propulsion systems
- 2) Fueling
- Process and procedures
  - Hazards

### 11.1.3 Vehicle inspections

- 1) Pre-trip inspection (according to CDL Requirement)
- Inspection methods and checklists
  - Security checklist/emergency equipment
  - Documentation/pre trip/defect
- 2) Brake testing
- *Air brake systems check*
    - Air leakage brake test
    - Low air pressure warnings
    - Spring brake test
    - Air compressor build-up test
    - Parking brakes
    - Service brakes
  - *Hydraulic brake system check*
    - Check parking brake
    - Visual inspection for leaks
    - Service brake check
- 3) Post-Trip inspection/checklists
- Security checklist
  - Documentation/defect
  -

### 11.1.4 Bus operating skills

- 1) Seat positioning/adjustment and seat belt
- Mirrors
- Rocking and leaning to improve visibility
- Adjustments
  - Coverage
  - Usage

- 2) Steering wheel adjustment
- 3) Vehicle start-up procedures
- 4) Shifting
- 5) Idling
- 6) Accelerating
- 7) Steering/maneuvering
  - Proper hand placement
  - Turning
  - Merging
  - Backing vehicle
  - Clearances
    - Curbside clearances
    - Roadside clearances
    - Height clearances
  - Following distances
- 8) Signaling
  - Directional
  - 4-Way
  - Yield indicators
- 9) Braking
  - Air Brake/hydraulic brake performance
  - Stopping distance
  - Retarder

#### **11.1.5 In-service operations**

- 1) Routine procedures
  - Fare structure: fares, passes, tickets and transfers
  - Scheduling
  - Destination information equipment
  - Radio procedures and usage
    - Mobile data terminal
    - Security alarms
    - Communication protocol
  - Climate control
- 2) Service stops
  - Unobstructed service stops
    - Flag/requested stops
    - Nearside service stops
    - Farside service stops
  - Obstructed service stops
  - Boarding and alighting
    - Door operation/control

- Kneeling the bus
  - Lifts/ramp considerations at the stop
    - Level ground
    - Obstructions
    - Curb distance/height
    - Securement procedures and equipment
  - Bike rack considerations/procedures
- 3) Transit facility procedures
- Revenue
  - Non revenue

### **11.1.6 Special driving conditions**

- 1) Road grade crossings
- 2) Railroad crossings
- 3) Expressway/freeway driving
- 4) HOV/Dedicated lane/Peak hour operation
- 5) Cue jumping/signal preemption/priority
- 6) Night driving/glare
- 7) Pedestrians and cyclists
- 8) Narrow streets
- 9) Construction/maintenance crews
- 10) Detours/route changes
- 11) Rural driving
- 12) City driving
- 13) Incline/decline
- 14) Bridges/draw bridges/tunnels
- 15) Electric trolley wires/overhead hazards
- 16) Signal malfunctions/power outages
- 17) Seasonal adjustments (back-to-school, day light savings time)

### **11.1.7 Driving in adverse weather (environmental challenges)**

- 1) Rain/thunderstorms
- 2) Fog
- 3) Snow/ice

- 4) Hail
- 5) Flash floods
- 6) Tornados/high winds
- 7) Seasonal hazards (leaves/dust)
- 8) Other natural occurrences

#### **11.1.8 Route training**

- 1) Mentoring/cadet training
- 2) Landmarks/points of interest
- 3) Hazard identification
- 4) Route maps/documentation
- 5) Time/transfer/layover/recovery/relief points/comfort stops

## **12. Safety and security**

### **12.1 Operator safety**

#### **12.1.1 On the road**

- 1) Defensive driving
  - Collision prevention
- 2) Road rage

#### **12.1.2 On the transit vehicle**

- 1) Injury prevention
  - Repetitive motion
  - cumulative trauma
- 2) Assault Prevention

#### **12.1.3 At the facilities**

- 1) Identification of yard and shop hazards
- 2) Movement of vehicle in the yard
- 3) Parking instructions
- 4) Confined area movements
  - Shop

- Wash bay
- Lift areas
- Fueling facility

#### **12.1.4 Wellness/quality of life**

- 1) Fatigue awareness/fatigue issues
- 2) Ergonomics
- 3) Health & wellness
- 4) Physical activity
- 5) Stress management
- 6) Medical management
- 7) Home safety/24-7 safety

#### **12.2 Customer safety**

- 1) Customer responsibility
- 2) Customer safety education
- 3) Boarding & alighting
- 4) Customer accidents

