INTRODUCTION

The purpose of this Resource Manual is to present information regarding some important transportation safety issues. It provides the building blocks for the formation of a Passenger, Vehicle and System (PVS) Safety Plan which should be an integral part of each transportation system's safety program.

Safety is an issue that affects every aspect of public transportation. Identifying and addressing potential hazards can save lives, reduce injuries, and save money. The following list are just some of the areas where safety should be a primary concern:

- Policy Formation;
- Planning;
- Procurement;
- Finance (through insurance);
- Operations;
- Customer Relations; and
- Maintenance.

Because safety is an issue that is all encompassing, every transportation system, whether large fixed-route bus systems or small rural providers, should make safety its top priority. The five sections of the Resource Manual and accompanying safety materials have been specifically designed to assist in that process.

Safety Definitions

The following definitions are presented to clarify some terms that are used throughout the Resource Manual.
Safety - Freedom from danger.

Security - Freedom from intentional danger.

Hazard - Any real or potential condition that can cause injury and/or damage to equipment or property.

Accident - An unforeseen event or occurrence that endangers life or property.

Incident - A disruption to the normal, safe operation of the transportation system that does not result in death, injury or significant property damage.

Risk - A classification of a hazard or dangerous condition that encompasses both its potential severity and the likelihood of an accident occurring.

Hazard Management - The practice of controlling, eliminating, or accepting potentially dangerous situations in an effort to reduce the level of risk.

Safety Program - The sum total of all safety tasks and activities that are established to enhance organizational effectiveness through the prudent management and analysis of risk(s).

Safety Plan - A document produced by the transportation system to catalogue and organize activities associated with its Safety Program.

Resource Manual Organization

Four different page colors are used to present the information contained in the Resource Manual. The following is a listing of the page colors with their contents:

WHITE - Central text concerning safety topics and materials.

ORANGE - Directions instructing the reader how to use the safety materials.
GREEN - Additional information about safety topics contained in "Attachments" to sections of the Resource Manual.

The first section of this Resource Manual addresses those safety issues related to preventive measures that can be implemented to effectively reduce risk exposure. Activities such as the formation of a Safety and Accident Review Committee are preventive steps that actively try to address potential hazards before they become accidents. Other topics presented in the section revolve around the central issue of preparedness for emergency situations and accident analysis.

The standard procedures discussed in the second section involve safety issues that are basic to any safety program. They include complying with federal requirements for operator licensing and elemental maintenance and operations practices.

The third section of the Resource Manual addresses the general topic of "Emergency Procedures". Included in this section are discussions of how transportation systems can prepare both themselves and local emergency response forces for an accident involving one of the system's vehicles.

The fourth section of the Resource Manual, "Safety Forms", presents all of the forms associated with the Passenger, Vehicle and System (PVS) Safety Program. Before each form is a set of instructions detailing the information that is required. The presentation of the safety forms follows the order of topical headings in the Resource Manual. Therefore, the first set of forms relate to "Preventive Activities"; the second details "Standard Procedures"; and the third outlines "Emergency Procedures".

Information from all of the safety topics presented should be used in the formation of the PVS Safety Plan presented in the fifth section. To make the preparation of the PVS Safety Plan easier, a generic pre-prepared plan is already included. All that is left to
do is to insert your transportation organization's information in the blank spaces and to set up some basic organizational requirements. The orange pages contain instructions to help make the process easier.

In order for any plan to work, it must be referred to consistently and used as a yardstick to measure progress. The Passenger, Vehicle and System Safety Plan is no different. Its success will largely depend on the effort you put into it.
SECTION 1
PREVENTIVE MEASURES
AND ANALYSIS
SECTION 1
PREVENTIVE MEASURES AND ANALYSIS

This section of the Resource Manual presents safety measures that can prevent accidents from occurring or steps that can make the transportation system useful in the event of a local disaster. Each topic emphasizes an approach to transportation safety activities that strives to keep accidents from happening. Aggressive identification of safety needs and clear assessment of possible hazards are the best means possible to control risk exposures.

The forms referred to in this part of the Resource Manual are presented in Section 4 - Passenger, Vehicle and System Safety Program Forms (Part 1).
THE SAFETY AND ACCIDENT REVIEW COMMITTEE

A transportation system's first step in improving safety should be to organize a Safety and Accident Review Committee. One of the main purposes of the Safety and Accident Review Committee is to prevent accidents from occurring by:

- identifying possible hazardous conditions;
- preparing Passenger, Vehicle, and System Safety Plans;
- working to alleviate or control hazardous conditions;
- establishing plans for emergency preparedness; and
- conducting analyses of accidents.

The Safety and Accident Review Committee should serve both as a forum to raise safety concerns and as a body with the power to rectify dangerous situations. In addition, it should move to make safety a primary concern in all aspects of the organization. To show this concern, the Committee should demonstrate through enthusiasm and leadership that safety is an issue that should be important to everyone.

Because a complete Safety Program includes a careful analysis of accidents that do occur, the Committee includes this vital function as part of its many activities. Through performing accident analyses, Committee members can pinpoint hazards and act to correct any safety deficiencies.

Organizing a Safety and Accident Review Committee

All levels of management (and delegates from every department in larger systems) should be represented on the Safety and Accident Review Committee. It is important that the System Manager or Project Director be an active participant (not necessarily as a leader) in the process to show that the program has support from the top. In addition to the System Manager or Project Director, at
least one full-time driver and mechanic (if applicable) should sit on the Committee. They can help raise safety concerns and pass information to other employees. The inclusion of drivers and mechanics on the Committee helps to show that safety is a concern that cuts across all job descriptions.

In addition to organizational representation, the Safety and Accident Review Committee should also include members of the local community. Outside or independent members could include:

- police officers;
- fire fighters;
- civil defense leaders;
- red-cross organizers;
- insurance adjusters; and/or
- community leaders.

The role of independent representatives should be to provide assistance to the transit system and to give unbiased opinions in controversial issues.

Committee Activities

There are two main functions of the Safety and Accident Review Committee. The first is to conduct Hazard Assessments of any situation that appears to possibly endanger the safe operation of the transportation system. A full discussion of Hazard Assessment, and a sample methodology are included as Attachment 1-1 (printed on green paper) located at the end of this section.

The second major function of the Safety and Accident Review Committee is to review vehicle accidents to assess whether or not they were preventable. A discussion of how accident reviews should be conducted and how to judge preventability are included as Attachment 1-2.
**Goal Formation.** It is important that the Safety and Accident Review Committee make goals and publicize the results (both good and bad). In addition, the Committee should promote safety enhancements by both individuals and groups to encourage others to do likewise.

**Procurement.** One of the functions of the Safety and Accident Review Committee should be to make recommendations on the purchasing of equipment from the standpoint of safety. Members of the Committee should review the major purchases that are proposed to make sure that the equipment meets safety criteria. This role is especially important in the competitive bid process where the winning bidder may have compromised on the safety level of the product. To prevent this from happening the Safety and Accident Review Committee should review all appropriate bid documents and make recommendations on safety standards.

Because the procurement process is frequently a long one, the Committee should make sure that this work is conducted as quickly as possible. In many cases, a quick review will actually speed up purchases because it can give a sense of immediacy to the process. (Quick reviews also set an accelerated pace for the people doing the procuring.) Except for major purchases, such as vehicles, the entire committee should not have to approve each purchase.

**Training.** Another important role for the Safety and Accident Review Committee is to review training programs for employees. These reviews should try to ensure that all training is comprehensive from a safety perspective and directly addresses known hazards in the transportation system's operating or work environments.

**Safety Awards.** The Safety and Accident Review Committee should be in charge of developing a safety awards program. Categories for such a program can include accident-free driving, no lost days due to injury, or other safety indicators. One major activity that the Committee should develop is an annual bus/van rodeo with prizes such as gift certificates for the winners.
Claims vs. Safety

One of the most important safety functions that a transportation system can perform is to review past accidents (vehicle and non-vehicle) in order to take preventive measures against a repeat of the same type of accident. This analysis could include not only accidents that have occurred for the transportation system, but those that seem to be prevalent throughout the state or in other similar operations.

A crucial element of the review process is to propose and implement counter-measures against the accident types identified. For example, if there is an increase in backing accidents the procedures for backing vehicles should be reviewed and changed. This means evaluating whether spotters are required under the current policy and if they are used. Another possibility is to assess whether guidelines should be established as to who is allowed to drive the vehicles in reverse.

For every accident type, there are a variety of possible causes and corrective measures. The job of the people conducting the analysis is to correctly identify the problem and to implement the best solution. The person or group responsible for this activity is up to the discretion of each individual transportation system, but it may be easiest to make the members of the Safety and Accident Review Committee responsible for the review process.

Some common accident types and possible corrective measures are listed in the paragraphs that follow.

Backing Accidents. If backing accidents occur, the first question asked should be whether the reverse was necessary. In many cases, policies restricting putting vans or buses into reverse unless it is absolutely necessary alleviates many backing accidents. It is also important to determine whether backing accidents occur on the grounds of the facility during parking or maintenance activities or
whether the accidents have occurred on the road. In the case of on-site backing accidents, spotters should be used at all times. On the road backing accidents can be avoided by mandatory driver walk-arounds before reversing the vehicle.

**Wheelchair Lift Accidents.** Many wheelchair lift accidents can be avoided with certified Passenger Assistance Techniques (PAT) instructions from Transportation Management Associates of Fort Worth, Texas. In addition to proper training, re-training and field supervision can prevent drivers from falling into bad habits. Due to the serious nature of wheelchair lift accidents, transportation authorities should not wait until an accident occurs to take corrective measures in ensuring that drivers use the proper techniques and procedures for operating lift equipment.

**Fixed Object Collisions.** Repeated collisions with fixed objects, especially when parking or operating a vehicle on-site, cannot be tolerated. If accidents with fixed objects occur, one of the best remedies is to put drivers back on the practice course. Practice courses can be set to varying degrees of difficulty and everyone can benefit the practice session. Other ways of preventing fixed accident collisions are to have drivers deploy spotters and/or do vehicle walk-arounds in tight maneuvering situations.

**Lifting Accidents.** One of the most frequent causes of workman's compensation claims are back injuries associated with lifting. These accidents can be avoided by instructing employees how to lift properly and to encourage employee physical fitness.

**Passenger Falls.** Passenger accidents related to falling usually occur because the driver starts to move the vehicle before all of its occupants have been seated. To address this problem, drivers must first be trained properly, and then checked upon repeatedly with on-the-road supervision. In addition, drivers must be told that they will be held responsible for any passenger falls that do occur.
**Industrial Accidents.** Employee accidents frequently occur due to neglect of standard operating procedures, such as the wearing of protective safety equipment at all times. In cases where an accident does occur without prior knowledge of the hazard, steps should be taken immediately to ensure that it does not happen again. These steps could include eliminating the hazard, controlling the hazard through installing safety devices, adopting new employee safety protection requirements, or instituting new rules and procedures to prevent a similar accident in the future.
ASSISTANCE IN A LOCAL DISASTER

Organizations that provide paratransit service can give unique assistance to emergency crews in the event of a local disaster. In the case of an area evacuation, transportation organizations, through their master passenger file, can assist by locating individuals who may be unable to leave their home without transportation assistance. Lift-equipped vehicles could then assist in evacuation efforts for those who are mobility impaired. In addition, all transportation systems can assist relief efforts by providing high-occupant capacity vehicles for transportation of emergency forces to the disaster area for evacuation of victims.

To provide the best assistance possible, every transportation organization should develop, in cooperation with local police, fire and ambulance forces, a disaster plan which defines all roles in the event of a local disaster. Such a plan should consider:

- possible emergency situations;
- communication capabilities;
- direction (chain of command);
- data on residents through passenger lists;
- vehicle sizes and capacities (passengers and cargo);
- clearances for vehicles on designated emergency routes (overpasses, bridges, ground clearances, etc.);
- driver first aid capabilities;
- maintenance and safety equipment; and
- refueling contingencies.

The transportation system should play an integral part in the formation of a local disaster response plan. Such a plan would bring together the available resources of the community including the transportation system's vehicles; emergency shelter sites and volunteers; and the primary response organizations (police, fire,
paramedics, and hospitals). It would also include a catalogue of possible disasters including earthquakes, train derailments, toxic chemical leaks, or petroleum spills.
EMERGENCY PREPAREDNESS NEEDS

In order to be fully prepared in the event of a transportation emergency, local rescue forces (fire, police, paramedics) should be familiar with the vehicles operated by the transportation system. In addition, emergency communication procedures should be worked out before an emergency occurs.

Simulated Rescue Exercises

Simulation exercises with emergency forces can assist rescue personnel in understanding the special needs of transportation emergencies. Many emergency crews are familiar only with automobile accidents, and do not know the basics of gaining access to a vehicle, shutting off the engine or communicating with passengers who may have special needs. Performance in all of these areas can be improved with practice on accessing the vehicles and instruction on the uniqueness of transportation operations.

To conduct a mock rescue situation, emergency personnel should first be instructed on access points, possible passenger disabilities, engine shut-off procedures, and other pertinent rescue information. After the instruction is completed, they should try to respond to a simulated accident scene. Volunteers should be situated on the vehicle as accident victims. Each person should have attached to them a card outlining their condition and/or disability (if any). The volunteers should also be aware of their condition (i.e., unconscious, broken leg, blind, etc.). To prevent easy entry into the vehicle, notices can be posted to restrict access. An alternative is to position the vehicle used in the exercise adjacent to a wall, tree, or other vehicle to make the rescue process harder and more realistic.

When the rescue crews are "dispatched" to the scene of the accident their efforts should be timed. Perhaps the most important aspect of the simulation to make it an effective exercise is to
discuss the accident afterwards with the emergency crews to learn what could be done better and to answer questions.

Emergency Communications

Effective emergency communication starts long before an accident or other emergency situation actually occurs. Dispatchers, supervisors, and drivers must know exactly what to do if an incident seriously disrupts normal operating conditions. In addition, links of communication should already be established between a transportation system and emergency forces well in advance of an accident occurrence.

All emergency response organizations should know who the primary and secondary contact persons are at the transportation system. In addition to receiving the central number for the transportation system, emergency forces should also be given a listing of the home phone numbers of all important personnel. This information can be included on an Agency Profile Sheet along with pertinent information on the vehicles operated by the transportation system.

In order to help rescue teams be effective in their response, the transportation system should clarify the needs of response forces in order to better prepare for emergency situations. For example, rescue crews may need precise information on the location of an accident in rural areas. This may, in turn, require transportation systems to work with each driver to make sure that they know how to communicate their exact location to the dispatcher at all times.

Emergency preparedness is an important aspect of public transportation that is frequently overlooked in the course of hectic daily operations. It is important however, to make the time for this important exercise to ensure that both rescue crews and transportation system personnel know what to do.

1-11
Their most important job is to make sure that they have all of the required information and that the information they receive is accurate. In many cases the person reporting an emergency will not relay information clearly. Therefore, it is the job of the dispatcher to ask the right questions. Table 1-1 provides a listing of the information that is required in emergency situations. In those transportation systems that do not have radios, Emergency Communications Forms (Exhibit 4-17 or 4-18) can help ensure that the proper information is accurately relayed to the dispatcher.
TABLE 1-1
DISPATCHER NOTIFICATION SHEET

PLEASE POST

When an emergency is reported the dispatcher must ask for the following:

- The exact location of the emergency
  - road
  - cross street
  - direction headed
  - landmarks

- The type of emergency
  - accident
  - fire
  - mechanical difficulty
  - health emergency

- Number of possible injuries

- Extent of injuries

- Whether emergency personnel have been notified

- Vehicle number or driver name

- Elapsed time since start of emergency
DRUG AND ALCOHOL TESTING

Recent regulations instituted by the U.S. Department of Transportation require providers of public transportation to test employees for drug use. Its final rule on "Control of Drug Use in Mass Transportation Operations" (49 CFR Part 653) stipulates that large transportation agencies receiving Section 3 or 9 funds, or those that operate within an urbanized area of 200,000 or more, must have antidrug use programs and testing in place no later than December 21, 1989. Section 18 fund recipients and those systems operating in urbanized areas of less than 200,000 must comply with the guidelines by December, 21, 1990 to remain eligible for federal funding. (Other regulations that apply to the establishment of drug testing programs include: 49 CFR Part 40 "Procedures for Transportation Workplace Drug Test Programs" and 49 CFR Part 29 "Omnibus Workplace Antidrug Act".) If your transportation organization does not receive funding from any of these sources then you do not have to meet the regulations.

In order to comply with the regulations, transportation systems must have in place by the appropriate deadline the following:

- a policy statement on drug use in the workplace;
- an employee and supervisor education and training program;
- a drug testing program for employees and applicants for employment in safety-sensitive positions; and
- administrative actions for record keeping, reporting, release of information, certification of compliance, and requesting waivers.

Policy Statement

A policy statement must be drafted and subsequently approved by the transportation system's governing body (e.g., Board of Directors) by the appropriate date. (Suggested requirements for a policy are
included as Attachment 1-3.) The document must clearly state that no employee be allowed to work in a safety-sensitive position while under the influence of prohibited substances. It should also state that employees are not permitted to work if they refuse to take a drug test or fail one that is administered to them. Employees may return to work in safety-sensitive positions when they pass a return to duty drug test.

**Education and Training**

Education and training on the issue of drug use and the transportation system's drug policy must be given to all employees who work in safety-sensitive positions. The training involved should include the distribution of informational material, a community service hotline telephone number for employee assistance (if available), and the organizational policy on drug use. Information on the effects of drug use must also be provided. Supervisors must receive an additional 60 minutes of training oriented towards recognition of indicators of drug use. This is to ensure that they will be able to make proper judgements as to whether reasonable cause testing is required.

**Drug Testing**

UMTA requires these transportation organizations falling under the regulations to test for five types of drugs:

- Marijuana (cannabinoids);
- Cocaine (including "crack");
- Phencyclidine ("angel dust");
- Amphetamines ("speed"); and
- Opiates (including opium, morphine, and codeine).

Transportation systems must establish a urine drug testing program using a laboratory certified by the Department of Health and
Human Services (DHHS). In addition, all results must be reviewed by a qualified Medical Review Officer (MRO). Employees may request to retake the tests (at their own expense) if they fail.

To comply with the new regulations, transportation providers must test employees under five conditions:

- pre-employment;
- reasonable cause;
- post-accident;
- random selection; and
- return to duty.

**Administrative Requirements**

Reports must be submitted semi-annually to UMTA that summarize the results of the drug testing that has been conducted. Drug testing records must be maintained by funding recipients, MROs and transportation systems for a five-year period.

