FEDERAL TRANSIT ADMINISTRATION

TRANSIT BUS SAFETY PROGRAM

Task 2 – Regulations and Oversight

(Federal, State, Local & Industry)

Final Report July 5, 2001

Prepared for:

FEDERAL TRANSIT ADMINISTRATION

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LIST OF ACRONYMS

 AASHTO American Association of State Highway and Transportation Officials ABA American Bus Association ADA Americans with Disabilities Act APTA American Public Transportation Association APWA American Public Works Association BSMP Bus Safety Management Program CalTIP California Transit Insurance Pool CDL Commercial Drivers License CD-ROM Compact Disk-Read Only Memory CFR Code of Federal Regulation CMV Commercial Motor Vehicle CTAA Community Transportation Association of America
ADAAmericans with Disabilities ActAPTAAmerican Public Transportation AssociationAPWAAmerican Public Works AssociationBSMPBus Safety Management ProgramCalTIPCalifornia Transit Insurance PoolCDLCommercial Drivers LicenseCD-ROMCompact Disk-Read Only MemoryCFRCode of Federal RegulationCMVCommercial Motor Vehicle
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CMV Commercial Motor Vehicle
I LAA I COMMUNITY LEADSPORTATION ASSOCIATION OF A MERICA
CVSA Commercial Vehicle Safety Alliance
CVSP Commercial Vehicle Safety Plan
DOT Department of Transportation
EPA Environmental Protection Agency
FMCSA Federal Motor Carrier Safety Administration
FMCSR Federal Motor Carrier Safety Regulations
FMVSS Federal Motor Vehicle Safety Standards
FTA Federal Transit Administration
HMR Hazardous Material Regulation
MCSAP Motor Carrier Safety Assistance Program
MTAP Multi-State Technical Assistance Program
NHTSA National Highway Traffic Safety Administration
NSC National Safety Council
NTI National Transit Institute
NTSB National Transportation Safety Board
OSHA Occupational Safety and Health Administration
RTAP Rural Transit Assistance Program
SAFER Safety Fitness Electronic Records
SCOPT Standing Committee on Public Transportation
SOP Standard Operating Procedures
SSPP System Safety Program Plan
TMi Transit Mutual Insurance Corporation of Wisconsin
TAG Technical Assistance Group
TSI Transportation Safety Institute
UMA United Motorcoach Association
UMTA Urban Mass Transportation Administration (now FTA)
USC United States Code
U.S.DOT United States Department of Transportation
WISDOT Wisconsin Department of Transportation
WSTIP Washington State Transit Insurance Pool

I. PROGRAM BACKGROUND AND REPORT INTRODUCTION

This draft report is part of Task 2 of the Federal Transit Administration's (FTA) *Transit Bus Safety Program* (*Program*). Task 2 seeks to identify and analyze the Federal, state, local and institutional regulations and oversight requirements that exist regarding transit bus safety.

The *Program* was initiated by the FTA in response to a 1998 National Transportation Safety Board (NTSB) special investigation report entitled "*Transit Bus Safety Oversight*" (PB98-917006, NTSB/SIR-98/03). The document was the result of findings from investigations and a subsequent public hearing in March 1998 concerning several high-profile transit bus accidents in the United States. The NTSB report observed that there is a lack of consistency among the states regarding oversight of transit bus safety and, as discussed above, there is currently no overall Federal regulatory structure guiding the oversight of transit bus safety.¹ *Consequently, NTSB recommended that the U.S. DOT, the American Public Transit Association (APTA), the Community Transportation Association of America (CTAA) and the American Association of State Highway and Transportation Officials (AASHTO) "develop...a model comprehensive safety program(s) and provide it to all transit agencies.*" The goal of the recommendations was to encourage the creation of a menu of suggested threshold transit bus safety standards and practices that not only could the large bus agencies in the U.S. practicably implement, but smaller bus operations as well.

As one can infer from the NTSB report, there is little tolerance for life-threatening accidents in the public common-carriage industry. While the transit bus industry is vastly safer in comparison to other forms of transportation, for various reasons, there is no doubt that public transit is subject to greater scrutiny in the eyes of the public. Yet, however excellent the safety record of the transit bus industry may be, it is incumbent upon transit agencies in the United States to provide the safest possible form of carriage that is economically feasible with public funds.

The *Program* Task 2 is the first step in developing a recommended model program that would help to ensure the safety and security of transit bus passengers in the United States and its territories. Part I of this report, *"Federal Regulatory Oversight and Industry Initiatives for Public Transit Safety,"* will identify and review transit bus safety regulations promulgated by the FTA, FMCSA, the National Highway Safety Administration (NHSTA), and discuss the roles of organizations such as the NTSB, APTA, and CTAA in transit bus safety. Part II, *"State Statutes and Regulations,"* will document and review all state legislation on transit bus safety in the U.S. and its territories. The objective of this part is to gather and document all relevant statutes, regulations and practices from the 50 states, the District of Columbia, Puerto Rico, Guam, American Samoa, the U.S. Virgin Islands, and the Commonwealth of the Northern Marianas. Finally, Part III will provide a review of unique local transit bus

¹ Additional information on the NTSB report can be found on page 15.

safety regulations and practices. All the research and documentation performed in this task was conducted with the cooperation and assistance of APTA, CTAA and AASHTO. Ultimately, *Federal, State, Local & Industry Oversight* will be a resource for subsequent *Program* tasks including:

- Development of a Model Transit Bus safety Program (Task 3)
- Development of Public and Private Advocacy Partnerships (Task 4)
- Development of Technical Assistance Projects/Best Practices (Task 5).

It is critical to stress that the goal of the *Program* is NOT to create a bus analogue to the rail fixed-guideway state safety oversight program (49 CFR Part 659). Rather, the purpose of this initiative is to compare and contrast current approaches to bus safety regulation and oversight in the United States and its territories. Ultimately, potential models for a national framework will be presented that could provide transit bus safety practice guidance to either large or small transit bus entities. While the categories of analysis for the study are drawn from the template of the rail oversight regulations, the *Program* fully acknowledges the fundamental differences between the rail and transit bus modes. Therefore, any eventual consideration of potential models for the guidance of transit bus safety will take into account the needs unique to transit bus operations.

Finally, for the purposes of the *Program* and this report, the term *"transit bus"* refers to an operator that receives public transportation funding, and will include the following modes:

- 1. Fixed-route bus, including Electric Trolley Bus
- 2. Demand-response vehicles
- 3. Intercity bus

This report's scope of inquiry includes privately owned vehicles that receive Federal funding, however its primary concern is the generally unregulated, publicly owned transit buses.

II. SUMMARY OF TRANSIT BUS SAFETY REGULATIONS AND OVERSIGHT

Transit bus safety operations are subject to very limited Federal safety regulation for narrowly defined areas including those of FTA: Bus Testing, Drug and Alcohol Testing, Triennial Reviews, Americans with Disabilities Act, etc. The FMCSA specifically exempts governmental entities from its jurisdiction. Transit industry initiatives focus on voluntary self-assessment of bus system operations and management, and programs of information dissemination, technical assistance and guidance. Both APTA and CTAA include safety considerations in their many activities and are active participants of the FTA Transit Bus Safety Program. In general, APTA sponsors the Bus Safety Management Program and represents the larger systems including the multimodal agencies whose bus systems tend to be fixed route served with full sized buses. CTAA promotes the Transit Safety Plus Program and generally serves smaller, including rural, communities and includes many paratransit operations that utilize smaller vehicles in a demand responsive mode. Part I fully describes Federal regulations and industry oversight of transit bus safety.

In reviewing transit bus safety regulations and oversight at the state level, it was found that relatively little has changed since the 1986 UMTA report was published. Florida and Colorado have distinguished themselves, however, by initiating very robust safety programs. All states have at least two agencies with some responsibilities for transit bus safety including the State DOT and the State Police. All jurisdictions have basic requirements for compliance to transit vehicle and equipment safety standards and have adopted the Federal Motor Carrier Safety Regulations (FMCSR) mandating periodic inspections for its intrastate carriers. Fifteen states have laws that are applicable to publicly owned vehicles and twenty-five jurisdictions have vehicle inspection programs. The others rely on self-inspections or inspections done by local garages and facilities. A comprehensive review of all state and territory regulations and oversight of transit bus safety is summarized in Part II.

A survey was conducted to identify any localities that have transit bus safety requirements that are more restrictive than those imposed at the Federal or state levels, but little was found. It is recognized that all transit operating agencies have policies, procedures and rules that influence operating and maintenance functions, including safety-critical activities, and local external requirements are scarce. Where requirements do exist, they are typically limited to the approval of streets on which buses may operate, the location of bus stops, the speed limit of transit vehicles on exclusive rights of way, and, in San Francisco, the clearance of trolley bus overhead wires.

The only additional source of transit bus safety oversight found to exist below the state government level was related to insurance pools. These are typically private associations operated for the benefit of their members. While they allow for economies of scale in the purchase of insurance, several also have extensive programs to improve safety awareness and practices through technical assistance and incentive programs. Additional information on insurance pools and a summary of local regulations is included in Part III.

PART I:

Federal Regulatory Oversight and Industry Initiatives for Public Transit Safety

I. INTRODUCTION

This section describes Federal regulations and industry oversight that may be directly or indirectly applicable to a model transit bus safety program including those of the following agencies:

- Federal Transit Administration (FTA)
- Federal Motor Carrier Safety Administration (FMCSA)
- National Highway Traffic Safety Administration (NHTSA)
- National Transportation Safety Board (NTSB).