#### **12.3 Security awareness and emergency procedures**

##### **12.3.1 Operator emergency procedures**

- Community/operator preparedness (emotional preparedness)

##### **12.3.2 Basic vehicle emergency procedures**

- Emergency equipment
  - Fire suppression/fire extinguishers
  - Flares and triangles
  - Wheel chock/stop
  - Emergency shut-offs if applicable

##### **12.3.3 Vehicle evacuations**

- When, where and how
- Special situation considerations (fire, bomb, collision)
- Customer considerations/special needs



#### **12.3.4 Vehicle fires**

- Types of fire identification
- Use of fire extinguisher
- Systems shut off

#### **12.3.5 Mechanical emergencies**

- 1) Fuels & fluid leaks and containment
- 2) Brake, steering, & acceleration failure
- 3) Warning devices
- 4) Stalled vehicle
  - Roadway/highway
  - Railroad crossing
- 5) Tire failure

#### **12.3.6 Medical emergencies**

- 1) Identification
- 2) Procedures
- 3) Blood borne pathogens issues

#### **12.3.7 Incident emergencies**

- 1) Roll-overs
- 2) Collisions
- 3) Pedestrians/cyclists
- 4) On board incidents
- 5) Boarding and alighting
- 6) Injuries

#### **12.3.8 Security emergencies**

- 1) Bombs and weapons of mass destruction
- 2) Hijacking
- 3) Suspicious behavior/packages
- 4) Threats and assaults
- 5) Other weapons (guns/knives/mace)

### 12.3.9 Incident investigation and documentation

- 1) Liability exposure/agency risk
- 2) Causal factors
- 3) Preventability and non-preventability
- 4) Incident/accident report
  - Current, complete and accurate
  - Witness/courtesy cards
- 5) On the job injury reports

### 13. Required training documentation

All training elements should be documented.

- Hours and elements of training
  - class room
  - behind the wheel
  - equipment
- Drug and alcohol
- Security
- Harassment
- ADA
- CDL
- Medical information
- Accident/incident
- Record retention
- FMLA
- OSHA
- Workers comp
- ADA
- Test results
- Training summary with trainer/operator sign-off
- Policy and procedure sign-off

### 14. Recommended best practices

- Agency wide safety committee structure involving someone from every department
- Bus operators safety committees/unions
- On going safety inspections
  - On board observations
  - Facility inspections
  - Road observation

- Probationary on board observations
- Periodic check of driver's license
- Medical requirements
- Accident review board:
  - management
  - labor
- Systems safety program plan
- Standardized training documents
- Periodic retraining
- Targeted retraining
  - performance monitoring
- Probationary review
  - 30, 60, 90 day review
- Data Collection
  - Computerized accident data reporting systems
- Incentive/rewards/safety awards
- Daily training assessment
- Healthy and wellness programs
- Bring in people with disabilities to share experiences/video
- Have operators experience first hand a "disability"



## Annex A

### Recommended commercial driving courses

- 1) National Safety Council Defensive Driving Course – Adapted for transit
- 2) Smith System

## Annex B

### Additional Resources

- 1) Training Resources Catalog for Rural and Specialized Transit Systems, FTA RTAP National Program, 1994.
- 2) 49 CFR Part 655 – Prevention of Alcohol Misuse and Prohibited Drug Use in Transit Operations.
- 3) National Occupational Standards Professional Bus Operator, Motor Carrier Passenger Council of Canada, June 2000.
- 4) Transit Safety and Security Prototype Approach, State of Colorado DOT, (CD format), December 2002.
- 5) A Guide to Determine Motor Vehicle Accident Preventability, National Safety Council.

### Websites

- FTA, <http://www.fta.dot.gov>
- FTA Office of Safety and Security, [www.fta.dot.gov](http://www.fta.dot.gov) and use tab, “Safety and Security”
- Washington State Transportation Training Commission, [www.wsttc.org](http://www.wsttc.org) (click tab on RTAP Scholarships)
- CTAA – [www.ctaa.org/training](http://www.ctaa.org/training)
- RTAP, [www.indiana.edu/mrtap](http://www.indiana.edu/mrtap)
- Transportation Safety Institute (TSI) [www.tsi.dot.gov](http://www.tsi.dot.gov)
- National Transit Institute (NTI), [www.ntionline.com](http://www.ntionline.com)
- Federal Register, [www.access.gpo.gov/nara](http://www.access.gpo.gov/nara)
- National Safety Council (NSC), <http://www.nsc.org>