**Alcohol Testing**

Although the U.S. Department of Transportation regulations do not mandate testing for alcohol, individual transportation systems may include such tests in their programs. Because alcohol is a factor in many accidents, it is strongly recommended that it be included in every transportation system's testing program.

Another important area of any substance abuse program, although it does not involve testing, is the misuse of prescription and non-prescription medications. Drivers must be held accountable for their job performance while they are on medication of any type. They should be responsible for reading labels and consulting with their physicians to make sure that they can work safely while taking any medication.
For more information on the USDOT regulations concerning drug testing, refer to UMTA report UMTA-IT-06-0190-89-1 "Implementation Guidelines for Anti-Drug Programs in Mass Transit". Copies can be ordered by calling the National Technical Information Service (1-703-487-4650).
FACILITY SAFETY

The five separate forms described in this section assist safety personnel in conducting facility inspections. The first, and most comprehensive is the Facility Safety Work Sheet which reviews multiple categories of facility safety. Two review sheets pertain to the storage of hazardous materials. The first inventories the materials contained in storage areas and the second is a checklist to ensure dangerous substances are kept in safe environments. The two final sheets are checklists to ensure that fire extinguishers and smoke detectors are appropriately placed and in working order. All forms referred to in this section are presented in Section 4 - Passenger, Vehicle and System Safety Program Forms.

Facility Safety Work Sheet

Facility Safety Work Sheets are designed (in conjunction with the fire extinguisher, smoke detector, and hazardous material work sheets) to review potential hazards (Exhibit 4-1). The work sheet has separate sections that review the following fundamental safety areas:

I. Basic Design Deficiencies
II. Inherent Hazards
III. Malfunctions
IV. Maintenance Hazards
V. Environmental Hazards
VI. Human Factors

Each section of the work sheet lists examples, causes, and control methods at the top of the sheet. Questions are then listed for each safety area outlining common safety problems. The respondent can either mark yes, no, or not applicable (n/a) to each question asked. If steps are necessary to correct the safety problem, the reviewer writes down its location and the action that needs to be taken.
Sections that do not apply to your operation can be removed and discarded. The walk-throughs or inspections should occur periodically depending on the size of your transportation system, but at least once per year.

**Hazardous Material Storage Forms**

The Hazardous Material Storage Forms serve two purposes. The Inventory Sheet (Exhibit 4-2) is used to keep a hazardous material listing of the areas where hazardous materials are stored. The second sheet, the Site Report (Exhibit 4-3), is used to inspect and record the condition of the storage area and its suitability for hazardous material containment.

The Inventory Sheet establishes a record of the contents of storage areas for emergency purposes. For example, if a fire were to occur at a facility, the firemen responding to the call could be warned of dangerous conditions that might exist if the storage area were to be engulfed in fire. The Inventory Sheet should be kept at three separate locations:

- at the storage area (posted outside);
- in the Administrative Offices (filed); and
- at the local fire station (filed with other emergency information).

For each storage location, a separate sheet should be used. (Use more than one sheet if necessary.) Each form should list the hazardous substance, the type of danger it poses and the amount that is stored for each location. The categories to be used in classifying a possible hazard are:

- T - Toxic (harmful if inhaled or swallowed);
- F - Flammable (catches fire easily); and
- C - Caustic (burns skin if touched).
In order to keep an accurate record of which hazards might be present in a storage area, the listing should be compiled on an annual basis. For this reason, the date which the form was completed is crucial and should be filled out in the bottom right-hand corner of the sheet.

The Site Report (2nd sheet) should be compiled at the same time as the inventory, but should only be kept in the files of the lead Safety Officer. Each storage area should be evaluated for the criteria listed. If the storage of the materials fails to meet any one of the criteria, the problem should be noted in a comment section and fixed immediately. To ensure that the problem gets fixed, another inspection should be scheduled within six weeks after the first evaluation.

**Fire Safety Checklists**

The Fire Extinguisher Checklist (Exhibit 4-4) and the Smoke Detector Checklist (Exhibit 4-5) should be used to periodically review the operating status of fire detection and prevention equipment. They can assist individuals conducting safety inspections by ensuring completeness and accuracy. In addition, the lists document necessary improvements and can be used to follow-up on delegated tasks.

The checklists contain a column for the location of units to be reviewed. A "master copy" of each checklist should be created listing the fire extinguisher and smoke detector locations throughout the facility. This "master list" can then be used as the basis for all subsequent checks.

Each checklist has a place to indicate the status of the unit being reviewed. An "A" indicates that the unit is fully operational. A "B" indicates that the unit needs service, and a "C" designates that the unit is missing. A box at the bottom of the sheet records actions taken to bring deficiencies up to standard. Checks should be run periodically and copies of each lists should be filed.
Facility Safety Checklist

A checklist covering the various activities to be conducted for this portion of the safety program is included as Exhibit 4-6.
SECTION 1
ATTACHMENTS
ATTACHMENT 1-1
HAZARD ASSESSMENT

Although it is impossible to accurately identify and correct every dangerous situation, many accidents can be avoided through careful prior analysis. This practice is called Hazard Assessment, and it has two important components.

The first component is to determine the likelihood that the hazard could produce an accident. This process entails a full evaluation of how frequently the hazard is encountered. For example, low head clearance on one type of vehicle could be encountered frequently by both passengers and the driver. Another, less likely, hazard could involve the combustion of hazardous materials in a storage area due to extreme heat. In either case, an accurate assessment of the possibility that an accident could occur is crucial to assessing the hazard correctly.

The second component of performing Hazard Assessment is the determination of the potential severity of an accident. This process involves carefully estimating the potential effects of an accident caused by the hazard. In the two examples used previously, the severity of each would be very different. In the case of the low head clearance, it is possible that a passenger or employee might get a concussion. The second example (the combustion of hazardous materials) has the potential for death or serious injury.

The practice of hazard assessment combines these two components (likelihood and potential severity) to form an overall determination of the hazard. A complete safety program therefore incorporates this type of analysis into its activities.

Sample Hazard Identification and Analysis Methodology. One way to conduct hazard assessments is to use a "Hazard Assessment Matrix" (Figure 1-1). The Matrix condenses "hazard assessment" into a chart and prioritizes those hazards that are evaluated.
## HAZARD ASSESSMENT MATRIX

<table>
<thead>
<tr>
<th>FREQUENCY OF OCCURANCE</th>
<th>HAZARD CATEGORIES</th>
<th>CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CRITICAL I</td>
<td></td>
</tr>
<tr>
<td>A FREQUENT</td>
<td>IA</td>
<td>UNACCEPTABLE OR UNDESIRABLE (MANAGEMENT DECISION NECESSARY)</td>
</tr>
<tr>
<td>B REMOTE</td>
<td>IB</td>
<td>ACCEPTABLE WITH MANAGEMENT REVIEW</td>
</tr>
<tr>
<td></td>
<td>IIA</td>
<td>ACCEPTABLE WITHOUT MANAGEMENT REVIEW</td>
</tr>
<tr>
<td></td>
<td>IIB</td>
<td></td>
</tr>
</tbody>
</table>

### Figure 1-1
HAZARD ASSESSMENT MATRIX
Two hazard severity categories are used to designate the magnitude of the "worst case" potential effects of the hazard.

- **Category I - Critical**
  Hazard can result in severe injuries or death to passengers, employees, or others who come into contact with the Transportation System and/or cause major property damage.

- **Category II - Marginal**
  Hazard can result in minor injury or negligible property damage.

After hazards are assessed for their potential severity, they can be examined to determine the **probability** that they may lead to an accident. As an increase in knowledge about safety is established through the course of the PVS Safety Program, prior accident information will be factored into the probability analysis if it is appropriate to do so. The following two categories are used to determine the probability of a hazard.

- **A - Frequent**
  The hazard is likely to cause an accident on a recurrent basis.

- **B - Remote**
  An accident is unlikely but possible during the life of the hazard.

**Hazard Resolution Methods.** After the magnitude and likelihood of possible accidents due to apparent hazards have been assessed, the list will be prioritized into risk categories. As illustrated in the Hazard Assessment Matrix, each hazard will be judged to be:

- unacceptable or undesirable (management decision required);
- acceptable with management review; or
- acceptable without management review.
The investigators should report back to the Committee not only a description of the hazard, but a recommendation on how the potential hazard should be categorized. This assessment is to be recorded and become part of the permanent record of the Safety and Accident Review Committee's activities. In addition, investigators are to be prepared to discuss several alternative solutions to each safety problem and their associated costs. These procedures are established to expedite the process of implementing solutions.

The order of priority in finding solutions for potential hazards are: elimination of the hazard; control of the hazard; and containment of the hazard. Measures that may be recommended by the Safety and Accident Review Committee to counteract potential hazards can include:

- design changes;
- safety devices;
- warning devices; and/or
- safety procedures.

When attempting to mitigate a potentially hazardous situation, members of the Safety and Accident Review Committee must conduct trade-off analyses that take into account not only safety issues, but also costs, potential losses and service impacts. For this reason resolution strategies must be flexible to match an appropriate solution to each situation.
ATTACHMENT 1-2

VEHICLE ACCIDENT REVIEW

Members of the Safety and Accident Review Committee are responsible for evaluating an accident that has already occurred and to determine whether the accident was "preventable". The group that meets for this purpose should be composed of at least one member each from both management and the vehicle operators, plus an independent evaluator.

The independent evaluator could be an insurance adjuster, police official or another person familiar with vehicle accidents. The most important criteria, however, is independence so that the committee's decisions cannot be questioned by either side. A member of the transportation system's Board of Directors, for example, would not be an appropriate person to serve on the committee as an independent voice.

In some small systems the system manager serves on the committee. In larger systems the head of operations may assume the responsibility of representing management. In either case the management representative has the dual role of making sure that management's interest in discouraging accidents is represented while at the same time maintaining a sense of fairness throughout the evaluative process.

Driver Representation. Drivers should be chosen to serve as part of the accident review group by, above all else, their accident history. Ideally, drivers who assist in accident reviews should have no accidents on their record and have driven for the transportation system. In cases where this is not possible, transportation systems will have to use their best judgement from the people available. Many times the safest drivers are neither the most vocal nor most popular. However, the reason drivers with accident-free records should be chosen is that they have a critical eye towards accident prevention (defensive driving). This perspective is different than the leadership qualities that both
management and employees would like to see in a supervisor. Therefore, it is important to remember that drivers who have a proven record of safety be chosen.

**Accident Review Procedures.** The accident review group or subcommittee should meet at a frequency that is comparable to the rate of accidents. If the system is small, accidents may occur infrequently. In such cases, it is a good idea to have the subcommittee meet at least once a year to review the criteria for judging accidents.

Disciplinary action is the responsibility of management once the accident review group reaches a decision. Final determination obviously rests in the hands of the manager of the transportation system. For this reason, it is probably best if that person is separated from the assessment process.
ACCIDENT PREVENTABILITY CRITERIA

In order to judge the preventability of an accident, the accident review group should use criteria that have been developed by the National Safety Council. The basic rule is that a preventable accident is one in which the driver failed to do everything he or she could reasonably have done to avoid it. A non-preventable accident, therefore, is one in which the driver did everything he or she could to prevent it. In order to clarify what is and is not preventable, the National Safety Council has prepared the following list of preventable accidents.

**Intersections.** It is the responsibility of professional drivers to approach, enter, and cross intersections prepared to avoid accidents that might occur through the action(s) of other drivers. Complex traffic movement, blind intersections, or failure of the "other driver" to conform to the law or traffic control devices will not automatically discharge an accident as "non-preventable." Intersection accidents are preventable even though the professional driver has not violated traffic regulations. His/her failure to take precautionary measures prior to entering the intersection are factors to be studied in making a decision. Professional drivers should be held accountable for avoiding intersection collisions due to the poor decisions or driving skills of others. Lane crossings, excessive speed, and sudden emergencies from blind spots by other drivers do not alter the fact that the accident could have been preventable.

**Vehicle Ahead.** Regardless of the abrupt or unexpected stop of the vehicle ahead, your driver can prevent rear-end collisions by maintaining a safe following distance at all times. This includes being prepared for possible obstructions on the highway, either in plain view or hidden by the crest of a hill or the curve of a roadway. Overdriving headlights at night is a common cause of rear-end collisions. Night speed should not be greater than that which will permit the vehicle to come to a stop within the forward distance illuminated by the vehicle's headlights.

1-29
Vehicle Behind. Investigation often discloses that drivers risk being struck from behind by failing to maintain a margin of safety in his/her own following distance. Rear-end collisions preceded by a roll-back, an abrupt stop at a grade crossing, when a traffic signal changes, or when your driver fails to signal a turn at an intersection, should be charged PREVENTABLE. Failure to signal intentions or to slow down gradually should be considered PREVENTABLE.

Passing. Failure to pass safely indicates faulty judgement and the possible failure to consider one or more of the important factors a driver must observe before attempting a maneuver. Unusual actions of the driver being passed or of oncoming traffic might appear to exonerate a driver involved in a passing accident; however, the entire passing maneuver is voluntary and the driver's responsibility.

Being Passed. Sideswipes and cut-offs involving a professional driver while he or she is being passed are preventable when he or she fails to yield to the passing vehicle by slowing down or moving to the right where possible.

Oncoming. It is extremely important to check the action of the driver when involved in a head-on or sideswipe accident with a vehicle approaching from the opposite direction. Exact location of vehicles, prior to and at the point of impact, must be carefully verified. Even though an opposing vehicle enters your driver's traffic lane it may be possible for your driver to avoid a collision. For example, if the opposing vehicle was in a passing maneuver and your driver failed to slow down, stop, or move to the right to allow the vehicle to re-enter his/her own lane, he/she has failed to take action to prevent the occurrence. Failing to signal the opposing driver by flicking the headlights or sounding the horn should also be taken into account.
**Fixed Objects.** Collisions with fixed objects are preventable. They usually involve failure to check or properly judge clearance. New routes, staged delivery points, resurfaced pavements under viaducts, inclined entrances to docks, marquees projecting over the traveled section of road, and similar situations are not, in themselves, valid reasons for excusing the driver from being involved. He must be constantly on the lookout for such conditions and make the necessary allowances.

**Pedestrians.** Traffic regulations and court decisions generally favor the pedestrian hit by a moving vehicle. An unusual route of a pedestrian at mid-block or from between parked vehicles does not necessarily relieve a driver from taking precautions to prevent such accidents. Whether speed limits are imposed on the area or not, speed too fast for conditions may be involved. School zones, shopping areas, residential streets, and other areas with special pedestrian traffic must be traveled at reduced speeds equal to the particular situation. Bicycles, motor scooters, and similar equipment are generally operated by young and inexperienced operators. The driver who fails to reduce his/her sight-distance has failed to take the necessary precautions to prevent an accident. Keeping within posted speed limits is not taking the proper precaution when unusual conditions call for voluntary reduction of speed.

**Private Property.** When a driver is expected to make pick-ups or drop-offs at unusual locations, or on driveways not built to support heavy paratransit or transit vehicles, it is his/her responsibility to discuss the operation with transportation management and to obtain permission prior to entering the area.

**Passenger Accidents.** Passenger accidents in any type of vehicle are preventable when they are caused by faulty operation of the vehicle. Even though the incident did not involve a collision of the vehicle, it must be considered preventable when your driver stops, turns, or accelerates abruptly. Emergency action by the
driver to avoid a collision that results in passenger injury should be checked to determine if proper driving prior to the emergency would have eliminated the need for the evasive maneuver.

**Non-Collision.** Many accidents, such as overturning, or running off the road, may or may not result from emergency action by the driver to preclude being involved in a collision. Examination of his/her driving procedure prior to the incident may reveal speed too fast for conditions, or other factors. The driver's actions prior to involvement should be examined for possible errors or lack of defensive driving practices.

**Failure to Adjust for Conditions.** Adverse weather conditions are not a valid excuse for being involved in an accident. Rain, snow, fog, sleet, or icy pavement have never caused an accident. These conditions merely increase the hazards of driving. Failure to adjust driving to the prevailing weather conditions, should be cause for labeling an accident preventable. Failure to use safety devices such as skid chains, sanders, etc., provided by the transportation system, should be cause for a preventable decision when it is reasonable to expect the driver to use such devices.

**Miscellaneous.** Improper use of side or rear doors, or passenger accidents resulting from passengers hanging out of windows are preventable by the driver.
ATTACHMENT 1-3
SUGGESTED ELEMENTS OF AN EFFECTIVE
DRUG ABUSE POLICY

PURPOSE

The purpose of the policy should not be merely to ensure compliance with the UMTA regulation, but to support the goal of a drug-free workplace. The presence of drugs in the body at levels detectable by the required testing is prohibited. Zero tolerance should be the standard, without regard to fine distinctions between such concepts as "drug affected," "under the influence," or "drug impaired." Any use of prohibited drugs creates the potential for degradation of job performance. Some suggestions to help you formulate an effective anti-drug policy are as follows.

- The policy should reflect management commitment to a drug-free transit operation.
- The policy should be designed to help people, not hurt them.
- It should protect your employees and the public from injury and economic loss due to affected employees.
- The policy should help to create a deterrent environment discouraging use, possession, and sale of drugs on or off the operator's property.
- It should be designed to provide information to those who want it, help to those who need it, and skills to those who need to apply them.
- The policy should provide a consistent process for disciplinary action (including termination) when necessary.
- It should not place moral definitions on use and abuse.
- The policy should not place all employees under a cloud of suspicion or coercion.
- The policy should not attempt to do the job of law enforcement authorities.
The following statements are recommended for inclusion in your written anti-drug policy, in addition to the basic UMTA requirements.

- Senior management is committed to a drug-free workplace, which protects the operation's most valuable resource—its employees—as well as the health and safety of the public.

- The manufacture, use, sale, distribution, possession, or presence in the body of prohibited drugs in the workplace may result in termination.

- The legitimate use of controlled substances prescribed by a licensed physician is not prohibited. Employees in sensitive-safety positions should inquire of their physicians, and notify the appropriate employer representative, of the effect of the use of prescription medications which may adversely affect job performance.

- All employees in sensitive-safety positions shall be subject to urine drug testing prior to employment or assignment, for reasonable cause, following an accident, on an unannounced random basis, and prior to return to duty if they fail to pass a drug test.

- Any person who fails to pass a required drug test shall be subject to disciplinary action, up to and including termination.

- Any person who refuses to submit a urine specimen, or who adulterates a specimen for drug testing, shall be subject to termination.