There are numerous publicly-funded research and technical assistance programs directed at the transit bus industry on a variety of topics, including safety. While these programs will be referenced, as appropriate, for other elements of the *Program*, there is no attempt to describe them here, since they do not relate directly to safety regulations and oversight. Two training programs funded in whole or in part by the FTA are described and include:

- Transportation Safety Institute (TSI)
- National Transit Institute (NTI)

The missions and programs of several private bus, transit industry and other private organizations are briefly presented, and those related to safety are described in detail. They include:

- American Public Transportation Association (APTA)
- Community Transportation Association of America (CTAA)
- American Association of State Highway and Transportation Officials (AASHTO)
- American Bus Association (ABA)
- United Motorcoach Association (UMA)
- Commercial Vehicle Safety Alliance (CVSA)
- National Safety Council (NSC)

APTA, CTAA and AASHTO are increasingly collaborating with each other, have made a commitment to support the *Program*, and are providing assistance in implementing this task.

The focus of the *Program* is on system safety and security including personnel, operational and maintenance issues. Issues related to occupational and environmental safety regulations, under the jurisdiction of the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA), respectively, are not being addressed as part of this effort.

II. FEDERAL REGULATION AND OVERSIGHT

A. Federal Transit Administration

FTA is one of the modal administrations within the U.S. Department of Transportation. FTA provides leadership, technical assistance and financial resources for safe, technologically advanced public transportation to enhance mobility and accessibility, improve the nation's communities and natural environment and strengthen the national economy. The FTA provides financial assistance to public transit agencies throughout the country through its grant programs. In addition, as identified below, the FTA has certain safety mandates that grantees must meet. In general, FTA's primary enforcement mechanism to assure compliance with its regulations is the withholding of Federal transit funds.

- 1. Investigation of Safety Hazards
 - 49 USC § 5329

<u>Requirements</u>: Section 5329 provides FTA with the discretionary authority to investigate a condition in equipment, a facility, or an operation receiving an FTA grant if the FTA believes that the condition may cause a serious hazard of death or injury. The purpose of the investigation is to determine the nature and extent of the condition and how to correct it. If the FTA determines that the condition causes a hazard:

- a. FTA must require that the grant recipient submit a Corrective Action Plan, and;
- b. FTA *may* withhold further financial assistance until a plan is approved and carried out.

<u>Notes</u>: Section 5329 evolved from its predecessor legislation, the *National Mass Transportation Assistance Act of 1974*. Section 107 of that Act, however, provided that the "Secretary *shall* investigate unsafe conditions." The discretionary power the Secretary presently wields under the current legislation is derived from section 22 of the *Urban Mass Transportation Act of 1964* (added by section 318(b) of the *Surface Transportation Assistance Act of 1982*) that eliminated the Secretary's requirement to investigate potentially hazardous conditions.

Although this section provides the Federal government with safety-related investigatory authority, it has been used only in three safety investigations (one pursuant to section 107, two to section 22) and one safety review (section 5329) since 1974. Moreover, while section 5329 provides broad discretionary authority for all modes, including transit bus, it is more of a reactionary tool than one of oversight.

- 2. Legal, Technical and Financial Capacity
 - 49 USC § 5307(d)(1)

<u>Requirements</u>: Section 5307(d)(1) requires a grantee to submit a final program of projects, and certification for each fiscal year that it –

- a. has or will have the legal, financial, and technical capacity to carry out the program;
- b. has or will have satisfactory continuing control over the use of equipment and facilities; and
- c. will maintain equipment and facilities.

<u>Notes</u>: FTA's grantmaking authority pursuant to section 5307 has not been established. In 1989, UMTA contended that its grant oversight authority enabled it to promulgate safety regulations. In *Amalgamated Transit Union v. Skinner* (1990),² UMTA cited sections 5307 and 5334 (known then as 49 USC §§ 1602(a)(2)(A) and 1602(a)(1), respectively) as authority to issue drug-testing rules.³ Ultimately, the Court did "not find it necessary to determine the parameters of UMTA's authority to condition grants in this manner because Congress has delegated to UMTA specific authority over safety in Section 22..."

- 3. Security
 - 49 USC § 5307(d)(1)(J)

<u>Requirements</u>: Section 5307(d)(1)(J) requires a grantee to submit a final program of projects, and certification for each fiscal year that it –

- a. will expend for mass transportation security projects, (including lighting, camera surveillance and emergency lines) intended to increase the security and safety of an existing or planned mass transportation system, at least one percent of its annual grant;
- b. unless it has decided that the expenditure is not necessary.

<u>Notes</u>: While there is no legal precedent relating to this section, it appears that subsection (b) does not empower FTA with any regulatory authority in terms of the provision of security for mass transit systems.

² Amalgamated Transit Union v. Skinner, 282 U.S.App.D.C.322; 894 F.2d1362 282 U.S.App.D.C.322; 894 F.2d1362 (1990).

³ Section 5334(a)(1) states: "...the Secretary of Transportation may – (1) prescribe terms for a project under sections 5307 and 5309-5311...."

4. *Rail State Safety Oversight*

• 49 USC § 5330 / 49 CFR Part 659

<u>Requirements</u>: This legislation requires states to designate a state oversight agency (other than the transit agency itself) to oversee the safety of rail transit systems operating within their respective borders.

These oversight agencies are mandated to:

- a. Develop standards that outline the relationship between the oversight entity and the rail transit system(s);
- b. Guides the rail transit systems in developing *System Safety Program Plans* (SSPP);
- c. Conduct on-site visits to rail transit systems at a minimum of every three years to perform a formal safety review to assess whether safety and security practices and procedures comply with the respective SSPPs;
- d. Require rail transit systems to report the occurrence of accidents and unacceptable hazardous conditions; and
- e. Require rail transit systems to minimize, control, correct or eliminate hazardous conditions identified during investigations in accordance with Corrective Action Plans drafted by the transit systems and approved by oversight entities.

The rail transit systems are mandated to:

- a. Develop SSPPs that comply with program standards created by the respective oversight agencies;
- b. Classify hazardous conditions and report any accident or unacceptable hazardous condition;
- c. Obtain oversight agency approval of Corrective Action Plans, and;
- d. Conduct safety audits and submit a report summarizing the results of the audits.

<u>Notes</u>: Pursuant to section 5330, FTA was required to promulgate rules to create the first state-managed oversight program for rail transit safety and security. Part 659, "*Rail Fixed Guideway System: State Safety Oversight*," was the ultimate result of this legislation.

While, in general, Part 659 does not apply to transit buses, and rail systems subject to regulation by the Federal Railroad Administration, it does constitute a substantial regulatory model from which a potential transit bus framework may borrow. The definition of "rail fixed guideway systems," as set out in section 659.5, does not

include bus systems.⁴ However, state oversight agencies may exert jurisdiction over non-fixed guideway modes at their discretion. For example, the dedicated busways in Pittsburgh, PA are subject to state safety agency oversight.

- 5. Triennial Grantee Review
 - 49 USC § 5307(i)(2)

<u>Requirements</u>: At least once every 3 years, the Secretary must review and evaluate the performance of a grantee in carrying out the recipient's program to monitor compliance with statutory and administrative requirements, and whether the grantee's operations are consistent with planning process requirements in sections 5303-5306.

<u>Notes</u>: The FTA provides its *Triennial Handbook* to provide guidance to grantees to prepare for the triennial audits. Among the 26 areas reviewed in these audits, a few audit areas relate to safety and security concerns, as follows:

- 1. Does the grantee have a written system safety program for bus? Does the plan follow APTA's Manual for the Development of Bus Transit System Safety Program Plans? If not, what model does it follow?
- 2. Does the system safety program plan include an emergency management plan? Does the grantee conduct periodic drills?
- 3. What key safety issues have been identified by the grantee for this year and how and how are they being addressed?
- 4. What type of safety training does the grantee provide?
- 5. Does the grantee have a safety awards program? Is there an active safety committee? To whom does the Safety Officer report?
- 6. Has the grantee submitted transit safety data on National Transit Database Form 405 for the past three years?
- 7. Does the grantee utilize the one percent of funds for transit security (pursuant to 49 USC 5307(d)(1)(J))? If yes, how did the grantee

⁴ 49 CFR § 659.5 – Definition of Rail Fixed Guideway System: "Any light, heavy or rapid rail system, monorail, inclined plane, funicular, trolley, or automated guideway that is included in FTA's calculation of fixed guideway route miles or receives funding under FTA's formula program for urbanized areas and is not regulated by the Federal Railroad Administration."

utilize the one percent expenditure over the last three years? If no, why does the grantee consider such expenditures unnecessary?

The above questions posed in the Triennial Grantee Review are actually only a limited portion of the review. Primarily, the review focuses on Federal requirements such as Buy America and ADA. As these are essentially grant-related rather than safety-related reviews, the Office of Oversight within the FTA Office of Program Management oversees this process rather than the Office of Safety and Security. The responses given to the above questions are utilized for informational and data gathering purposes rather than a means to regulate the industry.

- 6. Drug & Alcohol Testing
 - 49 USC § 5331

<u>Requirements</u>: The Secretary is required to prescribe regulations that establish a program requiring grantees to conduct preemployment, reasonable suspicion, return to duty, and random and post-accident testing of mass transportation employees responsible for safety-sensitive functions for the use of a controlled substance and alcohol in violation of law or a US Government regulation.

