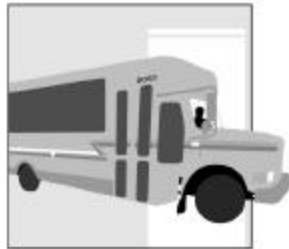


Safety Guidelines for Rural and Small Urban Transit Agencies



Prepared for:
**Texas Department of Transportation and
U.S. Department of Transportation,
Federal Highway Administration**

By:
Texas Transportation Institute

Product No. 0-4008-P1

SAFETY GUIDELINES FOR RURAL AND SMALL URBAN TRANSIT AGENCIES

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Product 0-4008-P1
Project Number 0-4008
Research Project Title: Transit Safety and Security Best Practices

Performed in cooperation with the
Texas Department of Transportation
and the
Federal Highway Administration

September 2002
Resubmitted: September 2002
Resubmitted: April 2003

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Disclaimer

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Acknowledgments

This project was conducted in cooperation with staff from the Texas Department of Transportation (TxDOT) and transit agencies in the state. Margot Massey and Susan Hausmann, both from TxDOT's Public Transportation Division, served as the Program Coordinator and the Project Director, respectively. Janine Sanders from Citibus of Lubbock, Mark Ostertag and James Hoskins from Capital Metropolitan Transportation Authority, David Martinez from VIA San Antonio, Tom Gruefe from the Metropolitan Transit Authority of Harris County, Mark Gillett from Dallas Area Rapid Transit, Mike Pefanis from the Corpus Christi Regional Transit Authority, and Rene Guajardo from Capital Area Rural Transportation System provided valuable information for the project. Bonnie Duke was responsible for word processing, Chris Sasser formatted the Guidebook, and Jim Lyle took the photographs used in the Guidebook; all are from the Texas Transportation Institute. The assistance of these individuals is both recognized and appreciated.

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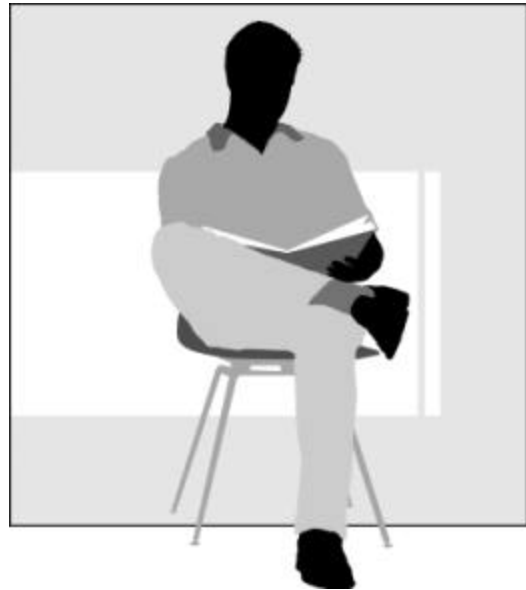
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Chapter 1 - Using the Guidebook



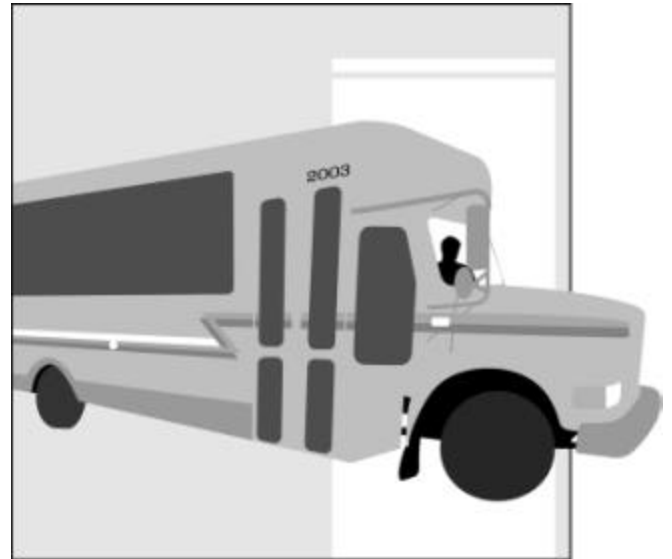
Providing safe and secure public transportation services is important in major metropolitan regions, small cities, and rural areas in Texas. The safety and security issues associated with transit services in these areas are different, however, with agencies in the state's urban centers facing greater exposure to potentially more dangerous and widespread concerns. Public transportation agencies providing service in small communities and rural areas must address many of the same basic safety and security issues as their urban counterparts, frequently with fewer staff and financial resources.

This guidebook presents information on safety-related topics for rural and small urban transit agencies in Texas. The information is targeted toward helping ensure the safe operation of transit services in the state and the safety of all transit

employees and passengers, and motorists and pedestrians using the roadways.

The guidelines are organized under the four general headings of: operator and employee selection and training, vehicle maintenance, drug and alcohol abuse programs, and safety data acquisition and analysis. These categories represent the core safety program elements identified in the Federal Transit Administration (FTA) Model Transit Bus Safety Program for rural and small urban transit agencies. Each section contains a general description of key issues and examples of specific approaches to address these concerns. Examples of procedures, forms, and techniques are provided for use by the transit agencies in the state. Additional references on sources of safety-related information and assistance are provided in the appendices.

Chapter 2 - Operator and Employee Selection and Training



The selection of employees, especially bus operators and other safety-sensitive personnel, is important for the safe operation of transit services. Bus operators are directly responsible for the safety of their passengers, as well as motorists and pedestrians sharing the roadways. Initial and ongoing training for all employees is also critical to safe and secure operations. This chapter highlights techniques to help ensure the selection of qualified operators and other transit personnel, as well as initial and ongoing training activities for these individuals.

OPERATOR AND EMPLOYEE SELECTION

Job Descriptions

Job descriptions should be developed for all transit employees, including bus operators and other safety-critical

employees, both paid and volunteer. Job descriptions should include the key functions of the position and any special requirements associated with the job. As defined by the Federal Transit Administration (1), “safety sensitive” functions include the following:

- Operating a revenue service vehicle including when not in revenue service,
- Operating a non-revenue service vehicle that requires operators to hold a commercial drivers license (CDL),
- Controlling dispatch or movement of a revenue service vehicle,
- Maintaining revenue service vehicles or equipment used in revenue service including repairs, component overhaul, and rebuilding, and
- Providing security and carrying a firearm on transit vehicles, at transfer

points, and at transit facilities open to the public.

Volunteers are exempt from the FTA drug and alcohol testing requirements unless they are required to operate a vehicle that requires a commercial driver's license. FTA defines volunteers as non-employees who perform a service as a charitable act without the expectation of receiving benefit.

The following list highlights some of the elements that may be included in the job description and requirements for transit vehicle operators. The Texas Administrative Code (2) and the Texas Commercial Motor Vehicle Drivers Handbook (3) provide the requirements for obtaining a CDL which follow federal requirements.

Physical Requirements

Bus operators should possess the following minimum qualifications.

Mental and Physical Condition

Operators must be in sound physical and mental condition. Operators must not have any physical or mental limitations that would interfere with safe driving, passenger assistance, and emergency activities. They must be physically capable of assisting persons with special needs, including individuals in wheelchairs.

Eyesight. The Texas Administrative Code (2) requires that individuals holding a CDL must have 20/40 or better vision in both eyes, and not be color blind. An individual may apply for a vision waiver if they have 20/40 or better distant binocular accuracy with or without corrective lenses.

Hearing. Bus operators must have hearing adequate to detect vehicle horns, emergency vehicle sirens, and train signals. The Texas Administrative Code (2) requires that individuals holding a CDL have good hearing.

Alcohol, Narcotics, and Drugs.

Operators shall not be addicted to the use of alcohol, narcotics, or habit-forming drugs. Drug and alcohol testing will be conducted in accordance with federal regulations.

Doctor's Physical Examination

Physical examinations shall be required annually for all bus operators.

Driving Ability and Driving Record

Driving Ability. Operators must be able to operate the types of buses or vans used by the transit agency. Operators with five years of driving experience are preferred.

Driving Record. Bus operators must have good driving records with no driving while intoxicated (DWI), reckless

driving, or other safety-related charges or tickets. Operators should not have had suspended or revoked licenses within the past 10 years for moving violations or violations of criminal laws.

Customer Interaction

Passenger Interaction. Operators must be able to interact with passengers in a courteous, pleasant, and helpful manner. Operators must be able to deal with passengers from diverse backgrounds and individuals with special needs.

General Skills

Operators should be able to speak and read English. Knowledge of Spanish may also be highly desirable in some areas. Operators should be able to perform basic math, be able to read maps and follow directions, and have a good understanding of the service area.

Figure 1 identifies the key elements to be included in a job description for a bus operator. The information above and in Figure 1 can be tailored to the specific needs and characteristics of a transit agency. Job descriptions for other safety-sensitive transit employees should include many of these same items. Emphasis should be placed on ensuring that safety-sensitive applicants are

drug- and alcohol-free, are in good physical condition, have the ability to exercise good judgment and stay calm in emergency situations, and have good interpersonal skills.

Driver's License Requirements

The Texas Administrative Code, which follows federal requirements, governs driver's license requirements for individuals operating vehicles with 16 or more passengers, including the driver. A CDL is required to operate a vehicle to transport more than 16 persons including the driver in Texas. There are three classes of CDLs in Texas, two of which cover operators of vehicles carrying passengers. A Class B CDL is required to operate any vehicle designed to transport 24 or more passengers, including the driver. A Class C CDL is required to operate a vehicle designed to transport 16 to 23 passengers including the driver. In addition, a CDL holder may have a passenger ('P') endorsement (2, 3).

Transit agencies may require potential bus operators to have a valid CDL when they apply for a job. Other agencies may allow individuals to start training programs while they are obtaining a CDL.

Education – High school diploma or G.E.D.

Age – At least 21 years

Licenses – Valid Texas driver’s license and ability to obtain and maintain Texas commercial driver’s license

Experience – 1 to 5 years

Basic Job Functions – Drive vehicle to pick up, transport, and drop off passengers over specified routes or between identified locations. Drive vehicle safely under different traffic and weather conditions. Interact with passengers in a courteous and helpful manner. Assist passengers in and out of vehicle, operate wheelchair lift, and secure wheelchairs in vehicle. Conduct pre- and post-trip vehicle inspection, which requires ability to balance oneself, climb, and strongly grip objects. Push doors, windows, emergency hatches, and other objects. Complete driver’s trip logs and other record keeping.

Other Requirements – Must have physical examination and meet physical requirements, adhere to agency drug and alcohol screening policies, have no driving while intoxicated or other major traffic citations, and maintain a satisfactory driving record.

Figure 1. Key Elements of Job Description for Bus Operators.

Transit agencies can check with the Texas Department of Public Safety (DPS) to ensure that applicants and operators have valid licenses. The form (DR1) for requesting information from the DPS on driver licenses and records is available on the DPS Website (<http://www.txdps.state.tx.us/ftp/forms/dr-1.pdf>). There is no charge for public agencies requesting record checks. The form can be sent by fax (512-424-7285), regular mail, or overnight delivery. Typical response time for requests sent by regular

mail is 17 to 21 days, while response time for requests sent by fax and overnight mail is 5 to 7 days. Private companies also provide driver license checking services. These businesses will take care of the DPS paperwork for a fee. DAC Services (<http://www.dacservices.com/company.com>) is an example of one company providing these types of services.

The VIA Metropolitan Transportation Authority of San Antonio Driver’s License Standard provides one example of the requirements used by a large

transit agency in Texas. The VIA Driver's License Standard is intended to ensure that employees who operate VIA vehicles have the appropriate licenses and maintain good driving records. All employees authorized to operate VIA vehicles are subject to having their driving records reviewed. All employees are required to report all moving vehicle violations, citations, status changes in their driving records, and arrests related to moving violations, whether the employee was operating a VIA vehicle or a personal vehicle at the time of the violation. VIA checks driver's license records through DPS on a quarterly basis, and follow-up actions are taken as needed. The standard outlines three levels of offenses and related disciplinary action that will be taken by VIA (4).

Background Checks

Conducting background checks on potential employees is standard procedure in many businesses and public agencies. Contacting previous employers and references provided by a prospective employee is the most commonly used approach. Transit agencies may undertake more detailed review of candidates for safety- and security-sensitive jobs, including completing criminal background checks.

These efforts may include contacting local police or public safety departments to check criminal records. Background checks may be conducted by transit agency personnel, or firms specializing in these types of activities may be hired.

Interviewing and Testing Prospective Employees

Interviews represent a major step in the hiring process for bus operators and other safety-sensitive transit positions. Individuals conducting the interviews should be provided with training on interviewing techniques. Personnel conducting interviews for the first time may wish to practice by interviewing other co-workers. A standardized list of questions should be prepared and reviewed by the appropriate agency personnel. The same questions should be asked of all applicants. The following are examples of questions that may be considered in interviewing prospective bus operators at rural and small urban agencies.

- Please describe your work history, especially any jobs relating to driving buses or other vehicles.
- Why are you interested in becoming a bus operator?

- What is your experience in dealing with the public? Have you worked with the elderly, individuals with special needs, and people of diverse backgrounds?
- Bus operators must exercise judgment in meeting bus schedules, while operating the bus safely and courteously and maintaining good public relations. How do you handle multiple objectives?
- Are you familiar with the general area covered by the transit agency?
- Please describe how you would handle the following situations. A passenger slips and falls getting off the bus. A passenger refuses to pay the required fare.
- Bus operators may have to deal with emergency situations. Have you had any first-aid training or other related training? Have you had any experience responding to safety concerns or emergencies?

Federal and state laws prohibit discriminating against applicants for employment. Equal Employment Opportunity (EEOC) policies require that all employees and applicants for employment are treated equally without regard to race, color, religion, sex, national origin, disability, or age. Questions that can be

answered by a simple yes or no response should not be used. Questions should evoke an answer beyond yes or no.

Figure 2 highlights key elements frequently included in the interview process. These steps can be followed by transit agency personnel conducting interviews for bus operators. Transit agencies may consider having more than one individual interview applicants. This approach provides multiple perspectives on a potential operator. It also allows more employees to be involved in the hiring process and to feel ownership in the hiring decision.

Written tests may be used as part of the application process. Transit agencies may develop their own questionnaire or they may use a commercially available service, such as the American Public Transportation Association's (APTA's) Bus Operator Survey and Selection (BOSS) program. This program uses a written survey and interview questionnaire to assist in screening applicants. More information about the BOSS program, and the costs associated with the program, is available directly from APTA.

- ◆ Prior to the interview, review the applicant's resume and job application.
- ◆ Explain how the interview will be conducted. Ask applicants to answer each question to the best of his/her ability.
- ◆ Provide a quick overview of transit agency mission, size, and areas of operation.
- ◆ Describe the nature of the transit agency, the management structure, and the reporting requirements.
- ◆ Explain the duties and responsibilities of the job; ask if applicants have any questions about the duties he/she would be performing.
- ◆ Ask specific questions relating to background, interest in job, response to certain situations, and other related topics.
- ◆ Take notes on the key points of each answer and general reactions to responses.
- ◆ Review notes after the interviews and meet with others who have conducted interviews.

