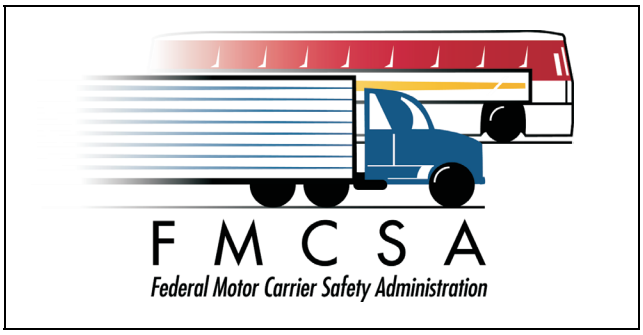
Safety Action Plan 2000-2003

Federal Motor Carrier Safety Administration



February 2000

Foreword

Since the first draft of the Safety Action Plan was released in the spring of 1999, many noteworthy activities have occurred, which are reflected in this final version. Comments on the draft plan were provided by representatives of safety groups, industry, driver associations, and State enforcement agencies. Public hearings focused exclusively on the subject of motor carrier safety were held by Congress and the National Transportation Safety Board. Internal program reviews were conducted by the Department of Transportation's Office of the Inspector General and by the General Accounting Office. An independent review of motor carrier safety issues was conducted by Mr. Norman Mineta, former Chairman of the House Committee on Transportation and Infrastructure. A DOT-wide motor carrier safety action plan was completed. In May 1999, a national goal of reducing truck and commercial passenger fatalities by 50 percent by the end of calendar year 2009 was announced by Secretary Slater. As a followup, the Department held workshops on motor vehicle carrier safety with representatives of safety groups, labor, and industry in order to identify strategies to meet this goal.

The Administration submitted a bill to Congress in 1999 proposing to strengthen the Commercial Drivers License Program, provide additional funding grants for States to increase compliance reviews and vehicle inspections, and improve the collection and reporting of data on motor carriers and commercial vehicle crashes. Both the House and Senate introduced major bills to improve the motor carrier safety program. In December 1999, the Motor Carrier Safety Improvement Act of 1999, P.L. 106-159, was enacted. A key provision of the Act was the establishment of the Federal Motor Carrier Safety Administration.

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Highlights

The Federal Motor Carrier Safety Administration (FMCSA) is a new agency established on January 1, 2000, within the U.S. Department of Transportation (DOT). The FMCSA mission is to improve truck and bus safety on our Nation's highways. In 1998, 5,374 people were killed and 127,000 were injured in traffic crashes involving commercial motor vehicles. The top priority goal of FMCSA is to reduce the number of fatalities resulting from crashes involving large trucks by at least 50 percent from the 1998 baseline by the end of 2009.

The *Safety Action Plan 2000-2003* describes the activities that FMCSA will undertake to address this national problem and make immediate progress toward its primary goal. The plan directs attention to those areas of greatest concern—poor drivers, unsafe carriers, and substandard vehicles—and focuses special attention on truck and bus safety at our national borders. Among the challenges faced by FMCSA in meeting its goal are a continued increase in truck travel, a need for better safety data and added improvements to the commercial drivers license program, leveraging existing resources to address the rapid expansion of the motor carrier population, and a need for further testing and demonstration of crash avoidance technologies.

Over the next 3 years, FMCSA will address these challenges by undertaking the key actions described in this plan. The actions will address opportunities in four areas:

- Increasing enforcement, targeting high-risk carriers and commercial motor vehicle drivers;
- Increasing safety awareness among the driving public and in the motor carrier industry;
- Improving safety information systems and commercial motor vehicle technologies; and
- Strengthening Federal commercial vehicle equipment and operating standards.

Major actions in each of the four areas above are listed below. More details about the actions are provided in the referenced chapters of the plan.

- **Increasing enforcement (Chapter 3):**
  - Federal investigators will increase compliance reviews of high-risk carriers.
  - Higher penalties will be imposed for violators of Federal safety regulations.
  - New entrant requirements will ensure greater safety compliance by motor carriers.
  - A nationwide effort with the States will link vehicle registration and safety fitness.
  - More funding will be provided to States to increase roadside inspections.
- **Increasing safety awareness (Chapter 4):**
  - The use of No-Zone educational and media materials will be expanded.
  - Seminars on fatigue recognition and management will be developed for commercial drivers and safety personnel.
  - Federal and State inspector skills will be improved through training in crash data collection, motor coach inspection, drug interdiction, and new technologies.
- **Improving safety information systems and technology (Chapter 5):**
  - The causes of commercial truck and bus crashes will be analyzed.
  - All individual carrier census records will be verified and updated.
  - A new system to collect data on all truck and bus crashes will be introduced.
  - A register combining carrier information with licensing and insurance records will be established.
  - Commercial vehicle collision warning and electronic braking systems will be tested.
  - Driver alertness, driving assistance, and control intervention systems will be evaluated.
  - A crash investigation data collection course will be developed for police officers.

- **Strengthening Federal standards for operations and equipment (Chapter 6):**
  - New commercial driver hours-of-service regulations will be proposed.
  - The safety rating process used to determine motor carrier safety fitness will be revised.
  - New rules that define an unfit carrier will be issued.
  - Training requirements for entry-level commercial motor carrier vehicle drivers will be established.
  - Convictions for all moving traffic violations will be recorded on commercial drivers license records.

In addition to the above actions, major initiatives are being undertaken by FMCSA to address safety concerns associated with cross-border truck operations at the Mexican and Canadian borders **(Chapter 7)**.

The actions to which FMCSA is committed in implementing its Safety Action Plan reflect the program directions mandated in the Motor Carrier Safety Improvement Act of 1999 (MCSIA), the Transportation Equity Act of 1998 (TEA-21), the Interstate Commerce Commission Termination Act of 1995, and the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). The planned actions also address the concerns and issues raised during recent independent program reviews conducted by the Department of Transportation's Inspector General, the U.S. General Accounting Office, and a panel led by Mr. Norman Mineta, former Chairman of the House Committee on Transportation and Infrastructure. This plan marks a starting point for FMCSA to take advantage of the opportunity and significantly reduce the safety problem in the next decade.

1. Introduction

The Motor Carrier Safety Improvement Act of 1999 (MCSIA) is a mandate to make major improvements in motor carrier safety. The Federal Motor Carrier Safety Administration (FMCSA) is now the focus for commercial motor vehicle safety in the U.S. Department of Transportation (DOT). The *Safety Action Plan 2000-2003* sets forth how FMCSA will address areas of opportunity to move toward the goals of reducing fatalities in large truck crashes by 50 percent by the end of 2009 and reducing the number of persons injured in crashes involving large trucks by 20 percent by the end of 2008, from the calendar year 1998 baseline of 5,374 fatalities and 127,000 injuries. The plan directs attention to those areas of greatest concern—poor drivers, unsafe carriers, and substandard vehicles—and focuses on opportunities that have the greatest potential for improving motor carrier safety.

Following this introductory chapter, the presentation of FMCSA's action plan is organized as follows:

- Chapter 2, "Trends, Challenges, and Directions," provides an overview of motor carrier safety data from 1988 through 1998, describes the challenges for FMCSA's safety programs, and summarizes current program directions.
- Chapter 3, "Increasing Enforcement of Federal Safety Regulations," describes planned actions to increase targeted enforcement of high-risk carriers, with the objective of bringing them into compliance (or, if they fail to comply, shutting down their operations), as well as actions to use penalties more effectively to sustain compliance.
- Chapter 4, "Increasing Safety Awareness," describes planned actions intended to improve commercial motor vehicle safety awareness by highway users and motor carriers, the court system that oversees adjudication of safety violations, and Federal and State investigators.
- Chapter 5, "Improving Safety Information and Technology," describes planned changes to information systems, technologies, and research to improve motor carrier safety databases and the general safety of vehicles and drivers, and to reduce crashes, injuries, and fatalities involving commercial motor vehicles.
- Chapter 6, "Improving Standards for Operations and Equipment," describes plans for priority rulemakings to improve the standards that cover the general safety of vehicles and motor carrier and driver operations.
- Chapter 7, "Special Initiatives: Border and International," describes planned actions to improve motor carrier safety related to Mexican and Canadian border crossings.
- Chapter 8, "Priorities," discusses the plan priorities, emphasizing the importance of congressional mandates.

Effective January 1, 2000, FMCSA became a new modal administration in the Department of Transportation. As shown in the organization chart in Appendix A, the new headquarters organization is constructed around the core business responsibilities of program development and program delivery. The four major offices in the new organization are Administration; Research, Technology, and Information Management; Policy and Program Development; and Enforcement and Program Delivery. The programs will continue to be delivered through offices in each State, which are headed by State Directors. The State Directors will be supported by FMCSA Service Centers located in Atlanta, Baltimore, Chicago, and San Francisco.

To address the particular concern about the delay and backlog of agency rulemaking actions, FMCSA has separated the functions of technical specialists, who craft the substance of rules, and legal specialists, who have rulewriting responsibilities. Additional staff will be added to the regulatory activity, and a regulatory ombudsman position mandated by MCSIA will be filled. The new organization design also meets the congressional intent that the unique demands of commercial passenger vehicle safety, international affairs, and consumer affairs be addressed.

As the Nation enters a new century, there are a number of reasons to view commercial truck and bus safety in a more optimistic light. Recent multiple, independent reviews of the national motor carrier safety program provide strategies and

concrete proposals for improvement that will lead to greater safety for all who use our Nation's highways. In the next few years, FMCSA will have additional resources to improve both State and Federal safety programs. Statutory changes in the MCSIA address critical program deficiencies identified in recent reviews.

Because improving safety is DOT's highest priority, FMCSA is committed to working with other DOT modal administrations on complementary safety activities. The development of a comprehensive motor carrier safety program involves the coordination of actions between the FMCSA and the Federal Highway Administration, National Highway Traffic Safety Administration, Research and Special Programs Administration, Federal Transit Administration, and Federal Railroad Administration. Just as important, FMCSA will work with other Federal agencies, Congress, the States, labor, the trucking industry, law enforcement, commercial passenger carriers, other safety agencies, the safety community, motor vehicle manufacturers, and the public to reach its goals. The *Safety Action Plan 2000-2003* marks a starting point for FMCSA to take advantage of emerging opportunities in order to realize a significant reduction in commercial motor vehicle safety problems over the next decade.

2. Trends, Challenges, and Directions

Highway Safety Trends

Vehicle Ownership and Travel

From 1988 to 1998, there was a 9-percent increase in the U.S. population and a 23-percent increase in gross domestic product. A direct result of this expansion was a significant increase in vehicle ownership and travel on the Nation's roadways, particularly for large trucks. The number of registered large trucks increased by 15 percent, from 6.1 million to 7.2 million, and travel by large trucks grew by 35 percent, from 141 million to 196 million vehicle miles (Exhibit 1). The growth for large trucks was comparable to the increase in number of vehicles and vehicle miles of travel for passenger cars, sport utility vehicles, and light trucks, which increased by 16 percent and 26 percent, respectively, in the same period.

The impact of economic growth on the commercial trucking industry is reflected in the number of interstate motor carriers, which doubled over the last decade from 200,000 in 1990 to more than 500,000 in 1999. Most of these motor carriers are owned and operated as small businesses. Currently, about 70 percent have 6 or fewer power units, and only 200 carrier companies own more than 1,000 power units. Of the total, about 42,000 companies are registered hazardous material carriers. Among the interstate carriers, there are about 13,000 bus companies, including intercity bus companies, limousine services, and church groups.

Crashes, Fatalities, and Injuries

In 1998, 41,471 people were killed on our Nation's roads. This total represents an 11-percent decrease from 1988. Almost 3.2 million people were injured in 1998, virtually unchanged from 1988. About 13 percent, or 5,374, of the fatalities were people killed in traffic crashes involving large trucks; and 4 percent, or 127,000, of the people injured were injured in crashes involving large trucks. Fatalities in large truck crashes declined from 1988 to 1992, then showed an upward trend beginning in 1992 before leveling off in 1997 (Exhibit 2).