- Employees are encouraged to voluntarily utilize the services of the employee assistance program (if provided) to deal with drug use or dependence before it affects on-the-job performance. However, voluntary self-referral to the employee assistance program shall not relieve the employee from responsibility for adequate job performance. Self-referral after notification of a required drug test will not eliminate the requirements to take such a test, nor will it preclude the taking of disciplinary action against an individual who fails a required drug test.

SECTION 2

STANDARD PROCEDURES
SECTION 2
STANDARD PROCEDURES

The topics that are addressed in this section are basic to the safe operation of any transportation system. They include compliance with the federal Commercial Operators License requirements and elemental safety subjects such as insurance, maintenance practices, and standard driver's forms. At a minimum, every transportation system should have standard procedures and practices for each one of these areas.

The forms referred to in this section are presented in Section 4 - Passenger, Vehicle and System Safety Forms (Part 2).
COMMERCIAL OPERATOR'S LICENSE

The National Commercial Driver Licensing Program is a result of the Commercial Motor Vehicle Safety Act, signed into law in October of 1986. The program sets national standards for the licensing of the drivers for certain types of vehicles including those that have a gross weight of over 26,000 pounds (transportation buses) and those that are designed to transport 15 or more passengers including the driver (maxi-vans).

The following regulations apply to commercial operators as of July 1, 1989.

- Commercial operators are not allowed to hold more than one driver's license.
- Commercial operators must inform their state licensing agency and their employer within 30 days of any out-of-state moving violation convictions.
- Commercial operators must notify employers within 30 days of any disqualification, suspension, revocation, or cancellation of their operating privileges.
- Operating privileges will be suspended for either DUI or leaving the scene of an accident while operating a commercial vehicle. One year for first offense, lifetime disqualification for second offense.

West Virginia is currently in the process of revising its licensing program for professional drivers. As of October 1, 1989 chauffeur's licenses will no longer be issued or renewed. In their place a Commercial Operators Licensing Program will be established that will test and license individuals according to operating classifications. For example, Class A signifies that the driver is allowed to operate any type of vehicle. Materials outlining the tests and operating regulations are available at State Trooper barracks, libraries, and court houses. Under the program, all chauffeur's licenses will become invalid after April 1, 1992 regardless of the license's expiration date.
INSURANCE

Insurance companies set their rates according to an analysis of a transportation system's risk exposure. The determination is usually based on evaluating the history of claims made against the transportation authority as shown in a Loss Run Statement.

An aggressive safety program can reduce the number of claims and thereby lower insurance premiums. In addition, many insurance companies factor into their analysis whether or not the organization has safety committees, driver training programs, safety incentives for employees, and a Passenger, Vehicle and System (PVS) Safety Plan. The formation of a well-planned and well-executed safety program makes sense because it not only prevents injuries and the potential loss of life, but could save the transportation system money.
COMMUNICATIONS EQUIPMENT

Radios provide transportation systems with an open channel of communication during times of emergency. They also allow greater flexibility in the normal execution and control of system operations. For this reason, many transportation systems consider radio communications to be an essential part of providing service to the public.

If your system does not have radio-equipped vehicles, see the section entitled "Emergency Communication Forms" (page 3-5). If your transportation system does have its vehicles equipped with radios or is thinking about purchasing them, the following safety information is important.

- Place the radios in a location where drivers can easily use the unit during all procedures.
- Place the radio in a location that can be reached by passengers if the driver were to become incapacitated.
- Post clearly written directions for passengers to use the communications system and give them a unique "code" to signify that an emergency exists.
- Provide enough slack in the extension cord for the microphone to be operated from outside the drivers window in the event that conditions in the vehicle (such as fumes or smoke) make communication from inside impossible.
- Restrict non-essential use of the radio.
- Write and distribute a set of operating procedures that clearly define the proper use of the communications system.
DRIVER FORMS

The forms described in this part of the Resource Manual enable drivers to conduct normal operations while noting any irregularities. The forms referred to in this section are presented in Section 4 - Passenger, Vehicle and System Safety Forms (Part 2).

Pre-Trip Vehicle Inspection Sheet

The Pre-Trip Vehicle Inspection Sheet (Exhibit 4-7) should be completed by each driver before he or she takes the vehicle out on the road. The procedure checks many of the vital components required for the safe operation of the vehicle. In addition, the pre-trip inspections, if performed properly, will set a minimum standard for the vehicles that go out on the road.

Drivers should review each component listed and place a check mark by each one that passes inspection. An "X" should be placed on the line if the component does not come up to standard. For example, if the right headlight is out, an "X" should be placed on the appropriate line.

When the driver completes the form, he or she should complete the information requested in the top box. The date, vehicle number and signature serve as a control mechanism so that the driver is fully responsible for completing the pre-trip inspection and so that he or she is obligated to pay attention to any problems listed on the form.

The lower box explains to a driver what to do if a problem is found on the vehicle. He or she is instructed to inform their supervisor who must take the responsibility for placing the vehicle in service if the component is not fixed immediately. This step provides an incentive for drivers to be thorough in their inspections, and also provides supervisors with an incentive to put on the road only those vehicles that they declare safe.
Vehicle Defect Sheet

The Vehicle Defect Sheet (Exhibit 4-8) is used by the driver when a mechanical problem develops during the course of his or her run. Information on the broken component and vehicle are to be filled out by the driver. Mechanics are responsible for recording on the sheet the repairs that have been made.

When a problem develops, the driver should place a check mark by the vehicle component that needs to be fixed. In addition, the driver must also fill out the information requested in the top box including a description of the defect, the vehicle number, the date and his or her signature.

The mechanic records all repair information in the second box. He or she is also required to sign and date the form. After the sheet is completed and the vehicle is repaired, it should be kept in each vehicles maintenance file.

Passenger Log

The Department of Finance and Administration of the West Virginia Public Transportation Division requires 16(b)(2) systems to have their drivers complete a "Driver's Trip by Trip Record" (Exhibit 4-9). This form records the origin and destination of each trip; classifies information about the trip and the passengers; and standard vehicle information such as beginning and ending mileage.

Drivers are required to record whether each trip was for a passenger who was either elderly, handicapped, non-ambulatory, or other. The driver must also record the primary purpose of the trip as one of the following:

- Medical;
- Employment;
- Nutrition;
- Social/Recreational;
Cost information should also be recorded by the driver for the fare or reimbursement charged per trip and fuel costs. Drivers must also note any preventive maintenance activity or repairs. At the end of each day, drivers are required to post the totals for each category to a Monthly Passenger Record (Exhibit 4-10).

**Incident Report**

Drivers should fill out an Incident Report (Exhibit 4-11) if anything unusual occurs during their tour. Examples of incidences that should be recorded include, but are not limited to:

- passenger falls (whether injuries occur or not);
- difficulties with passengers (safety belts, thrown objects, etc.);
- equipment failures which cause delays;
- running over objects which could cause residual damages to tires or undercarriage; and
- any unusual occurrences or events that caused or could cause future problems for the safe and reliable operation of the transportation system.

As soon as the tour is over the operator should indicate, on the Incident Report, the date and time of the incident, the vehicle being used and the location of the occurrence. Space is provided on the form for a description of the incident, and the back can be used for additional space if necessary. Upon completion of the form, drivers should sign their name and hand-deliver the sheet to a supervisor for a counter-signature.

Drivers should be encouraged to fill out the Incident Reports for any occurrence, even though it may seem insignificant at the time.
A paper trail dating back to the time of the incident is frequently the best defense transportation systems have against frivolous claims.

**Driver Forms Checklist**

A listing of the activities to be conducted for this part of the Safety Program is included as Exhibit 4-12.
PREVENTIVE MAINTENANCE

Preventive Maintenance (PM) programs are a set of vehicle inspections and service performances that occur at regular intervals based either on the number of miles or the number of hours a vehicle has been operated. A solid PM program lowers the cost of repairs over the life of the vehicle, assures that it is kept in safe operating condition, and reduces the number of costly and disruptive roadcalls. The key is to replace mechanical components just before they fail. This practice reduces the number of major repairs that occur as a direct result of failed components. For example, good PM programs replace brake shoes at set intervals so that their failure does not cause damage to discs or drums.

Your system's PM program should be based upon the manufacturer's suggested repair schedule and your system's own experience. For example, the manufacturer of your vehicles might suggest oil changes every 5,000 miles. Your mechanic, on the other hand, may recommend that in your operating environment the oil may need to be changed every 3,000 miles. In such circumstances it is nearly always best to follow the recommendation of your mechanic. An alternative is to get an independent assessment. In the example above, oil samples pulled at different intervals could be sent to a lab for analysis.

From the manufacturer's and mechanic's suggestions, construct three or four inspections ranging from simple standard maintenance such as changing the oil and replacing the filters to one that includes comprehensive tasks such as relining the brakes.

All good PM programs have the following things in common.

- The component replacements and inspections are comprehensive by the end of the inspection cycle.
- PM checklists are presented in a logical order for the mechanic.
o PM inspections are set at common intervals. For example, 3,000, 6,000, and 12,000 mile inspections allow maintenance crews to perform their comprehensive 12,000 mile inspection at the same time the vehicle is due for its 3,000 and 6,000 mile inspections.

o During the PM inspection, no more than 10 minutes should be spent for the repair of any component. If a task is projected to take longer, the repair should be left until after the inspection is completed. (But attended to before the vehicle is to be put in service.)

o Attention is paid to details such as missing screws, loose seats or worn components.
MAINTENANCE RECORDS

The degree to which maintenance records need to be kept is dependent upon several variables. A small 16(b)(2) operation that contracts out its maintenance work to a local garage will have very different needs than a small urban system that employs its own mechanics and has its own Parts Department.

However, one element that is crucial to any maintenance record-keeping system is a perspective on the repairs that have been made over each vehicle's lifetime. To track this information, many systems keep a listing of repair work in a file folder for each vehicle. The folder is used to hold all of the repair orders or invoices associated with the vehicle. The information recorded includes the date and mileage of the repairs and the nature of the work that was done.

The sample vehicle folder (enclosed with the Resource Manual) can be extremely valuable to transportation supervisors and managers in that it provides an at-a-glance reference for any recurring problems. Details on the actual repairs made are then easily accessible in the records held in the folder.

Another advantage of the folder is that it can be used by general managers or supervisors as a cross-check against any unnecessary repairs or missed PM inspections. If a repair occurs twice without a reasonable interval or occurs just after a PM inspection, the mechanics work can be called into question.
SECTION 3

EMERGENCY PROCEDURES
SECTION 3
EMERGENCY PROCEDURES

The safety topics discussed in this section center on preparing for emergency situations that may arise. As in many other safety areas, prior planning and preparation are crucial to a successful response to an emergency situation.

Emergency planning must include both transportation system preparation and rescue crew preparation. For the transportation system this includes establishing a system of communications in addition to proper preparation of emergency equipment and materials to be permanently placed on each vehicle. Rescue personnel should be provided with means for identifying vehicles and passengers, gaining access to the interior of transportation vehicles, and contacting the transportation system.

The forms referred to in this part of the Resource Manual are presented in Section 4 - Passenger, Vehicle and System (PVS) Safety Program Forms (Part 3).
SAFETY EQUIPMENT

The safety equipment that should be carried on each vehicle includes both emergency equipment and forms to be used in case of an accident.

On-Board Safety Equipment

All transportation vehicles must carry on-board equipment to assist with the following emergency situations:

- response (fire extinguisher, first aid, and evacuation);
- cautionary (flares, reflectors, etc.); and
- maintenance (jumper cables, lug wrench, etc.).

The ability of the driver to react to emergency situations is highly dependent upon the availability and condition of the equipment that should be on the vehicle. Therefore, all materials that relate to emergency situations should be checked as part of every preventive maintenance inspection. Equipment should be stored securely near the driver compartment and out of the way of passengers.

The fire extinguishers to be carried on each of the vehicles should meet minimum standards for the size of the vehicle and the type of applications for which they may have to be used. It is strongly recommended that each unit be a 17 pound Halon 1211 fire extinguisher with a rating of 3-A: 80-B: C. It should be located in a secure position within easy access of the driver and passengers.

All equipment must be secured to prevent injury to passengers in normal or emergency situations.
SUGGESTED VEHICLE EMERGENCY EQUIPMENT

Response Equipment

1 fire extinguisher
1 first aid kit (including instant cold packs)
5 Good Samaritan Cards or Emergency Notification Cards
1 seat belt cutter
1 pry bar
1 transfer board for non-ambulatory passengers

Cautionary Equipment

6 flares (to be replaced after each use)
2 reflective triangles
1 reflective vest

Maintenance Equipment

1 flashlight and set of extra batteries
1 set of jumper cables
1 spare tire plus appropriate jack and lug wrench.

In the summer, cautions should be taken to prevent vehicles from over-heating. During these months, each vehicle should carry its own 3 gallon container of water (preferrably antifreeze mixture). Under no circumstances should extra fuel be carried as part of the emergency kit.

In the winter, the following items should be included in the kit:

1 10 pound bag of sand or cat litter
1 snow/ice scraper
1 blanket
1 rope capable of pulling the vehicle
1 shovel
Passenger Profile Card

Passenger Profile Cards (Exhibit 4-13) are designed to assist emergency crews in the event of a serious accident. A card should be filled out for each passenger and kept readily available for whenever the passenger rides in a van. When trips are posted, each driver is responsible for taking the appropriate cards and placing them in a holding box that will be a permanent fixture for each vehicle.

Passenger Profile Cards aid emergency crews by helping them to:

- identify passengers who may be unconscious or unable to communicate; and
- advise rescue teams on the medical status of each passenger prior to the accident.

If used properly, Passenger Profile Cards can be extremely valuable in directing the efforts of rescue teams in an emergency.

Operator Accident Form

If an accident occurs, drivers should fill out an Operator Accident Form (Exhibit 4-14). This form has been designed to instruct the driver on what to do if an accident occurs and organize the information that should be collected. The Operator Accident Form is to be included in an accident kit that should be permanently stationed on the vehicle. The form should be read by the driver during training and followed closely after an accident occurs.

Accident Procedure Checklist

The Accident Procedure Checklist (Exhibit 4-15) provides a simple listing of actions drivers should take when they have an accident. The sheet should be carried on each vehicle along with the Operator Accident Form to assist drivers in the actions they need to take before information is collected.
Accident Information Checklist

The Accident Information Checklist (Exhibit 4-16) is a listing of all of the pertinent information that needs to be gathered at the scene of an accident. Although the same type of listing could be obtained through reading the Operator Accident Form, the Accident Information Checklist places all of the information on one page. This sheet should be carried on each vehicle and accompany the Operator Accident Form.

Emergency Communication Forms

Many smaller transportation systems may not have radios. To assist emergency situations, two different sheets have been developed that can be passed to motorists who wish to provide assistance. Your transportation system should choose one of the forms to be carried on your vehicles if they are not equipped with radios.

The first type of form is the "Good Samaritan Card" (Exhibit 4-17) which gives the passing motorist a detailed set of instructions. It is based on the concept that the first person to be contacted will be the transportation system's own dispatcher who will then alert emergency forces.

The second type of form, the Emergency Notification Card (Exhibit 4-18), lists the telephone numbers of local emergency forces. The passing motorist would call the appropriate emergency personnel for assistance aided by information filled out by the driver at the bottom of the sheet. The passing motorist would also be instructed to contact the dispatcher.

Passenger Cards

Passenger Cards (Exhibit 4-19) are used to accurately record vital information on the occupants of a vehicle at the time of an accident. The cards are used to contact passengers after an accident and to keep a record of who was on the vehicle.
The accident kit for each vehicle must include 15 pens and an envelope for the cards that are collected. Drivers are instructed, on the Accident Form, to:

- hand out a card to each passenger on the vehicle at the time of the accident;
- distribute the cards from the rear forward;
- indicate that the cards will be collected promptly;
- collect a card from each passenger; and
- thank each passenger for his/her cooperation.

Cards should be distributed from the rear of the vehicle first because the behavior of one passenger may affect others. If the first passenger refuses to fill out a card, he/she may influence others to do likewise. By starting the process in the back of the vehicle, the first interaction will not be "on display" for everyone to see.

The way that the driver handles the passengers after an accident can make a difference in the number of claims filed against the transportation system.
EMERGENCY RESPONSE MATERIALS

The following materials help emergency crews respond to the needs of the transportation system in case of an accident. They provide information on the transportation system itself, the vehicle involved in the emergency, and the passengers who may be on board the vehicle.

It is suggested that in addition to the following materials, your transportation system post its name, telephone number, and vehicle number on the outside of the vehicle and also prominently display the same information inside. This will provide emergency crews with a number to contact when they arrive on the scene.

Agency Profile Sheet

The Agency Profile Sheet (Exhibit 4-20) is filled out by transportation systems and distributed to local emergency personnel such as police forces, fire companies, and ambulance crews. The purpose of the sheet is to provide vital information on who to contact from the transportation system in case of an emergency and basic information on the vehicles operated.

Copies of the Agency Profile Sheet should be distributed as part of the transportation system's effort to coordinate local emergency preparedness needs.

Vehicle Profile Card

The Vehicle Profile Card (Exhibit 4-21) is kept in emergency vehicles to aid rescue crews in the event of an emergency involving a transportation vehicle. It can assist emergency personnel by listing important rescue information such as its seating capacity, fuel tank location and capacity, and emergency access points.
Emergency Labels

Included in the safety kit are 30 "RESCUE" labels that should be used by transportation systems to mark the emergency windows or doors and any roof ventilation/escape hatches which are suitable for use in an emergency. Emergency access points should be listed in each vehicle's service manual.

Passenger I.D. Cards

Passenger I.D. Cards (Exhibit 4-22) can be used to register passengers who use the transportation system and provide an additional means of reaching a passenger's primary physician or emergency contact if the need were to arise. The card can also be used to identify a passenger in an emergency or to control use of the transportation system to individuals who have been registered.

Emergency Placard

The Emergency Placard (Figure 4-23) is posted inside the vehicle. Its purpose is to advise and remind emergency personnel that some passengers may not be able to communicate or are incapable of some movements. At the scene of an accident it is frequently difficult to sort out previous impairments or disabilities from those that might have been caused by the accident. The Emergency Placard reminds rescue personnel that there is a good possibility that they should not make unwarranted assumptions about the normal capabilities of the accident victims.

Emergency Response Checklist

A listing of the activities to be conducted for this part of the Safety Program is included as Exhibit 4-24.
EMERGENCY EVACUATIONS

Passenger evacuations and accident scene activities can be structured around ten critical elements that together form a system of emergency response preparedness. The ten activities are:

- preparation;
- response;
- hazard control;
- support operations;
- gaining access;
- emergency care;
- disentanglement;
- removal and transfer; and
- debriefing and documentation.