Figure 2. Steps in Conducting Interviews for Bus Operators.

Road tests may be used by transit agencies to help determine an applicant's ability to safely operate a vehicle. Driving tests may be conducted as a second phase of the hiring process with individuals emerging from the interview process as potential candidates. In most cases, however, it appears that actually driving a bus, van, or other transit vehicle occurs only after other training is complete and only under the guidance of an instructor.

Making Selection Decisions

There is no magic formula for making good hiring decisions. Steps frequently followed in the selection process include reviewing the application and license/background checks, obtaining

feedback from the individuals conducting the interviews, and reviewing the written test and the road test, if conducted. The most qualified and best candidate or candidates for the position frequently emerge. Given the importance of good employees, hiring decisions should not be taken lightly. Adequate deliberation should be given to considering the various candidates. Transit agency personnel should be comfortable with not hiring any of the applicants in a pool if none meet the requirements or appear to be a good fit for the job.

Performance Evaluations

Transit agencies typically provide probationary periods for new employees and

conduct annual performance reviews. Probationary periods, which usually cover the first six months of employment, allow transit agencies to determine if an employee is capable of performing the job.

Performance reviews may be conducted at three months and at six months during the probationary period. Employees not able to perform to the expectations of a job may be dismissed during the probationary period with proper documentation.

Once an employee has successfully completed the probationary period, performance evaluations are commonly conducted on an annual basis. The probationary and annual review of bus operators may include ride checks and performance evaluations. Figure 3 provides an example of a ride check evaluation form, and Figure 4 provides an example of a bus operator evaluation form.

Transit employees in major urban areas are usually unionized. Transit managers at large agencies must follow the appropriate collective bargaining requirements related to evaluation, discipline, and dismissal. Transit employees with rural transit agencies and many small urban agencies do not tend to be union members. Performance evaluations at these agencies typically follow city, local agency,

or private non-profit organization guidelines.

OPERATOR AND EMPLOYEE TRAINING

Training in the prevention of incidents and accidents, and the proper procedures to follow should an incident occur, is critical to the safe operation of rural and small urban transit agencies. Training for bus operators should occur before they start regular service. Periodic refresher training covering key elements of previous training and new information, techniques, and procedures should also be conducted. Safety and security information and procedures should be major elements of initial and ongoing training.

Capital Metro On-Board Observation Report (Printed in triplicate)

Date		Division:		Defect Card:	
				Transfers:	
Operator's Name:			___ Full Time ___ Part Time ___ Probationary		
I.D. #:					
License #:		Bus #:	Block:	Time On:	Time Off:
Expiration:					
Boarding location:			Alighting Location:		
Type: (circle one)	Return to Work	Post-Accident	Pre-Graduation	Complaint	Routine
Performance Items					
Item		Rating		Item	
Rating		Rating			
1. Unit Inspections				16. Service Stops	
2. Destination/Block				17. Schedule Adherence	
3. Seat Belt Use				18. Door Operation	
4. Operator Appearance				19. Knowledge of Route	
5. Smooth Starts/Stops				20. Traffic Regulations	
6. R.R. Crossings				21. Speed of Operation	
7. Passing Clearance				22. Revenue Collection	
8. Use of Turn Signals				23. Calls Out Time Points	
9. Use of Mirrors				24. Use of Life/Restraints	
10. Following Distance				25. Overall Customer Relations	
11. Lane Control				26. Fare Box Procedures	
12. Correct Turning Procedures				Rating Codes S = Satisfactory N = Needs Improvement U = Unsatisfactory N/A = Not Applicable	
13. Driving to Road Conditions					
14. Judgment/Alertness					
15. Safety Precautions					
Supervisor's Signature:			Operator's Signature:		
COMMENTS:					
Disposition: (circle one)	Operator Commended	Satisfactory Operation	Operator Re-Instructed	Follow-Up Required	Re-Training Required
Operator Copy – White		Training Copy – Yellow		Operator File - Pink	

Figure 3. Example of Ride Check Evaluation Form (5).

NAME _____

YEAR _____

Rate the operator on each of the performance areas using the rating below.

4 – CLEARLY OUTSTANDING – Far exceeds job requirements.

3 – EXCEPTIONAL – More than meets job requirements.

2 – SATISFACTORY – Meets job requirements.

1 – SOME DEFICIENCIES EVIDENT – Has difficulty meeting job requirements.

0 – UNSATISFACTORY – Fails to meet job requirements.

	RATING
1. JOB KNOWLEDGE Consider the operator's job-related education, skills, and experience. Comments: _____	_____
2. JUDGMENT Consider the operator's capacity to make reasonable decisions. Comments: _____	_____
3. APPEARANCE Consider the operator's personal habits, clothing, and grooming as it relates to his/her job. Comments: _____	_____
4. COURTESY Consider the operator's courtesy toward passengers and other employees on the job. Comments: _____	_____
5. COOPERATION Consider the operator's willingness to help others accomplish their objectives. Comments: _____	_____
6. INITIATIVE Consider the operator's willingness to assist others and take initiative on non-required tasks. Comments: _____	_____
7. RELIABILITY/ON-TIME Consider the operator's dependability. Comments: _____	_____
8. ATTENDANCE Consider the operator's adherence to attendance guidelines. _____	_____

SUMMARY SCORE _____

Figure 4. Example of Bus Operator Performance Evaluation Form (6 modified).

Supervisor's comments on operator's strengths: _____

Supervisor's comments on operator's weaknesses: _____

Training and development action plan: _____

PERFORMANCE SUMMARY

DISCIPLINARY ACTIONS

Violation Reports _____ Oral Warnings _____ Written Warnings _____

Suspensions _____ Days _____

Type Date Length Reason

EMPLOYEE SUGGESTIONS

Date Description

MANAGEMENT COMMENDATIONS

Date Description

I acknowledge that my supervisor has reviewed this form with me and understand that it will be placed in my file. My signature does not necessarily indicate agreement with my evaluation.

Employee Signature

Date

Supervisor's Signature

Date

Reviewed by _____

Date _____

Figure 4. Example of Bus Operator Performance Evaluation Form (6, modified, Continued).

Driving and Safety Training

Numerous resources are available to assist transit agencies in developing and conducting training for bus operators and other safety-sensitive transit personnel. These resources include the Texas Department of Transportation's (TxDOT's) Public Transportation Division, the Community Transportation Association of America (CTAA), and the United States Department of Transportation. CTAA, in

cooperation with the Colorado Department of Transportation and transit groups in Colorado, developed a training program model for new bus operators. The training includes a combination of classroom and on-the-job sessions covering a three-week period. The topics covered in both training environments and the suggested duration of each session is highlighted in Table 1.

Table 2 highlights the basic elements of the current training program used at Citibus in Lubbock.

Table 1. CTAA Classroom and On-the-Job Training for New Bus Operators (7).

Topic	Hours
Classroom Training	
Organizational issues	8
Pre-trip inspection	4
Defensive driving	8
Passenger service and safety	16
Elderly and disabled sensitivity	8
Customer service	4
Crisis management	8
CPR and first-aid	8
Total Hours Classroom	64
On-the-Job Training	
Vehicle orientation	8
Pre-trip inspection	8
Defensive driving	8
Handling accidents	8
Crisis management	8
Passenger assistance	8
Routes, fares, paperwork, and customer service	8
Total Hours On-the-Job	56
Total Hours Classroom and On-the-Job	120

Table 2. Citibus Training Program Elements (8).

Type	Frequency	Personnel	Hours	Endorsement
Hazard Communication	Upon Hire	New Employees	Variable	
Right to Know	Upon Hire	New Employees	Variable	
Bus Operator Training	Upon Hire	New Operators	32	TSI
Defensive Driving	Every 2 years	All Employees	6	NSC
Sexual Harrassment	Every 2 years	All Employees	1	
General Safety	Quarterly	All Employees	2	
Passenger Assistance Tech.	Every 2 years	All Operators	8	TMA
Working with the Public	Every 2 years	All Operators	8	CSCS
Training the Trainer	Variable	All Operators	32	TSI
Specific Safety	As needed	Variable	Variable	

TSI = Transportation Safety Institute

TMA = Transportation Management Associates

NSC = National Safety Council

CSCS = Carl Swander Consulting Services

Pre-trip, in-vehicle, and post-trip inspections represent significant components of an operator’s training program. These elements are discussed in Chapter 3. These efforts may culminate with a road test, or an operator-in-training may be monitored on a number of occasions by a senior operator. Road tests should be at least one hour to obtain a good perspective of the trainee’s driving skills and abilities. Table 3 provides an example of a road test evaluation form. Most driving tests require the trainee to negotiate the following situations and to operate on a variety of bus routes:

- Right- and left-hand turns,
- Straight section of roadway in traffic,

- Intersections with different traffic controls and rights-of-way,
- Railroad crossings,
- Bus stops and other transit facilities,
- Tight curves, and
- Other situations that are typical or unique to a specific area.

Table 3. Bus Operator Trainee Road Test Evaluation Form (6, 9, modified).

Item	Completed (Y) Not Completed (N)	Times Missed	Deduction
<i>Preliminary Operator Actions</i>			
Adjusts the seat properly			
Adjusts the rear-view mirrors			
Fastens safety belt			
<i>Starting the Engine</i>			
Checks parking brake			
Does not race engine during warm-up			
<i>Position of Vehicle in Traffic Lanes</i>			
Drives in proper lane			
Keeps vehicle in center of travel lane			
Follows other vehicles at a safe distance			
<i>Turning</i>			
Approaches from proper lane			
Approaches at proper speed			
In proper lane during and after turn			
Strikes curb			
Makes turn unnecessarily wide			
<i>Traffic Signals/Intersections</i>			
Fails to yield right-of-way			
Traffic signal – through on amber			
Traffic signal – through on red			
<i>Passing Vehicles Traveling in Same Direction</i>			
Checks traffic ahead and to the rear			
Cuts back into line appropriately after passing			
<i>Railroad Crossings</i>			
Looks in all directions			
Comes to a full stop when necessary			
Stops at a safe place, if necessary			

TxDOT's Public Transportation Division offers training for small and rural transit agencies in the state on a number of topics, including those related to safety and security. Training is coordinated through the TxDOT districts, the Public Transportation Division, and local host

agencies. Training courses are scheduled based on requests from district staff and transit agencies.

Training courses offered include Transit Safety, Accident Management/Liability Considerations, Computer Labs, Customer Service/Dealing

with Difficult Customers, Elderly and Disabled Transportation Planning and Development, Emergency Management, Passenger Assistance, Professional Dispatching and Scheduling, State Management Review, Stress Management, and Vehicle Maintenance Management and Inspection. Information on the training courses is available on the Public Transportation Division Website.

The Transit Safety and Security Division of the Transportation Safety Institute (TSI) in the Department of Transportation's Research and Special Programs Administration (<http://www.tsi.dot.gov/divisions/Transit/transit.htm>) and the National Transit Institute (NTI) at Rutgers University (<http://www.ntionline.com/>) have numerous courses on transit safety-related topics. Appendix B provides a listing of training courses offered by TSI, CTAA, NTI, and other groups and Website addresses for more information.

Many of the training elements listed in Tables 1 and 2 address safety-related issues and concerns. Pre- and post-trip inspection, vehicle maintenance, drug and alcohol testing, and accident response and investigation are discussed more extensively in Chapters 3, 4, and 5. Other safety-related

topics usually covered in operator training are highlighted below.

Defensive Driving. Defensive driving skills are a key part of training for new bus operators and periodic retraining for current operators. Major topics covered in defensive driving training include vehicle familiarization, basic operation and maneuvering of a bus, dealing with special traffic conditions, and watching out for other vehicles, pedestrians, and bicyclists. Other topics include driving in inclement weather and at night, dealing with brake failures and blown tires, and crossing railroad tracks. The most frequent causes of accidents are described in training programs, and instructions on how to deal with these situations are provided.

Boarding and Alighting Passengers. Training should be provided in passenger boarding and alighting transit vehicles. Techniques for dealing with passengers with special needs should also be presented.

Dealing with Difficult Passengers. Operators usually receive training in how to deal with difficult passengers. These may be individuals who become upset over some problem or who become disruptive on a vehicle.

Wheelchair Lift Operation and

Securement. Special training is needed on the operation of wheelchair lifts on transit vehicles and securing wheelchairs once they are inside the vehicle. Elements typically covered include lift inspection, deploying a lift for use, providing assistance to the passenger, operating the lift, securing the wheelchair in the vehicle, and deploying the lift to drop off the passenger. Operators should also receive training in securing special equipment passengers may have, such as aspirators, ventilators, or other devices.

Vehicle Fires and Evacuation

Operators should receive training on what to do in the case of a fire, fuel leak, or other incident that requires evacuating a transit vehicle. Topics covered should include the use of fire extinguishers and practicing proper techniques, procedures to follow in evacuating a vehicle and practicing evacuation techniques, notification procedures, and maintaining the area once the vehicle has been evacuated.

Personal Safety. Although rural and small urban transit agencies may be less likely environments for operator harassment or other violent acts than major urban areas, bus operators should be given training on ways to protect their safety and the safety of

their passengers in case a potentially hazardous situation develops. Training should include the use of non-confrontational methods that protect the operator, passengers, and bystanders from escalating hostility or violence. This training may be included as part of “Working with the Public” or other passenger care instruction.

Emergency Management

Procedures. Cities and counties in Texas are required to establish emergency plans that coordinate the activities of policy, emergency workers, and government agencies in the event of a widespread emergency. These may be natural emergencies, such as hurricanes, or man-made disasters, such as chemical spills or explosions. A local transit agency should be involved in its local community emergency plan. A transit agency should also establish procedures for interacting with local emergency personnel in the case of a transit-related emergency. Operators and other employees that are likely to be respondents during an emergency should receive training on the transit agency’s approved roles and actions and, including the procedures and lines of communication that should be followed in emergency response.

First-Aid. First-aid training should include, at a minimum, procedures for contacting emergency personnel, communicating necessary information concerning a medical emergency, and making the sick or injured person as safe and comfortable as possible until medical personnel arrive. Transit agencies may opt to provide more extensive first-aid training to vehicle operators, such as a Red Cross Workplace Standard Training first-aid course (<http://www.redcross.org/services/hss/courses/firstaid.html>).

Bloodborne Pathogens. The Occupational Safety and Health Administration (OSHA) oversees health and safety regulations in the public sector, including public transit agencies. OSHA regulation 1910.1030 requires that public sector employees adopt an Exposure Control Plan that eliminates or minimizes employee's exposure to bloodborne pathogens. A bloodborne pathogen is defined as a pathogenic microorganism that is present in human blood and can cause disease in humans. Bloodborne pathogens include but are not limited to Hepatitis B Virus (HBV), and Human Immunodeficiency Virus (HIV). The

elements that must be included in the plan are highlighted in this section.

An Exposure Control Plan must be developed and reviewed on an annual basis to reflect new or modified tasks and procedures that affect occupational exposure and to reflect new or revised employee positions with occupational exposure. A copy of the Exposure Control Plan shall be made available to the Assistant Secretary of Labor for Occupational Safety and Health and the Director of the National Institute for Occupational Safety and Health or other designated representative. Copies of the Exposure Control Plan shall be available to employees upon request.