Exhibit 1. Registered Large Trucks and Miles Traveled, 1988-1998

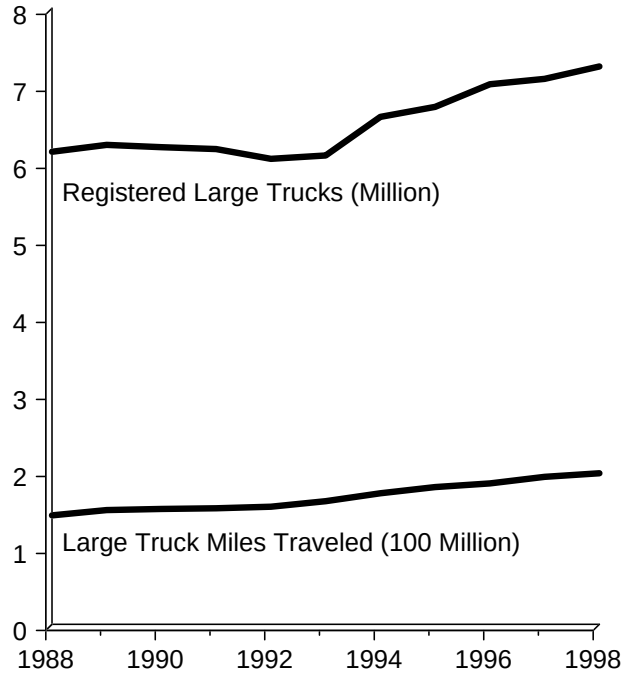


Exhibit 2. Fatalities and Persons Injured in Large Truck Traffic Crashes, 1988-1998

Year	Fatalities	Persons Injured
1988	5,679	130,000
1989	5,490	156,000
1990	5,272	150,000
1991	4,821	110,000
1992	4,462	139,000
1993	4,856	133,000
1994	5,144	133,000
1995	4,918	117,000
1996	5,142	130,000
1997	5,398	133,000
1998	5,374	127,000

Note: Large Trucks have a gross vehicle weight rating of more than 10,000 pounds.

Source: NHTSA FARS and GES.

Large trucks are over-represented in fatal crashes. Of all the people killed in motor vehicle crashes in 1998, 13 percent died in crashes involving large trucks. Yet trucks represent only 3 percent of all registered vehicles and about 7 percent of all vehicle miles traveled. While the number of fatalities is unacceptably high, some progress has been made in improving motor carrier safety. The progress can be measured by examining the number of large truck fatalities and injured persons based on the exposure to a potential crash. Exposure is defined as the number of truck vehicle miles traveled. The fatality or injury rate is calculated by dividing the total annual number of fatalities, or injured persons, in truck crashes by the total number of truck miles traveled.

Fatality and injury rates for large trucks and passenger vehicles declined from 1988 to 1998 (Exhibits 3 and 4). Over the 11-year period, the fatality rate for large trucks declined by 33 percent, compared with a 30-percent decline for passenger vehicles. Since 1992, the rate has declined only slightly for both vehicle types. Fatality rates are about 65 percent higher for large trucks. For large trucks, the injury rate declined by 30 percent from 1988 to 1998, compared with a 27-percent decline for passenger vehicles. For every year in the 11-year period, the injury rate for passenger vehicles was about 1.5 to 2 times the rate for large trucks.

In 1998 there were 37 fatal crashes involving interstate buses, and 49 people were killed in these crashes. During the past decade, the annual number of fatalities in interstate bus crashes has ranged between 25 and 49.

Program Challenges

Highway safety touches all of society. More than 90 percent of all transportation-related injuries and fatalities occur on highways. As such, highway safety investment and oversight are a shared responsibility. However, the Federal and State governments have a unique leadership role to play in addressing this problem. A summary of the major program challenges identified in recent program reviews is provided in the following paragraphs. These challenges must be addressed in order to make future progress in truck and bus safety.

Exhibit 3. Persons Killed in Vehicle Crashes per 100 Million Vehicle Miles Traveled, 1988-1998

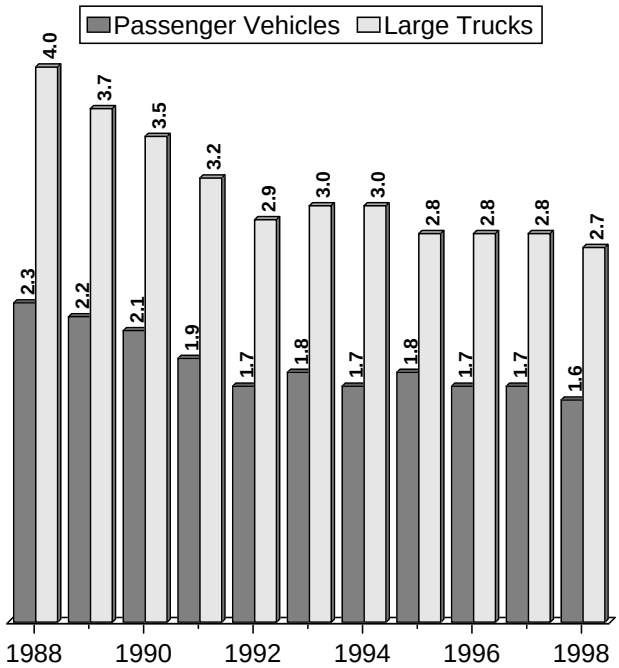
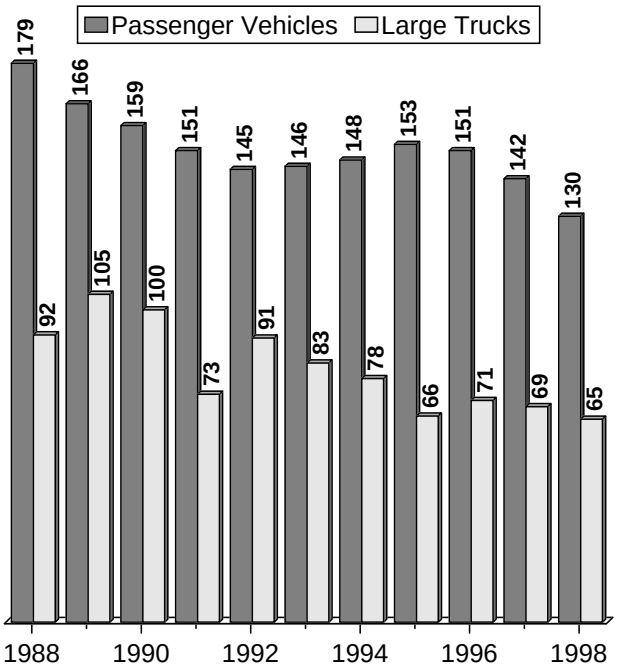


Exhibit 4. Persons Injured in Vehicle Crashes per 100 Million Vehicle Miles Traveled, 1988-1998



Growth in Travel Demand

As discussed earlier, the reversal in a downward trend in large truck fatalities during the mid-1990s reflects unprecedented new business activity and continuous growth in truck travel. The potential exposure of a large truck to a crash, expressed in terms of million vehicle miles traveled, increased by 40 percent during the period. There were also dramatic increases in the number of motor carriers and in vehicle ownership. The number of interstate motor carriers has increased by more than 50 percent since 1990, and the number of commercial drivers license (CDL) holders has increased by 38 percent since 1993, to more than 9 million in 1998. These strong upward trends in commercial travel and business growth will likely continue in the near future.

Data on Motor Carriers

Driver error is generally cited as a principal factor in crashes, with inattention and drowsiness being major contributing factors. It is estimated that mechanical defects contribute to between 5 and 15 percent of truck crashes. Highway design and environmental factors also contribute to crashes. Data for these factors in large truck crashes are unavailable, in most instances, for assessment of crash causes. The motor carrier census, an inventory of interstate motor carriers and their individual attributes, is not updated on a regular basis. These data deficiencies limit the design and implementation of effective crash mitigation strategies.

Compliance and Enforcement

Federal partnerships with the States to inspect vehicles and drivers at the roadside have done much to remove unsafe operations from the highways. However, FMCSA is able to conduct terminal-based compliance reviews on only a small portion of the motor carrier population because of limited resources and staff. Additional border staff and inspection facilities are also needed to ensure that safety regulations are met by foreign carriers, particularly when the U.S.-Mexican border is opened beyond the present commercial zones.

Commercial Vehicle Driver Training, Licensing, and Reporting

The number of CDL holders has increased by 38 percent since 1993. Even with this increase, it is clear that efforts on the part of the Federal and State governments to closely screen and better qualify truck drivers have made a difference. The introduction of the CDL and development of the national Commercial Drivers License Information System (CDLIS) make it possible for Federal and State safety officials to remove illegal and unqualified commercial vehicle drivers from the roadways. Improved medical screening and training also strengthen the commercial driver licensing program. Even so, much more remains to be done. Driver reporting systems used to monitor driver convictions and exchange records between States can be improved to be more complete, timely, and accurate. Commercial driver training programs also need further development through evaluation and rulemaking.

New Motor Carriers

The number of new motor carriers is increasing rapidly. Between 55,000 and 60,000 new carrier registrations were added to the FMCSA motor carrier management information system in 1999. Because many of these new entrants may have less industry experience than established carriers, FMCSA must undertake added efforts to ensure that new entrants are knowledgeable and in compliance with Federal safety requirements.

Safety Rulemaking

The agency rulemaking process must adhere to statutory and administrative requirements that make the process cumbersome, particularly if the rule is complex and its impact is considered controversial. In recent years, many statutory deadlines for new safety rulemakings have been missed. Limited staff and the requirements for multiple reviews to ensure that rules are not burdensome, costly, or unfair can also contribute to a lengthy rulemaking process.

Collision Avoidance Technologies

The development of on-board truck diagnostic and collision warning systems promises to further reduce the risk of crashes. However, further development and testing of their performance under real-world conditions is needed before these and other promising technologies can be introduced into the commercial motor carrier fleet.

Program Direction

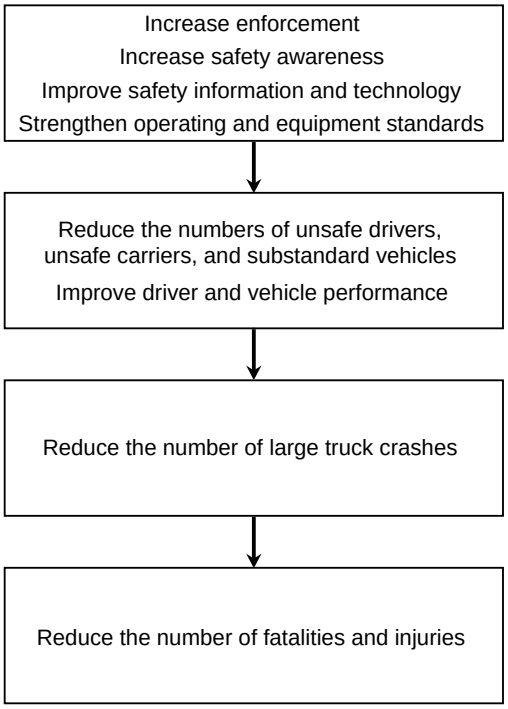
While there are formidable challenges to be addressed in improving motor carrier safety, there are also opportunities to meet the challenges and achieve reductions in crashes, fatalities, and injuries. For the next 3 years, FMCSA will address these challenges by:

- Increasing enforcement, targeting high-risk carriers and commercial motor vehicle drivers;
- Increasing safety awareness among the driving public and the motor carrier industry;
- Improving safety information systems and commercial motor vehicle technologies; and
- Improving Federal commercial vehicle equipment and operating standards.

As illustrated in Exhibit 5, the primary approach that FMCSA will use to improve truck and bus safety is aggressive enforcement of existing and new Federal safety regulations, combined with targeted education and outreach to the motor carrier industry, commercial drivers, and the driving public. These efforts will be enhanced by improvements in information and analysis and by research and development to provide new commercial motor vehicle safety technologies. Consistent with U.S. policies on the implementation of the North American Free Trade Agreement, FMCSA is also giving special consideration to truck and bus safety issues at the U.S. border crossings with Mexico and Canada.