Preparation

The first step in the planning process is inventorying the rescue equipment that is available. (A comprehensive list of emergency equipment is listed in Attachment A.) Although much of the equipment that is used in auto accident rescue situations can be applied to public transportation accidents, there are some important operations that do require special equipment. For example, rescue forces will need powered hydraulic tools to cut through wheelchair lifts, and/or ramps, that commonly block side or rear doors.

Rescue personnel should be trained for both emergency access to transportation vehicles and, if the system is a paratransit operation, in the evacuation of elderly and disabled passengers. Simulated accidents can be a particularly effective way to orient rescue crews to the special needs of public transportation emergencies.
Response

The correct level of effort needed to respond to an emergency is highly dependent on both the vehicle involved and the possible disabilities of the occupants. If the accident involves a paratransit vehicle, the level of effort needed from the response teams could be considerably greater than a typical auto accident. For this reason it is important that the emergency crews have as much information as possible before they respond to the accident. Useful information could include: type of vehicle, number of occupants, number of wheelchair occupants, number of passengers with sight, hearing, or speech disabilities, etc.

Assessment

Due to the fact that accidents that have involved public transportation vehicles are often more complicated than normal auto crashes, emergency response teams should take time to make a quick assessment of any factors that could dictate how the rescue should be conducted. This means that, if possible, they should evaluate the access points to the vehicle and the type of occupants on board before rescue efforts are started. The paratransit operator can assist this process by educating the emergency preparedness forces as much as possible before an accident. Familiarization and simulated training are recommended. All victims, if able to reply, should be asked about their disabilities and new injuries. If some victims are unconscious, the best source of information on their disabilities may be other passengers who may frequently ride with the victim. In addition, it is recommended that carriers develop a Passenger ID Card system whereby index cards containing important medical information on each passenger is kept in a clearly marked box at the front of the vehicle. In the event of an accident, emergency rescue teams can use this information in their decision-making process.
Hazard Control

On-site rescue crews must be conscious of other hazards that may develop. In addition to the normal dangers of fire or disrupted traffic patterns, public transportation poses some unique dangers to rescue crews. Many smaller vehicles such as modified vans and body-on-chassis small buses are less stable than autos or trucks. Wheelchair lifts make these vehicles much more susceptible to roll-overs during rescue operations. In addition, electric wheelchairs are extremely heavy and are powered by batteries that could leak acid if damaged or overturned.

Support Organizations

Additional equipment and personnel may be required for any of the following reasons:

- a fire may break out or re-ignite;
- darkness may hinder rescue and emergency medical treatment;
- crowds may be difficult to control; or
- bystanders may try to steal victims' belongings.

Gaining Access

As discussed previously, rescue crew orientation to the special design features of vehicles is a crucial part of accident response. In addition, vehicle profile cards (filled out by the transportation system and carried on emergency vehicles) can illustrate for emergency crews the vehicle's critical access points.

Emergency Care

Before victims can be extricated from the vehicle and taken to hospitals, it may be necessary to:
o engage in initial life-support activities;

o evaluate each victim's situation in order to aid further extrication procedures;

o protect all victims during extrication; and

o wrap or secure each victim.

The care in all emergency situations is basic. Paratransit accidents may pose problems to rescue crews who are trying to diagnose the nature of passenger injuries. For example, the treatment of a broken leg for a typical passenger and a paraplegic are the same. The difference is that a paraplegic passenger may not be aware that the leg needs treatment and thus may not be able to communicate that fact to rescue crews.

**Disentanglement**

After the medical condition of the victims has been assessed, decisions must be made on how to disentangle passengers. In all types of vehicle accidents, disentanglement may involve:

o cutting seat belts;

o removing seats;

o displacing pedals;

o cutting the steering wheel;

o displacing the steering column;

o removing the victim from the windshield; and/or

o removing victims from impaling objects.

In accidents that involve paratransit vehicles, the above situations along with disentanglement from:

o torso-restraint devices;

o wheelchairs;
the wheelchair lift or ramp;

- crutches or walkers; and/or
- various prostheses.

If hydraulically-powered lifts complicate rescue efforts they can be moved easily by activating the release mechanism or by cutting their hoses. If the hoses are cut, care must be taken to ensure that the fluid that emanates from the machinery does not ignite or contaminate the open wounds of victims.

Torso-restraint devices may sometimes be cut, without further injury to the victim, with a pair of safety belt cutters. Prostheses can also be easily removed to expedite rescue efforts.

**Removal and Transfer**

In a severe accident, most of the obvious access routes will be blocked or inoperable. If holes must be made in the vehicle's body structure to extricate victims, care must be taken to not complicate the disentanglement process or to injure the victims further.

The easiest exits from vans are the side door and rear doors (if they are not blocked by lift mechanisms or crushed beyond use). Removal of victims through windows may be only a last resort because of their relatively small openings, their height above ground, and the interference that seats can cause. Removal through roof escape hatches is most useful if the vehicle has been turned on its side.

**Debriefing**

All rescue personnel should be debriefed after responding to each emergency. The debriefing should help find:

- what standard rescue techniques could not be used because of the special characteristics of the occupants;
o what new techniques were improvised;

o what special equipment might have been useful if it had been available; and

o what kinds of training might increase the preparedness of rescue personnel.
SECTION 3
ATTACHMENTS
## ATTACHMENT 1-1
### LIST OF EMERGENCY RESCUE EQUIPMENT

### HAND TOOL KIT
- Aircraft snips
- Cold chisel set
- Claw hammer
- Machinist hammer
- Short-handled sledgehammer (2 1/2 pound)
- Linoleum knife
- Battery pliers
- Channel-locking pliers
- Diagonal-cutting pliers
- Needle-nosed pliers
- Slip-joint pliers
- Vise-grip pliers
- Punch set
- Rubber mallet
- Regular frame hacksaw
- Low-profile frame hacksaw
- Carpenter's handsaw
- Small treesaw
- Wire saw
- Adjustable wrench (assorted sizes)
- Open-end wrench (assorted sizes)
- Pipe wrench (assorted sizes)
- Socket wrench (3/8-inch drive, 3/8-inch to 3/4-inch capacity)

### ELECTRICALLY-POWERED TOOLS
- Chain saw
- Rescue-type circular saw
- Wood-cutting-type circular saw
- Electric drill
- Reciprocating-type power hacksaw
- Power shears
- Electric impact tool

### GASOLINE-POWERED TOOLS
- Disc saw kit

### HYDRAULICALLY-POWERED TOOLS
- 4-ton, 10-ton, or 20-ton capacity hydraulic rescue tool kit
- Hurst rescue tool

### AIR-POWERED TOOL
- Air cutting-gun kit

### CHEMICALLY-POWERED TOOLS
- Oxy-acetylene cutting torch kit

### TRAFFIC HAZARD-CONTROL EQUIPMENT
- Safety flares
- Warning flags
- Traffic-control flashlight

### FIRE SUPPRESSION AND PREVENTION EQUIPMENT
- Pressurized water extinguisher
- Carbon dioxide extinguisher
- Dry-chemical extinguisher
- High-expansion foam generator
- Light Water and dry-chemical system


3-16
<table>
<thead>
<tr>
<th>HAZARD DETECTION EQUIPMENT</th>
<th>RESCUE PROTECTION EQUIPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combustible gas detector kit</td>
<td>Safety Helmet</td>
</tr>
<tr>
<td>Carbon monoxide detection kit</td>
<td>Safety goggles</td>
</tr>
<tr>
<td>Oxygen analyzer</td>
<td>Gloves</td>
</tr>
<tr>
<td></td>
<td>Turnout coat</td>
</tr>
<tr>
<td>ELECTRIC HAZARD-CONTROL EQUIPMENT</td>
<td>Boots</td>
</tr>
<tr>
<td>Lineman's gloves and protectors</td>
<td>Self-contained, demand-</td>
</tr>
<tr>
<td>Lineman's hot stick</td>
<td>regulator breathing apparatus</td>
</tr>
<tr>
<td>100 feet of weighted synthetic rope</td>
<td></td>
</tr>
<tr>
<td>Insulated wire cutters</td>
<td>Spare compressed air cylinders</td>
</tr>
<tr>
<td></td>
<td>Full body acid suit</td>
</tr>
<tr>
<td>DANGEROUS-MATERIALS LEAK KIT</td>
<td>VICTIM PROTECTION EQUIPMENT</td>
</tr>
<tr>
<td>Nonsparking hammer</td>
<td>Aluminized rescue blankets</td>
</tr>
<tr>
<td>Hardwood and rubber cone-shaped</td>
<td>Asbestos blankets</td>
</tr>
<tr>
<td>plugs</td>
<td>Salvage covers</td>
</tr>
<tr>
<td>VEHICLES STABILIZATION EQUIPMENT</td>
<td>Smoke ejector and extension tube</td>
</tr>
<tr>
<td>Hardwood cribbing</td>
<td></td>
</tr>
<tr>
<td>Hardwood wedges</td>
<td></td>
</tr>
<tr>
<td>Air bag set</td>
<td></td>
</tr>
<tr>
<td>SUBMERGED VEHICLE KIT</td>
<td></td>
</tr>
<tr>
<td>Scuba gear</td>
<td>WARNING AND SIGNALING DEVICES</td>
</tr>
<tr>
<td>Compressed air tank with a long</td>
<td>Traffic-guide cones</td>
</tr>
<tr>
<td>hose</td>
<td>Safety vests</td>
</tr>
<tr>
<td></td>
<td>High-intensity, battery-operated flashing</td>
</tr>
<tr>
<td></td>
<td>lights</td>
</tr>
<tr>
<td>POWER-GENERATING AND POWER-</td>
<td>LIFE-SUPPORT KIT</td>
</tr>
<tr>
<td>DISTRIBUTING EQUIPMENT</td>
<td></td>
</tr>
<tr>
<td>Portable electric generator</td>
<td>Hand-held, bag-mask ventilating unit</td>
</tr>
<tr>
<td>Power cord and reel</td>
<td>Combination airway and resuscitation tubes</td>
</tr>
<tr>
<td>Power distribution box</td>
<td>Self-contained suction unit</td>
</tr>
<tr>
<td>LIGHTING EQUIPMENT</td>
<td>Oropharyngeal airways (assorted sizes)</td>
</tr>
<tr>
<td>Portable floodlights</td>
<td>Multitrauma dressings</td>
</tr>
<tr>
<td>Battery-operated headlamps</td>
<td>Self-adhering bandages</td>
</tr>
<tr>
<td></td>
<td>Triangular bandages</td>
</tr>
<tr>
<td></td>
<td>Gauze pads (4 x 4 inches)</td>
</tr>
<tr>
<td></td>
<td>Two towels</td>
</tr>
<tr>
<td></td>
<td>Adhesive tape</td>
</tr>
<tr>
<td></td>
<td>Occlusive dressings (aluminum foil or</td>
</tr>
<tr>
<td></td>
<td>plastic wrap</td>
</tr>
<tr>
<td>LIFE-SUPPORT KIT (Cont'd.)</td>
<td>PATIENT-TRANSFER EQUIPMENT (Cont'd.)</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Commerically made tourniquets</td>
<td>D-ring stretcher</td>
</tr>
<tr>
<td>Cervical collars (extrication-type)</td>
<td>Basket stretcher</td>
</tr>
<tr>
<td>Sphygmomanometer (dial-type)</td>
<td>Reeves stretcher</td>
</tr>
<tr>
<td>Stethoscope</td>
<td>1-inch rope sling</td>
</tr>
<tr>
<td>Flashlight</td>
<td>Hill-assist device</td>
</tr>
<tr>
<td>Bandage scissors</td>
<td>Disaster pouch</td>
</tr>
<tr>
<td>Notebook and pen</td>
<td></td>
</tr>
</tbody>
</table>

**ADDITIONAL EMERGENCY CARE EQUIPMENT**

- Positive-pressure oxygen resuscitator
- Aspirator (hand, battery, or gasoline-operated)
- Straps (9-foot web-type)
- Blankets
- Disposable obstetrics kit
- First-aid kit (modular)
- Inflatable splints
- Vacuum splints
- Traction splints
- Wire splints
- Short-board splints
- Cardboard splints

**PATIENT-TRANSFER EQUIPMENT**

- Short spine-board with straps
- Full backboard
- Combination rescue board
- Scoop-style stretcher
- Cable or chain come-alongs
- Chain and hook sets
- Rope and cable slings
- Number one grade manila rope (1/2-inch, 5/8-inch, and 3/4-inch)
- 3/4-inch two-shreave blocks
- 3/4-inch three-shreave blocks
- 1/2-inch and 3/4-inch snatch blocks
- Hydraulic lifting jacks (various capacities)
- Ratchet lifting jack

**MISCELLANEOUS EQUIPMENT**

- Step-to-straight-type ladder
- Gasoline storage cans
- Mobile radio transceivers
- Portable radio transceiver
SECTION 4

PASSENGER, VEHICLE AND SYSTEM SAFETY PROGRAM FORMS
SECTION 4
PASSenger, VEHICLE AND SYSTEM SAFETY
PROGRAM FORMS

This section presents the forms to be used in conjunction with your transportation system's Passenger, Vehicle and System Safety Plan. It is divided into three sub-sections to correspond with the information presented previously in the Resource Manual.

The first set of forms relate to preventive measures that the transportation system can take to ensure that hazards are correctly identified in operating facilities. The second section contains forms that assist the transportation system in performing standard procedures related to safety. The third and final set of forms relate to emergency procedures.

Each form has a set of directions accompanying it that states the form's purpose and how it should be used. Because not all of the forms will be used by each transportation system, they have been printed on single sheets so that they may be removed from the Resource Manual easily.
PART 1
PREVENTIVE MEASURE FORMS
FACILITY SAFETY WORK SHEET

PURPOSE: To assist safety personnel in conducting safety inspections of facilities

DIRECTIONS

Each Facility Safety Work Sheet has a topic heading such as "Basic Design Deficiencies" and a blank space for the date and the name of the reviewer. Examples of the types of hazards that relate to the topic, possible causes of any deficiencies and the methods that can be used to control the hazards are also listed under the topic heading.

All Facility Safety Work Sheets ask the reviewer a set of questions and provide spaces for recording responses. To each question the reviewer can check yes or no. If their answer is "no", then no more information is required. However, if the answer is "yes" the reviewer should write down the location of the problem in the space provided and describe the problem accompanied by what is being done to fix it.

Any Facility Safety Work Sheets that do not apply to your situation can be removed. In addition, a blank sheet has been included so that you may type in your own set of questions if an issue is not covered in forms provided.
FACILITY SAFETY WORK SHEET
I. Basic Design Deficiencies

Date: ________ Reviewer: ________

Examples include:
★ sharp corners
★ instability
★ excessive weight
★ inadequate clearance
★ lack of accessibility

Causes:
Improper or poor design

Control Methods:
Improve or change design

<table>
<thead>
<tr>
<th>Are there any sharp objects or surfaces that are unprotected?</th>
<th>Y</th>
<th>N</th>
<th>N/A</th>
<th>Location(s)</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there any work surfaces or shelving that are unstable?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there any machines and/or equipment that are not adequately supported?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there any physical barriers that impede the movement of either personnel or equipment?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there any tools or machines without accessible override or safety switches for use in both normal operating and emergency conditions?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FACILITY SAFETY WORK SHEET

II. Inherent Hazards

Date: __________ Reviewer: __________

Examples include:

- mechanical (e.g., rotating equipment)
- electrical
- explosives
- flammable gases or liquids
- toxic substances
- flying objects
- falling objects
- temperature

**Causes:**

Inherent characteristics

**Control Methods:**

1. Control devices
2. Warning devices
3. Procedures and training

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>N/A</th>
<th>Location(s)</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Are there any machines that have inadequate safety protection or are missing guards or other protective devices?  

* Are there any tools or machines that do not adequately protect the user from electrical shocks?  

* Are there any explosive or combustible materials that are either unmarked or not stored in a controlled and isolated environment?  

* Are there any flammable materials that are either unmarked or not stored in a controlled and isolated environment?  

* Are there any toxic materials that are either unmarked or not stored in a controlled and isolated environment?