The Exposure Control Plan shall determine the exposure category for each employee. The level of potential occupational exposure that each employee faces shall be identified, and the employer shall categorize them according to the risk exposure to blood or other potentially infectious materials. All tasks and procedures in which occupational exposure could occur shall be listed in their job classifications. Employees with the risk of occupational exposure shall participate in a training program, and refresher training must be completed annually.

Transit agencies shall identify a timetable for implementing various methods of complying with the regulation. Biohazard and first-aid kits must be provided in all vehicles, waiting rooms/transfer facilities, general office areas, and the maintenance facilities area. Biohazard kits and the appropriate containers for the disposal of bloodborne pathogens must be provided for operators and maintenance personnel. Required and recommended items for biohazard kits are discussed in Chapter 3. Hand-washing facilities that are readily accessible to employees must be provided, and a written cleaning schedule for all facilities must be maintained.

The Hepatitis B vaccine and vaccination series must be made available to all employees who have encountered occupational exposure. Along with the vaccine, a post-exposure evaluation and follow-up should be provided to all employees who have had an exposure incident at no cost to the employee. Employees who decline the vaccinations must sign a Vaccination Declination.

Employee Safety Training

The training activities noted above are appropriate for bus operators,

maintenance personnel, safety-sensitive employees, and other transit personnel. State and federal laws, as well as local agency and community policies, require training on specific topics for certain types of employees. As described in more detail in Chapter 4, federal law requires that safety-sensitive employees receive training on the effects of drug and alcohol use and abuse. Supervisors of safety-sensitive employees must receive additional training on reasonable suspicion of drug and alcohol use. Other laws and policies provide guidance on training related to sexual harassment in the workplace, discrimination, and equal employment opportunities.

Table 4 provides examples of the safety-related training topics that should be considered for all transit employees. Training should cover on-site safety-related issues unique to transit operations, as well as those that might be encountered in any place of work. Training for maintenance personnel should focus on the safe use of machines, tools, and liquids and lubricants used in daily operations. The scope of training activities should be tailored to the

Table 4. Examples of Safety-Related Training for All Transit Agency Employees.

Topic
General Safety Practices
Emergency Management Procedures
Personal Safety
Fires
Bomb Threats
First-Aid and Bloodborne Pathogens
Drug Abuse and Alcohol Misuse
Working with the Public/Dealing with Difficult Customers
Hazard Identification and Procedures
Accident Reporting and Investigation

size and nature of a transit agency, the types of services offered, the fixed facilities, rider characteristics, and local issues.

Ongoing Training and Retraining

Transit agency employees should be provided with ongoing training on safety-related topics and refresher courses on all aspects of their jobs. Ongoing training may take many forms, including safety committees, safety meetings, periodic training sessions, and off-site training opportunities.

Safety Committees. Transit agencies may form safety committees to help monitor safety concerns, obtain input on possible issues and solutions, and disseminate information on new requirements and procedures. Safety

committees provide a forum for the discussion of safety-related topics. Safety committees typically comprise representatives from all departments or areas within the transit agency. Specific roles and functions of safety committees may include the following:

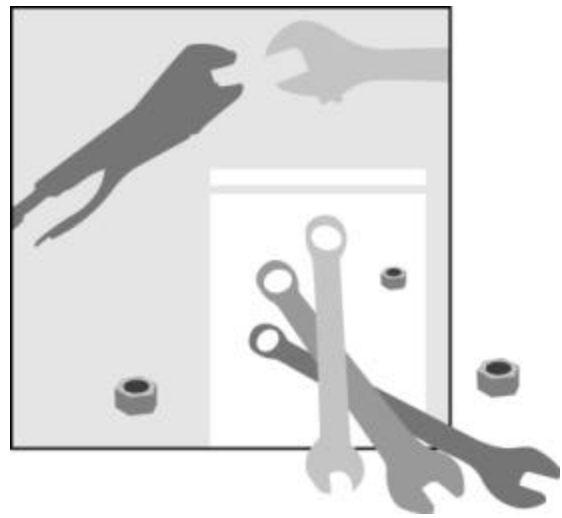
- Monitor safety policies and procedures,
- Identify new safety issues and possible solutions,
- Identify training needs and training opportunities,
- Conduct surveys and other activities, and
- Coordinate safety meetings.

Safety Meetings. Meetings on safety-related issues should be scheduled at regular intervals. These sessions may be part of regular operator or employee meetings or they may be special sessions focusing on safety topics.

Periodic Training Sessions. Transit agencies should conduct periodic training sessions and refresher courses on safety-related topics. Training is especially appropriate when new policies and procedures are introduced, when new safety issues emerge, and after accidents or incidents have occurred.

Off-Site Training Opportunities. As noted previously, a number of organizations offer training on various transit safety topics through the year. In addition, opportunities may arise for interested employees to attend safety training sessions at state and regional conferences and meetings.

Chapter 3 - Vehicle Maintenance



Proper maintenance of vehicles and equipment is critical to the safe operation of a transit agency. Well-maintained vehicles, equipment, and fixed facilities are essential to the safety of passengers, operators, other transit personnel, and the public. This chapter addresses basic vehicle maintenance practices and related topics. Information is presented on the key elements of preventive maintenance programs necessary to keep vehicles operating safely, reliably, and efficiently.

MAINTENANCE REQUIREMENTS AND MAINTENANCE PROGRAMS

The maintenance requirement for buses, vans, and other transit vehicles is established by the manufacturer. The maintenance requirements for parts, lubricants, and other vehicle components should be recorded, and a process should be established for monitoring these elements,

completing required services, reporting equipment problems, making needed repairs, and replacing parts as scheduled.

Maintenance programs are critical to keeping buses and other transit vehicles in safe operating condition. A maintenance program should outline the schedule for maintenance on major vehicle components, monitor completion of maintenance checks and replacement of parts or lubricants, and record ongoing maintenance concerns. Maintenance programs should follow the Manufacturer's Warranty Maintenance Schedule for vehicles and other equipment to ensure that warranty requirements are met. Maintenance requirements can be divided into the four categories: daily servicing, periodic inspections, internal maintenance, and breakdown maintenance. Table 5 provides more information on the maintenance elements typically found in each of these categories.

Table 5. Examples of Preventive Maintenance (6, 9, modified).

Category	Preventive Maintenance Elements
Daily Servicing	Pre- and post-trip inspection Full fuel tank levels Proper fluid levels Safety devices in working order Interior and exterior clean and no damage
Periodic Inspection	Periodic checks to detect and repair damage or wear conditions before major problems occur Tire wear Suspension Belts
Interval Related Maintenance	Based on experience and manufacturer guidelines Lubricating oils Brake fluid Tires Parts
Breakdown Maintenance	Necessary when failure in vehicle part of system requiring vehicle to be taken out of service Flat tires Engine breakdown Loss of brakes

The maintenance schedule should be matched to the vehicles operated by a transit agency, local conditions, and the agency policies and practices. Typical maintenance intervals for different types of buses and operating environments are (6):

- 3,000 miles for gasoline vehicles used in urbanized areas,
- 4,000 miles for gasoline vehicles used in non-urbanized areas,
- 4,000 miles for small diesel vehicles, and

- 6,000 miles for medium-to-heavy diesel buses.

Table 6 provides an example of the elements typically inspected at different intervals in maintenance programs. This information can be used by rural and small urban agencies to develop maintenance programs matched to the specific types of vehicles they operate and local conditions.

**Table 6. Examples of Preventive Maintenance Intervals and Elements Inspected
(6, 9, 10, modified).**

Interval	Elements Inspected
<p>Two months or 3,000-4,000 miles for gas and small diesel buses and 6,000 miles for medium/heavy buses (whichever comes first)</p>	<ul style="list-style-type: none"> ▪ Tire tread and pressure ▪ Wheel rims for cracks ▪ Lug nuts for tightness ▪ For oil and water leaks and belt condition ▪ Brakes, including master cylinder fluid level ▪ Exhaust system ▪ Seatbelts ▪ Passenger seats ▪ Brakes ▪ Change engine oil ▪ Change oil filter ▪ Spark plug wires ▪ Belts and hoses ▪ Rear axle differential oil ▪ Wheelchair securement and restraint systems ▪ Cycle wheelchair lift ▪ Windshield wipers and fluid ▪ All interior and exterior mirrors ▪ All exterior lights ▪ Headlights (high and low beams) ▪ Back-up lights and alarm ▪ Taillights ▪ Stop lights ▪ License plate light and plate taillight ▪ Turn signals ▪ Hazard warning lights ▪ Radio ▪ Fare box
<p>Six months or 8,000 to 12,000 miles depending on fleet experience and vehicle maintenance requirements</p>	<ul style="list-style-type: none"> ▪ All of the above ▪ Steering wheel for play ▪ Parking brake ▪ Brake and acceleration pedals ▪ Sun visor ▪ Horn ▪ Signs ▪ All window glass, door glass, and window operation ▪ Power steering fluid level ▪ Transmission fluid level ▪ Batteries ▪ Antifreeze and condition ▪ Exterior for body damage and condition

Table 6. Examples of Preventive Maintenance Intervals and Elements Inspected (6, 9, 10, modified, Continued).

	<ul style="list-style-type: none"> ▪ Air filter ▪ Shock absorbers and springs ▪ Wheel bearings ▪ Fuel tank condition ▪ Alternative mountings for tightness ▪ A/C system ▪ Rotate tires
12 Months or 24,000 to 36,000 miles	<ul style="list-style-type: none"> ▪ All of the above ▪ Detailed frame and body checks, including bolts/nuts, rivets, and welds ▪ Pull all wheels, measure and inspect brake drums, rotors, brake pads, and calipers ▪ Change rear axle differential fluid ▪ Change fuel filter ▪ Change air filter ▪ Clean engine and engine compartment (as needed)

PRE- AND POST-TRIP SAFETY INSPECTIONS AND FORMS

Pre-trip safety inspections should be conducted to ensure that vehicles are in good working order and are ready for service. Pre-trip inspections identify major problems that need to be corrected before a vehicle is put into service. Minor problems are also caught and scheduled for maintenance before they become major concerns, reducing the cost of repairs. A nine-step pre-trip safety inspection is highlighted in this section for use by rural and small urban transit agencies in Texas. The nine-step process is modified from a seven-step process presented by CTAA (11).

This inspection should take an operator approximately 10 minutes. Pre- and post-trip inspections may be completed every time there is a change in operator. The pre-trip inspection form used by the Capital Area Rural Transit Systems (CARTS) is shown in Figure 5.

A pre-trip inspection checklist should be completed before a vehicle is taken into service. Figure 5 provides an example of a pre-trip checklist that matches the following nine steps.

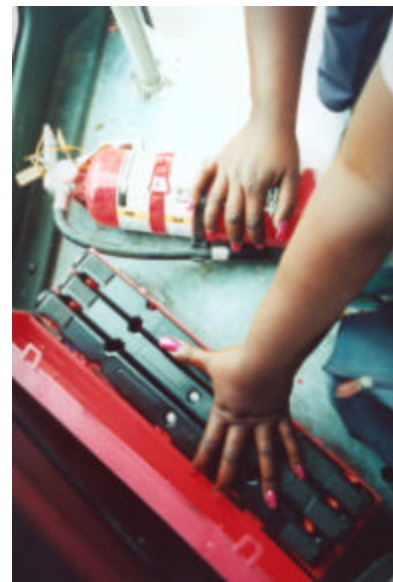
Step 1 – Check Engine. Before starting the vehicle, check the oil, radiator, brake fluid, and coolant levels. Check belts and hoses for cracks, splits, and worn spots. Check for loose battery cables and corrosion. Check for loose wires and fluid leaks. Start engine and check for leaking fluids.



Step 2 – Check Dashboard and Operator Compartment. Check turn signals, flashers, mirrors, lights, windshield wipers and washer, and gauges. Check seat, seat belt, horn, steering wheel, and radio.



Step 3 – Safety Equipment. Check to see that first-aid kit, flares, accident kit, fire extinguisher, and other safety equipment are properly located in the vehicle and are in working order.



Step 4 – Check Exterior Lights. With the engine running, check all exterior lights – headlights (high and low beams), parking lights, brake lights, turn signals, emergency flashers, back-up lights, and clearance lights.



Step 5 – Check Suspension. Check suspension to see if vehicle is lower on one side or in the front or back.



Step 6 – Check Tires. Check tire treads for depth, wear, loose parts, nails, and other foreign objects.



Step 7 – Check Outside of Vehicle. Check windows, doors, bumpers, and vehicle exterior for scratches, dents, and broken/cracked glass. Check exhaust for loose parts and noises.



Step 8 – Wheelchair Lift and Wheelchair Securement. Cycle the wheelchair lift and check wheelchair securement devices in the vehicle.



Step 9 – Test Brakes. Check brake system for sponginess.



Step 10 – Post-Trip Inspection A post-trip inspection should be completed at the end of an operator’s schedule to identify any problems that may have developed during the day. A post-trip inspection may use the same procedures and form as the pre-trip inspection, or the process may be modified. The post-trip inspection form used by CARTS is shown in Figure 6.



Capital Area Rural Transportation System Pre-Trip Vehicle Inspection

Driver: _____ Date: _____

Vehicle #: _____ Route #: _____ Odometer: _____

1. ENGINE COMPARTMENT

Oil level	_____ OK	_____ N/Attn.	Coolant level	_____ OK	_____ N/Attn.
Power steering fluid	_____ OK	_____ N/Attn.	Brake fluid	_____ OK	_____ N/Attn.
Battery fluid	_____ OK	_____ N/Attn.	Transmission fluid	_____ OK	_____ N/Attn.
Windshield washer fluid	_____ OK	_____ N/Attn.	Fan belts	_____ OK	_____ N/Attn.
Radiator hoses	_____ OK	_____ N/Attn.	Power steering hoses	_____ OK	_____ N/Attn.
Air conditioning hoses	_____ OK	_____ N/Attn.	Wiring insulation	_____ OK	_____ N/Attn.

2. DRIVER'S AREA – ENGINE RUNNING

Unusual engine noise	_____ OK	_____ N/Attn.	Instrument gauges	_____ OK	_____ N/Attn.
Steering wheel "play"	_____ OK	_____ N/Attn.	Accelerator	_____ OK	_____ N/Attn.
Shift lever	_____ OK	_____ N/Attn.	Horn	_____ OK	_____ N/Attn.
Windshield wiper/Washer	_____ OK	_____ N/Attn.	Light switches	_____ OK	_____ N/Attn.
Air conditioning/Heater	_____ OK	_____ N/Attn.	Emergency equipment – spare fuses, first-aid kit, fire extinguisher, reflective triangles	_____ OK	_____ N/Attn.
Front	_____ OK	_____ N/Attn.			
Rear	_____ OK	_____ N/Attn.			
Fire suppression/CNG detection test	_____ OK	_____ N/Attn.			