Notes: The regulations promulgated pursuant to section 5331 are:

- a. 49 CFR Part 653 Prevention of Prohibited Drug Use Used in Transit Operations;
- b. 49 CFR Part 654 Prevention of Alcohol Misuse in Transit Operations.

This section and the regulations promulgated thereunder represent a substantial effort to provide a safe environment for passengers and transit personnel. These regulations are meant to prevent the use of prohibited drug consumption and alcohol misuse among transit personnel in safety-sensitive positions to prevent, for example, traffic accidents due to operators under the influence of drugs and/or alcohol. Furthermore, these laws and regulations require that an employee that tests positive to be given an opportunity for identification and treatment. It provides DOT with discretion in prescribing the consequences for testing positive, though DOT has not exercised this power and leaves it to localities to deal with such matters. FTA can conduct audits to monitor compliance with this section.

- 7. Bus Testing Facilities
 - 49 USC § 5318

<u>Requirements</u>: The Secretary is required to establish a facility for the testing of new bus models, as a condition for being purchased with FTA funds, for the following criteria -

- a. Maintainability
- b. Reliability
- c. Safety
- d. Performance (including braking)
- e. Structural integrity
- f. Fuel Economy
- g. Emissions
- h. Noise

<u>Notes</u>: FTA contracts with the Pennsylvania Transportation Institute to operate the bus testing program with the test track located at Penn State University in State College, PA. The maintenance facility and the static testing site are located in Altoona, PA. The only direct safety test conducted at Altoona is a double land change at increasing speeds up to 45 MPH. No crash testing is performed. FTA finances 80% of the bus testing costs with the manufacturer covering the balance. Results of bus testing are made available to grantees planning to purchase buses with FTA funds. All buses that are purchased or leased using Federal funds must have been tested at Altoona, and a report of the findings made available before Federal funds may be considered for use.

- 8. Americans With Disabilities Act of 1990
 - 42 USC §§ 1241 et.seq.

<u>Requirements</u>: Pursuant to this act and section 504 of the Rehabilitation Act of 1973, it is considered discrimination for a public entity which operates a fixed-route system to -

- a. Purchase or lease a new bus that is not readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs;
- b. Purchase or lease a used bus unless such entity makes demonstrated good faith efforts to purchase or lease a used vehicle that is readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs; and
- c. Fail to provide paratransit and other special transportation to individuals with disabilities, including individuals who use wheelchairs, at a level of service comparable to that of public transportation afforded by the entity to those without disabilities, with response time comparable, to the extent practicable, to that of public transportation afforded by the entity to those without disabilities.

<u>Notes</u>: The regulations pertaining to transportation for individuals with disabilities promulgated pursuant to the ADA (49 CFR Parts 27, 37, and 38) include design and operating safety specifications and standards.

- 9. Crime Prevention and Security
 - 49 USC § 5321

<u>Requirements</u>: The Secretary may make capital grants from amounts available under section 5338 of this title to mass transportation systems for crime prevention and security.

B. Federal Motor Carrier Safety Administration

FMCSA was established within the DOT on January 1, 2000. Formerly part of the Federal Highway Administration, the FMCSA's primary mission is to prevent commercial vehicle-related fatalities and injuries. Administration activities contribute to ensuring safety in motor carrier operations through enforcement of its Federal Motor Carrier Safety Regulations (FMCSR), targeting high-risk carriers and commercial motor vehicle (CMV) drivers; improving safety information systems and commercial vehicle technologies; strengthening CMV equipment and operating standards; and increasing safety awareness. To accomplish these activities, the FMCSA works with Federal, state, and local enforcement agencies, the motor carrier industry, labor safety interest groups, and others.

However, it is critical to note for the purposes of this report that the FMCSR explicitly exempt *publicly operated* transit bus carriers, with certain exceptions.⁵

• 49 CFR 390.3(f)(2)

<u>Requirements</u>: Transportation performed by the Federal government, a state, or any political subdivision of a state, or agency established under a compact between states that has been approved by the Congress of the US, is not subject to FMCSR.

<u>Notes</u>: It would be highly likely that, had the FMCSA not promulgated 49 CFR 390.3(f)(2), this report would not have been necessary as all transit buses would have come under the aegis of the FMCSA's safety regulations *(see 49 CFR Parts 350 & 355, Motor Carrier Safety Assistance Program below)*. Presently, the FMCSR affect CMV in interstate commerce with a seating capacity of 16 or more (including the driver).

⁵ The exemption of publicly operated transit bus carriers from FMCSA oversight was an administrative rather than a Congressional mandate.

Although, in general, FMCSR do not apply to publicly operated transit bus operations, such carriers must, however, comply with 49 CFR Part 383 commercial drivers license (CDL) and, in certain cases, 49 CFR Part 390 accident report-retention requirements:

• 49 CFR 383.23

<u>Requirements</u>: No person shall operate a CMV:

- a. unless such person has taken and passed written and driving tests which meet Federal standards, and;
- b. unless such person is in possession of a CDL which meets the standards of the issuing state or jurisdiction of domicile.
- 49 CFR 390.15

<u>Requirements</u>: If a governmental entity engages in interstate charter transportation of passengers, it must provide assistance in accident investigations. Such entities are required to:

- a. Make all records and information pertaining to an accident available to an authorized representative or special agent of the FMCSA upon request;
- b. Provide all reasonable assistance in the investigation of any accident, and;
- c. Maintain for a period of one year after an accident occurs, an accident register containing at least the following information
 - 1. A list of accidents register
 - 2. Dates of accidents
 - 3. Location of accidents
 - 4. Driver name
 - 5. Number of injuries
 - 6. Number of fatalities
 - 7. Whether hazardous materials, other than fuel spilled from the fuel tanks of motor vehicles involved in the accident, were released
- 49 CFR Parts 350 and 355

<u>Requirements</u>: The Motor Carrier Safety Assistance Program (MCSAP), authorized pursuant to these Parts, is a Federal grant program for all states, territories and the District of Columbia. The goal of the MCSAP is to reduce CMV-involved accidents, fatalities, and injuries through consistent, uniform, and effective CMV safety programs by setting forth the conditions for participation. MCSAP promotes and provides incentives for the adoption and uniform enforcement of safety rules, regulations, and standards compatible with the FMCSR and Federal Hazardous

Material Regulations (HMR) for both interstate and intrastate motor carriers and drivers.

To receive Basic Program Funds, a state must:

- a. Adopt and enforce state laws that are compatible with the FMCSR and HMR;
- b. Prepare a Commercial Vehicle Safety Plan (CVSP), which reflects a performance-based program;
- c. Adopt reporting standards and forms required by the FMCSA to record safety-related data obtained by work performed under the CVSP.

<u>Notes</u>: MCSAP represents a substantial, implemented model from which a potential bus safety regulatory framework may borrow. While all 50 states, the District of Columbia and U.S. territories have enacted statutes and regulations compatible with the FMCSR to regulate intrastate carriers, almost all these jurisdictions have adopted the 49 CFR Part 390.3(f)(2) governmental entity exception. (*See* Part II, for more explanation.) In general, in addition to CDL requirements, the states and territories have in whole or substantially adopted the following FMCSR:

- a. Part 390 FMCSR, generally
- b. Part 391 Qualifications for Drivers (including medical examinations)
- c. Part 393 Parts and Accessories Necessary for Safe Operation
- d. Part 395 Hours of Service
- e. Part 396 Inspection, Repair, and Maintenance (including Appendix G, Minimum Periodic Inspection Standards)

(See, Part II, for explanation of these regulations.)

C. National Highway Traffic Safety Administration

NHTSA has a legislative mandate to issue Federal Motor Vehicle Safety Standards (FMVSS) and regulations to which manufacturers of motor vehicle and equipment must conform and certify to compliance. These standards and regulations are minimum safety performance requirements for motor vehicles or items of motor vehicle equipment. These requirements are specified in such a manner "that the public is protected against unreasonable risk of crashes occurring as a result of the design, construction, or performance of motor vehicles and is also protected against unreasonable risk of death or injury in the event crashes do occur." NHTSA's FMVSS pertaining to buses can be found at *49 CFR Part 571*, and include the following:

- a. Location and indication of dashboard controls and displays
- b. Transmission shift lever sequence, starter interlock and transmission braking effect
- c. Windshield defrosting and defogging systems
- d. Windshield wiping and washing systems

- e. Anti-lock brakes and stopping distance requirements
- f. Brake hoses
- g. Lamps, reflective devices, and associated equipment
- h. Rearview mirror
- i. Hood latch system
- j. Theft/rollaway protection
- k. Motor vehicle brake fluids
- 1. Pneumatic tires
- m. Tire selection and rims
- n. Air brake systems
- o. Accelerator control systems
- p. Light vehicle brake systems
- q. Occupant protection in interior impact
- r. Head restraints
- s. Impact protection for the driver from the steering control system
- t. Steering control rearward displacement
- u. Glazing materials
- v. Seating systems
- w. Occupant crash protection
- x. Seat belt assemblies and anchorages
- y. Child restraint systems
- z. Roof crush resistance
- aa. Bus emergency exits
- bb. Windshield zone intrusion
- cc. Fuel system integrity
- dd. Flammability of interior materials

D. National Transportation Safety Board

This independent Federal agency is mandated to investigate every civil aviation accident in the U.S. and significant accidents in the other modes of transportation, including transit. It also conducts special investigations and safety studies, and issues safety recommendations to prevent future accidents. The rules of the NTSB are located at 49 *CFR, Chapter VIII*.