Please continue on next page.
### FACILITY SAFETY WORK SHEET

#### II. Inherent Hazards (Continued)

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
<td>Location(s)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Are there any areas in which hoists or other lifting equipment are operated that are not clearly marked?
- Are there any overhead storage areas that do not have guards against falling objects?
- Are there any storage areas for flammable or combustible materials that are not well ventilated?
- Are there any work or storage areas that do not have smoke detectors or other appropriate warning devices?
- Are there any air conditioning or air ventilation ducts that contain fungi? (Have instances of headaches and dizziness increased among personnel?)
FACILITY SAFETY WORK SHEET

III. Malfunctions

Date: ____________ Reviewer: ____________

Examples Include:
★ structural failures
★ mechanical malfunctions
★ power failures
★ electrical malfunctions

Causes:
(1) Faulty design
(2) Manufacturing defects
(3) Improper or lack of maintenance
(4) Exceeding operational limits
(5) Environmental effects

Control Methods:
(1) Fail safe design
(2) Higher safety margins
(3) Redundant circuitry or equipment
(4) Preventive maintenance
(5) Timed replacement
(6) Safety and warning devices
(7) Procedures and training

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>N/A</th>
<th>Location(s)</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there any tools or appliances that are not approved by an independent testing laboratory?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there any tools or machines that have visible signs of wear such as cracks or frayed wiring?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there any tools or machines that have not had scheduled maintenance?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there any tools or machines that could become dangerous if a power outage occurred during operation?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there any outlets or machines that do not operate on circuit breakers?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FACILITY SAFETY WORK SHEET

IV. Maintenance Hazards

Date: __________ Reviewer: __________

Examples include:
* improper connections
* component failures
* equipment damage
* operational delay

<table>
<thead>
<tr>
<th>Causes:</th>
<th>Control Methods:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Faulty design</td>
<td>(1) Design</td>
</tr>
<tr>
<td>(2) Manufacturing defects</td>
<td>a) simplified design</td>
</tr>
<tr>
<td>(3) Improper or lack of maintenance</td>
<td>b) fail-safe design</td>
</tr>
<tr>
<td>(4) Exceeding operational limits</td>
<td>c) easy access to equipment</td>
</tr>
<tr>
<td>(5) Environmental effects</td>
<td>d) elimination of need for</td>
</tr>
<tr>
<td></td>
<td>special tools or equipment</td>
</tr>
<tr>
<td>(2) Safety devices</td>
<td>(3) Warning Devices</td>
</tr>
<tr>
<td>a) guards for moving parts</td>
<td>a) label signs</td>
</tr>
<tr>
<td>b) interlocks</td>
<td>b) lights</td>
</tr>
<tr>
<td></td>
<td>c) audible alarms</td>
</tr>
<tr>
<td></td>
<td>(4) Procedures and training</td>
</tr>
<tr>
<td></td>
<td>a) documentation of proper</td>
</tr>
<tr>
<td></td>
<td>procedures</td>
</tr>
<tr>
<td></td>
<td>b) improved training courses</td>
</tr>
<tr>
<td></td>
<td>c) housekeeping</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>N/A</th>
<th>Location(s)</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Are there any tools or machines that are severely damaged but are still in use?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Are there any tools or machines that are not cleaned or maintained on their specified service schedules?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Are there any machines that are not accessible for repairs?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Are there any machines or tools that do not have guards or interlocks?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Are there machines that do not have appropriate warning devices such as lights or alarms?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please continue on next page.
### FACILITY SAFETY WORK SHEET

**VI. Human Factors (Continued)**

Date: __________ Reviewer: __________

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>N/A</th>
<th>Location(s)</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Are there any machines that do not have backout or recovery instructions if normal operation is disrupted?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Are there any storage areas that have inadequate protection or warning systems for environmental hazards?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Are there any employees who are not trained in the operation of dangerous tools and equipment?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Are there any storage areas which are not both clearly marked and isolated?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Do any employees operate dangerous machines without proper protective equipment?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FACILITY SAFETY WORK SHEET

IV. Maintenance Hazards (Continued)

Date: __________ Reviewer: __________

<table>
<thead>
<tr>
<th>Question</th>
<th>Y</th>
<th>N</th>
<th>N/A</th>
<th>Location(s)</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there any maintenance manuals which are not kept on file?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have there been any repairs made in the last year by untrained personnel?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there any work areas that could be hazardous due to poor housekeeping?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are safety factors ever omitted in the procurement process?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FACILITY SAFETY WORK SHEET

V. Environmental Hazards

Date: __________ Reviewer: __________

Examples include:

- heat
- cold
- dryness
- wetness
- slipperyness
- glare
- darkness
- natural hazards (lightning etc.)
- gas or other toxic fumes

Causes:

1. Inherent
2. Foreseen or unforeseen natural phenomena

Control Methods:

1. Design
   a) Increased resistance to temperature changes
   b) Increased resistance to dryness or wetness
   c) Fail safe design

2. Safety devices
   a) Sufficient heating or cooling
   b) Adequate insulation
   c) Restricted access
   d) Temperature or moisture sensor

3. Warning senses
   a) Visual
   b) Auditory
   c) Olfactory

4. Procedures and training

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>N/A</th>
<th>Location(s)</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Are there any work or storage areas that have wide variances in temperature?
- Are there any work or storage areas that have wide variances in moisture levels?
- Are there any work areas that are excessively dark or have glare problems?
- Are there any machines which are affected by wide variances in temperature or moisture?

Please continue on next page.
FACILITY SAFETY WORK SHEET

V. Environmental Hazards (Continued)

Date: __________  Reviewer: __________

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>N</th>
<th>N/A</th>
<th>Location(s)</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Are there any storage areas that have inadequate protection or warning systems for environmental hazards?
- Are employees who are not sufficiently aware of how changes in environmental conditions could affect machines or materials?
- Are there any vehicle pathways that are affected repeatedly by glare, ice or other natural hazards?
FACILITY SAFETY WORK SHEET

VI. Human Factors

Date: ____________  Reviewer: ____________

Examples include:

- stress (sensory, mental, motor)
- physical surroundings
  - noise
  - illumination
  - temperature
  - energy sources
  - air and humidity
  - vibration
- errors
  - omission
  - commission
- non-recognition of hazards
- incorrect decisions
- tasks done at wrong time
- non-performance of tasks
- improper performance of tasks

Causes:

1. Inadequate attention to design criteria
2. Poor location, design of controls
3. Equipment complexity
4. Non-recognition of inherent hazards
5. Incorrect installation
6. Failure of warning devices
7. Failure to follow instructions
8. Lack of knowledge of procedures
9. Inadequate training

Control Methods:

1. Design (to address)
   causes 1-6
2. Safety devices
   a) Isolation (deactivation)
   b) Barriers (guards)
   c) Interlocks (deactivation)
   d) Temperature Sensor
3. Warning devices
   a) Auditory (tactile) - signal, sound, light
   b) Auditory (tactile) - bell, alarm
   c) Tactile (touch) - shape, texture
4. Procedures and training
   a) Clear warning labels (nature of hazard, action to avoid injury, consequences)
   b) Use of complete, proper, safe procedures
   c) Adequate training (also refresher training)
   d) Backout/Recovery procedures
   e) Protective equipment
   f) Emergency procedures
   g) Proper maintenance procedures

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>N</th>
<th>N/A</th>
<th>Location(s)</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there any work environments that are abnormal in terms of sight, sound, temperature, humidity and/or vibration?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there any machines or equipment that do not have a posted set of safety instructions?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there any machines or tools that do not tell the user the possible dangers of its use?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please continue on next page.
EXHIBIT 4-1
FACILITY SAFETY WORK SHEET (CONCLUDED)

<table>
<thead>
<tr>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewer:</td>
</tr>
<tr>
<td>Y</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
HAZARDOUS MATERIAL STORAGE FORM
INVENTORY SHEET

PURPOSE: To assist safety personnel in cataloguing a list of stored hazardous materials.

DIRECTIONS

An Inventory Sheet should be completed for each area where hazardous materials are stored. Each potentially hazardous substance should be listed in the space provided. Each hazardous substance should then be classified as either Toxic (hazardous if inhaled or swallowed); Flammable (easily catches fire); or Caustic (dangerous if touched without protection). Additionally the quantity of each hazardous substance should be indicated. Because the contents of storage areas can change over time, it is important for the reviewer to sign and date the Inventory Sheet at the bottom of the page.

For example, if a space is used to recharge or store batteries the substance noted would be "previously used and/or discarded batteries". Because the fumes from battery acid are both toxic and flammable in concentrated amounts and battery acid is harmful if it comes into contact with skin, its hazard classification would include all three categories and would be designated as "TFC". The quantity could be written as "10-15 units" to account for any changes that might take place.
Hazardous Material Storage Forms
Inventory Sheet

Complete one form for each area where hazardous materials are stored.

Organization: _______________________
Address: ____________________________
Storage Location: ____________________

**Inventory:**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Hazard</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Signed ______________________ Date: _____
Hazardous Material Storage Forms
Site Report

Storage Location: ____________________________

Please evaluate each storage area for the criteria listed.

<table>
<thead>
<tr>
<th>Status</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td></td>
</tr>
<tr>
<td>Identification</td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td></td>
</tr>
<tr>
<td>Leaks</td>
<td></td>
</tr>
<tr>
<td>Cleanliness</td>
<td></td>
</tr>
<tr>
<td>Ventilation</td>
<td></td>
</tr>
<tr>
<td>Rust</td>
<td></td>
</tr>
<tr>
<td>Wiring</td>
<td></td>
</tr>
<tr>
<td>Shelving</td>
<td></td>
</tr>
<tr>
<td>Lighting</td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td></td>
</tr>
<tr>
<td>Isolation</td>
<td></td>
</tr>
</tbody>
</table>

Signed ____________________________ Date __________

EXHIBIT 4-3
SITE REPORT
HAZARDOUS MATERIAL STORAGE FORM
SITE REPORT

PURPOSE: To help the reviewer make a quick assessment of the condition of storage areas.

DIRECTIONS

The reviewer should indicate the location of the storage area in the space provided at the top of the page. The sheet lists a number of factors that could make a storage area unsafe. Those factors are:

- Access;
- Identification;
- Leaks;
- Cleanliness;
- Ventilation;
- Rust;
- Wiring;
- Shelving;
- Lighting;
- Security; and
- Isolation.

Next to each category the reviewer should indicate whether or not the condition of the storage area is satisfactory or unsatisfactory for the appropriate category. If the category is judged to be "unsatisfactory" the reviewer should indicate the problem and corrective steps in the space provided.
FIRE EXTINGUISHER CHECKLIST

PURPOSE: To assist safety personnel in evaluating the condition of fire extinguishers.

DIRECTIONS

Fire Extinguisher Checklists should be prepared for each building occupied by the transportation system. This includes all administrative offices, maintenance shops, and vehicle storage areas. A permanent listing of the locations of fire extinguishers should be typed in the column marked "Location". Photo copies of the sheet should then be used to mark the status of each fire extinguisher during the review process. The categories that should be used are:

- A - Ready;
- B - Needs Service; or
- C - Missing.

At the bottom of the sheet is a box marked "Action Taken", which should be used to indicate any problems and their proposed resolutions.
### Fire Extinguisher Checklist

- **A- Ready**
- **B- Needs Service**
- **C- Missing**

<table>
<thead>
<tr>
<th>Location</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Action Taken:**

---

**EXHIBIT 4-4**

**FIRE EXTINGUISHER CHECKLIST**

4-20
SMOKE DETECTOR CHECKLIST

PURPOSE: To assist safety personnel in evaluating the condition of smoke detectors.

DIRECTIONS

Smoke Detector Checklists should be prepared for each building occupied by the transportation system. This includes all administrative offices, maintenance shops, and vehicle storage areas. A permanent listing of the locations of smoke detectors should be typed in the column marked "Location". Photo copies of the sheet should then be used to mark the status of each smoke detector during the review process. The categories that should be used are:

- A - Ready;
- B - Needs Service; or
- C - Missing.

At the bottom of the sheet is a box marked "Action Taken", which should be used to indicate any problems and their proposed resolutions.
## Smoke Detector Checklist

<table>
<thead>
<tr>
<th>A- Ready</th>
<th>B- Needs Service</th>
<th>C- Missing</th>
<th>Building</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Taken:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EXHIBIT 4-5**

SMOKE DETECTOR CHECKLIST
CHECKLIST FOR FACILITY SAFETY

PURPOSE: To assist in the establishment of a Passenger, Vehicle and System Safety Program.

DIRECTIONS

Use this form to check safety activities once a Safety Program has been established.
✓ CHECKLIST FOR FACILITY SAFETY

☐ Safety and Accident Review Committee actively reviews facility safety issues

☐ Facility Safety Work Sheets are used to catalogue potentially dangerous situations

☐ Hazardous Material Storage Forms (Inventory Sheets) are used to catalogue substances

☐ Storage areas are inspected using Hazardous Material Storage Forms (Site Reports)

☐ Fire extinguishers are checked on a regular basis to ensure that they are in working order

☐ Smoke detectors are checked on a regular basis to ensure that they are in working order

☐ Employees are aware of proper procedures for handling and using hazardous materials

EXHIBIT 4–6
CHECKLIST FOR FACILITY SAFETY
PART 2

STANDARD PROCEDURE FORMS
PRE-TRIP VEHICLE INSPECTION SHEET

PURPOSE: To help ensure the safe mechanical condition of each vehicle before it is used in service.

DIRECTIONS

The Pre-Trip Vehicle Inspection Sheet should be completed by each driver before they start their run. Items to be checked are listed on the left side of the page. Two boxes on the right side of the page highlight information that should be recorded for administrative purposes.

There are three main areas that must be inspected by the driver. The exterior inspection checks the lighting systems, tires, body damage, and wheelchair lift/ramp operation. The interior inspection checks the operating condition of the major mechanical systems such as the brakes and steering as well as the operation of the radio (if applicable) and the cleanliness of the vehicle. Drivers should also visually check the condition of the belts and hoses in the engine compartment and fluid levels as instructed by their supervisor.

Exterior Inspection

The exterior inspection can be completed more efficiently by two people but it should not take long for a single person to do the work.

<table>
<thead>
<tr>
<th>Headlights</th>
<th>Both high and low beams must be checked.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn Signals</td>
<td>Front and back pairs of signals must work. In addition hazard lights must be operational.</td>
</tr>
<tr>
<td>Back-up Lights</td>
<td>Back-up lights must work if transmission is shifted into reverse. (Should be inspected by another individual if possible.)</td>
</tr>
</tbody>
</table>
Mirrors  All mirrors must be present, unobstructed, and adjusted to the person who will be driving the vehicle.

Windshield Wipers  Windshield wipers must work at all settings. Wiper fluid pump should also be tested.

Windows  Windows must be secure and in good operating condition.

Tires  All tires should be visibly inspected for inflation and tread wear.

Body Damage  Any body damage should be reported even if transportation system administration and personnel are already aware of the problem.

Cleanliness  Outside of the vehicle should be inspected for accumulated dirt and grime.

Lift/Ramp Operation  All wheelchair lifts must be checked before the vehicle is put into service, whether or not the lifts are intended to be used.

Interior Inspection

Brakes  Brakes should be checked by putting the vehicle in gear without acceleration and applying the brakes.

Steering  Steering wheel should both have a full range of motion and effectively turn the front wheels.

Gauges and Indicators  All gauges and indicators should be visually inspected to make sure that they are operational.

Transmission Selector  Vehicle should be capable of being shifted into any gear.

Radio  If the vehicle is equipped with a radio, a radio check should be conducted with dispatch.

Cleanliness  The interior of the vehicle should be free of any litter, food, or excessive dirt.
Engine Area Inspection

Each driver should visibly inspect the engine compartment for any loose belts or hoses. Fluid levels should also be checked as appropriate.
PRE-TRIP VEHICLE INSPECTION SHEET
(Complete before vehicle is placed in service.)

Use this form to assist you in inspecting your vehicle before each trip. Give the completed form to your supervisor before leaving the vehicle storage area.

EXTERIOR INSPECTION

- Headlights
- Turn Signals
- Back-up Lights
- Mirrors
- Windshield Wipers
- Windows
- Tires (inflation and tread wear)
- Body Damage (specify)
- Cleanliness
- Wheelchair Lift/Ramp Operation

INTERIOR INSPECTION

- Brakes
- Steering
- Gauges and Indicators
- Transmission Selector
- Radio
- Cleanliness

ENGINE AREA INSPECTION

- Belts and Hoses

Fluid Levels: (Appropriate checks to be determined by Supervisor.)

- Oil
- Steering
- Windshield Washer
- Transmission
- Brake

DEFECT PROCEDURE

If there is a problem with this vehicle notify your supervisor immediately. Before placing the vehicle in service obtain a signature from either your supervisor or mechanic that the defect has been fixed or the vehicle is safe to drive.

Supervisory Signature

REPAIRED

SAFE

EXHIBIT 4-7
PRE-TRIP INSPECTION SHEET
VEHICLE DEFECT SHEET

PURPOSE: Used by drivers to record and report any vehicle malfunctions that develop during their run.

DIRECTIONS

Drivers should use this form to indicate any vehicle defects that occur during their run. An "x" should mark the component or area that seems to be malfunctioning. Drivers must also describe the defect as they record information on the vehicle in question, the date and, their name in the first box. The mechanic should describe any repairs made in the second box. If no repairs are made because the problem could not be located, the mechanic should also record that information.
VEHICLE DEFECT SHEET
(Return to supervisor if repairs are needed)

If a problem develops with your vehicle during your trip, indicate the nature of the problem on this sheet by both checking the appropriate difficulty and explaining the problem in as much detail as possible. Give the completed form to your supervisor at the end of your tour.

**EXTERIOR**

- Headlights
- Turn Signals
- Back-up Lights
- Mirrors
- Windshield Wipers
- Windows
- Cleanliness
- Body Damage
- Tires (inflation and tread wear)
- Wheelchair Lift/Ramp Operation

**INTERIOR**

- Brakes
- Steering
- Gauges and Indicators
- Transmission Selector
- Radio
- Cleanliness

**ENGINE AREA**

- Belts and Hoses

**Fluid Levels:**

- Oil
- Transmission
- Steering

- Radiator
- Battery
- Brake
- Windshield Washer

**REPAIRS MADE:**

Mechanic's Signature

Date

**EXHIBIT 4-8**

VEHICLE DEFECT SHEET

4-31
DRIVER'S TRIP-BY-TRIP RECORD

PURPOSE: To compile trip information for the State of West Virginia 16(b)(2) program.

DIRECTIONS

The Driver's Trip-By-Trip Record is required by the State of West Virginia to be carried on vehicles that provide 16(b)(2) service. It collects passenger, trip purpose, and fare information for the state. In addition, it provides a daily record of fuel and repair costs.

Trips are classified by their origins and destinations which are recorded in the two left-hand columns. Passenger trip purpose and fare information can then be entered under the remaining columns. Revenue information is entered by trip in the far right column. Fuel and repair costs are noted in the boxes at the bottom of the sheet.
MONTHLY PASSENGER RECORD

PURPOSE: To compile trip data on a monthly basis using the Daily Driver’s Trip-by-Trip Record.

DIRECTIONS

The Monthly Passenger Record form is used to compile the information collected on the Trip-By-Trip Passenger Record forms. The daily totals for each category are posted to the monthly report.
### MONTHLY PASSENGER RECORD

<table>
<thead>
<tr>
<th>PASSENGER CLASSIFICATION</th>
<th>MEDICAL</th>
<th>EMPLOYMENT</th>
<th>NUTRITION</th>
<th>SOCIAL/REC</th>
<th>EDUCATION</th>
<th>SHOP/PERSONAL</th>
<th>TO HOME</th>
<th>OTHER</th>
<th>TOTAL</th>
<th>FUEL/OIL</th>
<th>DONATIONS/FARES</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELDERLY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HANDICAPPED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTHER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NON-AMBULATORY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRIMARY TRIP PURPOSE</th>
<th>FUEL/OIL</th>
<th>DONATIONS/FARES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDICAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMPLOYMENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUTRITION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCIAL/REC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUCATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHOP/PERSONAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TO HOME</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTHER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**For Month of**

**Vehicle Serial No.**
INCIDENT REPORT

PURPOSE: Used by drivers to document and report occurrences that fall outside the scope of normal service provision.

DIRECTIONS

An Incident Report should be filled out by the driver any time normal operations are disrupted regardless or whether anyone was injured or property was damaged. Incidents should include all "near misses" with vehicle and any significant passenger problems. Documenting incidents helps protect the transportation system against liability claims and can pinpoint problems that may significantly affect transportation system operations in the future.