3. LIGHTS- OPERATION AND CLEANING

Low beam	_____ OK	_____ N/Attn.	Four-way flashers	_____ OK	_____ N/Attn.
High beam	_____ OK	_____ N/Attn.	Instrument panel	_____ OK	_____ N/Attn.
Front turn signal	_____ OK	_____ N/Attn.	Dome/Courtesy	_____ OK	_____ N/Attn.
Rear turn signal	_____ OK	_____ N/Attn.	Parking/Clearance lights	_____ OK	_____ N/Attn.
Destination signs	_____ OK	_____ N/Attn.	Brake lights	_____ OK	_____ N/Attn.
Front	_____ OK	_____ N/Attn.	Passenger door	_____ OK	_____ N/Attn.
Side	_____ OK	_____ N/Attn.	Back-up lights	_____ OK	_____ N/Attn.
Keypad	_____ OK	_____ N/Attn.	License plate	_____ OK	_____ N/Attn.

4. GENERAL WALK-AROUND

Overall body condition	_____ OK	_____ N/Attn.	Cleanliness – inside/outside	_____ OK	_____ N/Attn.
Windshield clean	_____ OK	_____ N/Attn.	Rear wheels/lug nuts	_____ OK	_____ N/Attn.
Leaks – oil, water, fuel	_____ OK	_____ N/Attn.	Rear tires – proper pressure	_____ OK	_____ N/Attn.
Rear view mirrors	_____ OK	_____ N/Attn.	Front tires/lug nuts	_____ OK	_____ N/Attn.
Exhaust system – no leaks	_____ OK	_____ N/Attn.	Front tires – proper pressure	_____ OK	_____ N/Attn.
Wood trim (Trolley)	_____ OK	_____ N/Attn.			

5. BRAKES AND SUSPENSION

Parking brake	_____ OK	_____ N/Attn.	Springs – front/rear	_____ OK	_____ N/Attn.
Service brake – leaks, unequal pulling, needs adjustment	_____ OK	_____ N/Attn.	Shocks – front/rear	_____ OK	_____ N/Attn.
			Front end alignment	_____ OK	_____ N/Attn.
			Air brake test	_____ OK	_____ N/Attn.

6. PASSENGER AREA

Entry steps secure	_____ OK	_____ N/Attn.	Handrails secure	_____ OK	_____ N/Attn.
Seats secure	_____ OK	_____ N/Attn.	Seatbelts	_____ OK	_____ N/Attn.
Emergency exits	_____ OK	_____ N/Attn.	Roof hatches	_____ OK	_____ N/Attn.
Cargo secure	_____ OK	_____ N/Attn.			

7. WHEELCHAIR LIFT

Access door	_____ OK	_____ N/Attn.	Lift operation smooth	_____ OK	_____ N/Attn.
Hydraulic fluid leaks	_____ OK	_____ N/Attn.	Tie-down straps	_____ OK	_____ N/Attn.
Electrical controls	_____ OK	_____ N/Attn.	Manual controls	_____ OK	_____ N/Attn.

Figure 5. CARTS Pre-Trip Inspection Form (12).

Capital Area Rural Transportation System Post-Trip Vehicle Inspection

Driver: _____ Date: _____

Vehicle #: _____ Route #: _____ Odometer: _____

1. DRIVER'S AREA – ENGINE RUNNING

Unusual engine noise	_____ OK	_____ N/Attn.	Instrument gauges	_____ OK	_____ N/Attn.
Steering wheel "play"	_____ OK	_____ N/Attn.	Accelerator	_____ OK	_____ N/Attn.
Shift lever	_____ OK	_____ N/Attn.	Horn	_____ OK	_____ N/Attn.
Windshield wiper/Washer	_____ OK	_____ N/Attn.	Light switches	_____ OK	_____ N/Attn.
Air conditioning/Heater	_____ OK	_____ N/Attn.	Emergency equipment –	_____ OK	_____ N/Attn.
Front	_____ OK	_____ N/Attn.	spare fuses, first-aid kit, fire		
Rear	_____ OK	_____ N/Attn.	extinguisher, reflective		
Battery/Charging System	_____ OK	_____ N/Attn.	triangles		

2. LIGHTS, OPERATION AND CLEANING

Low Beam	_____ OK	_____ N/Attn.	Four-way flashers	_____ OK	_____ N/Attn.
High beam	_____ OK	_____ N/Attn.	Instrument panel	_____ OK	_____ N/Attn.
Front turn signal	_____ OK	_____ N/Attn.	Dome/Courtesy	_____ OK	_____ N/Attn.
Rear turn signal	_____ OK	_____ N/Attn.	Parking/Clearance lights	_____ OK	_____ N/Attn.
Brake lights	_____ OK	_____ N/Attn.	Passenger door	_____ OK	_____ N/Attn.
Back up lights	_____ OK	_____ N/Attn.	License plate	_____ OK	_____ N/Attn.

3. GENERAL WALK-AROUND

Overall body condition	_____ OK	_____ N/Attn.	Cleanliness – inside/outside	_____ OK	_____ N/Attn.
Windshield clean	_____ OK	_____ N/Attn.	Rear wheels/lug nuts	_____ OK	_____ N/Attn.
Leaks – oil, water, fuel	_____ OK	_____ N/Attn.	Rear tires – proper pressure	_____ OK	_____ N/Attn.
Rear view mirrors	_____ OK	_____ N/Attn.	Front tires/lug nuts	_____ OK	_____ N/Attn.
Exhaust system – no leaks	_____ OK	_____ N/Attn.	Front tires – proper pressure	_____ OK	_____ N/Attn.

4. BRAKES AND SUSPENSION

Parking brake	_____ OK	_____ N/Attn.	Springs – front/rear	_____ OK	_____ N/Attn.
Service brake – leaks, unequal pulling, needs adjustment	_____ OK	_____ N/Attn.	Shocks – front/rear	_____ OK	_____ N/Attn.
			Front end alignment	_____ OK	_____ N/Attn.

5. PASSENGER AREA

Entry steps secure	_____ OK	_____ N/Attn.	Handrails secure	_____ OK	_____ N/Attn.
Seats secure	_____ OK	_____ N/Attn.	Seatbelts	_____ OK	_____ N/Attn.
Emergency exits	_____ OK	_____ N/Attn.	Roof hatches	_____ OK	_____ N/Attn.
Cargo secure	_____ OK	_____ N/Attn.			

6. WHEELCHAIR LIFT

Access door	_____ OK	_____ N/Attn.	Lift operation smooth	_____ OK	_____ N/Attn.
Hydraulic fluid leaks	_____ OK	_____ N/Attn.	Tie-down straps	_____ OK	_____ N/Attn.
Electrical controls	_____ OK	_____ N/Attn.	Manual controls	_____ OK	_____ N/Attn.

7. ADDITIONAL COMMENTS:

Reviewed by: _____

Date: _____

Figure 6. CARTS Post-Trip Inspection Form (13).

EMERGENCY EQUIPMENT ON VEHICLES AND USE

The following emergency equipment should be located on rural and small urban transit vehicles. Operators should be trained in the proper use of each item. The equipment should be checked daily as part of the pre-trip inspection to ensure that each is located in its proper place and is in working order.

Flashlight with Batteries. Buses should contain a working flashlight within easy reach of the operator for use in emergencies. Flashlights should be checked daily as part of the pre-trip inspection. Extra batteries and light bulbs should be provided as a precautionary measure.

Fire Extinguisher. A fire extinguisher should be located on the vehicle within easy reach of the operator. A dry chemical or carbon dioxide fire extinguisher with a 1A:BC rating and an Underwriter's Laboratory label is suggested. A 20-pound dry chemical fire extinguisher is recommended (9). Fire extinguishers have

approximately 30 seconds of use. Operators should be trained in the use of fire extinguishers. Fire extinguishers should be checked daily during the pre-trip inspection. A green needle on the extinguisher indicates it is ready for use. Extinguishers without a green needle should be replaced immediately, and fire extinguishers should be recharged by qualified personnel after every use. The following steps should be followed to use a fire extinguisher:

- Remove extinguisher from mounting bracket and hold vertically.
- Remove safety pin.
- Point hose at the base of flames.
- Squeeze handle to discharge chemicals.
- Direct chemical until fire is out or extinguisher is empty.

First-Aid Kit. Transit vehicles should contain a first-aid kit meeting required standards. The kit should be sealed, and kits with broken seals should be turned in for restocking and resealing. Figure 7 illustrates the items typically found in an on-board first-aid kit.

- ◆ Band Aids/Adhesive Bandages
- ◆ Bandage Compress
- ◆ Gauze Pads
- ◆ Triangular Bandages
- ◆ Adhesive Tape
- ◆ Sting, Kill Swabs
- ◆ Sterile Buffered Isotonic Eyewash Kit
- ◆ Instant Cold Pack
- ◆ Triple Antibiotic Ointment
- ◆ CPR Microshield Rescue Breather and Gloves
- ◆ Disposable Gloves
- ◆ Rescue Blanket
- ◆ Bum Spray
- ◆ Alcohol Wipes
- ◆ Scissors

Figure 7. On-Board First-Aid Kit Items.

Flares. Flares are used as warning devices when a bus is disabled. Caution should be used when lighting flares, as they get extremely hot. Flares should not be used near gasoline or other flammable liquids. Flares are stored in metal containers. To light a flare:

- Grasp flare in right hand.
 - Twist and lift off cap with left hand.
 - Strike fuse across cap.
 - Point ignited end away from body.
- Three (3) flares should be placed in the following locations:
 - At the side of the vehicle on the roadway side– a safe distance from the vehicle and oncoming traffic.
 - Approximately 40 paces or 100 feet to the rear of the vehicle. If there is a hill or curve, the distance should be greater, but no farther than 300 feet.
 - Approximately 40 paces or 100 feet in front of the vehicle, again using

greater distances if conditions warrant.

Reflective Triangles. Three red reflectors should be provided on each bus. Reflectors can be used as warning devices for disabled buses during the day and night. Reflectors should be placed in the same locations around a vehicle as flares.

Reflective Vest. Transit vehicles should contain a reflective vest to be worn by a bus operator when a roadside emergency occurs or whenever an operator must be in the roadway.

Emergency Notification Cards. Transit vehicles should contain cards that can be distributed to passengers and other individuals in case of an accident. The cards should contain contact information for the transit agency.

Biohazard Kit. A biohazard kit should be located on transit vehicles, within easy reach of the operator. Items typically found in a biohazard kit include disposable gloves, disinfectant spray, paper towels, absorbent powder, approved bags and containers for proper disposal, dust pan, brush and tongs for handling sharp items, mouth and nose mask, and disinfectant towelettes for immediate hand cleaning.

Seat Belt Cutter. A seat belt cutter should be located on transit vehicles for use

in emergencies requiring cutting wheelchair securement devices.

Pry Bar. A pry bar should be included on transit vehicles for use in the case of a crash or other accident.

Transfer Board. A transfer board, for use in transporting non-ambulatory passengers, should be provided on transit vehicles.

Jumper Cables. Jumper cables, which may be needed in case of a dead battery, should be located on transit vehicles.

Spare Tire, Jack, and Lug Wrench. These items should be located on a transit vehicle to fix a flat tire.

Camera. Consideration should be given to including a disposable camera on transit vehicles for use in recording incidents or potential safety concerns. Unused cameras should be replaced at regular intervals to ensure film quality.

SAFETY CONSIDERATIONS IN VEHICLE PROCUREMENT

Safety should be considered in the procurement of new transit vehicles. The size, weight, and design of transit buses and vans should be appropriate for the intended use, roadway system, road condition, and area. The following safety features should

also be considered in the procurement of new vehicles.

Americans with Disabilities Act (ADA) Requirements. All vehicles must be equipped with either a lift or ramp that allows passengers using wheelchairs or other assisted devices to board. Lifts must measure at least 30 inches by 48 inches and be capable of lifting a minimum of 600 pounds. Vehicles less than 22 feet in length must have at least one wheelchair station that can be either forward- or rear-facing. Vehicles over 22 feet in length must have at least two wheelchair stations, one of which must be forward facing. Securement stations must be at least 30 inches by 48 inches. Vehicles with a gross vehicle weight rating (GVWR) of 30,000 pounds or more are required to be capable of restraining up to 2,000 pounds of forward force per securement leg and a minimum of 4,000 pounds per mobility aid. Vehicles with a GVWR of less than 30,000 pounds are required to have securement devices capable of restraining up to 2,500 pounds per securement leg and a minimum of 5,000 pounds per vehicle. A secured wheelchair should have less than 2 inches of movement in any direction.

Mirrors. In addition to the standard right- and left-hand mirrors, other mirrors

and visual aids may be considered to improve an operator's vision. Convex wide-angle left- and right-side mirrors increase an operator's field of vision. Inside mirrors in the stepwells and over the front windshield can enhance an operator's view of the interior of a bus and reduce blind spots.

Seats and Seatbelts. Fully adjustable and ergonomically correct seats may be considered to enhance operator safety and comfort. Working three-part safety belts are required.

Passenger Seating and Flooring. Non-skid flooring and seats without sharp surfaces or edges should be considered.

Bumpers. Energy absorbing bumpers may be considered to help absorb the shock of an impact and reduce potential damage.

Fire Suppression System Consideration may be given to a fire suppression system, which uses sensors located at strategic points in the vehicle to identify a fire and to release an extinguishing agent either automatically or by manual control.

Exterior Lights. Side-mounted turn signals, extra brake lights, and other exterior lighting may be considered.

Chapter 4 - Drug and Alcohol Abuse Programs



Ensuring that transit operators and other personnel are drug- and alcohol-free is vital to the safe operation of transit services. Further, transit providers receiving FTA operating or capital funds must comply with the FTA Drug Testing and Alcohol Misuse Requirements. This chapter outlines policies, procedures, and responsibilities for drug and alcohol programs.

FTA DRUG AND ALCOHOL TESTING REQUIREMENTS

The *Omnibus Transportation Employee Testing Act* was passed by Congress in 1991 to respond to growing concerns over potential drug and alcohol use by transportation employees performing safety-sensitive functions. The legislation required all agencies of the U.S. Department of Transportation to implement a drug and alcohol testing program.

The U.S. Department of Transportation published 49 CFR Part 40, *Procedures for Transportation Workplace Drug and Alcohol Testing Programs*, in 1994, outlining the minimum uniform requirements for programs of the modal agencies. FTA published requirements for certain recipients of FTA funding in 1994. FTA modified the regulations in response to revisions in Part 40 made by the Department of Transportation in 2000. The revised requirements are contained in 49 CFR Part 655, *Prevention of Alcohol Misuse and Drug Use in Transit*, issued in 2001. FTA monitors compliance with the drug and alcohol testing requirements. Monitoring activities include review of annual reports submitted to FTA by grantees and on-site audits of drug and alcohol testing programs.

More detailed information on FTA requirements and transit agency case studies are available in FTA reports (1, 14) and

Websites (<http://www.transit-safety.volpe.dot.gov/Safety/DATesting/Newsletters/Issue18/HTML/pg4.htm> and <http://www.transit-safety.volpe dot.gov/Safety/DATesting/Newsletters/Issue19/HTML/pg2.htm>). The two FTA reports, *Implementation of Guidelines for Drug and Alcohol Regulations in Mass Transit (1)* and *Best Practice Manual: FTA Drug and Alcohol Testing Program (14)*, outline the requirements and provide examples of the approaches transit agencies are using to meet the regulations.