The aim of all these efforts is to reduce the numbers of unsafe carriers, substandard vehicles, and poor drivers and improve overall driver and vehicle performance. This approach will result in fewer, less severe crashes involving commercial motor vehicles and a decrease in associated fatalities and injuries.

Exhibit 5. Program Design for Improving Commercial Motor Vehicle Safety



Each of the program strategies is explained in more detail in the following paragraphs.

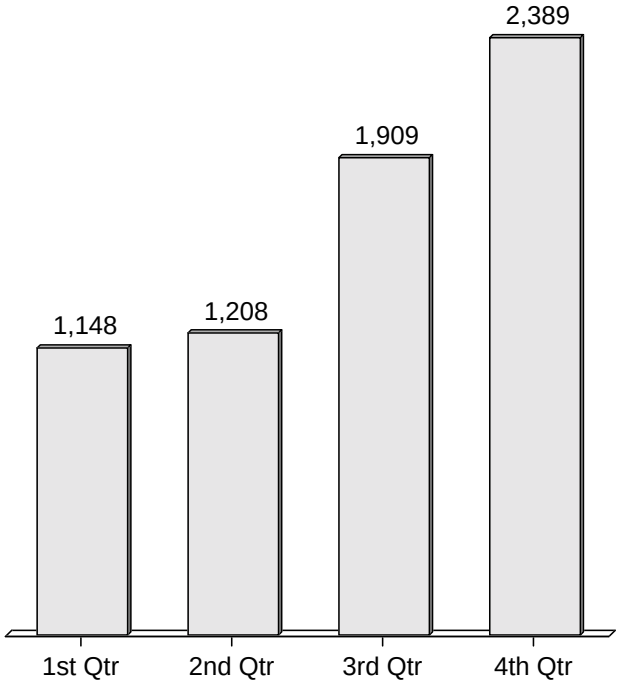
Increasing Enforcement

A major opportunity to improve safety is to increase targeted enforcement for high-risk carriers and drivers. Motor carrier management practices have a major influence on driver and vehicle safety performance. While high-risk carriers are a distinct minority among carriers, they show a clear and persistent pattern of poor vehicle maintenance, violations of driver hours-of-service limits, frequent moving violations and other reckless driving, and minimal compliance with State and Federal regulations. All of these behaviors contribute to poor safety performance. A recent analysis revealed that high-risk carriers have a 169 percent higher crash rate than the carrier population at large, based on crash data available for all carriers. Thus, identifying high-risk carriers and engaging in targeted, systematic enforcement are important program objectives.

In April and June 1999, FMCSA issued a directive to its field units to increase the number of compliance reviews performed by each safety investigator to an

average of 4 to 5 per month, increase fines, and limit negotiated settlements. The directive also called for compliance reviews to be conducted for all high-risk carriers. Subsequently, the average number of compliance reviews performed by Federal field staff in fiscal year 1999 effectively doubled from 1,148 to 2,389 (Exhibit 6). In addition, higher civil fines and penalties for violations of the safety regulations mandated by the Transportation Equity Act for the 21st Century (TEA-21) were implemented. This action has substantially raised the average amount claimed for violations from $3,083 in the first quarter of 1999 to $5,775 in the last quarter of the year.

Exhibit 6. Number of Compliance Reviews by Quarter, Fiscal Year 1999



Increasing Safety Awareness

Increasing the safety awareness of motor carriers, commercial drivers, passenger car drivers, and other roadway users provides further safety opportunities and challenges. The driver is a major factor in crashes. Passenger car driver errors are often cited as contributing factors in fatal crashes involving a large truck and a passenger vehicle. Driver inattention and drowsiness, in particular, contribute to driver error in crashes.

Because driver errors contribute significantly to fatal crashes involving trucks and passenger cars, FMCSA has invested resources to educate passenger car drivers about sharing the road with large trucks and buses. Since 1994, the No-Zone program has reached a large audience through public service announcements and driver education programs. Plans are also being made to expand the Share the Road initiative through a number of strategies. Educational efforts to combat the drowsy driver are also continuing, directed specifically at drivers and their families, as well as shippers, dispatchers, and managers. Other initiatives, such as sharing information about best safety practices with motor carriers, educational and technical assistance to motor carriers about driver fatigue, and improving training for safety investigators, are being pursued.

Improving Safety Information and Technology

A critical challenge is to acquire more timely, complete, and accurate crash and related motor carrier data and to make more effective use of the information. In recent motor carrier program reviews, information deficiencies were identified as a critical area in need of improvement. Knowledge about the causes of truck crashes, contributing factors, and accurate and timely data used to identify high-risk carriers are essential to improving motor carrier safety program decisions. Better information will improve our ability to link these decisions to the desired outcomes. Although data in the existing motor carrier information system have been incrementally improved over many years, further improvements are needed.

To address these concerns, FMCSA is working with the National Highway Traffic Safety Administration to undertake a crash causation study, develop a truck crash investigation data collection course for police officers, and build a new crash data file to collect all truck and bus crash information. FMCSA is also updating its motor carrier census information. Work is underway to improve safety technology on trucks and buses, such as hazard location warning devices, rollover stability, and other technological enhancements. Through its Intelligent Vehicle Initiative (IVI), FMCSA is exploring

opportunities for integrating on-board electronic systems and making them compliant with the national Intelligent Transportation System (ITS) architecture.

FMCSA has also developed electronic data interchange standards, set up data communication networks, and piloted software for the electronic transfer of safety performance data among Federal and State enforcement agencies. The collection of Federal and State information systems is named Commercial Vehicle Information Systems and Networks, or CVISN (pronounced "c-vision"). It is not a new information system, but rather a system architecture that allows dissimilar State and Federal systems to communicate. This provides enforcement personnel, particularly those at the roadside, access to information systems previously unavailable.

With the passage of MCSIA, additional funding to improve information systems and data analysis will become available in fiscal year 2001. To address other data deficiencies, FMCSA has initiated: (1) a uniform, national measure of motor carrier safety performance, named SafeStat, which is used to rank interstate motor carriers on their safety performance; (2) the Performance Registration Information System Management, or PRISM, which links State vehicle registration with safety fitness; (3) a program to provide portable hardware and software for use by State and Federal inspectors in compliance reviews and roadside inspections; and (4) a new system architecture to allow broader enforcement access to carrier information. These initiatives will result in systematic improvements to carrier, vehicle, and driver performance data and better analysis and identification of high-risk carriers and drivers for targeted enforcement.

Improving Standards for Operations and Equipment

Another area of opportunity for safety is improving commercial operating standards and equipment. This approach raises the safety threshold, particularly in areas where prior research and analysis have identified safety problems or program deficiencies. Rulemakings have been completed or proposed in the past year to increase the visibility of trucks at night with retro-reflective material, disqualify commercial drivers for railroad grade crossing violations, and prohibit the operation of unfit motor carriers. In the future, new rules for hours-of-service, safety ratings, and qualifications for new drivers will be implemented. The timely completion of rulemakings will be a priority for both FMCSA and the Department of Transportation.

Approach to Border Issues

The North American Free Trade Agreement (NAFTA) addresses trade and economic relationships between Canada, the United States, and Mexico. Because commercial trucking is the principal means of transporting goods among the three countries, NAFTA includes a timetable for phasing out commercial motor vehicle access restrictions and establishing more compatible safety standards. Mexican and U.S. trucks have been precluded from entering the interior of each other's national boundaries.

The United States and Mexico were to have allowed access to the border States for delivery and backhaul of cargo in December 1995 and access to and from any point within each country by January 2000. The timetable for implementing the access provisions was postponed by the United States, however, pending successful resolution of safety discussions with Mexico. A timetable for bus operations is also included in NAFTA. Full truck and bus access between the United States and Canada was established before NAFTA.

The three NAFTA countries are working together to make their respective motor carrier safety regulations compatible. The United States has always required that any motor carrier or driver operating on its roads must comply with existing safety regulations. In addition, FMCSA and the States are working to integrate Mexican carriers and drivers into existing compliance and enforcement programs. To increase the enforcement presence, FMCSA has added 27 border inspectors over the past 2 years.

3. Increasing Enforcement of Federal Safety Regulations

In the next 3 years, FMCSA plans to carry out 10 action items with the goal of increasing the compliance of high-risk carriers with Federal safety regulations. The planned actions include increasing the number and consistency of compliance reviews for high-risk carriers; increasing enforcement actions by Federal and State authorities; certifying third parties; implementing the Performance and Registration Information Systems Management (PRISM) program in more States; and increasing the resources for, and quality of, roadside motor vehicle inspections.

Compliance Reviews and Enforcement Actions

Overall, 25 percent of the approximately 500,000 interstate carriers have been reviewed and rated by Federal and State safety investigators. Now, with the authority provided in MCSIA, third-party contractors can be certified to provide support in the future. This will enable FMCSA to obtain safety information on many of the motor carriers that have not been reviewed.

In fiscal year 1999, more than 6,600 compliance reviews were conducted by Federal officials, and 2,481 were conducted by States. Of the 6,600 Federal reviews, 2,899 (44 percent) led to enforcement actions. To expand the enforcement presence, FMCSA directed its field staff in April 1999 to increase compliance reviews to an average of four to five per month for each safety investigator. The number of Federal compliance reviews subsequently rose by more than 80 percent from the first quarter to the last quarter of fiscal year 1999 (see Exhibit 5 on page 6).

Penalties for safety violations were also increased. Fines of up to $10,000 for each separate violation can now be assessed. As a result, the average claim per case has risen from $3,083 in the first quarter of fiscal year 1999 to $5,575 in the fourth quarter of the year. In addition, average settlements nearly equal the original amount of the claim, demonstrating the effectiveness of the FMCSA policy to limit negotiated settlements. Progress of each of FMCSA's State Division Offices in meeting these goals is being closely monitored.

FMCSA has initiatives underway to strengthen management of its enforcement program. For example, comprehensive safety enforcement programs in each State are being developed through the Motor Carrier Safety Assistance Program (MCSAP). Uniform policies for enforcement practices, fines, and settlements have been established, and Uniform Fine Assessment (UFA) software has been developed for use by all investigators nationwide. The software makes penalties more uniform nationwide and ensures a fair and consistent enforcement program. It was updated in 1999 to reflect penalty increases contained in TEA-21.

In addition, FMCSA has provided guidance to field offices to limit negotiated settlements of fines for safety violations; established a repeat violators policy and provided written guidance to clarify that progressive sanctions are to be applied for repeat violations; and reaffirmed existing policy regarding the timely completion of enforcement cases. Steps have been taken to ensure that the enforcement tracking system is properly updated when enforcement cases are closed. The backlog of enforcement cases that existed in 1999 has also largely been eliminated.

PRISM Implementation

A national safety management program is being implemented to identify high-risk carriers and remove them from operation on the road. The PRISM program, an enforcement program that ties State commercial motor vehicle registration systems to the safety fitness of motor carriers, is being introduced by FMCSA nationwide.

Under PRISM, identification of the carrier responsible for the safe operation of a vehicle is made at the time of registration, so that safety events can be accurately assigned to that carrier. The program identifies high-risk carriers on the basis of their actual over the road performance, provides many opportunities for poor performing carriers to improve, actively monitors safety progress, and applies progressively harsher sanctions to carriers that fail to improve. Carriers that continue to pose a high risk to safety could face suspension, denial, or

revocation of their commercial vehicle registration privileges. To date, two States in the PRISM program have removed vehicle plates from six carriers. Currently, there are 12 States participating in the program, and 5 additional States have expressed interest in the program.

Roadside Safety Inspections

Federal and State officials conducted more than 2 million roadside vehicle inspections in 1999. Roadside inspections are a time-consuming task. A full Level I inspection of the vehicle and driver takes an average of 45 minutes. FMCSA and the States have streamlined the procedures by focusing on known, high-risk carriers and carriers for which little or no safety information is available.