On the Incident Report form, drivers are requested to record basic information about the incident including the date, time, vehicle and location of the occurrence. They are then prompted to describe, in their own words, what occurred. Finally drivers are asked to sign the sheet and hand it to their supervisor.
Incident Report

Please supply the following information about the incident you are reporting

Date: __ / __

Time: __ : __ AM __ PM

Vehicle: ___

Location: ________________________________

Description of Incident

_____________________________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________

When you have completed the report sign your name below and take the form to your supervisor.

________________________________________  ________________________________
Driver Signature                             Supervisor Signature

EXHIBIT 4-11
INCIDENT REPORT

4-37
CHECKLIST FOR DRIVER SAFETY

PURPOSE: To assist in the establishment of a Passenger, Vehicle and System Safety Program.

DIRECTIONS

Use this form to check safety activities once a Safety Program has been established.
☑ CHECKLIST FOR DRIVER SAFETY

☐ Pre-trip inspection forms are used by drivers daily

☐ Drivers report all mechanical problems on Vehicle Defect Sheets

☐ Each trip is recorded on Trip by Trip Records

☐ All trips are posted to Monthly Passenger Records

☐ Drivers have been instructed to report all unusual occurrences on Incident Reports

☐ Dispatcher or System Manager reviews all driver forms as appropriate

☐ All driver safety concerns as reported on driver forms are addressed

EXHIBIT 4-12
CHECKLIST FOR DRIVER SAFETY
PART 3

EMERGENCY PROCEDURES FORMS
PASSenger profile card

Purpose: To aid rescue personnel in the event that passengers are found unconscious at the scene of an accident.

Directions

The front of each Passenger Profile Card gives rescue personnel the identifying characteristics of each passenger and the names and numbers of emergency contacts. The detailed information that needs to be listed on the cards includes the following.

- **Name**: the passenger's first and last names.
- **Sex**: male or female.
- **Date of Birth**: passenger's date of birth.
- **Weight**: approximate weight of the passenger.
- **Height**: approximate height of the passenger (note - in severe accidents, passengers may become dislodged from their wheelchairs. To aid in the identification process, height and weight need to be recorded for everyone, wheelchair consumers).
- **Hair Color**: passenger's hair color.
- **Eye Color**: color of passenger's eyes.
- **Date**: date the card is used.
- **Race**: ethnic background (i.e., white, black, Hispanic, Asian, or Native American).
- **Characteristics**: distinguishing features of passenger - enter at least 3 (i.e., build, hair characteristics such as curly, balding, etc., eyeglasses - although these may fall off during an accident, or any other prominent feature of the passenger.
- **Mobility Aids**: enter if the passenger has a prosthesis or uses a device to move such as a cane, walker, or wheelchair.
- **Primary Physician**: full name of the passenger's doctor.
**TELEPHONE:** both office and home numbers of doctor, if possible.

**EMERGENCY CONTACT:** name or organization to be contacted in an emergency (i.e., passenger's family or the institution providing care).

**TELEPHONE:** two telephone numbers for the emergency contact, if possible.

On the reverse side of the card, space is provided to enter any pertinent medical information on the passenger. The detailed medical emergency information that needs to be listed includes the following.

**MEDICAL CONDITIONS:** any illnesses that the passenger has such as quadriplegia, arthritis, epilepsy, etc.

**DISABILITIES:** any skills or abilities that the passenger may not be able to perform normally.

**MEDICATION(S) TAKEN:** any medication that the passenger takes even if it is on an infrequent basis.

**ALLERGIES:** anything that may not be covered in the previous categories (this space may be used to repeat any critical condition that may affect emergency care, i.e., ALLERGIC TO PENICILLIN).
PASSENGER PROFILE CARD

Name ____________________________ Hair Color ______

Sex _______ Weight _______ Eye Color ______

Date of Birth _______ Height _______ Race _______

Characteristics ______________________________________

Mobility Aids ________________________________________

Primary Physician: ________________________________

Phone _________________ or ________________________

Emergency Contact: ________________________________

Phone _________________ or ________________________
# Medical Emergency Information

<table>
<thead>
<tr>
<th>Medical Condition(s)</th>
<th>Medication(s) Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Disabilities**

<table>
<thead>
<tr>
<th></th>
<th>Allergies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Special Instructions:**

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
OPERATOR ACCIDENT FORM

PURPOSE: To assist drivers in making decisions and collecting the appropriate information after an accident has occurred.

DIRECTIONS

The cover page asks the driver to record the accident date and time, and to sign the sheet after all required information has been provided. The signature should be viewed as an indication by the driver that everything he/she has recorded on the form is correct.

The following are descriptions of each of the steps outlined in the report.

Step 1: Call the Dispatcher. The driver is instructed to use the radio to announce the type of emergency. The form directs the driver to provide other vital information to the dispatcher and rescue crews, if necessary. If the vehicle does not have a radio, one of the Emergency Communication forms should be filled out by the driver indicating vital information and given to a passing motorist.

Step 2: Aid the Injured. The driver is directed to aid those passengers and the occupants of other vehicles who are injured. However, no one should be removed from any vehicle unless a smoke or fire condition exists or is eminent. If there is such a condition, the driver is instructed to immediately evacuate all passengers as quickly as possible.

Step 3: Warn Other Drivers. The driver is instructed to warn other motorists of the accident scene by placing flares and reflective triangles at both the front and rear of the vehicle.
Step 4: Do Not Discuss Accident Except with Police or Supervisors. To protect the transportation system and the driver from unnecessary legal claims, the driver is instructed to say nothing about the accident to unauthorized individuals. This step should be reviewed carefully during training.

Step 5: Record Information on Other Drivers and Vehicles Involved. If an accident occurs, the driver should fill out the appropriate information as many times as necessary and use the back of the form if more space is needed.

The driver should collect all required information including the name, address, telephone number, and birth date of each driver involved in the accident. Notation should be made of the make, year, license plate, state, and registration number of all vehicles involved. Specific visible damage should be recorded as well as the insurance company and policy number of the owner of the vehicle.

Step 6: Record Information on Injured Individuals. The driver should record the appropriate information for each person injured as a result of the accident. Drivers are instructed to write down the vital information on each injured individual and to indicate whether the person was in their vehicle, another vehicle, or a pedestrian.

Step 7: Distribute and Collect Passenger Cards. The Resource Manual provides the driver with detailed instructions on the distribution process of Passenger Cards. A full discussion of Passenger Cards accompanies this kit.

Step 8: Record Information on Witnesses. The driver should record the names, addresses, and phone numbers of at least three witnesses to the accident if possible.

Step 9: Record Information on Non-Vehicle Property Damage. The driver is required by the form to record any non-vehicle
property damage that has occurred as a result of the accident. Two sets of lines are provided which list the object damaged, the nature of the damage, the owner of the damaged property, and their telephone number.

Step 10: Record Information on Police Officers Present. After an accident occurs, the driver should note the names, badge numbers, and jurisdictions of the police officers who respond to the assistance request. This part of the form provides three sets of spaces for the driver to record the information.

Step 11: Sketch the Accident. Before the driver leaves the scene of the accident, he/she should sketch how the accident occurred. This sheet provides a road system to be used by the driver to indicate his/her own vehicle and the other vehicles (if any) involved. A circle to the right of the diagram should be used by the driver to indicate "North" by placing an arrow in the proper direction.

Step 12: Describe the Accident. Lines are provided to give a narrative description of the accident. The driver is also instructed to indicate the date and time of the accident as well as the weather and road conditions. A line is provided at the bottom of the page for the driver to sign after he or she has recorded all applicable information.
Operator Accident Form

(Please follow these instructions.)

STEP 1: Contact police and your dispatcher

- Announce type of emergency (accident, vehicle breakdown, medical emergency etc.)
- Announce vehicle number and your name
- State your exact location
  - Road
  - Direction headed
- Describe Condition of Occupants
  - # of injured occupants
  - severity of injuries

STEP 2: Aid the injured

- Do not remove passengers from vehicle unless an emergency situation exists. (Fire etc.)

STEP 3: Warn other drivers

- Be sure to place warning devices well in advance and to the rear of the accident scene

EXHIBIT 4-14
OPERATOR ACCIDENT FORM
STEP 4: Do not discuss the accident except with police or your supervisor.

- Do not discuss the accident with passengers, drivers of other vehicles or witnesses

STEP 5: Record information on other drivers

Driver's Name ___________________________ Date of Birth _____
Address ________________________________ Tel. ______
Lic. # _________________________________ State ___
Make of Veh. _______ Year _____ Plate _______
Damage _________________________________
Insurance Co. ___________ Policy # ____________

(Attach information on other vehicles as necessary)

STEP 6: Record information on those injured

Name ___________________________ Date of Birth _____
Address ________________________________ Tel. ______
Injury _________________________________
Injured was: (circle one)
In your vehicle   In another vehicle   Pedestrian

(Attach information on others injured as necessary)

EXHIBIT 4-14
OPERATOR ACCIDENT FORM (CONTINUED)
STEP 7: Distribute passenger cards

- Remember to:
  Hand a card to each passenger
  Pass out cards starting at the rear
  Collect the cards promptly
  Always thank passengers who cooperate

STEP 8: Collect information from witnesses

Name ___________________________ Date of Birth ________
Address __________________________
Day Phone _______ Evening Phone ________

Name ___________________________ Date of Birth ________
Address __________________________
Day Phone _______ Evening Phone ________

STEP 9: Record non-vehicle property damage

Object Damaged __________________________
Nature of Damage __________________________
Location __________________________

Object Damaged __________________________
Nature of Damage __________________________
Location __________________________

EXHIBIT 4-14
OPERATOR ACCIDENT FORM (CONTINUED)

4-50
STEP 10: Record the names of police officers

Name ___________________________ Badge # _____
Jurisdiction ________________________

Name ___________________________ Badge # _____
Jurisdiction ________________________

Was a summons issued? Yes  No
To Whom? _________________________

STEP 11: Sketch the accident

Indicate North by drawing an arrow in the circle

\[\text{Diagram of an intersection} \]

EXHIBIT 4-14
OPERATOR ACCIDENT FORM (CONTINUED)
**STEP 12: Describe the accident**

Description: ____________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

Date: __/___/___  Time: ___:___ AM PM

Weather: ________________  Road Condition: ________________

After you have filled out the report completely, and fully reviewed its content, please sign your name.

_________________________________________________________________

**EXHIBIT 4-14**

OPERATOR ACCIDENT FORM (CONCLUDED)

4-52
CHECKLIST FOR ACCIDENT PROCEDURES

PURPOSE: To assist drivers in conducting post-accident activities.

DIRECTIONS

Drivers may wish to follow this list to make sure that they are acting properly after they have been involved in an accident. The form should be included on each vehicle located near the Operator Accident Form.
CHECKLIST FOR ACCIDENT PROCEDURES

☐ Attend to injured by applying first aid or CPR if qualified

☐ Move injured only if their lives are in immediate danger

☐ Turn off ignitions of any vehicles involved in the accident

☐ Warn other drivers of accident by placing flares or reflective triangles to the rear and front of the accident scene

☐ Send for appropriate assistance noting exact location and requirements

☐ Contact dispatcher in addition to sending for help

☐ Take down information on other vehicles and drivers by filling out the accident form

EXHIBIT 4-15
CHECKLIST FOR ACCIDENT PROCEDURES

4-54
CHECKLIST FOR ACCIDENT INFORMATION

PURPOSE: To assist drivers in gathering the correct information after an accident.

DIRECTIONS

Drivers should use this form to check that they have collected all of the necessary information at the accident scene. The Accident Information Checklist should be kept on the vehicle and can be used in conjunction with the Operator Accident Form.
✓ CHECKLIST FOR ACCIDENT INFORMATION

☐ Information has been collected on other drivers involved in the accident

☐ Information has been collected on other vehicles involved in the accident

☐ Information has been recorded on people injured as a result of the accident

☐ Passenger cards have been distributed and collected from every passenger who was on the vehicle at the time of the accident

☐ Information has been gathered from those who might have witnessed the accident

☐ Information has been recorded for any non-vehicle property damage

☐ Information has been recorded on police officers who were at the accident scene and citations

☐ Description of accident has been recorded
EMERGENCY COMMUNICATION FORMS

PURPOSE: To assist operators who do not have a radio on their vehicle and who are faced with an emergency situation. Two forms are presented to choose from. Your organization should select one of the two.

DIRECTIONS (Good Samaritan Card)

The Good Samaritan Card contains space for the time of the accident, necessary telephone numbers for use by the Good Samaritan and the following vital information:

- emergency codes and vehicle identification;
- location;
- assistance required; and
- passenger Status.

Emergency Codes and Vehicle Identification. The Good Samaritan is asked to relay information that identifies the type of emergency and the vehicle in trouble. The nature of the emergency is indicated by the driver when he/she circles the words "red", "blue" or "yellow". The colors represent the following:

- RED - Accident;
- BLUE - Medical Emergency; and/or
- YELLOW - Vehicle Breakdown (cannot move).

NOTE: It is possible to indicate more than one emergency type by circling multiple colors.

Location. This information describes the location of the vehicle involved in the emergency. The driver is asked to fill in the road or street where the vehicle is located, the direction headed, two points of reference (e.g., intersections), and a landmark near the site of the emergency.
**Assistance Required.** Information in this section lists the type of assistance that is needed: police; fire; ambulance; tow; and other (the driver must specify). It should **never be assumed** that the type of emergency indicated by the color code requires a standard response.

**Passenger Status.** The final information concerns the number of people who are on the vehicle at the time of the emergency and their status (e.g., how many are injured or how many are in wheelchairs, etc.).

The Good Samaritan is asked to give his/her name and telephone number to the dispatcher at the end of the conversation. This is so they can be contacted in the future and thanked for their assistance.

**DIRECTIONS (EMERGENCY NOTIFICATION CARD)**

The Emergency Notification Card is similar to the Good Samaritan Card in that it is also passed to a motorist in an emergency. It differs in that it lists local emergency numbers to call as well as the number for the dispatcher. The use of this form does not place the burden of notifying emergency personnel on the dispatcher but would be good to require as a backup.

At the top of the sheet is a space to fill in the number of the vehicle on which the form is to be carried. A box at the top portion of the form contains spaces for the phone numbers of the Police, Fire, Ambulance, and dispatcher. These numbers must be filled in by the transportation system **before** the form is placed on the vehicle.

The driver is responsible for filling out information regarding the location of the vehicle and the nature of the emergency. He or she is also directed to write down the number of people injured and to indicate the severity of the injuries.
Good Samaritan Card

Time ____ am / pm

Please read the following instructions carefully.

Notice: You have been asked to help us respond to an emergency situation concerning one of our vehicles. Please complete the following steps as quickly as possible. Thank you for your cooperation.

STEP 1: Call my dispatcher. (You can make this a collect call by having the operator announce you as a "Good Samaritan").

- Phone ____________________________
- If no answer call ____________________

STEP 2: Give the dispatcher or receptionist the following information **exactly** as it is written.

- I have been asked by your driver to report a code red / blue / yellow status for vehicle # ________
- The exact location of the vehicle is:
  - Street/Road ____________________________
  - Headed Towards ____________________________
  - Between ____________________________
  - Near ____________________________
- The driver is requesting that you contact:
  - Police ____ Fire ____ Ambulance ____ Tow
  - Other ____________________________
- The number of occupants on the vehicle is ______
- The number of injured occupants is ______
- The number of people in wheelchairs is ______

Step 3: Give your name and home phone number so that we may thank you for your assistance.

Thank You!

EXHIBIT 4-17
GOOD SAMARITAN CARD
VEHICLE # ___________

EMERGENCY NOTIFICATION CARD

TELEPHONE NUMBERS

Police ____________________________
Fire ______________________________
Ambulance _________________________
Transportation System ______________

IMPORTANT INFORMATION

LOCATION (Be as specific as possible)
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

PROBLEM (Be as specific as possible)
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Number of Possible Injuries _____
Severity of Injuries _______________
PASSenger Card

Purpose: To be filled out by passengers at the scene of an accident to record who was on the vehicle.

Directions

On the front of the Passenger Card, information is filled in by each passenger. The detailed information requested includes:

- **Name** - passenger's first and last name;
- **Address** - passenger's current residence;
- **Telephone Numbers** - day and evening telephone numbers;
- **Today's Date** - passenger must date the card;
- **Current Time** - passenger must fill in the time; and
- **Signature** - the passenger's signature must be on file for validation purposes.

The reverse side of the card contains a diagram of a vehicle with the front and rear indicated. Passengers are required to place an "X" in the location where they were sitting at the time of the accident.
Passenger Card

Please assist us by filling out this card completely.

Name: ____________________________
Address: __________________________

Phone Numbers (Very Important)

Day: ___________ Evening: ___________

Today's Date: _________

Current Time: _________

Signature of Passenger

Please Complete Other Side Also
Mark an "X" where you were sitting.

Thank You!

EXHIBIT 4-19
PASSENGER CARD (CONCLUDED)

4-63
AGENCY PROFILE SHEET

PURPOSE: To provide rescue crews information concerning the transportation system and its vehicles in case of an emergency.

DIRECTIONS

At the top of the Agency Profile Sheet, lines are provided for basic agency information. The space for telephone numbers is intentionally long to accommodate multiple offices or special numbers.

The first box contains spaces for six individuals and their home phone numbers to be listed as emergency contacts. The second box contains information about the vehicles operated by the system. Transportation systems should record in the appropriate spaces the number of the vehicles in the fleet; their color scheme or markings; the different types of vehicles; their identifying features; and their capacity for ambulatory passengers and wheelchairs.
**AGENCY PROFILE SHEET**

Agency Name ____________________________
Address ________________________________
Telephone ______________________________

**Emergency Contacts**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Vehicle Information**

Fleet Size _____  Colors/Markings __________________

<table>
<thead>
<tr>
<th>Vehicle Types</th>
<th>Identifying Features</th>
<th>Capacity Amb./WC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

EXHIBIT 4-20
AGENCY PROFILE SHEET
VEHICLE PROFILE CARD

PURPOSE: To assist emergency crews in identifying a vehicle at the accident scene and describing its emergency access points.

DIRECTIONS

One of the most important parts of the form is the vehicle identification information. The data supplied in these spaces will be the only means that rescue crews have of knowing which Vehicle Profile Card to use. Information that should be conveyed in this section of the card include:

- Vehicle Numbers (the vehicle numbers of each vehicle of this type);
- Location of Numbers (where to find the numbers on the vehicle);
- Identifying Features (unique characteristics of vehicles of this type);
- Seating Capacity; and
- Wheelchair Stations.