A NTSB Special Investigation Report was issued on November 17, 1998 entitled *Transit Bus Safety Oversight* (NTSB/SIR-98/03) that has prompted this study. Specific recommendations of the investigation to the U.S.DOT included the following:

- "Collect accurate, timely, and sufficient data so that thorough assessments can be made relating to transit bus safety.
- "Evaluate the collected data, as part of the oversight program, to identify the underlying causes of transit bus accidents that could lead to the identification of safety deficiencies at transit agencies.

• "Develop, in cooperation with the American Public Transit (now Transportation) Association, the Community Transportation Association of America, and the American Association of State Highway and Transportation Officials, a model comprehensive safety program(s) and provide it to all transit agencies."

III. FEDERALLY FUNDED TRAINING PROGRAMS

A. <u>Transportation Safety Institute</u>

TSI is an element of the U.S.DOT's Research and Special Programs Administration located in Oklahoma City that provides training related to all transportation modes. The Transit Safety and Security Division of TSI is the training unit for the FTA's Office of Safety and Security. It provides a variety of courses and seminars to heighten industry awareness of the risks to public safety and security in the areas of human factors, operational practices, policies, procedures, and compliance with regulations. Examples of courses relevant to bus safety include:

- Accident investigation, analysis and prevention
- Alternative fuels safety
- Bus operator training for instructors
- Hazard identification and resolution
- Fatigue awareness
- Substance abuse program management and compliance
- System safety concepts
- State safety oversight compliance
- Transit industrial and workplace safety
- Fire/Life safety seminars
- Transit system security.

The following specific courses are either under development or being revised:

- Bus System Safety (being developed)
- Bus Collision Analysis (being developed)
- Safety Evaluations of Alternative Fuels Facilities and Equipment (being revised)
- Emergency Response and Access to Alternative Fueled Vehicles (being revised).

Courses are offered at TSI in Oklahoma City as well as being conducted at various transit agencies throughout the country. Most courses are provided free for Federal and state agencies and FTA grant recipients, but a materials fee is charged. Some courses are only offered on a cost-recovery basis.

Certificates are issued to participants who successfully complete courses. In addition, the FTA and the TSI Safety and Security Division have established a certification program for Transit Safety and Security Practitioners.

B. <u>National Transit Institute</u>

Funded by a grant from the FTA, NTI's mission is to provide training, education, and clearinghouse services in support of public transportation and quality of life in the United States. NTI was established in 1992 at Rutgers, The State University of New Jersey. Based on industry-defined needs, a variety of training and educational resources are provided to the transit industry. They are provided free to transit agencies and transit unions. Three types of training are provided – worker-to-worker, train-the-trainer, and direct training. NTI's resources include programs to improve workplace health and the safety of transit workers. There are courses, a resource guide, a resource CD-ROM, and hazard factsheets.

IV. PRIVATE ORGANIZATION OVERSIGHT

A. American Public Transportation Association

This transit industry organization represents bus, rapid transit and commuter rail systems, and entities responsible for planning, designing, constructing, financing and operating transit systems that carry over 90% of the transit passengers in the U.S. and Canada. APTA's staff efforts related to safety and security are led by the Director of Operations, Safety & Security Programs, who is participating in the FTA Transit Bus Safety Program.

APTA has developed and provides a *Bus Safety Management Audit Program* (BSMP) for its members for a fee based on system size. The BSMP is a comprehensive, 26-point framework for instituting and complying with system safety best practices. APTA also has an extensive committee structure that includes the Bus Safety Committee (that includes guidance of the Bus Safety Management Program) and a Small Operations Steering Committee.

The BSMP is based on the proven methodologies of APTA's well-established Rail Safety Audit Program on which the FTA State Safety Oversight of Rail Fixed Guideway Systems Program was modeled. APTA also has a Commuter Rail Safety Management Program, and all three safety audits programs are based on a similar model that has proven effective in its design and application. As part of the BSMP, APTA provides guidance and consultation to bus agencies to develop, institute and maintain a system safety plan designed for their unique systems, plus triennial on-site audits to ensure compliance and develop internal safety expertise. Program elements include the following:

- Hazard identification and resolution
- Accident & incident investigation and reporting
- Emergency response planning, training and coordination
- Safety data acquisition and analysis
- Configuration management
- Inter-departmental coordination

- Employee safety programs
- Drug and alcohol abuse programs
- Contractor safety coordination
- Security

The BSMP is scaled to each agency depending on size. During the initial three years in the program, APTA system safety experts meet with each agency three times, for a total of six days for small systems, eight days for medium-sized systems, and twelve days for large systems. APTA provides the following services:

- Introductory Visit includes familiarization with the operations, an audit program overview for staff, and a preliminary evaluation of system safety program readiness
- Site Safety Audit includes management interviews, random audits of operations and maintenance, document collection and review, configuration management system, and operational site inspections, as well as audit entry and exit conferences
- Follow-up Audit Visit verifies the implementation of recommendations made during the audit visit and critique of progress, as well as any new safety programs and management initiatives
- Off-Site Resources include unlimited consultation on the industry's best practices; invitations to APTA system safety seminars; access to APTA peer reviews, technical evaluations, panels of inquiry, accident investigation; and system safety publications.

A Regional Program has been adapted for small systems with 50 or fewer vehicles. Within the Regional Program, a minimum of three such transit systems located within close proximity of each other can constitute a region and may jointly attend preparatory/pre-audit meetings at a common, central location.

APTA believes that the primary purpose for the existence of a transit system is to move people safely. In order to accomplish this goal, an individual transit system must be able to identify all hazards in order to eliminate, minimize or control them. In addition, all safety-related responsibilities must be identified. These responsibilities ideally would be delegated to the proper units within the organization. Such units would be provided adequate resources to carry out their respective responsibilities. A transit system has the responsibility of applying operating, technical and management techniques and principles to the safety aspects of the system throughout its life cycle to reduce hazards to the lowest practical level through the most effective use of available resources. This process is known as "system safety".

A transit system establishes a System Safety Program Plan (SSPP) by formalizing this process in a written document. APTA has produced a document to facilitate this process, *Manual for the Development of Bus Transit System Safety Program Plans*, to assist its

members in developing and implementing SSPPs designed for the specific needs of each bus transit system. This Manual also serves as the baseline for the BMSP and the related safety audit. As part of the triennial audit, APTA examines the following cumulative system safety characteristics:

- Does the transit system have a SSPP that is in conformance with the APTA *Manual for the Development of Bus Transit System Safety Program Plans*?
- Has the transit system's SSPP been fully implemented?
- Is the transit system conducting an internal safety audit program to identify, track, and resolve safety program deficiencies?

APTA believes that the net result to the participating transit systems will be an improved ability to know whether adequate attention is being given to safety considerations in the continuing operation of their systems. While the BSMP will not evaluate or audit actual physical conditions of the transit system, it will examine the safety management practices of the participating systems, and will help each system to determine if its own System Safety Program is up to accepted contemporary practice.

B. <u>Community Transportation Association of America</u>

While APTA tends to represent the larger transit agencies, CTAA is an association of organizations and individuals that provide a network of community-based agencies and coordinated services to fill the gap that exists between the private automobile and traditional mass transit.

In addition to providing a variety of technical assistance, training, clearinghouse and communications functions, they disseminate information under the Rural Transit Assistance Program (RTAP). RTAP is funded by the FTA and includes a national and state programs that work together in a partnership. The national RTAP is administered by the American Public Works Association (APWA) in a consortium arrangement with CTAA.

CTAA believes that for every community transit organization, safety is the top priority. Transit systems are concerned about the safety of their passengers, drivers and operating personnel, and their maintenance staff. This concern extends to the safety of the vehicles and facilities. Training, preparedness, and an organization-wide safety consciousness are critical to making "safety first" a reality at CTAA.

In support of this concern, CTAA has developed a training and safety management review program called "Transit Safety Plus" that is analogous to APTA's BSMP. Since 1998, CTAA has been working with the NTSB, the Colorado DOT, the Colorado Association of Transit Agencies on Transit Safety Plus to assure the safety of the nation's public and community transit systems in terms of:

• Compliance with safety-related laws and regulations

- Adherence to laws and procedures
- Documentation that proper safety practices are followed
- Training that assures safe procedures are a daily routine.

For additional information, see Colorado's summary page under state regulations. Transit Safety Plus is a voluntary program built around an on-site review, where members of the Transit Safety Plus team visit the transit organization. A typical review is two days in duration, and follows the following sequence:

- Structured interviews with the transit organization's manager and key personnel
- One or more "ride-alongs" and driver interviews
- On-site report preparation
- On-site exit interview and oral report to the general manager
- A written report detailing the most successful aspects of the organization's training and safety program, and making suggestions for improvements
- A customized training and safety toolkit, including the specific resources and materials that the Transit Safety Plus reviewer determines will help improve the safety practices of the organization.

This program is not a "safety audit program." It does not produce findings, calculate safety ratings, or otherwise grade a transit system on its safety program. Instead, CTAA's Transit Safety Plus focuses on identifying the strategies for helping transit organizations better fulfill their own commitment to safe transportation.

The program review team is comprised of experts with a wide range of expertise, including consultants and the CTAA Assistant Director. There are fixed cost-plus travel expenses for the two reviewers. There is a lower fee if the organization does not perform their own maintenance and for CTAA members. Special pricing is available for multiple-site reviews contracted by state agencies, state associations, or other consortia involving five or more transit organizations.

CTAA also has the following professional certification programs that are guided by a panel of industry leaders as well as CTAA's own staff:

- Certified Community Transit Manager
- Passenger Service and Safety Driver Certification
- Professional Dispatching and Scheduling
- Vehicle Maintenance Management and Inspection (for safety and reliability).