To improve the inspection process, Federal and State motor carrier safety roadside inspectors are provided with current and historical information about vehicle inspections and out-of-service violations. Through the safety and fitness electronic records (SAFER) system, FMCSA is making information on carrier safety performance available to Federal and State enforcement officials at the roadside. With this information, roadside enforcement officers can more readily identify and focus inspections on high-risk motor carriers, improving the effectiveness of the inspectors and minimizing delays for carriers with good safety records and well-maintained vehicles. Inspectors are provided with laptop computers for near real-time electronic reporting of roadside inspection results.

Planned Actions

E1: Increase Enforcement of High-Risk Carriers

E2: Certify Federal, State, and Third Parties To Collect Safety Information

E3: Establish Consistent Nationwide Enforcement Penalties

E4: Deploy Performance and Registration Information Systems Management (PRISM)

E5: Develop an Implementation Plan To Extend Safety Regulations to Shippers

E6: Create a New Entrant Program

E7: Improve the Effectiveness and Efficiency of Roadside Inspections

E8: Increase the Resources for State Roadside Inspections

E9: Improve the Use of the Driver Hotline

E10: Improve Hazardous Materials Transportation Safety

E1: Increase Enforcement of High-Risk Carriers

FMCSA will identify high-risk motor carriers and work to improve their safety posture. Tasks include: (1) increase the number of compliance reviews performed to an average of 4 to 5 per investigator per month; (2) complete compliance reviews on all SafeStat A and B carriers and a percentage of C through G carriers, and monitor the progress of the State Division Offices; (3) refine the SafeStat high-risk ranking criteria through more aggressive data quality initiatives; (4) develop a new SafeStat methodology for commercial passenger operations; (5) develop a uniform enforcement manual; (6) identify and implement additional methods for selecting carriers for reviews, including the use of field staff experience to augment SafeStat selection and applying Section 4017 of TEA-21 by using driver-reported safety violations to set priorities for motor carrier compliance reviews; (7) revise compliance review followup procedures for commercial passenger operations; (8) eliminate the current backlog of enforcement cases; and (9) issue shutdown orders to unfit carriers with the authority provided in TEA-21.

Lead Office: Enforcement and Compliance and Field Offices

Support Office: Data Analysis and Information Systems, Regulatory Development

Implementation Period: 2000-2001

E2: Certify Federal, State, and Third Parties To Collect Safety Information

MCSIA allows third parties to conduct certain non-enforcement review functions, including collecting safety information that would normally be collected by Federal or State safety investigators during compliance reviews. The Act requires that a certification process be established for Federal, State and third parties. FMCSA will complete a certification rulemaking by December 2000 and develop

operational practices within 24 months to certify Federal, State, and third parties.

Lead Office: Driver and Carrier Operations

Support Office: Enforcement and Compliance, Regulatory Development

Implementation Period: 2000-2002

E3: Establish Consistent Nationwide Enforcement Penalties

The new penalty provisions of TEA-21 were implemented nationwide in April 1999, and the Uniform Fine Assessment Model was updated. In addition, a consistent settlement policy to minimize penalty variance was established. Progress by the field offices in limiting negotiated settlements of fines for safety violations, particularly for repeat violators, is being monitored, and the collection of penalty assessments is being pursued aggressively. To further enhance penalty provisions, MCSIA (1) recommends that minimum penalties be established; (2) recommends that maximum penalties be established for a pattern of repeat violations; (3) requires a study of the effectiveness of the TEA-21 penalties, with recommendations to Congress by September 30, 2002; and (4) requires procedures for revocation or suspension of registration for nonpayment of penalties after 90 days of the time of the specified order of payment.

Lead Office: Driver and Carrier Operations

Support Office: Regulatory Development, Enforcement and Compliance

Implementation Period: 2000-2002

E4: Deploy Performance and Registration Information Systems Management (PRISM)

Congress authorized funding in TEA-21 to expand the PRISM program. Through PRISM, FMCSA will continue to establish links between State motor carrier registration systems and Federal safety information systems. Actions include: (1) adding three to five new States to the program each year; (2) providing training, including Federal personnel, to new States; and (3) providing technical assistance to new States as they develop PRISM implementation plans.

Lead Office: Enforcement and Compliance

Support Office: Field Offices

Implementation Period: 2000-2003

E5: Develop an Implementation Plan To Extend Safety Regulations to Shippers

FMCSA will develop an implementation plan in fiscal year 2000 for submission to Congress, as required under TEA-21. The plan will describe how the agency would extend regulations and oversight and enforcement activities to shippers and other non-motor-carrier entities in the event that regulatory authority is provided to the agency. The authority, if granted, and regulations would address loading/unloading, shipping, and delivery scheduling practices that result in subsequent safety violations and illegal activities.

Lead Office: Research and Technology

Implementation Period: 2000

E6: Create a New Entrant Program

In recent years, there has been a substantial increase in the number of new motor carrier entrants. Past research has shown that new motor carriers registering with DOT are less likely to comply with safety regulations. The goal of this program is to assure the safety fitness of new carriers. The major tasks are: (1) conduct background research, including a review of past studies; (2) design a conceptual framework for the new entrant safety fitness process; (3) establish minimum requirements for new entrants to ensure that they are knowledgeable about the safety regulations; and (4) develop procedures for safety reviews of new entrants within 18 months after they begin operations. FMCSA will also evaluate the need for a more stringent system for new entrant passenger carriers.

Lead Office: Driver and Carrier Operations, Data Analysis and Information Systems

Support Office: Regulatory Development, Enforcement and Compliance

Implementation Period: 2000-2001

E7: Improve the Effectiveness and Efficiency of Roadside Inspections

FMCSA will identify technologies to improve the identification of problem commercial motor vehicles and carriers at the roadside. The agency is conducting a feasibility study of technologies for real-time credential and safety data to better identify vehicles at the roadside. Previous research with optical recognition systems, using DOT-MC and/or ICC numbers as potential identifiers, showed promise. An operational test of recommended technologies is planned for fiscal year 2000.

Lead Office: Research and Technology

Support Office: Motor Carrier Safety Programs

Implementation Period: 2000-2001

E8: Increase the Resources for State Roadside Inspections and Traffic Enforcement

FMCSA will promote an increase in the number of roadside safety inspections of vehicles and drivers, as well as traffic enforcement activities, by providing additional MCSAP funding to States. Using funds provided in MCSIA, additional inspection and enforcement activities will be performed by States participating in MCSAP. Additional emphasis will be directed at commercial passenger operations.

Lead Office: Motor Carrier Safety Programs

Support Office: Commercial Passenger Carrier Safety

Implementation Period: 2001-2003

E9: Improve the Use of the Driver Hotline

The FMCSA will improve the operation and use of its motor carrier safety hotline to provide 24-hour, 7-day coverage with qualified answering service, information collection and assistance, and improved followup action processes and reporting.

Lead Office: Enforcement and Compliance

Implementation Period: 2000

E10: Improve Hazardous Materials Transportation Safety

FMCSA will improve the process of identifying hazardous materials motor carriers and shippers with safety problems and will encourage associated compliance reviews. Special attention will be given to working within the PRISM program and the SafeStat to add emphasis on carriers that transport hazardous materials. Other actions include: (1) inspecting 10 or more cargo tank manufacturers and conducting a special national inspection project focused on removing unsafe cargo tanks from the Nation's highways in 2000; (2) conducting SHIPPER CHECK 2000, which will consist of a week-long activity using the new computerized Package Inspection Program (PIP); (3) conducting special cargo tank and hazardous materials seminars for industry; (4) working with RSPA to finalize cargo tank and other rulemakings; (5) participating in a special "Operation Safe Transit" intermodal strike force activity, which will concentrate on undeclared or hidden hazardous material shipments.

Lead Office: Enforcement and Compliance

Support Office: Data Analysis and Information Systems

Implementation Period: 2000-2001

4. Increasing Safety Awareness

While FMCSA is committed to increasing enforcement, safety awareness will continue to play an important role in improving commercial motor vehicle safety. Outreach and education actions will address target audiences including motor carrier operators, commercial drivers, and the driving public. Training actions will improve the capabilities of Federal and State employees engaged in roadside inspection and related enforcement activities.

Outreach and Education

In fiscal year 1998, FMCSA began mailing safety status letters to motor carriers with marginal safety performance. At a minimum, the letters are designed to increase safety awareness within the motor carrier industry. More importantly, they provide motor carriers with specific details about their operations that need improvement. This approach provides the opportunity for immediate and voluntary corrective action by the carrier.

FMCSA is expanding its outreach and education efforts to identify at-risk highway users and inform them about safer driving practices. Outreach efforts will include minimizing fatigue among truck drivers and providing information to passenger car drivers as to how to share the road safely with large trucks and motor coaches. FMCSA also continues the No-Zone campaign to reach passenger car drivers who share the road with large trucks and motor coaches. The No-Zone program reaches audiences nationwide through all forms of media and is included in many State driver licensing manuals. FMCSA has disseminated materials on fatigue recognition and management and is developing material outlining best safety practices, which will be provided to truck and commercial passenger vehicle operators.

Training in new roadside inspection procedures and accompanying technologies is provided annually by FMCSA's National Training Center (NTC). During fiscal year 1999, NTC provided training to more than 5,000 Federal and State employees in drug interdiction, hazardous materials, vehicle inspection, crash data collection, and compliance reviews. The agency will increase its reach and broaden its training offerings over the next 3 years.

Planned Actions

SA1: Implement a New Outreach Effort: Safety Is Good Business

SA2: ITS/CVO Technology Truck Demonstration

SA3: Improving Driver Awareness

SA4: Improve CDL and CDLIS Program Effectiveness

SA5: Improve Federal and State Inspector Training

SA1: Implement a New Outreach Effort: Safety Is Good Business

FMCSA developed a new outreach effort in 1999 to highlight the advantages of following good safety practices for truck and bus companies. During fiscal year 2000, FMCSA will work with major commercial motor vehicle insurers and drivers, shippers, the safety community, and motor carriers to assess the target audience, quantify the economics of safe operations, and develop a message for the target audiences. Various strategies will be used to reach the target audience.

Lead Office: Motor Carrier Safety Programs

Support Office: Commercial Passenger Carrier Safety

Implementation Period: 2000

SA2: ITS/CVO Technology Truck Demonstration

The agency will continue to use the Intelligent Transportation System/Commercial Vehicle Operation (ITS/CVO) Technology Truck to inform the safety community on new safety enhancement technologies that are currently available. The ITS/CVO Technology Truck is a working display that was seen by thousands in 21 States during 1999. It is used to provide in-depth ITS/CVO awareness training.

Lead Office: Research and Technology

Implementation Period: 2000

SA3: Improving Driver Awareness

FMCSA will identify target audiences involved in highway safety risks and develop educational material directed at those audiences. Several tasks will support this effort: (1) enlist 100 more carriers to use the No-Zone decal program, and produce additional media messages; (2) conduct various educational seminars for truck and bus drivers and safety personnel on fatigue recognition and management, and distribute fatigue information during International Highway Safety Week; (3) develop a full safety campaign to include all highway safety issues, identifying potential partnerships and developing and marketing targeted safety messages;(4) work with DOT's National Highway Traffic Safety Administration (NHTSA) to increase seat belt use.

Lead Office: Motor Carrier Safety Programs, Public and Consumer Affairs

Support Office: Service Centers

Implementation Period: 2000-2001

SA4: Improve CDL and CDLIS Program Effectiveness

FMCSA will enhance the efficiency and effectiveness of the commercial drivers license (CDL) and Commercial Drivers License Information System (CDLIS) programs by improving awareness among various interested parties during fiscal year 2000. Actions include: (1) provide training for judges, prosecutors, and law enforcement under the Commercial Vehicle Safety Partnership Program; (2) prepare an interim report to Congress on improving the CDL knowledge and skills test; (3) complete the focus group and survey phases of the Graduated CDL Study; and (4) develop and conduct a national CDL training course for all FMCSA field staff.