The next section on the Vehicle Profile Card lists the capacity and location of the fuel tanks. In addition, information about the emergency shut off procedure is presented if the ignition mechanism is inaccessible.

The box at the bottom of the page lists areas of the vehicle through which rescue workers could gain access. For each area, information should be given as to where the emergency access might or might not be, (for example, the roof escape hatches) and their operation. The last line lists a phone number that can be called if there are any questions concerning the vehicle or its access.
To begin the process of completing the sheets, a list should be made of the different types of vehicles in the fleet. Information should then be recorded for each vehicle type. If the access points on two different vehicles are exactly the same, then only one sheet should be used listing the identifying features of both vehicles.
VEHICLE PROFILE CARD
(Do Not Remove From Vehicle)

Transit System _______________________

Vehicle Type _______________________

Vehicle Identification

Vehicle Numbers _______________________
Location of Numbers ___________________
Identifying Features ___________________
Seating Cap. _____ Wheelchair Stations ____

Fuel Tank Information

Capacity _____ Location _______________

Emergency Shut-Off Procedure: _______________

Emergency Access Points

Driver’s Side _______________________
Pass. Side _______________________
Front _______________________
Rear _______________________
Roof _______________________
Window Info. _______________________

If further information is required call: _______________

EXHIBIT 4-21
VEHICLE PROFILE CARD

4-68
PASSenger ID Card

Purpose: To help identify passengers in case of an emergency.

Directions

The Passenger ID Card records basic information about the passenger such as his or her name, address, telephone number, date of birth, and sex. Additional identifying characteristics listed on the card include eye color, hair color, height, and weight.

The bottom part of the card lists a primary physician and his or her phone number(s) and a person or organization to reach in case of an emergency. After the information is recorded on each passenger, the card should be laminated and carried by the passenger whenever they ride a system vehicle.
PASSENGER I.D. CARD

Name _____________________________________________________________

Date of Birth ________ Sex _____ Eye Color ______

Hair Color _____ Height _____ Weight _____

Primary Physician: ________________________________

Phone ______________________ or ______________________

Emergency Contact: ________________________________

Phone ______________________ or ______________________
EMERGENCY PLACARD

PURPOSE: To remind emergency crews that passengers carried on transportation system vehicles may not normally be able to communicate with rescue personnel in some ways.

DIRECTIONS

The Emergency Placard should be posted inside each vehicle in a highly visible place.
This Vehicle May Carry Passengers Who Are:

- Blind
- Hearing Impaired
- Mentally Disabled
- Physically Disabled

And/Or

EXHIBIT 4-23
EMERGENCY PLACARD
CHECKLIST FOR EMERGENCY PROCEDURES

PURPOSE: To assist in the establishment of a Passenger, Vehicle and System Safety Program.

DIRECTIONS

Use this form to check safety activities once a Safety Program has been established.
✓ SAFETY CHECKLIST FOR EMERGENCY PROCEDURES

☐ Passenger Profile Cards have been placed on each vehicle in revenue service

☐ Each driver knows how to correctly fill out an accident form

☐ Each driver is aware of the responsibilities and procedures in emergency situations

☐ Drivers have been instructed to pass out and collect Passenger Cards after each accident

☐ Police, fire, and ambulance crews have received Agency Profile Sheets

☐ Vehicle Profile Cards have been distributed to emergency response personnel

☐ Emergency Placards are posted in each vehicle

EXHIBIT 4-24
CHECKLIST FOR EMERGENCY PROCEDURES
SECTION 5

PASSenger, VEHICLE AND SYSTEM SAFETY PLAN
PASSENGER, VEHICLE AND SYSTEM SAFETY PLAN FOR

(Name of Agency)

DATE: ___________________
TO BE TYPED ON YOUR LETTERHEAD

MEMORANDUM

TO: All Employees
FROM: (Director or Manager)
DATE: ____________________
RE: Passenger, Vehicle, and System Safety

It is the objective of the (name of agency) to provide safe and reliable service to its passengers. As a result, it is the responsibility of all employees to make sure that we conduct our daily operations in the safest manner possible.

As part of the commitment to safety, the (Board of Directors or any other appropriate body) has passed a resolution calling for a Safety Plan whose overall goal is to prevent and reduce the severity and number of accidents involving vehicles, passengers, employees, or any other individuals who come into contact with the transportation system.

To ensure that the Safety Plan is successfully implemented, (name of individual or yourself) has been appointed the system's Lead Safety Officer. As part of the Safety Program, employees are required to bring any conditions perceived to be unsafe to (the Lead Safety Officer's name)'s attention.

I am fully committed to this Passenger, Vehicle and System Safety Plan because it formalizes safety as the transportation system's top priority. Please join with me in supporting this important program.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>DIRECTIONS FOR SYSTEM DESCRIPTION</td>
<td>3</td>
</tr>
<tr>
<td>SYSTEM DESCRIPTION</td>
<td>4</td>
</tr>
<tr>
<td>Transportation System History</td>
<td>4</td>
</tr>
<tr>
<td>Scope of Transit Services</td>
<td>4</td>
</tr>
<tr>
<td>Operating Environment</td>
<td>6</td>
</tr>
<tr>
<td>DIRECTIONS FOR EMPLOYEE RESPONSIBILITIES</td>
<td>7</td>
</tr>
<tr>
<td>Safety Program Management and Administration</td>
<td>7</td>
</tr>
<tr>
<td>Selecting Responsibilities for Personnel</td>
<td>8</td>
</tr>
<tr>
<td>EMPLOYEE RESPONSIBILITIES</td>
<td>9</td>
</tr>
<tr>
<td>Safety Management</td>
<td>9</td>
</tr>
<tr>
<td>The System Manager/Project Director (Option 1)</td>
<td>10</td>
</tr>
<tr>
<td>The System Manager/Project Director (Option 2)</td>
<td>11</td>
</tr>
<tr>
<td>The Lead Safety Officer (If Option 2 is chosen)</td>
<td>12</td>
</tr>
<tr>
<td>Dispatchers/Supervisors</td>
<td>13</td>
</tr>
<tr>
<td>Drivers</td>
<td>14</td>
</tr>
<tr>
<td>Maintenance Personnel</td>
<td>15</td>
</tr>
<tr>
<td>DIRECTIONS FOR SAFETY AND ACCIDENT REVIEW COMMITTEE</td>
<td>16</td>
</tr>
<tr>
<td>Committee Organization</td>
<td>16</td>
</tr>
<tr>
<td>Accident Review Organization</td>
<td>17</td>
</tr>
<tr>
<td>THE SAFETY AND ACCIDENT REVIEW COMMITTEE</td>
<td>19</td>
</tr>
<tr>
<td>Accident Prevention Activities</td>
<td>19</td>
</tr>
<tr>
<td>Accident Review Activities</td>
<td>20</td>
</tr>
<tr>
<td>Safety and Accident Review Committee Members</td>
<td>21</td>
</tr>
<tr>
<td>Hazard Assessment</td>
<td>21</td>
</tr>
<tr>
<td>PROGRAM IMPLEMENTATION AND MAINTENANCE</td>
<td>26</td>
</tr>
<tr>
<td>Safety Goals and Objectives</td>
<td>26</td>
</tr>
<tr>
<td>Program Schedule</td>
<td>26</td>
</tr>
<tr>
<td>Requirements for Plan Updates</td>
<td>27</td>
</tr>
<tr>
<td>APPENDIX A: OPERATIONS AND MAINTENANCE SAFETY RULES</td>
<td>28</td>
</tr>
<tr>
<td>Driver Safety Rules</td>
<td>28</td>
</tr>
<tr>
<td>Maintenance Safety Rules</td>
<td>29</td>
</tr>
<tr>
<td>DIRECTIONS FOR APPENDIX B: SAFETY STATISTICS AND GOALS</td>
<td>30</td>
</tr>
<tr>
<td>AND GOALS</td>
<td></td>
</tr>
<tr>
<td>APPENDIX B: SAFETY STATISTICS AND GOALS SHEET</td>
<td>31</td>
</tr>
<tr>
<td>DIRECTIONS FOR APPENDIX C: PROGRAM SCHEDULE</td>
<td>32</td>
</tr>
<tr>
<td>APPENDIX C: PROGRAM SCHEDULE</td>
<td>33</td>
</tr>
<tr>
<td>APPENDIX D: GUIDELINES FOR SAFETY AND ACCIDENT REVIEW COMMITTEE</td>
<td>34</td>
</tr>
<tr>
<td>DIRECTIONS FOR APPENDIX E: PASSENGER, VEHICLE AND SYSTEM SAFETY FORMS</td>
<td>38</td>
</tr>
<tr>
<td>APPENDIX E: PASSENGER, VEHICLE AND SYSTEM SAFETY FORMS</td>
<td>39</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HAZARD ASSESSMENT MATRIX</td>
<td>24</td>
</tr>
</tbody>
</table>

# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LIST OF BOARD MEMBERS</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>MEMBERS OF THE SAFETY AND ACCIDENT REVIEW COMMITTEE</td>
<td>22</td>
</tr>
</tbody>
</table>
INTRODUCTION

To emphasize the importance of safety in all aspects of transportation operations, (Name of your organization) (hereafter referred to as "the Transportation System") has established a set of comprehensive safety activities called the Passenger, Vehicle and System (PVS) Safety Program. The goal of the PVS Safety Program is: to reduce the severity and number of accidents involving vehicles, passengers, employees or any other individuals who come into contact with the Transportation System.

As a result of the PVS Safety Program, the Transportation System hopes to achieve not only an improved safety record, but to establish safety as its number one priority. In order to be effective the program is oriented towards identifying potential hazards and implementing solutions before accidents occur. In addition, the PVS Safety Program emphasizes post-accident analysis so that steps can be taken to minimize or prevent future accidents.

The purpose of this document (referred to as the PVS Safety Plan) is to help establish and maintain the PVS Safety Program for the Transportation System. It serves as a blueprint for all safety activities by:

- establishing how safety activities are organized;
- outlining employee safety responsibilities;
- instituting hazard analysis methods; and
- setting goals and objectives for the program.

The PVS Safety Plan is updated annually to both record past safety performance and to establish goals for the upcoming year. Although the PVS Safety Plan sets a course for the direction of the
PVS Safety Program to follow, the Plan's existence alone does not guarantee success. A commitment to incorporate safety into every aspect of the Transportation System's operations is the only way to ensure that safety experiences will be improved. For this reason the Transportation System's employees are the most important component of both the PVS Safety Plan and PVS Safety Program.
DIRECTIONS FOR SYSTEM DESCRIPTION

This section of the PVS Safety Plan outlines your transportation organization's services and background. It is important to document this information as carefully as possible. This will help document the context that the PVS Safety Plan addresses and helps to individualize the Plan to your specific situation.

If your organization has a one-page description of its background and/or activities you may want to incorporate it into the document. It is important, however, that basic information such as the hours of operation, the number of rides per year, and a rough breakdown of the type of trips provided be included in the Plan. This information serves to indicate to the reader that the activities of the Safety Program must be placed in the context of the transportation organization's operating environment.
SYSTEM DESCRIPTION

(Organization Name) is a Transportation System that serves the area of (Name of Area Served). The Board of Directors consists of ___ people appointed by (Name of Appointing Body or Person), and serve a team of ___ years.

Board meetings are held at the ___(location)_____ in ___(room number)______ at ___(time)___ every ___(day meeting occurs)_. The names and positions of Board Members are listed on Table 1.

Transportation System History

If you have a one page description of your services and/or organizational history, insert it here.

Scope of Transit Services

(Organization Name) provides service approximately ___ days a year. The weekday hours of operation for the service are from ___ a.m. to ___ p.m. Weekend hours are (List weekend hours). During the ___-___ fiscal year approximately ___ riders were transported out of a total service area population of ___

Public transportation is essential to the community(ies) that (Organization Name) serves. The system is used by people to travel to and from:

____% Work
____% Shopping
____% Health Care
____% School
____% __________________
____% __________________
____% __________________
____% Other
<table>
<thead>
<tr>
<th>Member</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Operating Environment

Safety precautions depend in large part on the operating environment of each Transportation System. The Transportation System’s operating area is approximately ____% rural and ____% urban. Vehicles operate on a road network that is composed of:

____% City streets
____% Suburban residential streets
____% Interstates/Throughways
____% 4-lane highways
____% 2-lane highways
____% unpaved roads

Common hazards that drivers must face when operating a vehicle are:

(List common hazards such as heavy traffic, animals, etc.)

In case of snow or other weather-related emergencies, (Name of Person) makes a determination as to whether to operate the service. If a weather emergency occurs during the day, drivers on the road are informed about the system’s operating status by (Type of Communication System).
DIRECTIONS FOR EMPLOYEE RESPONSIBILITIES

The following pages list different employee positions commonly found in transportation organizations and their responsibility under the PVS Safety Program. Because transportation organizations vary in size, scope, and management structure it is not possible to write a listing of responsibilities that is applicable to every situation. For this reason the job responsibilities for each position have been listed separately so that you can pick the listings that are most applicable to your situation.

Safety Program Management and Administration

In small systems Project Directors or Transportation Managers perform many functions. Due to a lack of resources (available personnel or money) Project Directors of small systems will probably serve not only the manager of the safety program, but also as its primary implementer. In larger transportation organizations, however, the Project Director or System Manager is more removed from the daily provision of service. In such cases it is likely that another individual would coordinate the activities of the safety program. (Although the Project Director or System Manager would still be ultimately accountable for safety.)

To account for both types of organizations, two options have been developed for the management structure of the safety program and the responsibilities of the Project Director or System Manager. Option 1 should be used when the head person in the organization is to be primarily responsible for both directing and conducting safety activities. Most small transportation organizations should choose this option.

Option 2 outlines the responsibilities of the Project Director or System Manager for larger transportation organizations that cannot have their safety activities directed and conducted by just one person. In such cases the responsibilities outlined under
Option 2 refer to the Project Director or System Manager's responsibility for the overall safety program but does not refer to how the safety activities will be administered. In cases where Option 2 is used, a Lead Safety Officer should be appointed to take over the day-to-day administration of the safety program. A separate sheet is provided listing the Lead Safety Officer's responsibilities under the safety program if Option 2 is chosen. (If Option 1 is chosen then the sheet outlining the responsibilities of the Lead Safety Officer should be discarded.)

Selecting Responsibilities for Personnel

The following six sheets list the safety responsibilities of different types of employees. In order for your plan to be complete, you should pick those that apply to your particular organization. For example, if your organization does not have mechanics, that section can be discarded. On the other hand, if drivers serve as dispatchers, both the Driver and the Dispatcher/Supervisor sheets should be included. In this way an employee is charged with the safety responsibility of the role they fulfill in the organization at any one time, not his or her main occupation.
EMPLOYEE RESPONSIBILITIES

To ensure that operations are conducted in the safest manner possible, all Transportation System personnel have been assigned specific responsibilities to assist in increasing the level of safety throughout the system. In addition to their responsibilities under the PVS Safety Program, operators and mechanics are required to adhere to the safety rules listed in Appendix A.

Office personnel are responsible under the PVS Safety Program for being thoroughly familiar with emergency procedures. All personnel must know the location of fire extinguishers and emergency exits, and understand all emergency communication procedures (including operation of the radio if available).

Safety Management

The management of the PVS Safety Program is the responsibility of a combination of specific individuals and the Safety and Accident Review Committee. As in all operational matters, the System Manager, (Name of the System Manager), holds ultimate responsibility for the direction of the PVS Safety Program and the execution of the PVS Safety Plan.

The Safety and Accident Review Committee has a broad scope of responsibilities that primarily encompass accident prevention and accident review. Its activities include, but are not limited to vehicle safety, facility inspections, accident reviews, safe work practices, emergency procedures, safety reviews, and the development and updating of the PVS Safety Plan. By placing the requirements of the PVS Safety Program on several employees, no one person is overburdened with the responsibility for all safety activities.
The System Manager/Project Director (Option 1)

The top manager of the Transportation System is responsible for the overall direction and implementation of the Safety Program. He or she should be well informed of the Safety Program's status and work to conduct safety activities.

As the employee in charge of safety, he or she should be a member of the Safety and Accident Review Committee and be in charge of collecting and disseminating safety information. The System Manager or Project Director is specifically charged with the following responsibilities under the PVS Safety Program:

- being answerable for the safe conduct of the Transit System's operations;
- communicating safety as a top priority to all employees;
- listening and taking appropriate action on all safety concerns and hazards brought to his or her attention;
- reporting directly to the transit manager any safety concerns or hazards;
- identifying potential safety concerns or hazards in any part of the Transit System's operations;
- actively soliciting the safety concerns of other employees;
- serving as a liaison between the Safety and Accident Review Committee and transit system employees; and
- working to ensure that the PVS Safety Program is carried out on a daily basis.
The System Manager/Project Director (Option 2)

The top manager of the Transportation System is responsible for the overall direction and implementation of the Safety Program. As such, he or she should be well informed of the transit system's safety status on a daily basis. Although the manager's many obligations make it impossible to attend to every detail of the PVS Safety Program, he or she should be very familiar with specific programs and the status of the system in relation to achieving its safety goals.