C. American Association of State Highway and Transportation Officials

This organization of state highway and transportation officials is an advocate for excellence in multimodal and intermodal transportation that provides a foundation for a strong economy and an enhanced quality of life.

AASHTO administers the Multi-State Technical Assistance Program (MTAP) that provides a variety of networking and technical exchange services to state transit agencies. Forty-three states participate in MTAP's bi-annual meetings, committees and other communications and exchange programs. MTAP serves as an advisor to the AASHTO Standing Committee on Public Transportation (SCOPT). SCOPT is responsible for developing voluntary standards, guidance, and policy recommendations for public transportation issues and programs. SCOPT covers issues pertaining to urban and rural mass transit, commuter rail, intercity bus, ridesharing, paratransit, and specialized transit facilities for the elderly and disabled.

D. American Bus Association

The ABA is the trade organization of the intercity bus industry and represents the industry's interest in Washington, DC. It represents approximately 800 motorcoach and tour companies in the United States and Canada that operate charter, tour, regular route, airport express, special operations and contract services (commuter, school, transit). Another 2,300 members represent travel, tourism, and suppliers. The ABA is a member of the Commercial Vehicle Safety Alliance (CVSA).

The ABA Safety Committee consists of four subcommittees – Driver, Regulatory, Vehicle Maintenance, and Driver/Mechanic Competitions. Safety Committee activities include:

- Reviewing safety and regulatory issues of concern to the intercity bus industry
- Fostering a working relationship with the FMCSA and the CVSA.

The ABA Office of Government Relations keeps members apprised of all safety and regulatory issues of interest to the intercity bus industry. It addresses safety issues by:

- Assisting ABA member in complying with the FMCSRs
- Preparing and delivering testimony to the U.S. Congress on commercial motor carrier and bus safety issues
- Preparing comments on Federal rulemaking with implications for motorcoach safety
- Keeping members apprised of the latest safety technological advances
- Actively participating in safety conferences and on committees, including the CVSA
- Working with the FMCSA's Motorcoach Program leaders and Bus Technical Assistance Group (TAG) on a variety of safety issues.

E. <u>United Motor Coach Association</u>

UMA is comprised of more than 900 professional bus and motorcoach companies and more than 200 associate members (suppliers and manufacturers). UMA states that

"safety is the most important aspect of the motor transport of passengers, surely America's most precious cargo. The UMA is a strong supporter of stringent safety standards for America's passenger carriers."

UMA advocates understanding and using the information contained in FMCSA's **SA**fety Fitness Electronic Records (SAFER) System database to assure that a prospective carrier does not have an unsatisfactory safety rating. They have published the *Consumer's Guide to Purchasing Motorcoach Services* and provide a direct website link to the USDOT's Safety Ratings. UMA is also a member of the CVSA.

F. <u>Commercial Vehicle Safety Alliance</u>

CVSA is an international association of Federal, state, and provincial officials responsible for the administration and enforcement of motor carrier safety laws in the United States, Canada and Mexico. CVSA works to promote uniformity compatibility and reciprocity of commercial vehicle inspections and motor carrier safety enforcement activities in North America.

CVSA Associate Membership is open to commercial carriers (trucks and buses), allied organizations and trade associations, private and public research and academic institutions, and companies and firms that provide products and services relative to commercial vehicle safety. CVSA sponsors international conferences and workshops; have technical working committees; facilitate government contacts; provide periodic newsletters; develop training and educations materials; and publish the annual CVSA Operations Manual, an invaluable resource on a variety of safety related topics.

G. National Safety Council

The NSC is a nonprofit, non-governmental, international public service organization dedicated to improving the safety, health and environmental well being of all people. The NSC helps to educate, influence policy, and is a widely recognized, authoritative source for tracking and maintaining safety statistics for a variety of different areas, including motor vehicles.

The Council believes that incidents that cause unintentional injuries are not just random occurrences, but instead are the result of multiple conditions involving the interactions of machines and environments in which people live, work, drive, and play. The Council views what some call "accidents" as unplanned, unwanted and nearly always preventable events. They have provided voluntary defensive driving training programs for transit systems.

V. SUMMARY

The table on the following page provides a summary of the regulatory and oversight initiatives that were identified in this report. Substantial Federal oversight and industry

guidance exists for public rail and fixed guideway transit systems and for private motorcoach (especially interstate) operations as regulated by the FMCSA. Public transit bus operations, however, are subject to very limited Federal safety regulation for narrowly defined areas (Bus Testing, Drug and Alcohol Testing, Triennial Reviews, Americans with Disabilities Act, etc.) and safety oversight is limited to the voluntary initiatives of APTA and CTAA.

At the national level, four transit bus safety regulatory and guidance frameworks are apparent:

- 1. The FMCSA MCSAP approach
- 2. The FTA Rail State Safety Oversight (49 CFR Part 659) approach
- 3. The APTA Bus Safety Management Program approach
- 4. The CTAA Transit Safety Plus Program approach.

Each of these four mechanisms is applied in a different manner. The first two are regulatory in nature and rely on state enforcement of safety regulation and oversight responsibility. The FMCSA approach sets national standards that are applied equally in all states. The FTA approach places the prime standard-setting authority with the states under more general Federal requirements. The APTA and CTAA approaches, as alternatives, provide for voluntary self- assessment of the transit bus operations (with the exception of the FTA and FMCSA requirements that apply, as noted previously) with industry organizations providing technical assistance and guidance of the industry's safety efforts.

The following table depicts the regulations and guidance that exist for transit bus safety by FTA, FMCSA, NHTSA, APTA and CTAA. By comparing transit bus to rail fixed guideway under FTA, it is apparent that gaps exist in Federal regulation and governmental oversight. Future efforts of the *Program* will review oversight that exists at the state and local level and alternative models for more uniform national oversight.

Summary of Federal Regulatory Oversight and Industry Initiatives Related to Transit Bus Safety

Agency/	Safety		Transportation		
Organi-	Oversight	Primary	Modes		
Zation	Examples	Focus	Addressed	Comments	
FEDERAL REGULATION AND OVERSIGHT					
FTA	Rail State	Grant	Transit	Some safety requirements relate to	
	Safety	Making		all grantees, but only non-railroad	
	Oversight			fixed guideways require oversight	
FMCSA	Motor Carrier	Safety	Commercial	Safety regulations required for	
	Safety	Regulatory	Trucks and	buses over 15 person capacity,	
	Assistance		Motorcoaches	including CDL	
NHTSA		Safety	All that Use	Some Federal Motor Vehicle	
		Regulatory	Highways	Safety Standards apply to buses	
NTSB		Safety	All	Concern over lack of uniform	
		Oversight		transit bus safety oversight	
FEDERA	LLY-FUNDED	TRAINING P	ROGRAMS		
TSI		Safety	All Except	Many courses address system	
		Training	Railroad	safety and transit bus safety	
NTI		Training	Transit	Mostly worker health and safety	
PRIVATE	C ORGANIZAT	ION INITIAT	IVES		
APTA	Bus Safety	Assistance	Transit – Larger	Bus Safety Management Program	
	Management	& Education	Public Systems	is voluntary for a fee	
CTAA	Transit Safety	Assistance	Transit – Smaller	Transit Safety Plus Program is	
	Plus	& Education	Public Systems	voluntary for a fee	
AASHTO		Assistance	Motorcoaches and	MTAP is for state government	
-MTAP		& Education	Transit	transit agencies, usually in DOTs	
ABA		Assistance	Private		
		& Education	Motorcoaches		
UMA		Assistance	Private		
		& Education	Motorcoaches		
CVSA		Assistance	Private Trucks &		
		& Education	Motorcoaches		
NSC		Assistance	All Transportation	Has provided defensive driving	
		& Education	Other Areas	programs for transit systems	

Categories of	FTA	FTA	FMCSA	NHTSA	APTA	СТАА
Oversight	Bus	Rail				
SSPPs Required		Χ			Χ	
Safety Evaluations		Χ			Χ	Χ
Audits/Inspections		Χ	X		Χ	Χ
Fitness-for-Duty		Χ	X			
Security Included		Χ			Χ	Χ
Vehicle Standards			X	X	Χ	
Vehicle Testing	Χ					
Drug & Alcohol Testing	Χ	Χ			Χ	
Certification/Licenses			X		Χ	
Accident Reporting/	X	Χ	X		X	X
Investigations						
Working Conditions					Χ	Χ
FTA Grant Compliance	Χ	Χ				

Summary of Bus Safety Regulatory and Oversight Frameworks and Comparison to Rail Transit

PART II:

State Statutes & Regulations

I. INTRODUCTION

A. <u>UMTA's "State Regulation and Oversight of Public Transit Safety"</u>

In 1986, the Urban Mass Transit Administration (UMTA) published "*State Regulation and Oversight of Public Transit Safety*" (UMTA-DC-06-0477-86-1/DOT-TSC-UMTA-88-7) which documented what oversight activities states engaged in at the time to assure that public transit was as safe as possible. That document covered state legislation and practices with respect to transit bus and rail system safety in the 50 states, the District of Columbia and Puerto Rico.