Lead Office: Driver and Carrier Operations

Support Office: Motor Carrier Safety Programs

Implementation Period: 2000

SA5: Improve Federal and State Inspector Training

The National Training Center will: (1) develop a new set of technical in-service courses to be delivered to Federal, State, and local government officials; (2) increase the knowledge of Federal and State investigators in motor coach inspections by delivering the course to 500 investigators; (3) deliver new Intelligent Transportation Systems courses to Federal and State employees; and (4) continue training for traffic enforcement officers regarding drug interdiction and ways to safely stop trucks for roadside inspections.

Lead Office: Human Resources

Implementation Period: 2000-2001

5. Improving Safety Information and Technology

Information and technology activities support development of enforcement programs as well as changes to operation and equipment standards. Key actions in the information and analysis area include further deployment of the Commercial Vehicle Information Systems Network (CVISN), establishing a unified carrier register, and improving the collection and use of safety data. FMCSA will also conduct a crash causation study and complete a program effectiveness study. In research and technology, emphasis will be placed on driver alertness and fatigue detection, testing of collision warning and avoidance technologies, and improving electronic braking and steering systems.

Commercial Vehicle Information Systems Network

FMCSA has developed electronic data interchange standards, set up data communication networks, and piloted software for the electronic transfer of safety performance data among Federal and State enforcement agencies. The collection of Federal, State, and carrier information systems is called CVISN (pronounced "c-vision"). CVISN is not a new information system but rather a system architecture that allows dissimilar State and Federal systems to communicate. The network provides enforcement personnel, particularly those at the roadside, access to information systems previously unavailable. This approach promises to make roadside inspections more efficient and effective. CVISN is being piloted in 10 States, designed in 20 States, and planned in 12 additional States.

Unified Carrier Register

To improve the effectiveness of the enforcement program, periodic updates of basic census information in FMCSA's national Motor Carrier Management Information System (MCMIS) are needed. In the past, updates have not been routine. Funding and new authority for census improvements were provided in MCSIA and will now be performed periodically. In addition, FMCSA is working to establish a Unified Carrier Register, combining the USDOT identification system with the former ICC information system. With this system all carriers can be identified properly at initial registration, pertinent information can be obtained and updated, and inspection and crash reports can be attributed to the correct carrier.

Collection and Availability of Safety Data

The linchpins of enforcement are timely data, valid measures of safety performance, and the ability to identify high-risk motor carriers accurately and reliably. Over the past several years, FMCSA has developed a uniform national system, SafeStat, to evaluate motor carrier safety performance. The system is used to identify and rank interstate motor carriers based on their safety performance. The agency also provides each State with the information and training to use the Inspection Selection System (ISS) for targeting high-risk carriers at roadside inspections. This system has limitations, however, because up-to-date information on the carriers and their crash histories is sometimes incomplete. With the funds earmarked in MCSIA, motor carrier data improvements can now be made.

Pilot Test Electronic Driver Logbook

FMCSA has launched a pilot project that couples global positioning system (GPS) technology with on-board computers to create electronic driver logbooks. This project, initiated in fiscal year 1998 with a large motor carrier, allows the carrier to record drivers' hours of service by use of GPS technology and complementary computer software programs.

Crash Causation and Program Effectiveness

FMCSA is working with NHTSA to create a database on large truck crash causation. The data will be used to identify countermeasures that will have the greatest effect on reducing serious truck crashes. Underlying FMCSA actions is the need to evaluate the overall effectiveness of the motor carrier safety programs in reducing crashes, fatalities, and injuries. The agency has developed analytical models that measure the effectiveness of the compliance review process and roadside inspections.

First-generation models are being reevaluated as newer, more complete data become available. FMCSA conducts national random statistical surveys to provide baseline data on the condition of trucks, buses, and their drivers and determine alcohol and drug use. This information will provide FMCSA with data to assess the effectiveness of its motor carrier safety programs.

Driver Awareness and Fatigue

New research when translated into program enhancements can improve safety awareness. Research has recently been completed on: (1) effects of loading and unloading and a 14-day 10-hour work schedule on driver fatigue; (2) driver scheduling practices; (3) local and short-haul driver fatigue; (4) truck sleeper berths and driver fatigue; and (5) truck rest area parking requirements. A promising method (the PERCLOS machine-vision system) has been developed for monitoring driver alertness and detecting fatigue. In a cooperative effort, NHTSA and FMCSA have identified a highly reliable indicator of fatigue- related performance decrement. This project has developed a new camera and machine vision software that can record and analyze a driver's eyelid movement in real time while driving.

Collision Warning and Avoidance Technologies

Work is underway on collision warning devices and other technological enhancements. This work will form part of FMCSA's broader Intelligent Vehicle Initiative (IVI), Commercial Vehicle Platform. FMCSA is accelerating the development and use of in-vehicle monitoring and control intervention systems, including work with motor vehicle manufacturers on electronic brakes and on-board sensing of safety-critical systems. IVI work is also underway on truck stability, collision warning devices, and hazard location technologies.

Electronic Braking and Steering

FMCSA is exploring opportunities for integrating on-board sensors systems for brakes and tires. A major focus is improving electronic braking and steering systems. Sensors and electronics are improving the monitoring performance of vehicles, making possible the timely warning, diagnosis, and reporting of system problems.

Planned Actions

IT1: Deploy CVISN in a Majority of States

IT2: Establish a Unified Carrier Register

IT3: Improve Availability of Safety Data for Enforcement

IT4: Improve Collection of Commercial Motor Vehicle Crash Data

IT5: Evaluate the Effectiveness of Major Programs

IT6: Benchmark Best Industry Practices and Analyze the Safety Posture of the Regulated Community

IT7: Reduce the Number of Problem Drivers

IT8: Pilot Test Use of GPS Technology in Place of Driver's Log Books

IT9: Research Operational Factors in Driver Fatigue

IT10: Test Intelligent Vehicle Initiative (IVI)/ Driver Alertness

IT11: Reduce Car-Truck Proximity Crashes and Increase Driver Awareness

IT12: Develop Brake Performance Testing and Sensing Technology

IT13: Perform Large Truck Crash Causation Study and Establish a Database

IT14: Test Intelligent Vehicle Initiative (IVI)/ Rollover Stability

IT15: Test Intelligent Vehicle Initiative (IVI)/ Hazard Location

IT16: Test Intelligent Vehicle Initiative (IVI)/ Collision Warning and Advanced Braking

IT17: Develop Enhancements to Commercial Motor Vehicle Driver Training and Performance Management

IT1: Deploy CVISN in a Majority of States

TEA-21 sets a goal to deploy CVISN in a majority of States by September 30, 2003. CVISN is not a new information system, but rather an architecture that allows existing, dissimilar Federal, State, and carrier systems to exchange information electronically

through the use of standards and available communications infrastructure. The information can be used at the roadside to target problem carriers and commercial motor vehicles, or at the desk to check the safety and credentials history of a carrier at the time of registration. CVISN Level 1 capabilities include safety information exchange, interstate credentials administration, and roadside electronic screening. The actions include: (1) developing the two Prototype States and eight Pilot States to test the CVISN architecture and standards and to deploy Level 1 capabilities; (2) providing training and funding to States to develop ITS/CVO business plans; (3) providing three CVISN deployment workshops for States to develop project plans and system designs that will serve as blueprints for deployment and a tool for securing the required resources to meet deployment goals; and (4) providing incentive funding for States to deploy Level 1 capabilities. The respective milestones are: (1) complete CVISN Level 1 deployment in two Prototype States and one Pilot State by October 2000; (2) complete CVISN Level 1 deployment in two additional Pilot States by December 31, 2000; (3) complete ITS/CVO business plans in 30 States and have 20 States complete the CVISN workshops by October 2000; and (4) complete CVISN Level 1 deployment in a majority of States by September 30, 2003. The Federal Highway Administration (FHWA) Intelligent Transportation Systems Joint Program Office and FMCSA's State Division Offices are major partners in this initiative, along with State agencies and the motor carrier industry.

Lead Office: Research and Technology

Support Office: Field Offices, Data and Information Systems

Implementation Period: 2000-2003

IT2: Establish a Unified Carrier Register

The Interstate Commerce Commission Termination Act of 1995 requires DOT to establish a new, single Federal online system to replace FMCSA's carrier registration system, the former ICC licensing and insurance system, and the Single-State Registration System. The new Federal information system, the Unified Carrier Register (UCR), will benefit carriers by providing a single point for registration and establishing a unique identifier, the USDOT number, for each carrier. The UCR will include information on interstate and intrastate motor carriers, shippers, brokers, and freight forwarders. A Notice of Proposed Rulemaking on the UCR will be completed by FMCSA in the fall of 2000 and a Final Rule by spring 2001. The UCR will be operational within 1 year of the final rulemaking.

Lead Office: Driver and Carrier Operations

Support Office: Data Analysis and Information Systems, Regulatory Development

Implementation Period: 2000-2002

IT3: Improve Availability of Safety Data for Enforcement

FMCSA will provide the most current, accurate, and complete safety data to the enforcement community as follows: (1) Deliver new SAFETYNET 2000 software to all 50 States and provide necessary training to use the system. FMCSA will use the data from the system to prioritize carriers for roadside screening and electronic clearance. Twice annually, FMCSA will integrate the most current crash, inspection, and census data available from all 50 States and use the data in SafeStat to identify high-risk carriers that require enforcement and on-site compliance reviews. Methods for better identification of high-risk commercial passenger operations will also be evaluated. The new software will also allow all users to perform simple and complex queries that allow them to make management decisions. The software will be developed, tested, and ready for deployment by January 1, 2001. (2) MCSIA requires periodic update of the census information for all motor carriers in order to determine more accurately the numbers and types of truck and bus operations and to remove motor carriers that are no longer operating. All for-hire motor carriers will be contacted and requested to update their census information by December 2000. A Notice of Proposed Rulemaking to require periodic update of the census will be completed by FMCSA in the fall of 2000. (3) FMCSA will continue to explore data collection options during fiscal year 2000 that use the Automated Safety Assessment Program. By January 2001 FMCSA will test the program to collect, on-line, motor carrier census information. (4) FMCSA currently has several Internet sites with pertinent carrier safety information, such as carrier ratings and SafeStat information, that could have an impact on carrier, shipper,

and insurance business decisions. In addition, crash data at the State and national level and recent data analyses are currently available online. FMCSA will market the availability of these data online in order to increase, by 20 percent, the number of people and businesses requesting information on carrier safety status through the SAFER system and the number of persons accessing the Analysis and Information (A&I) online system. A&I began providing detailed safety data results from SafeStat on January 2000. (5) FMCSA is working with the States of Minnesota and Florida to create a crash investigation course for police to improve the collection of data in large truck crash investigations. FMCSA will offer the course more broadly in fiscal year 2000.

Lead Office: Data Analysis and Information Systems
Support Office: Enforcement and Compliance
Implementation Period: 2000-2003

IT4: Improve Collection of Commercial Motor Vehicle Crash Data

MCSIA requires the creation of a program with the States to improve the collection and subsequent analysis of commercial vehicle crash data. NHTSA will work with FMCSA in a cooperative effort to administer the program. Timely, complete, and accurate crash data are the cornerstone of the process of identifying high-risk carriers and conducting reliable analysis. During fiscal year 2000, an interagency agreement with NHTSA will be established and a work plan will be developed. System testing will begin in fiscal year 2001. FMCSA and NHTSA, along with several State safety organizations, have been working together for several years to standardize a core set of data elements that each State would include on police crash reports. The Model Minimum Uniform Crash Criteria could enhance the crash data of both agencies. While adoption of the elements is voluntary, efforts will be made to provide State agencies with the information they need to reach a decision on changing their crash reports.