The manager is responsible for assessing the adequacy, responsiveness, thoroughness, and effectiveness of the Lead Safety Officer and all other safety-related personnel in the development of the PVS Safety Plan and the implementation of the PVS Safety Program. The manager is specifically charged with the following management responsibilities for the PVS Safety program:

- being answerable for the safe conduct of the Transit System's operations;
- communicating safety as a top priority to all employees; and
- listening and taking appropriate action on all safety concerns and hazards brought to his or her attention.
The Lead Safety Officer (If Option 2 is chosen)

The Lead Safety Officer is the individual who is directly responsible for implementing the PVS Safety Program. He or she is expected to be a member of the Safety and Accident Review Committee and be in charge of collecting and disseminating safety data. The Lead Safety Officer is specifically charged with the following management responsibilities for the PVS Safety Program:

- reporting directly to the transit manager any safety concerns or hazards;
- identifying potential safety concerns or hazards in any part of the Transit System's operations;
- actively soliciting the safety concerns of other employees;
- serving as a liaison between the Safety and Accident Review Committee and transit system employees; and
- working to ensure that the PVS Safety Program is carried out on a daily basis.
Dispatchers/Supervisors

In larger transportation systems, Supervisors are responsible for communicating the Transit System's safety policy to all employees. For this reason supervisors must have full knowledge of all safety rules and policies, but more importantly must communicate those policies to other employees in a manner that encourages them to work safely as a matter of principle. The specific responsibilities of supervisors under the FVS Safety Plan include:

- having full knowledge of all standard and emergency operating procedures;
- ensuring that the drivers make safety a primary concern when on the job;
- cooperating fully with the safety program regarding any accident investigations;
- listening and acting upon any safety concerns raised by the drivers; and
- reporting to the Safety Coordinator or the General Manager any safety concerns or possible hazards.
Drivers

As the primary point of contact with passengers, each driver whether full-time, part-time or volunteer, plays a crucial role in forming the public's perspective of how service is delivered. Although safe operation is everyone's responsibility, the behavior and actions of drivers are the most visible element of the Transit System's safety awareness. As part of the PVS Safety Program all driver's must:

- show primary concern for the safety of the passengers at all times;
- have complete knowledge of all standard and emergency operating procedures (including evacuation);
- be thoroughly familiar with fuel and service lane standard and emergency operating procedures;
- obey all traffic laws—especially speed limits;
- cooperate fully with safety operations and accident investigations;
- be assured that each vehicle is in safe condition either through the use of the daily inspection form or the release of a mechanic or supervisor; and
- report any safety concerns or possible hazards to the appropriate person (supervisors, the Safety Coordinator, or the General Manager).
Maintenance Personnel

Mechanics are responsible for not only the safe operating condition of the vehicles, but for a safe work environment in the maintenance area. Appropriate protective gear is to be worn at all times and proper safety precautions are to be followed. In addition, all flammable and toxic materials are to be stored safely and securely away from any work activity that could cause an accident or emergency. Specific responsibilities for maintenance workers under the PVS Safety Plan include:

- safe operation of all machinery and equipment;
- complete knowledge of both standard and emergency operating procedures;
- knowledge of proper chemical spill containment and clean-up procedures;
- clean and safe condition of all work areas;
- knowledge of all emergency shut-off switches;
- knowledge of the location and safe operation of fire extinguishers; and
- communication of all safety concerns to the Safety Coordinator or foreman.
DIRECTIONS FOR SAFETY AND ACCIDENT REVIEW COMMITTEE

The Safety and Accident Review Committee is organized into two parts. The main function of the Committee is to prevent accidents from occurring. A secondary purpose that directly relates to this prime objective is to evaluate accidents that have already happened. The organization of the Committee reflects these priorities. The main body of the Committee meets to discuss issues relating to safety and accident prevention. A sub-group of this main body is responsible for reviewing vehicle-related accidents and assessing whether or not they were preventable.

Committee Organization

The people who serve on the Safety and Accident Review Committee should represent both the transportation organization and local community. Five or seven committee members allow the Committee to have a broad representative base and retain manageability. Small organizations may wish to only have three members on the safety committee, but this increases the workload since each person would have to participate in both accident prevention and accident review activities.

Representation on the Committee should include individuals from various parts of the transportation organization and independent representatives. Appropriate categories for employees to be represented include dispatchers, drivers, and mechanics (if applicable). Outside members could include representatives from local police, fire, or ambulance organizations. Other possibilities for outside representation include local officials, insurance representatives (assuming they have no financial ties to the transportation organization) and Board Members.

The Safety and Accident Review Committee shall meet on a monthly basis to work on PVS Safety Program issues. At the meetings, members of the Committee will report on safety related concerns,
review potential hazards, and designate individual members to investigate safety issues. Once a safety concern is brought to the attention of the Committee, one or more representatives will be chosen to evaluate the potential hazard. They will then report their findings at the next meeting.

**Accident Review Organization**

The accident review activities of the Safety and Accident Review Committee are handled separately from the other responsibilities. A group of Safety and Accident Review Committee members meets periodically to assess whether or not an accident was preventable. Guidelines for judging whether or not an accident is preventable are listed in Appendix D.

Due to the sensitive nature of the issues discussed in accident reviews, the determining body must be viewed as objective and impartial. The group that meets for this purpose should be composed of at least one member each from both management and the vehicle operators, plus an independent evaluator from outside the transportation system.

The independent evaluator could be an insurance adjuster, police official or another person familiar with vehicle accidents. The most important criteria, however, is independence so that the Committee's decisions cannot be questioned by either side. A member of the transportation system's Board of Directors, for example, would not be an appropriate person to serve on the Committee as an independent voice.

In some small systems the system manager serves on the Committee. In larger systems the head of operations may assume the responsibility of representing management. In either case the management representative has the dual role of making sure that management's interest in discouraging accidents is represented while at the same time maintaining a sense of fairness throughout the evaluative process.
Driver Representation. Drivers should be chosen to serve on the Committee by, above all else, their accident history. Ideally, vehicle operators who assist in accident reviews should have no accidents on their record and have driven for the transportation system. In cases where this is not possible, transportation systems will have to use their best judgement from the people available. Many times the safest drivers are neither the most vocal nor most popular. However, the reason drivers with accident-free records should be chosen is that they have a critical eye towards accident prevention (defensive driving) as evidenced by their success. This perspective is different than the leadership qualities that both management and employees would like to see in a supervisor. Therefore, it is important to remember that drivers who have a proven record of safety be chosen.

Independent Representation. The independent representative(s) should have a background in accident investigation. If an appointed independent representative is an insurance adjuster or has a similar position in the insurance industry, he or she cannot have any financial connection to the transportation system. Other conflicts of interest include police officers or fire personnel who were dispatched to the accident scene.

Management Representation. The management representative(s) who are a part of the Safety and Accident Review Committee should present themselves as fair and impartial participants while at the same time upholding a strict interpretation of what is preventable.

Disciplinary action is the responsibility of management once the Safety and Accident Review Committee reaches a decision. Final determination obviously rests in the hands of the top manager of the transportation system. For this reason, it is probably best if that person is separated from the assessment process.
THE SAFETY AND ACCIDENT REVIEW COMMITTEE

The Safety and Accident Review Committee performs two important functions. Members of the Committee conduct activities that focus on preventing accidents, and also analyze those accidents that do occur. Both functions are necessary because they act together to strengthen the safety program as a whole. Preventive functions keep the Transportation system active in addressing safety concerns. However, to direct those activities in the most effective means possible, analyses must be made on those accidents that do occur. This "check" can then be used to assist in evaluating safety activities and to direct safety program resources (e.g., personnel, money, time, etc.) appropriately.

Accident Prevention Activities

The Safety and Accident Review Committee works to develop the PVS Safety Plan and to implement the PVS Safety Program. Members of the Committee conduct safety reviews and assess potential hazards on an individual basis. One of the main functions of the Committee is to serve as the body that develops and reviews training programs and assesses the appropriateness of their content. Members of the Committee also have the responsibility of searching for new training opportunities that could improve the Transportation System's safety performance.

A major focus of the Safety and Accident Review Committee activities is to identify and neutralize potential hazards. To do this it concentrates on work activities and safety issues such as route analyses, driving techniques, and boarding and discharging.

In addition to conducting hazard analyses when problems are brought to its attention, the Safety and Accident Review Committee is also charged with conducting safety reviews. These reviews can concentrate on any aspect of operations and include work practices, facility inspections, emergency preparedness, or any other part of
the Transportation System. Reviews conducted by the Safety and Accident Review Committee serve to:

- determine compliance with management policies, rules, regulations, standards, codes, procedures and assigned safety system responsibilities;
- identify significant recurring accidents and residual hazards that are to be resolved by the organization being reviewed; and
- recommend specific action plans for correcting or minimizing the effects of identified accidents or causes.

In addition to preventive measures such as safety reviews and assessments, the Safety and Accident Review Committee is the body primarily responsible for the promotion of safety. Activities in this area include safety awareness campaigns, safety award programs and special safety-related events such as dinners or roadeos.

**Accident Review Activities**

Another responsibility of the Safety and Accident Review Committee is to objectively review accidents to investigate whether or not they were preventable.

The Transportation System bases its concept of expert safe driving practices on those outlined in defensive driving courses; the ability to avoid accidents in spite of the wrong actions of the other drivers and regardless of roadway or weather conditions. A preventable accident, therefore, is any occurrence involving a Transportation System vehicle that results in property damage and/or personal injury, in which the driver in question failed to do everything he or she reasonably could have done to prevent the occurrence.

Due to the sensitive nature of the Committee's activities some of its decision's may be controversial. For this reason, Committee members should be chosen on the basis of whether their judgement will be respected by others.
Safety and Accident Review Committee Members

A listing of Safety and Accident Review Committee members is listed separately on Table 2.

Hazard Assessment

Although it is impossible to accurately identify and correct every dangerous situation, many accidents can be avoided through careful prior analysis. This practice is called Hazard Assessment, and it has two important components.

The first component is to determine the likelihood that the hazard could produce an accident. This process entails a full evaluation of how frequently the hazard is encountered. For example, low head clearance on one type of vehicle could be encountered frequently by both passengers and the driver. Another, less likely, hazard could involve the combustion of hazardous materials in the central storage area due to extreme heat. In either case, an accurate assessment of the possibility that an accident could occur is crucial to assessing the hazard correctly.

The second component of performing Hazard Assessment is the determination of the potential severity of an accident. This process involves carefully estimating the potential effects of an accident caused by the hazard. In the two examples used previously, the severity of each would be very different. In the case of the low head clearance, it is possible that a passenger or employee might get a concussion. The second example (the combustion of hazardous materials) has the potential for death or serious injury.

The practice of hazard assessment combines these two components (likelihood and potential severity) to form an overall determination of the hazard. A complete safety program therefore incorporates this type of analysis into its activities.
<table>
<thead>
<tr>
<th>Name</th>
<th>Organization/Position</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sample Hazard Identification and Analysis Methodology. One way to conduct hazard assessments is to use a "Hazard Assessment Matrix" (Figure 1). The Matrix condenses "hazard assessment" into a chart and prioritizes those hazards that are evaluated.

Two hazard severity categories used to designate the magnitude of the "worst case" potential effects of the hazard are as follows.

- Category I - Critical
  Hazard can result in severe injuries or death to passengers, employees, or others who come into contact with the Transportation System and/or cause major property damage.

- Category II - Marginal
  Hazard can result in minor injury or negligible property damage.

After hazards are assessed for their potential severity, they can be examined to determine the probability that they may lead to an accident. As an increase in knowledge about safety is established through the course of the PVS Safety Program, prior accident information will be factored into the probability analysis if it is appropriate to do so.

A Frequent
The hazard is likely to cause an accident on a recurrent basis.

B Remote
An accident is unlikely but possible during the life of the hazard.

Hazard Resolution Methods. After the magnitude and likelihood of possible accidents due to apparent hazards have been assessed, the list will be prioritized into risk categories. As illustrated in the Hazard Assessment Matrix (Figure 1), each hazard will be judged to be:
HAZARD ASSESSMENT MATRIX

<table>
<thead>
<tr>
<th>FREQUENCY OF OCCURANCE</th>
<th>HAZARD CATEGORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CRITICAL I</td>
</tr>
<tr>
<td>A FREQUENT</td>
<td>IA</td>
</tr>
<tr>
<td>B REMOTE</td>
<td>IB</td>
</tr>
</tbody>
</table>

HAZARD RISK INDEX

<table>
<thead>
<tr>
<th></th>
<th>CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA</td>
<td>UNACCEPTABLE OR UNDESIRABLE (MANAGEMENT DECISION NECESSARY)</td>
</tr>
<tr>
<td>IIA, IB</td>
<td>ACCEPTABLE WITH MANAGEMENT REVIEW</td>
</tr>
<tr>
<td>IIB</td>
<td>ACCEPTABLE WITHOUT MANAGEMENT REVIEW</td>
</tr>
</tbody>
</table>

FIGURE 1
HAZARD ASSESSMENT MATRIX
o unacceptable or undesirable (management decision required);

o acceptable with management review; or

o acceptable without management review.

The investigators will report back to the Committee not only a description of the hazard, but a recommendation on how the potential hazard should be categorized. This assessment is to be recorded and become part of the permanent record of the Safety and Accident Review Committee's activities. In addition, investigators are to be prepared to discuss several alternative solutions to each safety problem and their associated costs. These procedures are established to expedite the process of implementing solutions.

The order of priority in finding solutions for potential hazards is: elimination of the hazard; control of the hazard; and containment of the hazard. Measures that may be recommended by the Safety and Accident Review Committee to counteract potential hazards can include:

o design changes;

o safety devices;

o warning devices; and/or

o safety procedures.

When attempting to mitigate a potentially hazardous situation, members of the Safety and Accident Review Committee must conduct trade-off analyses that take into account not only safety issues, but also costs, potential losses and service impacts. For this reason resolution strategies must be flexible to match an appropriate solution to each situation.
PROGRAM IMPLEMENTATION AND MAINTENANCE

The Transportation System has established this PVS Safety Plan as part of its effort to make safety a priority in all aspects of its operations. In order for the PVS Safety Program to remain a vital part of these activities it must be periodically maintained and updated. The Lead Safety Officer is the individual who is primarily responsible for this continuous process. To ensure that he or she can perform this function, the top manager of the Transportation System is obligated to provide the necessary resources to develop the PVS Safety Plan and to implement the PVS Safety Program.

Safety Goals and Objectives

On an annual basis the Safety and Accident Review Committee will record safety statistics for the previous year and develop goals for the next year. Meeting or exceeding safety goals is the driving force behind creating a commitment to safety throughout the organization. To emphasize their importance, the Safety and Accident Review Committee and the manager of the Transportation System are responsible for developing incentive systems that reward individual, department and system safety performance. A listing of safety goals is included in Appendix A of this PVS Safety Plan.

Program Schedule

The schedule for performing and implementing the PVS Safety Program is contained in Appendix B. The schedule identifies those activities that must be performed during the first six months after the plan’s approval. These efforts include the establishment of the Safety and Accident Review Committee, and the goals needed to form the foundation of the PVS Safety Program.
The Safety and Accident Review Committee is responsible for developing the schedule and adjusting it as necessary. It is responsible for making sure that an updated version of the schedule is available for all personnel.

**Requirements for Plan Updates**

The Project Director or System Manager and members of the Safety and Accident Review Committee are jointly responsible for maintaining and updating the PVS Safety Plan. The revisions made to the plan must be approved by the Board of the Transportation System or oversight agency.
APPENDIX A

OPERATIONS AND MAINTENANCE
SAFETY RULES
DIRECTIONS FOR APPENDIX A
OPERATIONS AND MAINTENANCE SAFETY RULES

Incorporate the following safety rules into your employee manuals. If you do not have an employee manual, you should post the rules prominently.

Some small systems may not employ maintenance personnel. In such cases, the rules addressing maintenance safety practices can be discarded.
Maintenance Safety Rules

(1) Vehicles that are not safe to operate are not allowed to be on the road.

(2) The Lead Mechanic ultimately decides whether or not a vehicle is safe to drive (not the System Manager or Project Director).

(3) Only authorized maintenance personnel can certify that a vehicle is safe to drive.

(4) Explanations are required on all defect cards detailing the repairs made to fix the problem or why no repairs were necessary.
APPENDIX A
OPERATIONS AND MAINTENANCE SAFETY RULES

Driver Safety Rules

(1) Before a vehicle can be placed in service a pre-trip inspection must be completed and the operator must be satisfied that the vehicle is safe to drive.

(2) If a defect is identified before beginning service a supervisor or approved mechanic must sign-off on the vehicle before it can be placed into service.

(3) Vehicles cannot be moved unless all occupants (including the driver) are appropriately seated, belted, and if appropriate have their wheelchairs tied down.

(4) If a defect develops during the day it must be marked on a vehicle defect card at the completion of the trip and the vehicle may not be placed into service until a supervisor or approved mechanic signs off on it.
APPENDIX B

SAFETY STATISTICS AND GOALS
DIRECTIONS FOR APPENDIX B
SAFETY STATISTICS AND GOALS

Appendix B should be used to establish goals for safety performance and to record results. The first column displays the results of the previous statistical period. The second column records the goals set for that period. The third and last column displays the Safety and Accident Review Committee's goals for the current period.

Accident and safety activities vary widely in relation to the size and operating environment of each transit system. For example, smaller systems may go more than a year without a vehicle accident while larger systems could have vehicle accidents on a monthly basis. The term "statistical period" is used to leave the type of measurement up to each individual transportation system. Small system may wish to measure accidents per 500,000 miles. Large systems, on the other hand, may wish to keep safety statistics on an annual, semi-annual, or quarterly basis.

Whichever period of performance you decide to use, make sure to state it at the bottom of the page in the space provided.
## APPENDIX B
### SAFETY STATISTICS AND GOALS SHEET

<table>
<thead>
<tr>
<th>Date</th>
<th>Total Last Period</th>
<th>Goal</th>
<th>Goal For Next Period</th>
</tr>
</thead>
</table>

#### Vehicle Accidents
- **Total Vehicle Accidents**
- **Clearly Preventable**
- **Clearly Nonpreventable**
- **Borderline**

#### Types of Collisions
- **Other Vehicle**
- **Fixed Object**
- **Other (animals etc.)**

#### Passenger Accidents
- **Total Passenger Accidents**
- **Passenger Falls**
- **Other Incidents**
- **Number of Claims**

#### Employee Injuries
- **Total Employee Injuries**
- **Driver Injuries**
- **Other Employee Injuries**
- **Driver Days Lost**
- **Other Employee Days Lost**

**NOTE:** One statistical period equals ________________.

-34-
APPENDIX C

PROGRAM SCHEDULE
Appendix C should be used to assign a due date to elements of the PVS Safety Program. Several possible tasks are listed. Tasks that do not apply to your program can be crossed out from the list. In addition, you may wish to add tasks which are not listed but are appropriate to your program.
### APPENDIX C
#### PROGRAM SCHEDULE

<table>
<thead>
<tr>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Formalize approval of PVS Safety Plan
Select Lead Safety Officer
Establish Safety and Accident Review Committee
Establish Safety and Accident Review Committee
Collect Safety Data
Set Goals and Objectives
Update and Refine PVS Safety Plan
Select Outside Representatives
Conduct Facility Safety Review
Train All Employees on the Use of Fire Extinguishers
Develop Plans for a Bus Roadeo
Set Date for Vehicle Evacuation Exercises
Complete Review of Emergency Preparedness
Inspect All Accident Kits
Review New Accident Forms with Drivers
APPENDIX D

GUIDELINES FOR SAFETY AND ACCIDENT REVIEW COMMITTEES
APPENDIX E
PASSenger, Vehicle AND System Safety FORMS

(Transportation System to add appropriate forms.)
This Vehicle May Carry Passengers Who Are:

- Blind
- Hearing Impaired
- Mentally Disabled
- Physically Disabled

And/or