However, since that document was published, FTA was mandated by Congress to promulgate rules regarding the oversight of rail fixed guideway systems not regulated by the Federal Railroad Administration. In December 1995, FTA issued 49 CFR Part 659, *"Rail Fixed Guideway System; State Safety Oversight"* which requires states to designate a state agency to oversee their rail fixed guideway systems' safety practices. The primary responsibility of the oversight entity is to require and monitor the implementation of System Safety Program Plans (SSPP) by rail transit agencies. If states do not meet the comprehensive safety requirements of Part 659, the FTA can withhold up to 5% of a fiscal year's apportionment under FTA's formula for urbanized areas. The impetus for the promulgation of Part 659 was the fact that before December 1995 there was a complete void in oversight authority in the various jurisdictions in the United States with respect to rail transit safety.

B. State Regulation of Transit Bus Safety in 2001

In contrast, there is presently no comprehensive, unified Federal involvement in the area of transit bus safety, particularly in the case of publicly operated carriers. Today, the most comprehensive oversight authority the Federal and state governments have relative to transit bus safety is through the Federal CDL program implemented by the respective state Departments of Transportation (DOT). In addition, pursuant to the FMCSA MCSAP, the State Police of the various states and territories enforce FMCSR on buses in inter- and intrastate commerce. However, along with Federal drug and alcohol regulations, only the CDL requirements apply to publicly operated vehicles. Therefore, a substantial number of transit buses in the U.S. today are subject to little or no statutory guidance in the area of safety, for example, in terms of vehicle standards and inspections or driver hours of service. Essentially, with the existence of the adopted FMCSR, state motor vehicle codes, public utility statutes, department of safety regulations, transit authorities, and state transit departments which administer grantees and subgrantees of public funds, a loose and inconsistent bus safety framework exists across the U.S. and its territories today.

II. STATE TRANSIT BUS SAFETY STATUTES & REGULATIONS

A. <u>Methodology</u>

The objective of Part II is to identify and examine the transit bus safety statutes and regulations of the U.S. and its territories. To accomplish this, various internet databases such as state websites and legal databases were utilized and, with the assistance of the AASHTO Multi-state Technical Assistance Program (MTAP)—an initiative that provides a technical information exchange forum for state transit agencies—representatives of the 56 jurisdictions covered in this report were contacted and asked to review and complete a survey which covered the following topics:

- The existence of explicit transit bus safety policies
- The existence of specific agencies designated to carry out the oversight of transit bus safety
- The requirement of SSPPs
- The requirement of a state permit with safety criteria to operate transit buses
- The existence of transit bus and equipment safety standards
- The existence of CDL requirements above that required by the Federal government
- The existence of fitness-for-duty requirements
- The requirement of vehicle, facilities and driver performance inspections/monitoring
- The existence of accident/incident reporting/investigation requirements
- The requirement to address security concerns of personnel and passengers.

The researchers initially used the assistance of the MTAP Alert system, an e-mail information request system in which queries can be made to all MTAP members (usually one state DOT transit official served as the state's MTAP contact) on issues facing the transit industry. Initially, an explanation of the *Program* and a request for assistance was transmitted to the MTAP members by an MTAP Alert sent by the AASHTO MTAP administrator in early December 2000, followed shortly thereafter by the survey questions. A clarification of the survey questions was sent by the MTAP administrator in early January 2001 as it had become apparent that certain questions were unclear to some MTAP members. In January 2001, the researchers also followed up with all the MTAP members by phone and, as not every state and territory is an MTAP member, other means were used to locate appropriate parties to answer the survey questions in non-MTAP jurisdictions. The FTA, APTA and CTAA provided assistance in locating these latter representatives. By the end of January 2001, at least 56 contacts had been made. In addition, when necessary to clear up issues regarding state implementation of FMCSR, the researchers made inquiries to the MCSAP Lead Agencies of various states. Ultimately, for certain jurisdictions, the researchers were required to identify and consult with additional representatives to complete the surveys, sometimes requiring upwards of four additional contacts. As responses to the survey were received by the researchers, often clarifications of the answers were necessary for various reasons resulting in either additional phone calls or e-mails directly to the state contact(s).

In addition to contacting state representatives, the researchers also engaged in independent study of state statutes and regulations. From time to time, statutes were often consulted to clarify or confirm responses received by the various jurisdictions. Moreover, on one occasion (for the state of Pennsylvania), the researchers were assisted by various state representatives to discuss the jurisdictions of their respective state agencies, how they interacted and how the rules and regulations of their state are, in actuality, carried out.

The state contacts were eventually given the opportunity to see how the information they provided, via the surveys, additional queries and conversations, was eventually represented in the report and were given time to comment, and add or delete information as appropriate.

The goal of the survey was to gather as much information about the safety legislation and practices of each individual jurisdiction as possible. While each state has regulations adopted for the MCSAP, the preponderance of the states have limited to no legislation regulating publicly operated transit bus safety due to the FMCSR governmental exception 49 CFR Part 390.3(f)(2). Recognizing this condition, the researchers requested, when jurisdictions did not have legislation with respect to the various questions in the survey, more information on whether states acted to compensate for the lack of statutory mandates. For example, if a state did not mandate vehicle inspection, did the state DOT inspect the vehicles of its grantees or subgrantees by agreement or contract? Or did the state distribute "Best Practice" manuals to operators? Or were there bills in the state legislature with regard to a particular bus safety issue? Basically, the researchers were attempting to get a holistic reading of the state of transit bus safety in each jurisdiction.

Once again, it is important to stress that the goal of the *Program* is NOT to create a bus analogue to the rail fixed-guideway state safety oversight program (49 CFR Part 659). Rather, the purpose of this initiative is to compare and contrast current approaches to bus safety regulation and oversight in the United States and its territories. Ultimately, potential models for a national framework will be presented that could provide transit bus safety practice guidance to either large or small transit bus entities. While the categories of analysis for the study are drawn from the template of the rail oversight regulations, the *Program* fully acknowledges the fundamental differences between the rail and transit bus modes. Therefore, any eventual consideration of potential models for the guidance of transit bus safety will take into account the needs unique to transit bus operations.

B. Potential Limitations

The researchers were largely dependent upon state contacts for their assistance in gathering information about their respective states, and are grateful for their time, patience and assiduousness. However, the quality of much of the data represented in this report depends on the quality of the information received from the jurisdictional representatives. Understanding how transit buses are regulated today, as the researchers have uncovered, is an extremely difficult undertaking at minimum, even when there is seemingly a single oversight entity for transit bus safety and a comprehensive statutory framework in existence in a jurisdiction. The researchers have attempted to provide the truest and most contemporary picture of the state of transit bus safety in the U.S. and its territories. However, to comprehensively understand how transit bus regulation *actually* works in each jurisdiction would require a more significantly robust study than is presently able to be conducted.

C. Using this Part

The analysis of the data collected from the jurisdictional representatives is presented in two sections:

1. Trend Analysis Summary Matrix:

The following section will provide a summary of the responses obtained from the surveys and subsequent research findings. A matrix further summarizing this information is provided indicating whether statutes and/or regulations exist with respect to the different categories of analysis. Certain categories on the matrix have been subdivided into "Government" and "Intrastate" headings to indicate whether statutes apply not only to intrastate carriers, but whether the law applies to the publicly operated carriers as well. As the reader will notice, two categories of analysis listed above are not included in the summary of the response and in the matrix: the existence of additional CDL requirements and Security mandates. These categories were omitted from the matrix as there were no indications that states enacted substantial CDL regulations stronger than the Federal versions in the 56 jurisdictions surveyed, nor that any jurisdictions had any comprehensive security planning statutes. In addition, the question which included Accident Reporting and Investigation was split into two separate columns for clarity.

2. Individual State Summaries:

While the Summary Matrix provides a comprehensive overview of the state of transit bus safety regulations in the 56 jurisdictions, it is still a binary summary of "yes" and "no" responses. In contrast, the individual jurisdictional summaries (see Appendix) provide, in many instances, a more in-depth view of the individual states and territories. For example, while Ohio lacks any legislation pertaining to publicly operated transit bus safety, the Notes section of the Ohio's summary describes the state's *Model Vehicle Safety Program*. The state summaries can provide a more detailed picture of the safety practices of each state pursuant to legislation, contract, manuals, etc.

III. SUMMARY OF SURVEY RESULTS

General Findings

In general, outside of the issuance of FMCSR, CDL and drug and alcohol requirements, there has been relatively little change in state regulation of transit bus safety since the 1986 UMTA report was published. As in 1986, today, very few jurisdictions have legislated to comprehensively assure transit bus safety. Unchanged since 1986, New York, California, Massachusetts and New Jersey remain leaders in transit bus safety regulation. While it is no coincidence that these are among the leading transit states in the country, they have provided templates upon which other jurisdictions may build.

This is not to say there were no notable changes since 1986. Two states which have distinguished themselves from the majority of the country are Florida and Colorado. In the early 1990s, Florida enacted comprehensive transit bus safety legislation covering publicly operated carriers. The legislation not only clearly states Florida's commitment to public transportation safety (as in NY), but also implements SSPP, inspection, fitness-for-duty, and vehicle standard requirements. Colorado took a simpler approach to covering publicly operated carriers—it did not adopt the FMCSR exempting governmental entities, 49 CFR 390.3(f)(2).