Lead Office: Data Analysis and Information Systems
Support Office: Motor Carrier Safety Programs
Implementation Period: 2000-2003

IT5: Evaluate the Effectiveness of Major Programs

FMCSA must continue to evaluate the effectiveness of its programs. Preliminary analytical models have been developed for the roadside inspection and compliance review programs. Traffic enforcement will be added to the new roadside inspection model. A third model will be developed to integrate all models and will be used to determine the best program mix of inspections, compliance reviews, and traffic enforcement. In a separate project, the 10 States with the highest numbers of fatal large truck crashes were given grants to improve their safety data. The effectiveness of their use of the grant funds will be evaluated. Major tasks include: (1) revising the current models used to evaluate the effectiveness of roadside inspection and compliance review programs by December 2000; and (2) creating and testing a preliminary integrated model by December 2001. An evaluation report will be delivered in fiscal year 2001.

Lead Office: Data Analysis and Information Systems
Implementation Period: 2000-2001

IT6: Benchmark Best Industry Safety Practices and Analyze the Safety Posture of the Regulated Community

FMCSA will conduct surveys or assist in surveys to assess the performance of the regulated fleet, vehicles, and drivers. Major tasks include: (1) Estimating the condition of the vehicles and drivers on the Nation's highways by periodically conducting a random National Fleet Safety Survey. The next survey will be conducted by December 2001. (2) Estimating the condition of commercial passenger carrier drivers and vehicles by conducting a random National Bus Fleet Survey by April 2000. (3) Conducting an annual survey of motor carriers to estimate the drug and alcohol usage rate among CDL drivers based on random, post-accident, and reasonable suspicion testing. The 1998 rate estimates will be available by April 2000. (4) Identifying industry best safety practices within segments of the industry. The report on best practices will be completed in September 2001.

Lead Office: Data Analysis and Information Systems
Support Office: Motor Carrier Safety Programs
Implementation Period: 2000-2001

IT7: Reduce the Number of Problem Drivers

In cooperation with its State partners, FMCSA will assist in making improvements to commercial driver licensing systems. Specifically, the agency will improve systems for exchanging information among courts, police, and licensing agencies and among the States. This effort is designed to ensure that driver offenses appear in the driver history in a complete, timely, and accurate manner. This will increase the likelihood that law enforcement, prosecutors, judges, and licensing agencies have the information they need to identify and take remedial action with problem drivers. A status report on the system improvements will be completed by December 2001.

Lead Office: Driver and Carrier Operations
Support Office: Motor Carrier Safety Programs
Implementation Period: 2000-2001

IT8: Pilot Test Use of GPS Technology in Place of Driver's Log Books

FMCSA will determine whether global positioning system (GPS) technology and many of the complementary safety management computer systems currently being used in the motor carrier industry provide at least the same degree of monitoring accuracy as automatic on-board recorders. Motor carriers with GPS technology and related safety management computer systems will be allowed to enter into a pilot agreement with FMCSA to use such systems to record and monitor drivers' hours-of - service in lieu of complying with the handwritten records of duty status requirement. FMCSA will assess both the monitoring accuracy of GPS technologies used by motor carriers participating in the pilot test and the potential economic advantages associated with the use of GPS technology to reduce the information collection burden for complying with hours-of-service regulations.

Lead Office: Driver and Carrier Operations
Implementation Period: 2000-2001

IT9: Research Operational Factors in Driver Fatigue

In 2000 and 2001, research will be completed on the effects of various work/rest cycles on performance, commercial motor vehicle crash rates by time of day, motor coach driver fatigue and stress, local and short-haul driver fatigue, shipper-encouraged safety violations that may increase fatigue, truck sleeper berths and driver fatigue, and driver scheduling practices that affect fatigue.

Lead Office: Research and Technology
Implementation Period: 2000-2001

IT10: Test Intelligent Vehicle Initiative (IVI)/ Driver Alertness

FMCSA will accelerate the development, availability, and use of driving assistance and intervention systems to reduce motor vehicle crashes. The major tasks include operational tests of drowsy driver technology on commercial vehicles. A pilot test of technological aids to improve fatigue management has been initiated, including the testing of fatigue management technologies such as the actigraph (a wrist-worn sleep monitor), in-vehicle alertness monitoring, lateral lane tracking, in-vehicle black box performance monitoring, and fatigue-reducing vehicle steering linkages. Data collection will begin in April 2000. FMCSA will work with NHTSA and industry on these technologies.

Lead Office: Research and Technology
Implementation Period: 2000-2001

IT11: Reduce Car–Truck Proximity Crashes and Increase Driver Awareness

FMCSA will identify the causes of car-truck proximity crashes and develop countermeasures to reduce those crashes. This will be accomplished by: (1) determining the effectiveness of existing, and developing innovative new media and outreach approaches to enhancing the No-Zone program; (2) encouraging States to adopt a Share the Road component in driving manuals and educational driver courses; (3) completing a study in fiscal year 2000 to identify human factors and possible countermeasures for commercial motor vehicle backing and lane changing; (4) conducting an instrumented vehicle study of car-truck interaction to characterize and document the actions of cars and other vehicles around trucks; (5) collaborating with NHTSA on a study of truck mirror use and effectiveness and developing recommended practices; and (6) initiating in 2001 the development of a space management pilot program for implementation in commercial motor vehicle fleets, focusing on headway

management, blind spots, passing, merging, and wide right turns.

Lead Office: Research and Technology
Implementation Period: 2000-2001

IT12: Develop Brake Performance Testing and Sensing Technology

FMCSA will establish specifications for performance-based brake testing technologies including roller dynamometers, flat-plate brake testers, breakaway torque testers, an on-board decelerometer, and an infrared brake temperature measurement system. These systems are currently used as screening devices only during inspections. FMCSA will develop pass/fail criteria for braking force using performance-based brake testing technologies. The use of the performance-based brake testing machines could be expanded to include enforcement of the new Federal brake performance standards.

Lead Office: Vehicle and Roadside Operations
Implementation Period: 2000-2001

FMCSA will evaluate a mobile infrared brake screening device to enable inspectors to screen commercial motor vehicles for faulty brakes at main-line speeds. This technology will increase the efficiency of the roadside inspection process by quickly identifying vehicles with certain brake defects. FMCSA will complete the evaluation by January 2001.

Lead Office: Research and Technology
Implementation Period: 2000-2001

IT13: Perform Large Truck Crash Causation Study and Establish a Database

FMCSA and NHTSA will conduct a study of the causes of serious truck crashes. The data will fill a void in available information concerning the causes and contributing factors of large truck crashes. The data will be gathered at sample sites across the country and used to populate an analytical database. A work study plan for the database will be developed in early 2000, and crash investigations at four pilot sites will begin in the summer of 2000. NHTSA will administer the program in cooperation with FMCSA. Additional funding is provided for 2001 through 2003.

Lead Office: Data Analysis and Information Systems
Implementation Period: 2000-2003

IT14: Test Intelligent Vehicle Initiative (IVI)/ Rollover Stability (Generation 0: Freightliner)

FMCSA and its partners will evaluate a Roll Stability Advisor an in-cab device that will be installed on six trucks and will warn drivers of what their combination tractor/trailer rollover threshold is and how close to that threshold the driver has driven. The device is designed to provide feedback to the driver to allow driving adjustments to reduce the number of rollover-related crashes. Real-world operational testing will begin by September 2000. Partners in the project are FHWA, NHTSA, Freightliner, PraxAir, the University of Michigan Transportation Research Institute, and others.

Lead Office: Research and Technology
Implementation Period: 2000-2002

IT15: Test Intelligent Vehicle Initiative (IVI)/ Hazard Warning (Generation 0: Mack Trucks)

FMCSA and its partners will operationally test an infrastructure-assisted hazard warning system for commercial motor vehicles. The hazard warning system, to be installed on 40 vehicles, will identify high-risk highway locations and provide in-cab notification to the drivers. The test will also incorporate an automated collision notification system. Real-world operational testing will begin by September 2000. Partners in the project are FHWA, NHTSA, Mack Trucks, McKenzie Tank Lines, the Virginia Department of Transportation, and others.

Lead Office: Research and Technology
Implementation Period: 2000-2002

IT16: Test Intelligent Vehicle Initiative (IVI)/ Collision Warning and Advanced Braking (Generation 0: Volvo Trucks)

FMCSA and its partners will test 100 commercial motor vehicles equipped with collision warning systems and advanced braking systems. The goal of the test is to evaluate the effectiveness of in-cab

warnings of objects in the driving path, as well as advanced braking systems that can provide shorter stopping distances. Real-world operational testing will begin by September 2000. Partners in the project are the FHWA, NHTSA, Volvo North America, US Express Leasing, Inc., systems suppliers, and others.

Lead Office: Research and Technology
Implementation Period: 2000-2003

IT17: Develop Enhancements to Commercial Motor Vehicle Driver Training and Performance Management

In 2000 and 2001, FMCSA will: (1) begin operations of a TEA-21-mandated truck driver training and training technology research center in Connellsville, PA; (2) conduct an empirical study of the relationship between payment methods for commercial motor vehicle drivers and safety (September 2001); (3) complete an updated assessment of available simulators for truck driver training simulation validation and initiate procurement for a simulator validation study (September 2000); (4) report promising research opportunities for employing the National Advanced Driving Simulator in FMCSA and other commercial motor vehicle safety research (January 2001); (5) identify driver performance management practices that lead to acceptance of in-vehicle driver monitoring technologies and to positive behavior change (September 2000); and (6) provide a congressionally mandated grant to the truck driving safety center at Crowder College, MO (September 2000).

Lead Office: Research and Technology
Implementation Period: 2000-2001

6. Improving Standards for Operations and Equipment

Setting new performance standards for vehicles, drivers, and motor carriers will raise the bar for safety in commercial operations. In 1999, FMCSA issued a final rule on trailer conspicuity retrofitting, disqualification of drivers for railroad grade crossing violations, and rear impact protection. Many current motor carrier safety regulations are criticized as difficult to understand. FMCSA is completely revising the Federal Motor Carrier Safety Regulations (FMCSRs) to simplify the rules and make them easier to follow, clearly define responsibility for compliance, and clarify the consequences of noncompliance. In addition, FMCSA is developing a revised safety rating process and implementing the congressional mandate for defining an "unfit" motor carrier that should be prohibited from operating in interstate commerce.

Hours-of-Service

FMCSA is updating the prescribed maximum hours that drivers can operate a vehicle and the minimum hours a driver must be allowed to rest. This rulemaking builds on recent driver alertness research conducted by the agency and others.

New Entrants

To further improve carrier operations, MCSIA requires DOT to establish minimum standards for new entrants, in order to ensure that they are knowledgeable about safety regulations. In addition, new entrants will be subject to a compliance review within 18 months of initiating operation.

Commercial Drivers License

The objective of the commercial drivers license (CDL) program is to establish uniform testing, licensing, and sanction standards, in order to screen out drivers who are unable or unwilling to drive safely. FMCSA and the States successfully implemented the program in 1992 and built the Commercial Drivers License Information System (CDLIS) to control licensing and track violations by commercial drivers. Under MCSIA, major program improvements are expected. States will be required to record all convictions for moving traffic violations, including those committed in noncommercial vehicles, on the records of commercial drivers. States would be prohibited from issuing special licenses or masking violations of commercial drivers convicted of traffic violations. Alternative identifiers such as fingerprinting, to further reduce CDL fraud and mandatory driver training standards, are also being examined.

Planned Actions

OE1: Motor Carrier Safety Assistance Program (MCSAP) Management

OE2: Develop a Revised Safety Rating Process and Determine "Unfit" Carriers

OE3: Issue Zero Base Review of the Federal Motor Carrier Safety Regulations

OE4: Develop Driver Training Standards for Multiple Trailer Combination Vehicle (MTCV) Drivers

OE5: Issue New Driver Hours-of-Service Regulations

OE6: Revise Rules for Driver Physical Qualifications

OE7: Issue CDL Violation Rulemakings and Determine Entry-Level Standards

OE8: Establish New Standards for CDL Disqualifications, Violations, and Provisional Licenses

OE9: Issue Regulations on Cargo Securement

OE10: Revise Imminent Hazard Definition

OE11: Commercial Van Definition

OE1: Motor Carrier Safety Assistance Program (MCSAP) Management

FMCSA will implement the commercial vehicle safety program changes authorized in TEA-21 by publishing a revised Motor Carrier Safety Assistance Program (MCSAP) regulation. This regulation will implement States' performance-based commercial vehicle safety programs, improve coordinated safety planning at the State level, and provide incentive funding based on the States' progress in reducing fatalities and accidents involving commercial

vehicles. The Notice of Proposed Rulemaking was published in March 1999, and a final MCSAP rule will be published by summer 2000, to be effective October 2000. Additional MCSAP program changes made by MCSIA will be implemented with further rulemaking in fiscal year 2000. Additional funding to increase State enforcement will be made available in fiscal year 2001 through fiscal year 2003.