The FTA regulations provide specific direction to grantees on drug and alcohol testing programs. Many of the requirements are straightforward and must be met by all grantees, while others provide flexibility for local transit operators. The four required elements of a drug and alcohol testing program include a policy statement, an education and training program, a drug and alcohol testing program, and a referral, treatment, and evaluation program.

The drug testing regulation is intended to prevent prohibited drug use in public transportation operation. It requires recipients of FTA funding to have an anti-drug program to detect the use of prohibited drugs by safety-sensitive employees and to deter those employees from using prohibited

drugs. The objective of the alcohol testing regulation is to prevent alcohol misuse in transit operations through the development of programs focusing on preventing accidents and injuries resulting from the misuse of alcohol by safety-sensitive employees. The definition of safety-sensitive employees is provided in Chapter 1 of this Guidebook.

Compliance with the regulations is a condition of FTA funding. Compliance must be certified on an annual basis. False certification or misrepresentation is punishable with criminal penalties. Both regulations preempt state and local laws, except those relating to criminal law violations. Transit agencies may expand upon the FTA requirements and adopt more stringent rules. According to FTA regulations, employees must be informed of the FTA-mandated requirements and those that are imposed by the transit agency.

The FTA regulations require that employees receive or have access to information on drug abuse, alcohol misuse, and local sources of help for drug and alcohol problems. Safety-sensitive employees must receive at least 60 minutes of training on the effects of drug use on personal health, safety, and the workplace. Supervisors of safety-sensitive employees

must receive at least 60 minutes of training on reasonable suspicion covering physical, behavioral, and performance indicators of drug use and 60 minutes on the physical, behavioral, speech, and performance indicators associated with alcohol misuse.

The main requirements of the drug and alcohol regulations are highlighted below.

Policies. Transit agencies must develop and adopt drug abuse and alcohol misuse program policies and procedures that address applicability, prohibited behavior, circumstances for testing, testing procedures, required employee compliance, and consequences. The agency contact person for the drug and alcohol program must also be identified.

Applicability. The regulations apply to safety-sensitive employees only. Safety-sensitive employees are those who perform a duty related to the safe operation of transit services, including contractors. Safety-sensitive duties include operating revenue service vehicles, operating vehicles that require a commercial driver's license, dispatching revenue service vehicles, performing maintenance on revenue service vehicles or equipment, and security personnel carrying firearms. FTA excludes maintenance contractors that perform

services for grantees that receive funding under Section 5309, 5307, and 5311 and serve an area under 200,000 in population.

Volunteers are exempt from the FTA drug and alcohol testing requirements unless they are required to operate a vehicle that requires a CDL. FTA defines volunteers as non-employees who perform a service as a charitable act without the expectation of receiving benefit. Those who provide charitable services in return for some benefit, such as community service as an alternative to a criminal sentence or academic credit, are covered by the rule. Volunteers who receive mileage reimbursement only are not considered to receive a benefit and are not covered by the rule. Volunteers who receive payment in excess of their personal expenses are covered by the rule.

Prohibited Behavior. The drug regulations prohibit the consumption of five specified illegal drugs – marijuana, cocaine, amphetamines, opiates, and phencyclidines. A safety-sensitive employee is subject to drug testing anytime while on duty. Safety-sensitive employees are prohibited from reporting for duty or remaining on duty if their ability to perform their assigned functions is adversely affected by alcohol, or if their breath alcohol concentration is 0.04

or greater. Employees with an alcohol concentration of 0.02 or greater, but less than 0.04, may not be allowed to perform or continue to perform safety-sensitive functions until a subsequent test measures less than 0.02, or the employee has been removed from duty for at least 8 hours. Alcohol tests can only be conducted just preceding, during, or immediately following the performance of a safety-sensitive job function. In addition, employers must prohibit employees from consuming alcohol within four hours of performing safety-sensitive job duties, while on call, and within eight hours following an accident.

Testing Methods. Transit agencies must use testing procedures that are consistent with the requirements set forth in 49 CFR Part 40, as amended, including urinalysis for drugs and evidential breath testing for alcohol. The regulations define the procedures for urine specimen collection, including the use of custody and control forms, sealing and shipping procedures, laboratory processing procedures, establishment of minimum testing thresholds, quality assurance and quality control procedures, review of results by a Medical Review Officer, and reporting requirements for drug tests. The procedures for breath alcohol collection, including

specifications for the testing equipment and testing technicians, are also defined.

Testing Categories. The regulations identify six categories for drug testing and five categories for alcohol testing. Drug testing must be performed for pre-employment (including transfers to a safety-sensitive position), reasonable suspicion, random, post-accident, return to duty, and follow-up. Alcohol tests must be performed for all of the same instances except for pre-employment. Transit agencies may choose pre-employment alcohol tests following the FTA guidelines. A pre-employment alcohol test can be conducted only after a contingent offer of employment or transfer is made and testing requirements must be considered and reflect equal treatment for all covered employees. Each of these categories is briefly described below.

- **Pre-Employment.** Prior to the performance of a pre-employment drug test, the applicant or employee must be informed in writing of the requirements for the urine test for the five drugs. An employee may not be hired or transferred into a safety-sensitive position unless they have a negative test result.
- **Reasonable Suspicion.** An employer can require a safety-sensitive employee

to submit to a drug and alcohol test when the employer has reasonable suspicion to believe that the employee has used a prohibited drug or misused alcohol as defined in the regulations.

The request to take a reasonable suspicion test must be based on specific, articulatable observations related to the appearance, behavior, speech, or body odor of the employee. The reasonable suspicion determination must be made by a supervisor who is trained in detecting the signs and symptoms of drug use or alcohol misuse. Alcohol testing is authorized only when the observations are made just preceding, during, or immediately following the performance of safety-sensitive job functions.

- **Post-Accident.** A post-accident drug and alcohol test must be conducted any time there is loss of human life. Unless the safety-sensitive employee can be completely discounted as a contributing factor, a post-accident test must be performed anytime an individual requires immediate transportation to a medical treatment facility or one or more vehicles incurs disabling damage that precludes removal from the scene in its usual manner. Post-accident tests

are to be performed on all safety-sensitive employees operating vehicles at the time of the accident and any other safety-sensitive employee that could have contributed to the accident. Post-accident tests should be performed as soon as possible after an incident, but should not delay necessary medical attention for injured people or prohibit a safety-sensitive employee from leaving the scene of the accident to obtain assistance in responding to the accident or obtain emergency medical care.

- **Random Testing.** Random testing is intended to deter and detect prohibited drug use and alcohol misuse. A scientifically valid random number selection method must be used to select safety-sensitive employees for unannounced drug and alcohol testing. All safety-sensitive employees must have an equal chance of being selected. Test dates should not constitute a predictable pattern and should be spread evenly through the year. The number of random drug tests conducted annually must equal at least 50 percent of the total number of safety-sensitive employees subject to testing, included in the testing pool. FTA recommends that a slightly higher figure of at least

55 percent of safety-sensitive employees be tested to account for possible cancelled tests. The number of random alcohol tests conducted each year must equal at least 10 percent of the covered employees in the pool.

FTA may adjust the random alcohol and drug testing rates based on analysis of possible drug and alcohol violation rates for the transit industry as a whole.

- **Return to Duty.** As described in more detail in the section on developing drug abuse and alcohol use policies, transit agencies may adopt automatic termination policies or second-chance policies for employees violating drug and alcohol requirements. If an agency has a second-chance policy, return to duty and follow-up testing of an employee must be performed. Before any safety-sensitive employee is allowed to return to duty following a positive test result or a test refusal, that employee must first be assessed by a Substance Abuse Professional (SAP) and have a negative drug test and a breath test indicating an alcohol concentration of less than 0.02. The purpose of the return-to-duty test is to provide a degree of assurance to the

employer that the individual is presently drug- and alcohol-free.

- **Follow-Up.** Employees allowed to return to duty are subject to unannounced follow-up testing for at least 12 months, but not more than 60 months. The frequency and duration of the follow-up testing should be determined by the Substance Abuse Professional (SAP), as long as a minimum of six tests are performed during the first year the employee has returned to duty.

The FTA and the Department of Transportation (DOT) regulations also contain requirements for SAP and the Return to Duty Process. A SAP evaluation is required as part of the return to work process for an employee who has violated drug and alcohol regulations. The requirements address the credentials, basic knowledge, qualification training, continuing education, and documentation required for a SAP.

SAPs must have one of the following credentials:

- Licensed physician (Doctor of Medicine or Osteopathy),
- Licensed or certified social worker,

- Licensed or certified psychologist,
- Licensed or certified employee assistance professional, or
- Drug and alcohol counselor certified by the National Association of Alcoholism and Drug Abuse Counselors Certification Commission (NAADAC) or by the International Certification Reciprocity Consortium/Alcohol and Other Drug Abuse (ICRC).

Locating SAPs in rural areas can be difficult. Many rural transit agencies in Texas use SAPs in nearby urban areas. Currently, the U.S. DOT does not provide a listing of certified SAPs. The Substance Abuse Program Administrators Association (SAPAA) and the Drug and Alcohol Testing Industry Association (DATIA) may be able to provide information on local SAPs. Contact information on these organizations is provided in Appendix A. Other transit agencies in the state may also be good sources of information for SAPs in their areas.

The TxDOT Public Transportation Division requires transit agencies receiving federal funds through the department to demonstrate compliance with the FTA Drug and Alcohol Testing Program. The department does not mandate how the requirements are implemented. Rather, each

agency is allowed to develop a program that best meets its needs under its own authority.

TxDOT monitors compliance on an annual basis. The department uses a *Drug and Alcohol Management Program Monitoring Checklist* to check compliance. The checklist is posted on the TxDOT Website (<ftp://ftp.dot.state.tx.us/pub/txdot-info/ptn>). The checklist addresses the major elements of the FTA requirements including the following:

- Required Element of a Drug and Alcohol Program
- Education and Training Programs
- Policy Statement Elements
- Notice Requirements
- Drug Testing
- Alcohol Testing
- Pre-Employment Drug Testing
- Pre-Employment Alcohol Testing
- Reasonable Suspicion Test
- Post-Accident Testing
- Random Testing
- Return to Duty and Follow-Up
- Test Results
- Administrative Requirements
- Access to Facilities and Records
- Covered Employees – Safety-Sensitive Employees
- Services Information

The TxDOT Public Transportation Division also provides training for transit agency personnel on developing and carrying out drug and alcohol testing programs. The training sessions review the FTA requirements and provide examples of approaches to meet the rule.

DRUG AND ALCOHOL POLICIES

The FTA regulations require that grantees establish and adopt a policy defining their Drug and Alcohol Testing Program. The policy must be adopted by the transit governing body, highest-ranking official, or other appropriate group. The following elements must be addressed in the policy.

FTA Test Requirement. The policy must state that safety-sensitive employees are required to submit to drug and alcohol testing administered in accordance with the FTA regulations.

Optional Provisions. FTA regulations allow employers to implement drug and alcohol program requirements that exceed the minimum requirements in 40 CFR Parts 40 and 655. These elements must be identified in the policy.

Applicability. The categories of safety-sensitive employees subject to the regulations must be identified.

Prohibited Behavior. The specific behavior that is prohibited must be identified. As noted previously, the regulations prohibit consumption of five illegal drugs and alcohol by safety-sensitive employees.

Testing Circumstances. The specific circumstances under which safety-sensitive employees will be tested for alcohol and prohibited drugs should be identified. As noted previously, these circumstances include pre-employment, reasonable suspicion, post-accident, random, return to duty, and follow-up testing.

Drug and Alcohol Testing Methodology and Integrity. A statement that the employer will follow all the requirements in 49 CFR Part 40 must be included. The statement should address the procedures used to test for the presence of drugs and alcohol, to protect the employee and the integrity of the testing process, to safeguard the validity of test results, and to ensure that the test results are attributed to the correct employee.

Refusal Behavior and Consequences. The policy must include a description of the behavior that constitutes a refusal to take a drug or alcohol test and a statement that such a refusal constitutes a violation of the transit agency's policy.

Consequences of a Positive Drug or Alcohol Test. The policy should identify the consequences for an employee who has a verified positive drug test, has a verified alcohol concentration of 0.04 or greater, a verified alcohol concentration of 0.02 or greater but less than 0.04, or refuses to submit to a drug or alcohol test.

Designated Contact Person. The policy should identify the person designated to answer employee questions about drug and alcohol programs.

Figure 8 highlights the policy statement the Georgia Department of Transportation (GDOT) provides as an example for use by small and rural transit agencies in the state. Figure 9 presents the purpose of the Brazos Transit District's *Policy for Drug and Alcohol, and Other Prohibited Substances*.

The transit agency is dedicated to providing safe, dependable, and economical transportation services to our transit system passengers. Transit system employees are our most valuable resource and it is our goal to provide a healthy, satisfying working environment, which promotes personal opportunities for growth. In meeting these goals, it is our policy (1) to ensure that employees are not impaired in their ability to perform assigned duties in a safe, productive, and healthy manner; (2) to create a workplace environment free from the adverse effects of drug abuse and alcohol misuse; (3) to prohibit the unlawful manufacture, distribution, dispensing, possession, or use of controlled substances; and (4) to encourage employees to seek professional assistance anytime personal problems, including alcohol or drug dependency, adversely affect their ability to perform their assigned duties.

This policy is also intended to comply with all applicable Federal regulations governing workplace anti-drug and alcohol programs in the transit industry. The Federal Transit Administration (FTA) of the U.S. Department of Transportation has published 49 CFR Part 655, as amended, that mandates urine drug testing and breath alcohol testing for safety-sensitive positions and prohibits performance of safety-sensitive functions when there is a positive test result. The U.S. Department of Transportation (DOT) has also published 40 CFR Part 40, as amended, which sets standards for the collection and testing of urine and breath specimens. In addition, the Federal government published 40 CFR Part 29, "The Drug-Free Workplace Act of 1988," which requires the establishment of drug-free workplace policies and the reporting of certain drug-related offenses to the FTA. This policy incorporates those requirements for safety-sensitive employees and others when so noted.

Figure 8. Example of Policy Statement Provided by Georgia Department of Transportation (14).

The District has established this policy to assist in protecting the traveling public and its employees. The District also intends through this policy to reduce accidents, fatalities, injuries, and property damage that may result from employee's use of controlled substances or misuse of alcohol.

This policy is also intended to promote an overall safe, healthful, and efficient working environment for all employees. Being under the influence of a controlled substance or alcohol on the job poses serious safety and health risks to the user and to all those who work with the user. The use, sale, purchase, transfer, or possession of an illegal drug in the workplace, and the use, possession, or being under the influence of alcohol also poses unacceptable risks for safe, healthful, and efficient operations. The District also believes it has the obligation and the right to protect the District's property, information, equipment, operations, and reputation.

The District recognizes its obligations to clients and customers for the provision of services that are free of the influence of controlled substances and alcohol, and will endeavor through this policy to maintain such safe, efficient, and professional services.