The following is a summary of the findings from the data collected:

- 1. Existence of Overall Transit Bus (or Public Transit) Safety Policy Few states were able to identify legislation which explicitly addressed a commitment to transit bus safety. New York and Florida are two states that were found to have statements indicating a governmental commitment to public transportation safety. Florida enacted legislation in the early 1990s that brought it in the forefront of states in terms of transit bus safety regulation, rivaling states like New York in terms of comprehensiveness in scope for such planning. New Jersey also had a strong policy statement that focused on bus safety in general. The statutes of the other five states that were found to have governmental policies spoke to goals of highway or bus safety, either for private or public users, or both.
- 2. Existence of a Particular Oversight Agency All states have at least two agencies charged with transit bus safety including the state DOT and the State Police. Other agencies that may be listed in the state summaries are Departments of Safety, Public Utility Commissions, a Department of Revenue & Taxation, and a Department of Economic Development. While the State Police of the various jurisdictions is authorized to perform vehicle inspections and check for violations of motor vehicle codes, they are also often the MCSAP Lead Agencies.
- 3. **Requirement of SSPPs** Only two states, New York and Florida, require carriers to complete SSPPs. However, only Florida mandates the requirement of publicly owned carriers.

- 4. **Requirement of State Permit with Safety Requirements to Operate** Only four states (Massachusetts, New Jersey, Pennsylvania and New York) presently require operators to obtain a permit that mandate certain safety requirements to continue service.
- 5. **Requirement of Vehicle and Equipment Safety Standards** All jurisdictions have within their vehicle codes the requirements for basic equipment and continued compliance with these requirements, including (but not limited to):
 - Reasonably inflated, pneumatic tires with a certain level of traction
 - At least two brakes in working order
 - A horn, with audibility at a certain distance
 - Mirrors
 - Windshields with glazing
 - Safety Belts
 - Lamps
 - Safety Equipment, such as flares

These vehicles code requirements comply with the FMCSR 49 CFR Part 393 (Parts and Accessories Necessary for Safe Operation).

- 6. Existence of Fitness-for-Duty Requirements Every jurisdiction has adopted the FMCSR 49 CFR Parts 391 and 395 (Driver Qualifications and Hours of Service). Most jurisdictions adopted the hours of service, medical examination and records check requirements for drivers with little or no modification. However, only five states have enacted legislation which mandates public carriers to follow fitness-for-duty requirements (California, Colorado, Florida, Massachusetts, and New York).⁶
- 7. Requirement of Periodic Transit Bus and Facility Inspections All jurisdictions have adopted the FMCSR mandating periodic inspection for its intrastate carriers (49 CFR Part 396). However, sixteen jurisdictions (29%) had laws that are applicable to publicly owned vehicles.
- 8. **State Inspections** Twenty-four jurisdictions (43%) have state vehicle inspection programs. Other jurisdictions rely on self-inspections or inspections done by local garages and facilities.

⁶ 49 CFR Part 395 (Hours of Service) provides that no motor carrier shall permit or require any driver used by it to drive nor shall any such driver drive more than 10 hours following 8 consecutive hours off duty, or for any period after having been on duty 15 hours following 8 consecutive hours off duty. No motor carrier shall permit or require a driver of a commercial motor vehicle to drive, nor shall any driver drive, regardless of the number of motor carriers using the driver's services, for any period after having been on duty 60 hours in any 7 consecutive days if the employing motor carrier does not operate commercial motor vehicles every day of the week; or having been on duty 70 hours in any period of 8 consecutive days if the employing motor carrier operates commercial motor vehicles every day of the week.

- 9. **Requirement to Report/Investigate Accidents** All jurisdictions have a requirement within their respective vehicle codes to report accidents involving, at minimum, injuries or fatalities. Usually, the local police are charged with investigating such accident. However, only New York has a governmentally-created entity with its specific purpose of investigating public transportation accidents: the Public Transportation Safety Board.
- 10. **Requirement to Monitor Driver Operating Performance** Only New York has a comprehensive drive-along, driver performance evaluation statute. This mandate is just one element of the various checks New York has on driver qualifications.

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PART III:

Local Regulatory Oversight of Public Transit Safety

I. BACKGROUND AND INTRODUCTION

This draft report has been prepared as part of Task 2 of the Federal Transit Administration's (FTA) Transit Bus Safety Program. Task 2 seeks to identify Federal, state, local and institutional regulations and oversight requirements that exist regarding transit bus safety. A previous draft report was prepared in December 2000 on Federal regulations and the oversight provided by national transit organizations. This report addresses local regulations and a companion report has been prepared for regulations emanating from the state level. The impetus for this task is to provide a baseline of information from which to develop alternative models for transit bus safety oversight *of Public Transit Safety* (UMTA-DC-06-0477-86-1, DOT-TSC-UMTA-88-7). This activity responds in part to the National Transportation Safety Board (NTSB) which recommended that FTA "assess and ensure the safety of transit bus operations that receive Federal funding" in *Transit Bus Safety Oversight Oversight* (NTSB/SIR-98/03, November 17, 1998).

Draft reports of each regulation/oversight level (national, state and local) are being prepared and distributed for review and comment. These draft reports will be followed by an overall draft final report summarizing and analyzing the full range of transit bus safety regulation and oversight that exists at all levels. After appropriate review and comment, the final report will be prepared and will be a resource for subsequent Transit Bus Safety Program tasks including:

- Development of a Model Transit Bus Safety Program (Task 3)
- Development of Public and Private Advocacy Partnerships (Task 4)
- Development of Technical Assistance Projects/Best Practices (Task 5).

This report describes the results to date to identify transit bus safety regulations that exist at the local level that are more stringent than those imposed by the Federal government or the state in which the transit operation is located. "Local" can refer to an area smaller than a state, such as a region of a state, a county, or a city. There are a few cases in which transit is operated as a multi-state endeavor, such as the Washington Metropolitan Area Transit Authority that operates in two states (MD and VA) and the District of Columbia, and the Bi-State Development Agency that operates in Illinois and Missouri. These have been reviewed to determine how possible differences in state requirements are accommodated by and affect the regional agency.

II. METHODOLOGY

It is not known whether there are any unique local transit bus safety regulations, but the mission of this task is to attempt to identify any that exist and to analyze those that are found. It must be recognized that the scope of local transit bus safety regulations does not include those policies, rules and standard operating procedures routinely established by transit operating agencies to guide their operations and maintenance activities. The local requirements, for which a search has been undertaken, are those of an entity independent of the transit operating agency.

The approach employed has been to survey knowledgeable and responsible people within the Federal government, national transit industry organizations, states, and a cross section of

localities. These have included FTA, Volpe National Transportation Systems Center, APTA, CTAA, representatives that have provided input on transit bus safety regulations existing within each state and territory, public transit officials in selected regions and cities, and others, as suggested. The question that has been asked is: "Are you aware of any locality that has transit bus safety regulations or requirements that are more stringent than those imposed by the Federal or state government?"

Once localities were found to have unique transit bus safety regulations, a series of questions was planned to be asked to ascertain their nature and extent. Unfortunately, only very limited safety requirements were found and a detailed set of questions was not appropriate.

III. FINDINGS AND RECOMMENDATIONS

In addition to all of the states and territories that were contacted for input on their regulations related to transit bus safety, many other sources were surveyed. The contacts and the information they provided are summarized in the table at the end of this Part. The result is that no unique local transit bus safety regulations have been identified. Thus, the questions developed and included in Attachment A were never utilized. Several sources reported, however, that it is not uncommon for local governmental units to have the authority to approve the following:

- Bus stop locations
- Streets on which buses can operate
- The speed limit of transit vehicles on dedicated streets.

In general, transit operating agencies and the local jurisdictions maintain a cordial working relationship with regard to transit route and stop locations to maintain safe service while minimizing adverse neighborhood impacts. In Philadelphia for instance, the City has the right to limit wide vehicles (trucks and buses) from streets with narrow travel lanes. In Pittsburgh, which operates a contraflow bus lane on an arterial street and several bus rapid transit facilities, the City sets speed limits for the vehicles (transit) that use them.

Of the Five cities that operate trolley buses (Boston, Philadelphia, Dayton, San Francisco and Seattle), only San Francisco indicated being governed by any regulation. The State of California has a regulation related to the clearances of high voltage overhead transmission lines that applies to the trolley bus system. San Francisco also stated that while, technically, the trolley buses are not considered motor vehicles, everyone treats then as being subject to the motor vehicle code.

The only additional source of transit safety oversight existing below the state government level is related to insurance pools. These are typically private associations operated on a statewide basis for the benefit of their members. State departments of transportation are often partners with the transit insurance pools and occasionally provide grants to support specific activities such as studies to initiate the pool organization and for the development of safety programs and best practices manuals. States that have been identified as having transit insurance pools include the following:

- California
- Connecticut
- Michigan
- Ohio
- Washington
- Wisconsin

Advantages consist primarily of economies of scale in the purchase of insurance coverage resulting in lower premiums, but several transit insurance pools provide technical assistance to their members as a risk management tool. The objective of the technical assistance is to promote safety and to reduce the potential for accidents and claims. Obvious benefits include the reduced impact of accidents through both direct costs of damages and claims, and the cost of insurance coverage. Initiatives of transit insurance pools related to improving safety include the following:

- Safety Audits
- Safe Driving Incentive Programs
- Ride Checks
- Accident and Incident Reporting Procedures
- Accident Investigation Procedures
- Accident Prevention Programs
- Employment Practices
- Safety Rodeos
- Vehicle Inspection Procedures
- Preventive Maintenance Procedures
- Emergency Management Procedures
- Safety Performance Awards
- Operator and Mechanic Training Programs
- Safety/Training Scholarship Fund

As an example of the structure and programs of transit insurance pools, three are documented as follows:

California Transit Insurance Pool (CalTIP)

CalTIP was formed through the cooperative efforts of California's public transit operators in response to the insurance crisis that faced the industry in the 1984-1986 timeframe. In 1985, the California Transit Association Executive Committee authorized the formation of an insurance committee and the preparation of a study of alternative methods of providing liability insurance coverage. The study included a survey of the members of which 32 responded and participated in the initial study. The study recommended that California's public transit operators join together and form a joint powers authority for the purpose of creating a self-funded insurance pool. In 1987, CalTIP began providing insurance services for its 12 initial members. Now there are 31 transit operators that have viable options to the constantly shifting insurance marketplace.