Lead Office: Motor Carrier Safety Programs
Support Office: Regulatory Development
Implementation Period: 2000-2003

OE2: Develop a Revised Safety Rating Process and Determine "Unfit" Carriers

FMCSA issued an Advanced Notice of Proposed Rulemaking in 1998, requesting comments on the future evolution of a rating system that could be used both in making safety fitness determinations and in meeting the demands of shippers, insurers, and other users interested in evaluating motor carrier performance. FMCSA will complete a Notice of Proposed Rulemaking in the summer of 2000.

Lead Office: Regulatory Development
Implementation Period: 2000-2001

In a complementary rulemaking, Section 4009 of TEA-21 added a mandatory shutdown requirement for all carriers found to be "unfit" and provided carriers 60 days to improve their fitness. A Notice of Proposed Rulemaking on the TEA-21 shutdown provision was issued in August 1999. A final rule is expected to be completed by FMCSA in March 2000.

Lead Office: Vehicle and Roadside Operations
Support Office: Regulatory Development
Implementation Period: 2000

OE3: Issue Zero Base Review of the Federal Motor Carrier Safety Regulations

FMCSA will complete a revision of the Federal Motor Carrier Safety Regulations. The new rules will be more understandable, simplify the requirements where possible, introduce performance-based alternatives, focus more clearly on who has the responsibility for complying with each regulation, and describe the consequences of noncompliance. An extensive outreach program will accompany publication of the Notice of Proposed Rulemaking, which is expected to be published in the summer of 2000.

Lead Office: Driver and Carrier Operations
Support Office: Regulatory Development
Implementation Period: 2000

OE4: Develop Driver Training Standards for Entry-Level and Multiple Trailer Combination Vehicle (MTCV) Drivers

FMCSA will develop two rulemakings to ensure that commercial motor vehicle drivers are adequately trained. The entry-level rulemaking will address: (1) training requirements for novice commercial motor vehicle drivers; and (2) the unique training needs of MTCV drivers. The Notice of Proposed Rulemaking will be completed by FMCSA in the fall of 2000.

Lead Office: Driver and Carrier Operations
Support Office: Regulatory Development
Implementation Period: 2000

OE5: Issue New Driver Hours-of-Service Regulations

FMCSA will revise the current hours-of-service regulations for drivers of commercial motor vehicles. These regulations prescribe the maximum number of hours drivers may operate their vehicles before being required to go off-duty. The rulemaking will generate proposals for changes to the existing hours-of-service regulations, including records of duty status. A Notice of Proposed Rulemaking will be published in the spring of 2000.

Lead Office: Driver and Carrier Operations
Support Office: Regulatory Development
Implementation Period: 2000

OE6: Revise Rules for Driver Physical Qualifications

FMCSA will improve commercial driver fitness-for-duty requirements. Actions to be completed during 2000 include: (1) complete a Final Rule by summer 2000 to update and simplify the medical examination forms and procedures; (2) publish a Notice of Proposed Rulemaking by summer 2000 linking driver physical qualifications to the CDL process; (3) conduct a retrospective study to assess the level of risk associated with the operation of

commercial motor vehicles by insulin-using diabetic drivers; and (4) establish a panel of medical experts to review the diabetes requirements and guidelines and make recommendations for amending the current Federal diabetes standard. Other actions to be completed during 2000 include: (1) prepare a report to Congress on the feasibility of developing a practical and cost-effective program that allows insulin-treated diabetics to operate commercial motor vehicles in interstate commerce and, if a protocol is feasible, initiate rulemaking to implement it; and (2) complete the research and report on the presence and severity of sleep apnea in a sample of commercial drivers.

Lead Office: Driver and Carrier Operations
Support Office: Regulatory Development
Implementation Period: 2000

OE7: Issue CDL Violation Rulemakings and Determine Entry-Level Standards

FMCSA will: (1) develop a Final Rule to prohibit driving onto highway rail grade crossings without proper clearance space; (2) issue a Supplemental Notice of Proposed Rulemaking for learners permits by fall 2000; and (3) follow with a final rulemaking, if it is determined appropriate, in 2000.

Lead Office: Driver and Carrier Operations
Support Office: Regulatory Development
Implementation Period: 2000

OE8: Establish New Standards for CDL Disqualifications, Violations, and Provisional Licenses

FMCSA will implement the requirements in MCSIA to improve the CDL program, including: (1) promulgate new stipulations that include disqualification for driving with a revoked, suspended, or canceled CDL and conviction for causing a fatality through the negligent or criminal operation of a commercial motor vehicle; (2) establish authority for the Secretary of Transportation to disqualify a driver for up to 30 days if there is an imminent hazard; (3) establish criteria and time periods for disqualification of drivers who have been convicted of serious offenses involving vehicles other than commercial motor vehicles resulting in a revocation, cancellation, or suspension of the individuals' licenses; (4) add three offenses to the list of serious traffic violations for which a driver can be disqualified (driving without a CDL, driving without a CDL in possession, and driving without proper endorsement); (5) require States to request all information about the driving record of the individual from any other State that has issued a license to the individual; (6) require the State to notify DOT or the CDLIS operator of underlying violations that lead to disqualification, revocation, suspension, or license cancellation; (7) require DOT to notify the licensing States of traffic control violations by CDL holders within 10 days of violation; (8) prohibit special licenses, including provisional or temporary licenses; (9) require that States establish penalties consistent with Chapter 313 of Title 49; (10) require the States to maintain a record of each conviction of traffic control laws and make records available to the driver, DOT, employers, prospective employers, State agencies, and their agents; (11) prohibit the masking of violations or their withholding from driving records; (12) require States to revoke, suspend, or cancel CDLs in accordance with regulations for disqualification for serious offenses or drug and alcohol offenses; (13) prohibit States in substantial noncompliance with CDL requirements from issuing CDLs; (14) require States to query both the National Driver Register and the CDLIS before issuing or renewing any operator's license; and (15) withhold MCSAP funds from States in substantial noncompliance with CDL requirements. A Notice of Proposed Rulemaking is expected to be completed by FMCSA in the fall of 2000.

Lead Office: Driver and Carrier Operations
Support Office: Regulatory Development
Implementation Period: 2000-2002

OE9: Issue Regulations on Cargo Securement

FMCSA is participating in a bilateral research program with Canada to devise new North American standards for cargo securement. The research and rulemaking were initiated after a fatal crash involving poorly secured steel coils. A Notice of Proposed Rulemaking on new cargo securement standards will be completed by FMCSA by spring 2000.

Lead Office: Vehicle and Roadside Operations
Support Office: Regulatory Development
Implementation Period: 2000

OE10: Revise Imminent Hazard Definition

FMCSA will issue a rulemaking to revise the definition of an imminent hazard as required by MCSIA. A Notice of Proposed Rulemaking will be completed by FMCSA in the summer of 2000.

Lead Office: Driver and Carrier Operations
Support Office: Regulatory Development
Implementation Period: 2000-2001

OE11: Commercial Van Definition

FMCSA will issue a rulemaking to revise the definition of small passenger vans no later than December 9, 2000, as required by MCSIA.

Lead Office: Commercial Passenger Carrier Safety
Support Office: Regulatory Development
Implementation Period: 2000

7. Special Initiatives: Border and International

FMCSA programs provide a comprehensive approach to border safety issues. Some of the major initiatives include:

- Allocation of special enforcement grants to the border States to increase inspection activities;
- Encouraging States to consider constructing inspection facilities when applying for Federal funds under the Border/Corridor and other Federal aid programs;
- Establishment of policy-level and technical-level working groups under the auspices of the International Association of Chiefs of Police (IACP), to assist in the development and implementation of programs along the border and to help resolve problems as they may occur
- Training of Mexican officials to conduct commercial motor vehicle inspections consistent with U.S. standards
- Education and outreach activities to interested groups on both sides of the border
- Development of electronic systems to exchange safety information with Mexico and Canada
- Development of compatible safety and operating regulations for trucks and buses
- Deployment of Federal inspectors at key border locations to increase the enforcement presence; and
- Technical assistance to help Mexico improve its national safety programs and share in enforcement responsibilities along the border.

Current Initiatives: Mexico

Since December 1995, FMCSA has implemented a variety of educational, infrastructure, and enforcement initiatives in partnership with the States, FHWA, and other government agencies and the Mexican government, designed to address the safety concerns associated with the unique cross-border truck operations in the southwest border area. These initiatives have resulted in substantial improvements in many FMCSA border safety and compliance programs. Before the signing of the North American Free Trade Agreement (NAFTA), the U.S. enforcement presence at ports of entry and other areas within the commercial zones along the U.S.-Mexican border consisted primarily of periodic strike force activities and roving commercial vehicle inspection and size and weight operations. The assignment of 40 Federal and nearly 100 State personnel to key border locations has provided a more permanent and sustained enforcement presence and resulted in a marked increase in inspection activities. In 1999, more than 36,500 Mexican vehicles were inspected. Approximately 37 percent of the total number of inspections conducted were Level I, 60 percent were Level II, and 3 percent were Level III.

To continue to enhance enforcement activities, FMCSA will hire 20 additional inspectors in fiscal year 2001. FMCSA is also working with the States to leverage the current special MCSAP border enforcement grants with border/corridor grants and other Federal-aid funds made available through TEA-21 to build inspection facilities, hire additional inspectors, and purchase equipment. Currently, Federal inspectors and some State inspectors perform safety inspections within the Federal ports-of-entry housing the U.S. Customs, Immigration and Naturalization Service, and other Federal inspection agencies.

Current data on inspection activities indicate that Mexican trucks entering the United States are getting safer. The overall out-of-service rate at the border has improved and is now approximately 40 percent, down from 50 percent before December 1995. As is the case with U.S. vehicles and drivers, FMCSA continues to strive for greater improvements.

Current Initiatives: Canada

FMCSA is equally vigilant about the condition of Canadian motor carriers, vehicles, and drivers operating in the United States. The motor carrier safety situation at the Canadian border is vastly different from that at the Mexican border. The United States and Canada have a long history of working together to develop equivalent motor carrier safety regulatory and enforcement regimes. The exclusion of Canada from some of the programs

directed at Mexican commercial motor vehicle operations at the border is indicative of the great progress that already has been made with Canada toward establishing compatible standards and safety management systems and creating an appropriate framework for addressing problems. For example, the out-of-service rate for Canadian carrier operations in the United States is comparable to U.S. out-of-service rates.

Because the motor carrier safety regimes in Canada and the United States already are similar, the focus continues to be to achieve reciprocal safety rating procedures and standards and further harmonize safety oversight regimes. These efforts are being pursued in concert with Mexico, so that ultimately compatible motor carrier safety standards and oversight regimes can be achieved throughout North America. The three countries are developing compatible motor carrier and driver performance information systems, including carrier identification schemes and procedures for efficient exchange of information. FMCSA is also developing new operating authority standards to ensure that Mexican carriers conducting operations in the United States comply with applicable regulations and engage in safe practices.

Much work still remains. The successful completion of the four actions described below will lead to full integration of Mexican operations into FMCSA safety programs and will provide greater assurance that Mexican vehicles and drivers will not pose unreasonable safety risks when operating in the United States.