The District also understands that from time to time it may enter into a contractual agreement with another firm, and that firm may require a controlled substances and alcohol program.

Furthermore, the District takes note of its obligation to comply with US DOT regulations relating to controlled substances and alcohol use. The District will ensure that the controlled substances and alcohol testing conducted conforms with US DOT workplace testing requirements.

The District's position is that the sale, purchase, transfer, concealment, transportation, use, or possession of contraband by any employee of the District represents a threat to the health, safety, and well-being of its employees, customers, clients, and property, as well as to the traveling public and is therefore strictly prohibited.

Figure 9. Purpose of Brazos Transit District Drug and Alcohol Policy (15).

DEVELOPING AND CONDUCTING DRUG AND ALCOHOL TESTING PROGRAMS

The major elements to be addressed in developing and conducting a drug and alcohol testing program are described in this section. The FTA *Implementation Guidelines (1)* and *Best Practice Manual (14)* provide more detailed information on each of these elements. As noted, many transit agencies contract for the urine specimen and breath collection and analysis elements of a drug and alcohol testing

program, as well as other parts of a program. Within Texas, approximately two-thirds of the rural transit agencies contract with a third-party administrator for drug and alcohol testing. As of 2002, 18 different third-party contractors were being used by the rural agencies.

Drug Abuse and Alcohol Misuse Policies. The first element in a drug and alcohol testing program is the development of the policies that will be used to govern the program. These policies should address

the employees covered, the prohibited behavior, testing circumstances and procedures, required compliance, and consequences. A transit agency may adopt more restrictive policies than those required by FTA. These policies will govern other elements of the testing process. For example, decisions relating to the adoption of automatic termination policies or second-chance policies for offenders will influence other elements of the testing and follow-up program. Employees must be notified of the drug and alcohol policies, with any policies beyond the FTA requirements noted. Transit agencies may wish to have employees sign a form stating they have received and read the policies.

Drug and Alcohol Tests. The federal drug and alcohol requirements consist of three test functions. These functions are urine collection and analysis, breath collection and analysis, and medical review. Transit agencies may conduct some or all of these functions in house or may contract for all or some of the elements. Regardless of the approach used, transit agencies must have the internal oversight to ensure that the proper procedures are followed and that the FTA rules are met. The three functions and internal and external

administrative activities are highlighted below.

- **Internal Administration.** Elements to be addressed in the internal administration of drug and alcohol tests include documenting that employees receive the policy statement and have completed the required training. Employees should be required to sign forms indicating they have received and reviewed the drug and alcohol policies and participated in the appropriate training sessions as part of the documentation process. All testing (pre-employment, reasonable suspicion, post-accident, and random) must be documented. Most agencies use a variety of forms to administer and record each of these steps.
- **External Administration.** Transit agencies may elect to contract for drug and alcohol testing services. Two typical contracting options are using a third-party administrator (TPA) to conduct all the required activities and using different companies for the various activities. Care should be taken in selecting contractors to ensure that they meet federal requirements and have proven service records. Steps frequently taken in selecting contractors

include checking with other local and state groups to identify potential vendors, issuing requests for proposals (RFPs), evaluating proposals and selecting contractors, negotiating and signing contracts for the desired services, and monitoring the performance of contractors. Many transit agencies use checklists, quarterly reports, and other methods to monitor the performance of contractors.

- **Urine Specimen Collection and Analysis.** Urine samples are taken to determine use of prohibited drugs. Collecting urine samples requires restroom facilities. A facility that is not secure or ones that may provide opportunities to hide clean urine specimens should not be used. Mobile collection facilities may be used for both drug and alcohol testing.
- **Breath Collection and Analysis.** Breath samples are taken to determine alcohol misuse and alcohol levels. Evidential breath testing (EBT) devices are used to take the samples. EBTs are fairly expensive, and trained personnel are needed to operate them and to analyze the results. Samples can be taken and analyzed in a room that provides privacy.

- **Medical Review.** Medical Review Officers (MROs) are used to analyze the collected urine and breath samples. Test results are provided to the transit agency for appropriate action. Although federal regulations do not specify how test records should be maintained, they do require that records be secure and that access be limited. Most transit agencies appear to keep records either by test category or by individual employee.

DRUG AND ALCOHOL REFERRAL, TREATMENT, AND EVALUATION PROGRAMS

FTA regulations provide direction on elements that must be included in a drug and alcohol testing referral, evaluation, and treatment program. The exact components of the program will vary depending on the agencies' policies. Program elements of transit agencies with zero-tolerance policies, which call for automatic termination of employees violating the drug and alcohol rules, will be different from those with second-chance policies. There are more administrative responsibilities for referral, evaluation, and treatment associated with second-chance policies. Elements commonly found in drug and alcohol

referral, evaluation, and treatment programs are highlighted below.

Automatic Termination. Agencies with automatic termination policies for drug abuse and alcohol misuse by employees should document the name of the violator, the date, the nature of the violation, the termination date, and the date the employee was notified. The form should be signed by the responsible supervisor. The terminated individual should also be provided with information on FTA-compliant SAPs in the area. Currently, a majority of the rural transit agencies in Texas have automatic termination policies for drug abuse and alcohol misuse.

Second-Chance Policies. A more extensive referral, evaluation, and treatment process is required with second-chance policies. The following elements and forms may be considered for use by transit agencies.

- **Referral to Substance Abuse Professional.** Figure 10 provides an example of the referral form used by the City of Albuquerque.
- **Continued Employment/Return to Work.** Transit agencies may require employees to sign agreements outlining the conditions of their rehabilitation program and their continued

employment. Figure 11 highlights an example of the return to work agreement the Ohio Department of Transportation provides for use by transit agencies in the state.

- **Individual Treatment Plan.** Transit agencies may also require more detailed information about an individual's treatment program and may monitor progress. Forms may be used to outline the specific steps and activities an employee agrees to undertake as part of the return to work program. These agreements are typically signed by both the employee and the SAP or counselor.
- **SAP Follow-Up Assessment/Return to Work.** Transit agencies may require documents from the SAP on the employee's ability to return to work. Standard forms may be used to document the SAPs' assessment of the employee.

In addition, transit agencies should have drug and alcohol assistance programs for all employees, including those in safety-sensitive positions. Elements of these programs include providing information on local resources that are available for the treatment of drug and alcohol-related problems, informational sessions on drug and alcohol issues, posters, brochures, and

specific training programs. Appendix A contains a listing of organizations that may be of help in providing information on drug and alcohol issues.

As noted previously, FTA regulations require training for supervisors of safety-sensitive employees in the recognition of indicators of drug and alcohol use. General training is often provided for all employees on drug and alcohol misuse and abuse. As an example, the Brazos Transit District provides the following training for employees on drug and alcohol issues.

Supervisor Personnel. At least one hour of training on drug use and one hour on alcohol misuse is required for supervisors of safety-sensitive personnel. The sessions focus on the physical, behavioral, and performance indicators of probable drug use and alcohol misuse. Supervisory responsibilities for executing the policies, intervention tactics, and post-accident testing procedures are also covered.

All Employees. At least one hour of training on the effects and consequences of prohibited drug use and alcohol misuse on personal health, safety, the work environment, and the signs and symptoms that may indicate drug use and alcohol misuse are provided to all employees. The

training also includes a review of the agency's drug and alcohol policy, drug and alcohol testing procedures, and the steps taken to protect employees and the integrity of the testing process.

SUBSTANCE ABUSE AND PROFESSIONAL REFERRAL

I acknowledge that I have received a referral to a Substance Abuse Professional as required by FTA regulations.

The cost of this service will be borne by: the City the employee

Substance Abuse Professional referral:

Name _____

Address _____

City/State _____

Phone _____

Alternate Substance Abuse Professional referral.

Name _____

Address _____

City/State _____

Phone _____

I have received a copy of this referral.

Employee Signature

Date

Agency Representative Signature

Date

Figure 10. Referral to Substance Abuse Professional – City of Albuquerque (14).

**POST DRUG and/or ALCOHOL TESTING
RETURN TO WORK AGREEMENT**

THIS AGREEMENT is entered into by and between _____ AND _____ is committed to providing channels of assistance for employees seeking rehabilitation. However, the employee seeking rehabilitation must be committed in his/her efforts to remain free of drug abuse and alcohol misuse. Therefore, as part of the commitment, it is understood that the employee's continuation of employment at _____, for matters relating to the Drug Abuse and Alcohol Misuse Prevention Program, is based upon and constrained by the following terms:

1. _____ and _____ mutually agree that your continuation of employment for the next five years is contingent upon your satisfactorily meeting the terms outlined in this agreement and that failure to do so may subject you to disciplinary action up to and including termination of employment with _____.
2. During this period, you will be subject to unannounced follow-up testing with a minimum of six (6) tests the first year. Such tests are in addition to any tests that may be necessitated by _____ Drug Abuse and Alcohol Misuse Prevention Program or any tests required by a substance abuse professional (SAP) as part of the program to monitor the employee's compliance with his/her recommendations. You will be subject to disciplinary action up to and including discharge if you refuse to submit to testing or if you test positive for drugs and/or alcohol during this time period.
3. If you are absent from work during this period and it is determined that the absence is a result of, or related to, the use of drugs and misuse of alcohol, then _____ may take disciplinary measures up to and including discharge.
4. If you violate the conditions of _____ Program, the SAP's program, refuse to be tested, or have a positive drug test or an alcohol test with a concentration of .04 or greater under any testing circumstance within the five year period, you will be discharged.

This Agreement is voluntarily entered into by all parties, and in consideration for continuation of employment, the above conditions are hereby agreed to.

Dated this _____ day of _____, 20____.

SIGNATURES

Employee	Date	Representative	Date
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**Figure 11. Ohio Department of Transportation – Example of
Return to Work Agreement (14).**

Transit agencies may use a number of approaches and techniques to promote a drug- and alcohol-free workplace. These methods include posters, brochures, newsletters, Websites, and other techniques. Larger transit agencies usually have human resource departments responsible for these types of activities. Small urban and rural transit agencies typically do not have full-time human resource or employee assistance personnel. These agencies may rely on services available from parent organizations or other local groups. National organizations that also provide information on drug and alcohol programs are provided in Appendix A.

Chapter 5 - Safety Data Acquisition and Analysis

Developing, implementing, and maintaining systems to record, monitor, and analyze key safety information is important for many reasons. These include identifying key safety concerns, monitoring trends, and proactively addressing concerns before they become major problems. This chapter describes the types of safety-related data transit agencies should collect, the sources of this information, and data acquisition and analysis techniques.

ACCIDENT MANAGEMENT AND ACCIDENT REPORT FORMS

Although transit agencies work to avoid crashes and accidents involving buses and other vehicles, accidents will happen. Operators and other transit personnel should be trained in how to respond to different types of incidents, the procedures to follow, and appropriate follow-up activities. Accident management typically focuses on the four elements of situation assessment, notification procedures, protection of the



incident scene, and evacuation and rescue assistance.

The first critical step in responding to an accident or incident is to assess the factors necessary for summoning further help and for minimizing further damage or injury. Examples of these factors include:

- Type of emergency (fire, collision, hazardous materials spill, etc.),
- Location of the emergency, by address or landmark,
- Vehicles and structures (if applicable) involved in the accident,
- Number and types of injuries,
- Assistance required from the transit agency and from outside agencies (police, fire, ambulance, public utility), and
- Size of area involved (for fire, hazardous materials spill, flood, or other wide-spread hazard).

Notification procedures should be developed so that each employee knows whom to contact for all types of accidents, incidents, and emergencies. The notification procedures should be included in training for bus operators and other employees.

Information on the notification process and the names and telephone numbers of the appropriate individuals to contact should be located on transit vehicles.

Transit agencies should establish procedures for protecting passengers and personnel from further injury, for protecting evidence from being destroyed, and for providing assistance to others responding to an accident or incident. Guidance should also be provided to bus operators and transit personnel on dealing with bystanders, the media, and other groups.

Training should be provided to bus operators and other personnel on procedures for evacuating passengers from a vehicle. Training should cover vehicle access, procedures for assisting elderly riders and individuals with special needs, and relocating passengers once they have exited a vehicle.

Documentation of accidents and incidents is needed for legal and insurance purposes. Transit agencies should develop forms for recording the key information needed in the case of accidents. This information is also useful to help identify trends that may indicate weakness in existing training, procedures, or policies. Some agencies, like Capital Metro, use computerized forms to record information on accidents and incidents.

The instructions provided to Capital Metro operators in case of an accident are shown in Figure 12. The information is contained on a printed card that is carried in all vehicles. This approach is recommended for rural and small urban agencies, as it allows operators to quickly review and follow the appropriate steps.

The Public Transportation Division requires that small urban and rural transit agencies notify the department of incidents or accidents involving transit vehicles and security incidents. The forms shown in Figures 13 and 14, which are available on the TxDOT Website, must be completed and submitted by mail, e-mail, or fax to the District Public Transportation Coordinator (PTC) within five (5) days of the occurrence. The PTC is responsible for forwarding the form and any additional information to the division.

Security incidents include any unforeseen events or occurrences that may endanger human life or property. Figure 15 identifies the types of security incidents transit agencies are required to report. The definitions for the security incidents are based on the Federal Bureau of Investigation (FBI) Uniform Crime Report (UCR) Program.

Capital Metro's Procedures to Follow in an Accident

The information is printed on a 4 ½ inch x 8 ½ inch card and distributed to all operators and for placement in all agency vehicles:

<p style="text-align: center;">Procedures to Follow in An Accident</p> <p><i>*IMPORTANT – Read all the way through the following instructions before proceeding!</i></p> <ol style="list-style-type: none">1. Check for injuries and notify Radio Control.2. If the bus is operable and there are no injuries, move it in the shortest distance possible to get it out of the way of traffic. If not operable, put out road hazard triangles.3. Identify yourself to the drivers or owners of the other vehicles. (DO NOT assume responsibility for the accident regardless of the circumstances.)4. Obtain the full and correct name and addresses of the following:<ol style="list-style-type: none">a. The drivers and owners of the other vehicle.b. All parties, including passengers, involved in the accident.c. All witnesses.5. Obtain the vehicle license numbers of all vehicles involved.6. Obtain the operator license numbers of all other drivers involved in the accident.7. Obtain the names of other parties' insurance companies and agents, and their insurance policy numbers.8. Hand out courtesy cards to your passengers and any potential witnesses to the accident. (When possible, keep a mental check on the location of the passengers on the bus during the accident.)9. Assist your passengers in getting to their destinations.10. Complete an accident report and turn it in within 24 hours. <p>*Give statements only to the police, a transit agency supervisor, or the agency insurance investigator. DO NOT admit guilt to the other parties involved or discuss the facts relating to the accident. Make no comments on the mechanical condition of the bus. If the press, radio, or TV reporters are present, notify Radio Control. DO NOT make any statements to the reporters.</p>
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Figure 12. Capital Metro Procedures to Follow in an Accident (16).