CalTIP has proposed a Safety and Loss Control Work Program with the following goals:

- Establish a basic safety and loss control training program for all members.
- Establish a minimum standard for safety and loss control measures, based on the training program, that must be met by all existing and new members.
- Establish a system that provides incentives for meeting or exceeding the set standards.
- Provide feedback to members on their safety performance in the form of regular causal trend analysis reports.
- Establish a resource of available safety and loss control information, including best practices recommendations, available training sources, and written materials.

The basic safety and loss control training program will be based on the following 18 critical safety areas that were identified in the loss control survey:

- Driver Selection
- Driver Training
- Driver Re-Training
- Driver Evaluation
- Mechanic Employment
- Mechanic Selection
- Mechanic Training
- Mechanic Re-Training
- Mechanic Evaluation

- Vehicle Inspections
- Vehicle Maintenance
- Bus Stops
- Incident/Accident Reporting
- Elderly and Disabled Passengers
- Handling Operation Emergencies
- Employee and Passenger security
- Risk Transfer
- CHP Inspections

CalTIP has adopted modules based on these critical safety areas as guidelines for its members, however, at this time no incentives are in place for compliance with the modules.

Washington State Transit Insurance Pool (WSTIP)

WSTIP is a risk sharing pool designed to offer Washington Public Transportation Benefit Areas the best liability and property protection available at the lowest possible cost. WSTIP members are not only covered for their property and liability exposures, they participate in the management, control and policy development of the Pool. Fourteen transit operating agencies are currently members of WSTIP. While there are no safety "requirements," WSTIP has established a set of Minimum Best Practices Recommendations and members sign a compact agreeing to adopt the Recommendations. WSTIP provides training and technical assistance to members in implementing the Recommendations and there is consideration regarding the imposition of incentive and penalties as a means of encouraging their implementation.

The Minimum Best Practices Recommendations include the following elements:

- Senior Leadership roles and responsibilities of the general manager or executive director
- Accident prevention Program requirements for a comprehensive and up-to-date accident prevention/safety program
- Workers Compensation policies and procedures
- Employment Practices includes employee handbook, safety orientation and mandatory training
- Operator Training includes classroom, on the road and refresher
- Mechanic Training initial and refresher
- Dispatch Issues security program including procedures and training
- Accident Investigation and Reporting Procedures written and training
- Accident Review Committee review for preventability
- Vehicle Inspections operator pre-trip and end of shift
- Preventive Maintenance per manufacturers' guidelines with quality control and monitoring of performance and compliance
- Emergency Management written Emergency Management Plan
- Premises Liability safety committee review of employee input and proper authorization from governing bodies for bus stop locations
- Other Issues paratransit ADA compliance, operator training, vanpool standards and contract requirements.

<u>**Transit Mutual Insurance Corporation of Wisconsin (TMi)**</u>

TMi began in 1986 as a non-traditional insurance corporation based on a study funded by the Wisconsin Department of Transportation (WISDOT). From the beginning, TMi has been very innovative and has placed strong emphasis on safety. Unlike traditional insurance providers, TMi offers technical assistance in safety, generally at no charge. They promote and encourage safety among their members (currently 19), thereby reducing both the number of accidents and the dollar value of those accidents. Safety and performance are reflected in the Premium Allocation Formula, 35% of which is based on reward (for safe performance) and penalty (for poor performance) factors.

TMi offers its members the following safety-related programs:

- Safety Audits every two years at no cost
- Ride Checks every two years at no cost
- Driving Incentive Program that provides cash awards to employees
- Participation in the Annual TMi Rodeo with cash prizes
- Most Improved System Program for reduced claims during the year

- Scholarship Program to partially fund safety related training
- Annual Training Seminars on a variety of topics at no cost
- Transfer of information/services from the National Safety Council and CTAA
- Free use of training tapes and materials from TMi's library.

WISDOT has also supported the development of the Bus Safety Manual that is a source of guidance for TMi members. It represents a "model safety program" and "best practices," but is not intended as a set of mandatory "requirements." The Bus Safety Manual addresses the following topics:

- Personnel policies, hiring and communications
- Vehicle and Equipment Needs specifications, analysis and safety equipment
- Maintenance vehicle, facility, training, evaluations and incentives
- Operations vehicle safety inspections, security, emergency procedures, training, evaluation and incentives
- Accidents procedures, investigation, review committees, safety process and work related injuries

Through the TMi, safety has become a priority for their member transit operating agencies. While they make recommendations and not demands, they are able to exert sufficient pressure to achieve the desired safety performance results for the benefit of all of their members. As a last resort, a member could be voted out of the pool, but to date this extreme measure has never been taken.

None of the transit insurance pools reviewed impose safety "requirements" on their members. Rather, they promote guidelines, best practices, and various incentives to "encourage" safety. While no local transit bus safety regulations have been identified, the transit insurance pools offer a potential model of safety oversight that could be an element of a comprehensive FTA transit bus safety program. Insurance industry organizations (including the transit insurance pools), in addition to the national transit industry organizations (APTA, CTAA, AASHTO-MTAP), are prime candidates for forging public-private partnerships to improve transit bus safety. Task four of the FTA Transit Bus Safety Program will address this issue and seek to develop effective public private partnerships initiatives.

Summary of Contacts and Results

The information on the following table is in response to the question: "Are you aware of any locality that has transit bus safety regulations or requirements of oversight entities that are more stringent than those imposed by the Federal or respective state government?"

Agency/Organization	Contact	Input Provided
States and Territories	Numerous	All contacted reported that they were not aware of any unique local requirements.
CTAA-Gov't Affairs	Chris Zeilinger	No
APTA-Safety (Bus Safety	Greg Hull	No, but transit operating agencies could develop polices, rules, SOP, training,
Management Program)		safety programs, etc. that could exceed requirements.
City of Philadelphia-	Chris Zearfoss	No, but the State of PA has given the City the authority to regulate the movement
Transit		of >96" wide vehicles on its streets and to approve the location of transit stops.
NY Public Transportation	John Fabian	No, but we should consider standards for driver seat belt use, mirrors and right
Safety Board		side guards to inhibit people falling under the bus wheels.
Muni (SF, CA)-Safety	Brian Cunningham	No, but the clearances of trolley bus wire fall under a state regulation for high
		voltage transmission lines. Technically trolley buses are not considered motor
		vehicles, but everyone treats them as though they are part of the MV Code.
Volpe Center-Safety	Bob Aducci	No
Bi-State (IL/MO)-Safety	Pamela McCombe	No, buses are registered in state where garaged, but have a Bi-State license plate.
FTA-System Safety	Roy Field	No
NY City DOT	Pat Cassignola	No
Battelle FTA Transit Bus	Rollie King	Some states utilize transit insurance pools that encourage safety policies and
Safety Team Member		practices for their members.
TRA Transit Bus Expert	Jeff McCormick	No
Community Transit (WA)	Mike Burris	No
Pierce County (WA)	Steve Noonan	No
King County DOT (WA)	Terry Compton	No

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v (PA)-SafetyMike Zamiskaansit SafetyDave Barberansit SafetyJohn DockendorfE SafetyJohn DockendorfC SafetyFred JubaC SafetyLouis DerricoBus SafetyLouis DerricoA ChairmanRex KnowltonNorris SmithOn WilsonA ChairmanRex KnowltonA ChairmanRex KnowltonOffice StaffSeveralI Office RepsSeveralI Office RepsSeveralStaffSeveralStaffSeveralnicipal RiskRufus NyeAssociationAnn Marie WillatransitRebecca Tobinof WisconsinSebecca TobinatransitLauransultantNorm Ketola	SEPTA (PA)-Safety	Ron Hopkins	No, including trolley buses.
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Rufus Nye I Ann Marie Will Nancy Kreutzman Rebecca Tobin Laura Norm Ketola	CARTS (TX)	Dave Marsh	No
1 Ann Marie Will Nancy Kreutzman Rebecca Tobin Laura Norm Ketola	Michigan Municipal Risk	Rufus Nye	No. They insure a small number of buses operated by counties and do not have
 Ann Marie Will Nancy Kreutzman Rebecca Tobin Laura Norm Ketola 	Management Association		safety criteria.
Nancy Kreutzman Rebecca Tobin Laura Norm Ketola	CA Transit Insurance Pool	Ann Marie Will	No. They have adopted a safety and loss control work program for members.
Rebecca Tobin Laura Norm Ketola	Transit Mutual Insurance	Nancy Kreutzman	No. With WISDOT support, they have a comprehensive & proactive safety
Rebecca Tobin Laura Norm Ketola	Corporation of Wisconsin		program (with incentives) that includes a Safety Manual, training and audits.
Laura Norm Ketola	Washington State Transit	Rebecca Tobin	No. Member agencies make a commitment to following Minimum Best Practices
Laura Norm Ketola	Insurance Pool		Recommendations (not "requirements") to promote safety and minimize loss.
Norm Ketola	California Paratransit	Laura	No. They have relatively simple Risk Management Standards for their members.
Norm Ketola	Insurance Consortium		
	Bus Safety Consultant	Norm Ketola	No

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