TRANSIT VEHICLE INCIDENT REPORTING FORM

Form PTN-101
(Rev. 7/2002)
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TRANSIT AGENCY:
Safety Contact Person:
Area Code and Phone Number:

REPORTABLE FOR THE FOLLOWING REASON(S)

Individual died	<input type="checkbox"/>	Transit vehicle is towed away and removed from revenue service	<input type="checkbox"/>
Injury requiring immediate medical treatment away from the scene	<input type="checkbox"/>	Non-arson fire	<input type="checkbox"/>
Total damage exceeded \$7,500	<input type="checkbox"/>		

DATE OF INCIDENT:	INCIDENT TIME:	AM <input type="checkbox"/>	PM <input type="checkbox"/>
ESTIMATED TOTAL DAMAGE: \$	COUNTY:		
LOCATION:			
# OF FATALITIES:	# OF PERSONS TRANSPORTED FOR MEDICAL TREATMENT:		

AGENCY VEHICLE INFORMATION

LICENSE NO.:	MAKE:	
YEAR:	MODEL:	
ODOMETER READING:	FUNDING SOURCE:	
ESTIMATED VEHICLE DAMAGE: \$		
DAMAGE DESCRIPTION:		
DID VEHICLE EQUIPMENT FAIL TO OPERATE PROPERLY?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
(IF YES, EXPLAIN ON THE FOLLOWING PAGE)		
WAS THE AGENCY VEHICLE TOTALED?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
WERE DRUG & ALCOHOL TESTS PERFORMED?	YES <input type="checkbox"/>	NO <input type="checkbox"/>

Figure 13. TxDOT Transit Vehicle Incident Reporting Form.

DESCRIPTION OF INCIDENT: ATTACH LAW ENFORCEMENT REPORT(S) IF AVAILABLE

PREPARED BY:	DATE:
TITLE:	PHONE NUMBER:

Figure 13. TxDOT Transit Vehicle Incident Reporting Form (Continued).



SECURITY INCIDENT REPORTING FORM

TRANSIT AGENCY:
Security Contact Person:
Area Code and Phone Number:

DATE OF INCIDENT:	INCIDENT TIME:	AM <input type="checkbox"/> PM <input type="checkbox"/>	COUNTY:
LOCATION:			
# OF FATALITIES:	# OF INJURIES:	PROPERTY DAMAGE ESTIMATE: \$	

NUMBER OF SECURITY INCIDENT(S) CHECK ALL THAT APPLY

Homicide	<input type="checkbox"/>	Burglary	<input type="checkbox"/>	Bombing	<input type="checkbox"/>
Forcible Rape	<input type="checkbox"/>	Motor Vehicle Theft	<input type="checkbox"/>	Chemical or Biological Release	<input type="checkbox"/>
Robbery	<input type="checkbox"/>	Arson	<input type="checkbox"/>	Hijacking	<input type="checkbox"/>
Aggravated Assault	<input type="checkbox"/>	Bomb Threat	<input type="checkbox"/>	Kidnapping	<input type="checkbox"/>

DESCRIPTION OF INCIDENT: ATTACH LAW ENFORCEMENT REPORT(S) IF AVAILABLE

PREPARED BY:	DATE:
TITLE:	PHONE NUMBER:

THIS REPORT SHOULD BE COMPLETED AND SUBMITTED TO THE TxDOT PUBLIC TRANSPORTATION COORDINATOR FOR EACH REPORTABLE SECURITY INCIDENT NO LATER THAN 5 DAYS AFTER THE OCCURRENCE OR DISCOVERY OF EACH INCIDENT.

Figure 14. TxDOT Security Incident Reporting Form (14).

- Homicide: the killing of one human being by another, including murder and manslaughter;
- Forcible Rape: the carnal knowledge of a person, forcibly and/or against that person's will;
- Robbery: taking, or attempting to take, anything of value from another person by force, threat of force, or violence, thereby putting the victim in fear of harm;
- Aggravated Assault: an unlawful attack by one person upon another wherein the offender uses a weapon or displays it in a threatening manner, or the victim suffers obvious severe or aggravated bodily injury;
- Burglary: unlawful entry into a building or other structure with the intent to commit a felony or theft;
- Motor Vehicle Theft: theft of a motor vehicle;
- Arson: to unlawfully and intentionally damage, or attempt to damage, any property by fire or incendiary device;
- Bomb Threat: credible written or oral communication to a transit agency threatening the use of an explosive or incendiary device for the purpose of disrupting public transit services or to create a public emergency;
- Bombing: unlawful and intentional delivery, placement, discharge, or detonation of an explosive or other lethal device in, into, or against a public transport facility (including vehicles);
- Chemical or Biological Release: unlawful and intentional delivery, placement, discharge, or detonation of a biological or chemical lethal device in, into, or against a public transport facility (including vehicles);
- Hijacking: unlawful seizure or control of a transit vehicle; and
- Kidnapping: unlawful seizure, transportation, and/or detention of a person against his/her will or of a minor without the consent of his/her custodial parent(s) or legal guardian.

Figure 15. Types of Security Incidents That Must be Reported to TxDOT (17).

The FTA's National Transit Database (NTD) includes safety and security reporting categories. The FTA has recently undertaken and completed a major revision of the NTD and has conducted a pilot test of the revised safety and security components. The pilot included agencies testing the safety and security module software and screens. Transit agencies are required to complete major incident reports, which are intended to capture more detailed information on the most severe incidents occurring in the transit environment.

The FTA requirements for reporting frequency are based on the size of the transit agency. Transit agencies with 100 or more vehicles are to submit monthly reports for all modes. Transit agencies not meeting these criteria are required to submit reports on a quarterly basis (18).

ACCIDENT INVESTIGATION AND ANALYSIS TECHNIQUES

Transit agencies should establish procedures for investigating and analyzing accidents and incidents. Accident investigation involves collecting,

documenting, and analyzing data to help identify the cause of the accident. Factors examined include operator/employee actions, possible vehicle/equipment malfunctions or failures, actions of other motorists, weather conditions, and other factors. The information from accident investigations can be used in legal and other actions associated with a specific incident. The following five steps are frequently followed in investigating a transit vehicle accident or other incident involving transit employees.

Manage the Accident Scene .

Vehicle operators or other employees should first notify and request assistance from the appropriate police, fire, emergency medical service (EMS), or other emergency departments. The nature and severity of the accident will determine the groups contacted and the assistance requested. The obvious intent is to get help as quickly as possible for those who need it and to keep injured individuals as comfortable as possible. The accident scene should also be preserved and managed. Warning flares, reflective triangles, and other devices should be used as appropriate. The extent of damage to a vehicle should be assessed to determine if

there is potential for further problems, such as leaking fuel that may ignite.

Gather Information. This step involves gathering the facts associated with the accident. Activities associated with this step include making sketches and taking photographs of the vehicle and the situation, recording weather conditions, and examining equipment, pavement conditions, and other physical evidence. Some transit agencies use accident investigation kits to aid in these efforts. Figure 16 highlights examples of equipment and materials typically found in accident investigation kits.

Analyze Information. This step involves examining and analyzing the information gathered about the accident. The following items are typically included in an accident investigation involving a transit vehicle that should be used in the analysis:

- Accident report forms completed by the operator,
- A copy of the police accident report,
- Facts obtained while reviewing physical evidence,
- Accounts and information from witnesses and operators, and
- Pictures and sketches.

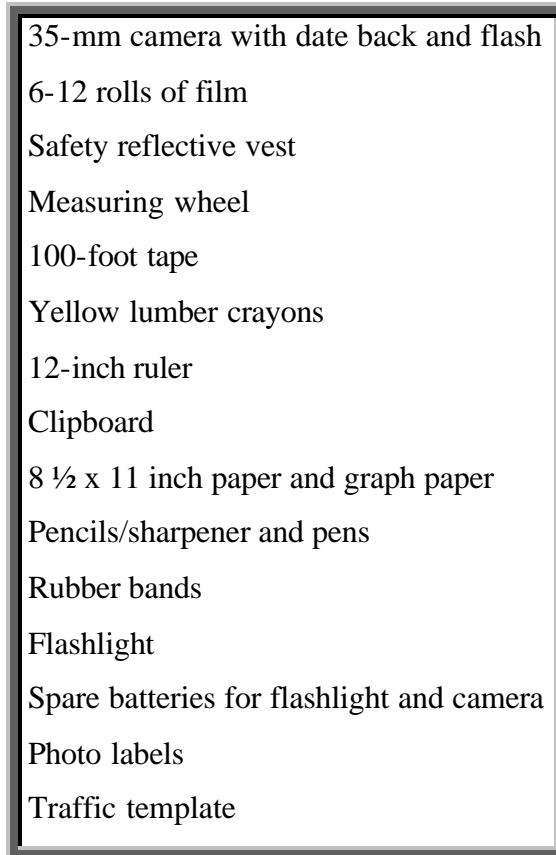


Figure 16. Items Included in Accident Investigation Kit.

Take Corrective Action as Appropriate. If the results of the accident analysis indicate specific problems with equipment, operators, or the location were the major cause of an accident or contributed to the accident, corrective actions should be identified to address these issues. The specific actions should be identified and responsibility assigned for implementing these actions.

Monitoring and Evaluating Corrective Actions. A process should be established and undertaken to monitor and

evaluate the corrective actions taken to address the identified problems.

PASSENGER INJURY OR CLAIM REPORTS AND FORMS

Information on any injuries to passengers resulting from a bus accident or incident should be collected. Transit agencies may use forms to collect this information at the time of the accident and for any claims that may be filed at a later time. Since lawsuits or other claims may be filed by an injured individual, transit agencies should check with their insurance company and legal advisors on the exact

information to be collected, the procedures to be followed, and the release of information.

Figures 17 and 18 provide examples of the type of information that may be collected on passengers injured in an accident. The form in Figure 17 is for use by transit personnel documenting an accident. Figure 18 provides an example of a form for collecting information from an injured passenger or a passenger witnessing an accident.

EMPLOYEE INJURY OR CLAIM REPORTS AND FORMS

Bus operators may also be injured in an accident or incident. In addition, bus operators and other transit personnel may be injured in other on-the-job accidents or incidents. On-the-job injuries are covered under the Texas Worker's Compensation laws. Transit agencies will need to collect and maintain the appropriate information on any job-related injuries. Transit agencies should consult with their insurance company and legal advisors on the exact information to collect and forms to use for employee injuries. Figure 19 provides an example of a form used by a supervisor to review an accident or incident, and Figure 20

illustrates an employee review form for an accident.

The following steps provide guidance on responding to any on-the-job accident or incident.

- Determine the extent and nature of an injury. Apply proper first-aid to prevent shock, bleeding, etc. Call EMS (911) if needed.
- Accompany the employee to a doctor if the employee is unable to drive.
- If not an emergency, send a return to work form with the employee.
- Complete an Injury Investigation Report. In case of fatality or serious injury, notify appropriate personnel immediately.
- Conduct assessment to determine the cause of incident and correct the hazard to prevent recurrence.
- Replenish the first-aid supply after use.
- Request a doctor's release before permitting return to work in case of serious injury.

In addition, transit agencies should review on-the-job accidents or incidents to identify possible safety problems, training or retraining needs, and other appropriate responses.

Bus Accident Report

Record of Injured Passenger

To be completed by Transit Personnel on passengers injured in an accident.

GENERAL INFORMATION

Name	Date of Birth			
_____	_____	_____	_____	
Home Address	City	State	Zip	Home Telephone Number
_____	_____	_____	_____	_____

Date and Time of Incident

Specific Location of Incident

INJURY INFORMATION

Type of Injury:

<input type="checkbox"/> Bruise	<input type="checkbox"/> Burns
<input type="checkbox"/> Strain/Sprain	<input type="checkbox"/> Foreign Body
<input type="checkbox"/> Puncture/Cut	<input type="checkbox"/> Disoriented
<input type="checkbox"/> Fracture	<input type="checkbox"/> Infection
	<input type="checkbox"/> Other _____

Part of Body Injured:

<input type="checkbox"/> Head	<input type="checkbox"/> Mouth	<input type="checkbox"/> Hand	<input type="checkbox"/> Leg	<input type="checkbox"/> Toe
<input type="checkbox"/> Neck	<input type="checkbox"/> Shoulder	<input type="checkbox"/> Finger	<input type="checkbox"/> Knee	<input type="checkbox"/> Back
<input type="checkbox"/> Eye(s)	<input type="checkbox"/> Arm	<input type="checkbox"/> Elbow	<input type="checkbox"/> Foot	<input type="checkbox"/> Internal

Medical Treatment:

On-Scene Treatment

Emergency Room

Other

Transit Personnel _____ Date: _____

Figure 17. Example of Record of Injured Passenger (11).

Bus Accident Report Passenger Injury or Witness

This report should be filled out by passengers who have witnessed an accident and/or were injured in an accident.

Name: _____

Mailing Address:

Date of Birth: _____

Sex: _____ **Eye Color:** _____

Hair Color: _____ **Height:** _____ **Weight:** _____

Primary Physician: _____

Phone Number(s): _____ or _____

Emergency Contact: _____

Emergency Contact Phone Number(s): _____ or _____

Disability or Medical Condition (if injured):

Current Medications Taken (if injured):

Figure 18. Example of Passenger Injury or Witness Form (11).

**On-the-Job Accident/Incident
Supervisor Review of Accident**

Name of Employee: _____ Date: _____

Accident/Incident: _____

Supervisor Name: _____

Date of Review: _____

UNSAFE PRACTICES

- | | |
|---|---|
| <input type="checkbox"/> Operating without authority | <input type="checkbox"/> Lack of attention |
| <input type="checkbox"/> Operating at an improper speed | <input type="checkbox"/> Failure to comply with rules or procedures |
| <input type="checkbox"/> Making safety devices inoperable | <input type="checkbox"/> Alcohol/Drugs suspected |
| <input type="checkbox"/> Using defective equipment | <input type="checkbox"/> Overexertion |
| <input type="checkbox"/> Using equipment improperly | <input type="checkbox"/> Other |
| <input type="checkbox"/> Failure to use protective equipment properly | |

UNSAFE CONDITIONS

- | | |
|---|--|
| <input type="checkbox"/> Defective equipment | <input type="checkbox"/> Weather |
| <input type="checkbox"/> Congestion | <input type="checkbox"/> Inadequate lighting |
| <input type="checkbox"/> Inadequate warning | <input type="checkbox"/> Assault/Horseplay |
| <input type="checkbox"/> Fire/Explosion hazards | <input type="checkbox"/> Other |
| <input type="checkbox"/> Facility/Area not maintained | |

CORRECTIVE ACTION RECOMMENDED

- Training (specify type) _____
- Clean/Maintain area
- Disciplinary action
- Replace/Repair equipment
- Additional protective equipment required
- Develop new safety rules/procedures
- Other

SUPERVISOR SUMMARY OF INCIDENT

SUPERVISOR'S SIGNATURE _____ DATE _____

**Figure 19. Example of On-the-Job Accident/Incident Supervisor Review Form
(6, 9, modified).**

**On-the-Job Accident/Incident
Employee's Review of Accident**

Name of Employee: _____ Date: _____

Accident/Incident: _____

Supervisor Name: _____

Date of Review: _____

Location of Accident: _____

Time of Accident: _____

Please describe the accident/incident from your prospective:

Please describe what you were doing just prior to the accident/incident:

Please describe how the accident/incident occurred:

Do you think this accident/incident could have been prevented? If so, how:

SIGNATURE _____ *DATE* _____

**Figure 20. Example of On-the-Job Accident/Incident Employee Review Form
(6, 9, 14, modified).**

OPERATOR REPORT FORMS FOR SAFETY CONCERNS

Transit routes, stops, shelters, and other facilities are located to provide a safe environment for bus operators, passengers, pedestrians, and motorists. In the course of daily operations, however, bus operators may encounter situations or conditions that pose potential safety concerns. Examples of possible safety-related issues include construction of a new driveway near an existing bus stop, vandalism to roadway or transit signs, and changes in roadway traffic conditions.

Bus operators should be provided with the opportunity to report safety or hazard concerns. Two commonly used approaches are to include an area on the post-trip inspection form for operators to report issues and concerns or to use a separate safety issue form. An example of a separate form is provided in Figure 21.

The information obtained from operators can be used by other transit agency personnel to follow up with the appropriate groups or agencies. Some safety concerns may be outside the scope of the transit agency, and transit personnel will need to work with personnel from the city,

county, TxDOT, or other agency to address the situation. Regardless of the mechanism used, it is important to provide feedback to an individual reporting the safety concern on the action taken or the reasons why no change could be made.

Bus Operator Safety Concern Form

Operator Name: _____

Date: _____

Route: _____

Please describe the Safety Problem or Issue.

Please identify possible actions to address the situation.

Signature

Date

Figure 21. Example of Operator Safety Concern Form.

References

1. Federal Transit Administration, Office of Safety and Security. *Implementation Guidelines for Drug and Alcohol Regulations in Mass Transit*. 2002. Washington, D.C.
2. Texas Administrative Code, Title 37, Part 1, Chapter 16, Subchapter A. *Licensing Requirements, Qualifications, Restrictions, and Endorsements*.
3. Texas Department of Public Safety. *Texas Commercial Motor Vehicle Drivers Handbook*. 2002. Austin, Texas.
4. VIA Metropolitan Transportation Authority. *Driver's License Standards*. Undated. San Antonio, Texas.
5. Capital Metropolitan Transportation Authority. *Capital Metro On-Board Observation Report*. Undated. Austin, Texas.
6. Wisconsin Department of Transportation Bureau of Transit. *Bus Safety Manual for Wisconsin Urban Transit Systems*. 2000. Madison, Wisconsin.
7. Community Transportation Association of America. *CTAA Classroom and On-the-Job Training for New Hire Vehicle Operators*. Undated. Washington, D.C.
8. Citibus. *System Safety Program Plan – Revision 1*: March 2001. Lubbock, Texas.
9. North Carolina Department of Transportation Public Transportation Division. *The North Carolina Passenger, Vehicle and Public Transportation System Safety Plan Guide*. 2000. Raleigh, North Carolina.
10. Ohio Department of Transportation. *Vehicle Safety Program*. Columbus, Ohio.
11. Community Transportation Association of America. *Pre-Trip and Post-Trip Vehicle Safety Inspections*. Undated. Washington, D.C.
12. Capital Area Rural Transit System. *CARTS Pre-Trip Inspection Form*. Undated. Austin, Texas.
13. Capital Area Rural Transit System. *CARTS Post-Trip Inspection Form*. Undated. Austin, Texas.
14. Federal Transit Administration, Office of Safety and Security. *Best Practice Manual: FTA Drug and Alcohol Testing Program*. 2002. Washington, D.C.
15. Brazos Transit District. *Brazos Transit District (The District) Policy for Drug, Alcohol, and Other Prohibited Substances*. October 2002. Bryan, Texas.

16. Capital Metropolitan Transportation Authority. *Capital Metro's Procedures to Follow in an Accident*. Undated. Austin, Texas.
17. Texas Department of Transportation. *Security Incident Report Form*. <http://www.dot.state.tx.us/PTN/geninfo.htm?pg=safe>.
18. Federal Transit Administration. *Revised National Transit Database, Safety and Security Module Pilot Program Instructions*. July 2001. Washington, D.C.

Other Sources of Information

Capital Metropolitan Transportation Authority. *Safety Rules Handbook*. 1996. Austin, Texas.

Dallas Area Rapid Transit. *System Safety Program Plan*. 2000. Dallas, Texas.

Federal Transit Administration. *Bus and Passenger Accident Prevention*. 1994. Washington, D.C.

Federal Transit Administration. *Transit Bus Safety Program: Task 3 – Development of Model Transit Bus Safety Program*. Prepared by Battelle and Transportation Resource Associates, Inc. 2001. Washington, D.C.

Hill County Transit District. *Safety and Security Policy, System Safety Program Plan and System Security Program Plan*. 2002. San Saba, Texas.

Fort Worth Transportation Authority. *System Safety Plan*. Undated. Fort Worth, Texas.

SPAN. *Safety System Plan*. Undated. Denton, Texas.

Sunline Transit Agency. *Sunline Safety Program*. 2002. Thousand Palms, California.

VIA Metropolitan Transportation Authority. *System Safety Plan*. 1999. San Antonio, Texas.

Appendix A - Organizations and Agencies

Transit Organizations and Agencies

American Public Transportation Association
1666 K Street, N.W., Suite 1100
Washington, D.C. 20006
Telephone: (202) 496-4800 Fax: (202) 496-4324
Website: <http://www.apta.com/>

Community Transportation Association of America
1341 G St, N.W., 10th Floor
Washington, D.C. 20005
Telephone: (202) 628-1480 Fax: (202) 737-9197
Website: <http://www.ctaa.org/>

Federal Transit Administration
400 7th Street, S.W.
Washington, D.C. 20590
Telephone: (202) 366-4043 Fax: (202) 366-3472
Website: <http://www.fta.dot.gov/>
FTA Safety & Security Website: <http://transit-safety.volpe.dot.gov/Default.asp>

Texas Department of Public Safety
5805 North Lamar Blvd.
Austin, TX 78752-4422
Telephone: (512) 424-2000
Website: <http://www.txdps.state.tx.us/>

Texas Department of Transportation
Public Transportation Division
125 E. 11th St.
Austin, TX 78701-2483
Telephone: (512) 463-8585 Fax: (512) 463-9896
Website: <http://www.dot.state.tx.us/insdot/orgchart/ptn/ptn.htm>

Drug and Alcohol Prevention and Treatment Organizations

Alcoholics Anonymous
A.A. World Services, Inc.
P.O. Box 459
New York, NY 10163
Telephone: (212) 870-3400
Website: <http://www.alcoholics-anonymous.org/>

Alliance for Consumer Education
Website: <http://www.inhalant.org/>

CDC National Prevention Information Network
P.O. Box 6003
Rockville, MD 20849-6003
Telephone: (800) 458-5231
Website: <http://www.cdcnpin.org/>

Center for Substance Abuse Prevention
Substance Abuse and Mental Health Services Administration
5600 Fishers Lane
Rockville, MD 20857
Telephone: (301) 443-3875 Fax: (301) 443-0247
Website: <http://www.samhsa.gov/centers/csap/csap.html>

Cocaine Anonymous
3740 Overland Ave. Suite C
Los Angeles, CA 90034
Telephone: (310) 559-5833
Website: <http://www.ca.org/contact.html>

Marijuana Anonymous
Marijuana Anonymous World Services
P.O. Box 2912
Van Nuys, CA 91404
Telephone: (800) 766-6779
Website: <http://www.marijuana-anonymous.org/>

National Clearinghouse for Alcohol and Drug Information
P.O. Box 2345
Rockville, MD 20852
Telephone: (800) 729-6686
Website: <http://www.health.org/about/aboutncadi.htm>

National Council on Alcoholism and Drug Dependence
20 Exchange Place, Suite 2902
New York, NY 10005
Telephone: (212) 269-7797 Fax: (212) 269-7510
Website: <http://www.ncadd.org/>

Partnership For A Drug-Free America
405 Lexington Avenue, Suite 1601
New York, NY 10174
Phone: (212) 922-1560 Fax: (212) 922-1570
Website: <http://www.drugfreeamerica.org>

Substance Abuse Treatment Facility Locator
Website: <http://findtreatment.samhsa.gov/>

Substance Abuse and Mental Health Services
Website: <http://www.samhsa.gov/>

Appendix B - Available Training and Other Resources

SUBJECT	Title/Source
Accidents/Incidents	Bus Collision Analysis Bus Collision Prevention/Investigation Seminar for Managers Collision Investigation for Transit Policy and Law Enforcement Fundamentals of Bus Collision Investigation Instructor's Course in Bus Collision Investigation Intermediate Problems in Bus Collision Investigation (Transportation Safety Institute, http://www.tsi.dot.gov/)
Alternative Fuels	Alternative Fuels (U.S. Dept. of Energy, Office of Transportation Technologies, Alternative Fuels Data Center, http://www.afdc.doe.gov/)
	Emergency Response and Access to Alternative Fueled Vehicles Safety Evaluations of Alternative Fuels Facilities and Equipment (Transportation Safety Institute, https://www.tsi.dot.gov/)
	Focus on Alternative Fuels (APTA, http://www.apta.com/services/safety/altfuelmay.cfm)
Annual Review and Performance Audits	Safety Teams (National Safety Council, http://www.nsc.org , National Accounts Manager, bormanc@nsc.org , 630-775-2273)
	Strategic Planning for Health and Safety Committees (National Transit Institute, http://www.ntionline.com/Training.asp , 732-932-1700)
Emergency Response and Security	Bus Collision Casualty Extrication Seminar Effectively Managing Transit Emergencies Fire/Life Safety Training Seminar Threat Management and Response to Bus Hijacking Transit Explosives Incident Management Seminar (Transportation Safety Institute, https://www.tsi.dot.gov/)
	Emergency Procedures for Rural Transit Drivers Evacuating Elderly and Disabled Passengers from Vehicle Emergencies (Arkansas Transit Association, Russ Blackman-Parish, russ@arktransit.org , 501-663-2288)
	Good Samaritan: Helping in an Emergency (Booklet) (National Safety Council, http://www.nsc.org , National Accounts Manager, bormanc@nsc.org , 630-775-2273)
Employee Safety	Bloodborne Pathogens Awareness (Arkansas Transit Association, Russ Blackman-Parish, russ@arktransit.org , 501-663-2288)

SUBJECT	Title/Source
	<p>Bloodborne Pathogens Transit Industry Occupational Safety & Health Resource Guide Workplace Violence (National Transit Institute, http://www.ntionline.com/Training.asp, 732-932-1700)</p> <p>Employee’s Seminar in Fatigue Awareness Instructor’s Seminar in Fatigue Awareness Manager’s Seminar in Fatigue Awareness Supervisor’s Seminar in Fatigue Awareness (Transportation Safety Institute, https://www.tsi.dot.gov/)</p> <p>Have A Nice Day! Skills and Techniques for Maintaining a Safe Environment on Your Bus (CD ROM) (National Transit Institute/San Diego Transit, http://ntionline.com/niceday.htm, 732-932-1700)</p> <p>Training Module for Back Safety (Oklahoma State University, Environmental Health and Safety http://www.pp.okstate.edu/ehs/modules/back.htm)</p>
Facility Safety	<p>Bioterrorism Handling Mail Hazardous Material Information Communication Workplace Violence (OSHA, http://www.osha.gov/bioterrorism/anthraxfactsheet.html)</p> <p>Chemical Hazards Ergonomics, Fatigue, and Stress Introduction to Indoor Air Quality Lock-Out/Tag-Out Procedures Workplace Health and Safety Resource (CD ROM) (National Transit Institute, http://www.ntionline.com/Training.asp, 732-932-1700)</p> <p>Crime Prevention through Environmental Design Transit Industrial Safety Management (Transportation Safety Institute, https://www.tsi.dot.gov/)</p> <p>First-Aid in the Workplace (Arkansas Transit Association, Russ Blackman-Parish, russ@arktransit.org, 501-663-2288)</p> <p>Preventing Workplace Violence (Centers for Disease Control, http://www.cdc.gov/niosh/violcont.html)</p>
Hazardous Materials	<p>Hazard Fact Sheets (National Transit Institute, http://www.ntionline.com/Training.asp, 732-932-1700)</p>
Human Resources and Training	<p>Bike and Pedestrian Safety Program Safety Orientation Presentation (Austin Capital Metro)</p>

SUBJECT	Title/Source
	<p>Coaching the Transit Bus Operator Coaching the Van Driver II Drug and Alcohol Training for Safety-Sensitive Employees Drug and Alcohol Training for Supervisors Stress Management for Transit Employees (Arkansas Transit Association, Russ Blackman-Parish, russ@arktransit.org, 501-663-2288)</p> <p>Defensive Driving Courses First-Aid Institute Courses – CPR, First-Aid, Bloodborne Pathogens Interactive Defensive Driving (CD-ROM Course) (National Safety Council, National Accounts Manager, bormanc@nsc.org, 630-775-2273)</p> <p>Developing a Driver Safety Training Program (RAE Consultants, Inc., Rick Evans, rick@raeconsultants.com, http://www.RAEConsultants.com, 303-860-9088)</p> <p>Driver Training and Train the Trainer (Smith System Driver Improvement Institute, Inc., info@smith-system.com, 817-652-6969)</p> <p>Worker To Worker Training (National Transit Institute, http://www.ntionline.com/Training.asp, 732-932-1700)</p> <p>Instructor Excellence Instructor’s Re-Certification Course in Bus Operator Training Instructor’s Course in Bus Operator Training Substance Abuse Management and Program Compliance Substance Abuse Management Lecture (Transportation Safety Institute, http://www.tsi.dot.gov/)</p> <p>Transit Personnel Video Training System (START) (Ergometrics & Applied Personnel Research, Inc., http://www.ergometrics.org/sttrain.htm, 425-774-5700)</p> <p>Substance Abuse Management Seminars: Revisions to 49 CRF Part 40 (Federal Transit Administration, Jennifer Whalley, 617-494-2686, whalley@volpe.dot.gov)</p>
Passenger Safety and Customer Relations	<p>Building Quality Service Child Passenger Safety Safe Transportation of the Public Under the Americans With Disabilities Act (ADA) Special Transit and Rural Transit Safety Transporting Passengers with Special Needs Understanding the Capabilities and Needs of Persons with Disabilities (Arkansas Transit Association, Russ Blackman-Parish, russ@arktransit.org, 501-663-2288)</p>

SUBJECT	Title/Source
	<p>CTAA Community Transportation Training and Safety Review Program (CTAA/CDOT/CASTA/CTAA Consultants, http://www.ctaa.org/training/safety, 202-661-0217)</p>
<p>System Safety Plans and Guides</p>	<p>Guidelines for System Safety Certification Transit Bus System Safety Transit System Safety (Transportation Safety Institute, https://www.tsi.dot.gov/)</p>
	<p>Safety Management Leadership (National Safety Council, National Accounts Manager, bormanc@nsc.org, 630-775-2273)</p>
<p>Vehicle and Equipment Maintenance and Operations</p>	<p>Transit Industry Occupational Safety and Health Resource Guide (National Transit Institute, http://www.ntionline.com/Training.asp, 732-932-1700)</p>