Planned Actions

N1: Improve Regulatory Compatibility

N2: Develop and Operate Information Exchange

N3: Establish Operating Authority Process

N4: Increase Enforcement and Compliance

N1: Improve Regulatory Compatibility

FMCSA will increase the level of compatibility of motor carrier safety regulations in North America by continuing to work with Mexican authorities to help them develop and publish minimum safety standards that include hours-of-service and log book requirements by October 2000. FMCSA will work in concert with Mexico and Canada to develop and implement consistent motor carrier safety regulations and complete a North American motor carrier safety operations guidebook by January 2002.

Lead Office: Motor Carrier Safety Programs

Support Office: Bus and Truck Standards and Operations

Implementation Period: 2000-2002

N2: Develop and Operate Information Exchange

FMCSA will increase the capability of inspectors to access data by improving the quality of U.S. data on Mexican carriers; providing technical assistance to Mexico and Canada to develop compatible information safety systems; and providing inspectors the capability to verify foreign database information on carriers, drivers, and vehicles. Progress will be measured by the development of a U.S. management information system for Mexican carriers operating in the United States; maintaining, on a recurring basis, a new USDOT database entry for each Mexican carrier applying for operating authority in the United States; assisting Mexican and Canadian officials in performing requirements analysis and designing needed software at their request; and establishing electronic connectivity to Mexican and Canadian databases by March 2003. An analysis of information systems and procedures needed will be completed by September 2000.

Lead Office: Motor Carrier Safety Programs

Support Office: Enforcement and Compliance, Data Analysis and Information Systems

Implementation Period: 2000-2003

N3: Establish Operating Authority Process

FMCSA will adopt operating authority rules and related procedures by issuing a Final Rule for the application process and developing efficient and accurate internal procedures to process submitted application information, including recording that information, in appropriate information systems. The goal of FMCSA is to publish new operating authority application requirements and complete procedures for processing applications by October 2000. Upon publication of the rules, FMCSA will

provide outreach activities to inform applicants and other interested groups about the new application process.

Lead Office: Bus and Truck Standards and Operations

Support Office: Motor Carrier Safety Programs, Enforcement and Compliance

Implementation Period: 2000-2001

N4: Increase Enforcement and Compliance

FMCSA will increase inspection capabilities along the southwest U.S. border by hiring additional Federal inspectors and providing them with the necessary facilities and technology; augmenting the State enforcement presence; and enhancing the use of technology to facilitate enforcement. Specific tasks include addition of 20 Federal border inspectors to the existing 40 inspectors by July 2001; procurement of facilities and communication support for all Federal inspectors; allocation of fiscal year 2001-2003 border enforcement grants by December of each year; working with the States to ensure that they consider inspection facilities and other needs of the enforcement agencies when they apply for Federal funding; and continuing to improve the capability of all border inspectors to access existing safety information systems.

FMCSA convened a group of headquarters and field office officials in 1999 to develop consistent enforcement policies and procedures for foreign operations. In concert with the States, FMCSA will develop border staffing standards for State and Federal inspectors by December 2000 and work to ensure that staffing standards are maintained by the States; establish requirements for carriers to maintain evidence of registration in each motor vehicle; and establish procedures for placing vehicles out-of-service if they are found operating outside the scope of the carrier's registration authority or operating without registration. In addition, FMCSA will issue a rule that implements the new penalty provisions, including disqualification from operation for foreign motor carriers found operating outside a commercial zone.

FMCSA will increase cooperative projects with Mexico by working with the Commercial Vehicle Safety Alliance (CVSA), the IACP, and border States. Specific tasks include: translating training videos on North American inspection procedures into Spanish by December 2000; conducting Mexican inspector refresher training sessions upon receipt of a request from Mexico; coordinating ongoing border activities in cooperation with CVSA, IACP, and the border States; and continuing education and outreach activities targeted at carriers crossing the border.

Lead Office: Motor Carrier Safety Programs

Support Office: Enforcement and Compliance

Implementation Period: 2000-2003

8. Priorities

FMCSA's *Safety Action Plan 2000-2003* provides an aggressive approach to improving truck and bus safety by setting specific, measurable tasks that will be implemented to address identified program shortcomings and, in particular, implement the provisions of the Motor Carrier Safety Improvement Act of 1999.

All the actions described in the plan must be accomplished in a timely fashion to improve commercial vehicle safety; however, certain actions have higher priority. The highest priorities are assigned to those actions mandated by Congress in the MCSIA, TEA-21, ICC Termination Act of 1995, ISTEA, and other legislation such as the Government Performance and Results Act and the annual Appropriations Acts, and to those that will meet the operational requirements of NAFTA. Thirty-five of the 47 actions fall into this category. Next in priority are those actions addressed by the independent reviews of FMCSA's programs by the Department of Transportation's Inspector General (OIG), the General Accounting Office (GAO), and the program review conducted by former Representative Norman Mineta.

Congress and the independent reviews have established the overall priorities for FMCSA. Within those parameters, priority is being given to strengthening targeted enforcement with underlying data improvements including the deployment of PRISM, completing important rulemakings, testing and deploying new safety technology, and improving industry and public awareness of commercial motor vehicle safety issues.

In Exhibit 7, the impetus for each action in the plan is identified, based on whether it was required by legislation and/or by independent reviews.

Exhibit 7. Action Items and Their Relationship to Legislation and Independent Reviews

	Action Required by:					
	Legislation			Independent Reviews		
Action Item	TEA-21	MCSIA	Other	OIG	GAO	Mineta Panel
Increasing Enforcement of Federal Safety Regulations						
E1						
E2						
E3						
E4						
E5						
E6						
E7						
E8						
E9						
E10						

Exhibit 7. Action Items and Their Relationship to Legislation and Independent Reviews (Continued)

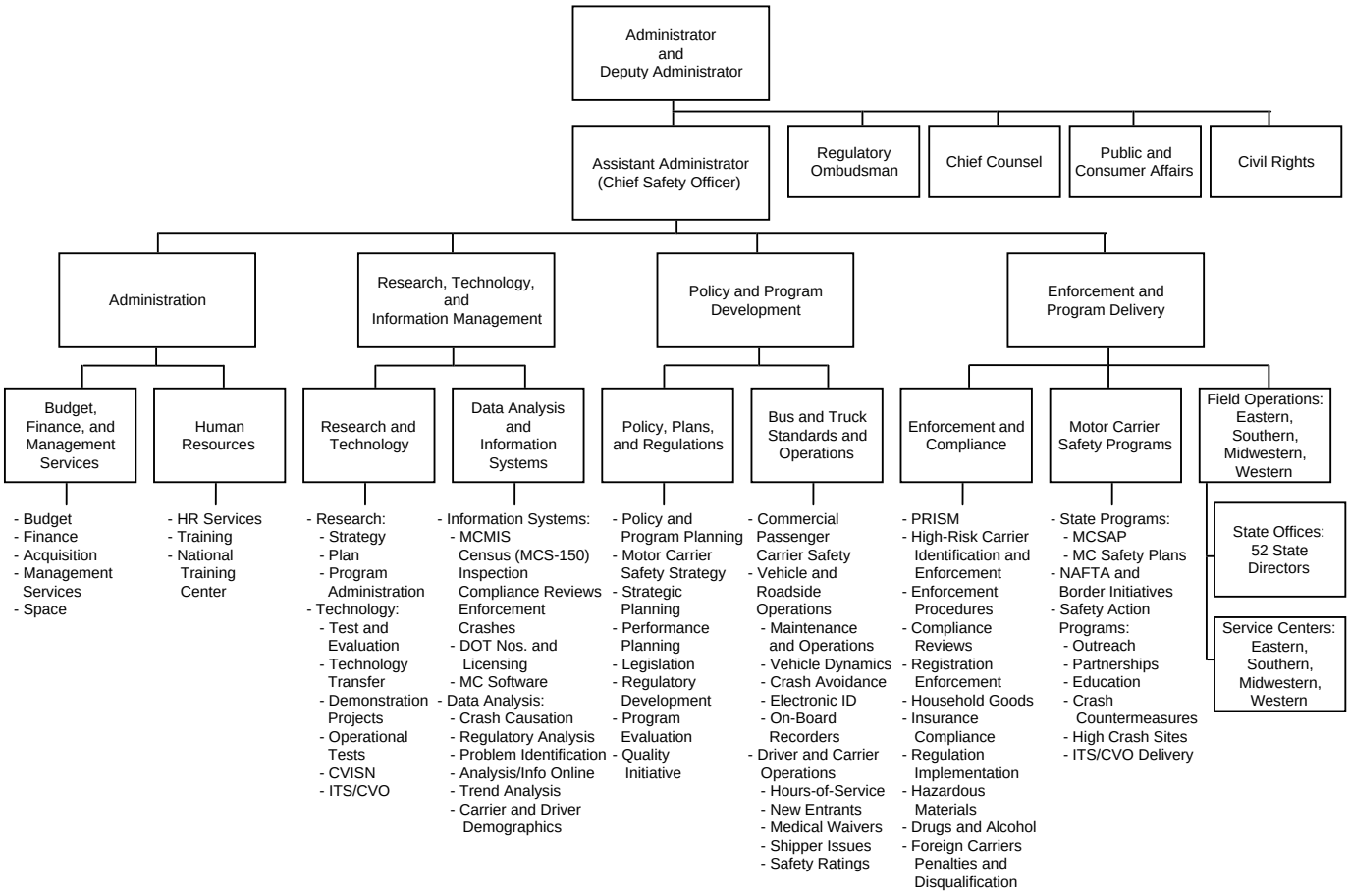
Action Item	Action Required by:					
	Legislation			Independent Reviews		
	TEA-21	MCSIA	Other	OIG	GAO	Mineta Panel
Increasing Safety Awareness						
SA1						
SA2						
SA3						
SA4						
SA5						
Improving Safety Information and Technology						
IT1						
IT2						
IT3						
IT4						
IT5						
IT6						
IT7						
IT8						
IT9						
IT10						
IT11						
IT12						
IT13						
IT14						
IT15						
IT16						
IT17						

Exhibit 7. Action Items and Their Relationship to Legislation and Independent Reviews (Continued)

Action Item	Action Required by:					
	Legislation			Independent Reviews		
	TEA-21	MCSIA	Other	OIG	GAO	Mineta Panel
Improving Standards for Operations and Equipment						
OE1						
OE2						
OE3						
OE4						
OE5						
OE6						
OE7						
OE8						
OE9						
OE10						
OE11						
Special Initiatives: Border and International						
N1						
N2						
N3						
N4						

Appendix A

Federal Motor Carrier Safety Administration



Appendix B

Glossary of Terms

ASAP (Automated Safety Assessment Program): A software application used by motor carriers to capture self-evaluation safety data on diskette for subsequent analysis by FMCSA.

ASPEN: Software developed by FMCSA, used at roadside inspection sites to collect data on the results of inspections and electronically transfer the data to State and national information systems. Includes the Inspection Selection System (ISS).

AVALANCHE: A component of ASPEN, used to receive inspection data from ASPEN units and prepare them for transfer into SAFETYNET.

CAPRI: Software developed by FMCSA, used by safety investigators to conduct compliance reviews.

CDL/DL (Commercial Drivers License/Drivers License): A license issued to an individual by a State or other jurisdiction, according to Code of Federal Regulations, Title 49, Part 383, which authorizes the individual to operate a designated class of motor vehicles.

CDLIS (Commercial Drivers License Information System): A software system that serves as a pointer to the complete record kept by the State issuing the license. The system is intended to provide States with the ability to check a nationwide information system for possible duplicates and to determine the status of a driver's commercial drivers license.

CVIEW (Commercial Vehicle Information Exchange Window): A distributed version of the SAFER System, owned by and located within a State, that facilitates the electronic exchange of carrier, vehicle, and driver safety and credential information among users and State and Federal systems.

CVISN (Commercial Vehicle Information Systems and Networks): A collection of State, Federal, and private-sector information systems and communications networks that support commercial vehicle operations (CVO).

CVO (Commercial Vehicle Operations): Includes all operations associated with moving goods and passengers via commercial vehicles over the North American highway system and the activities necessary to regulate the operations.

CVSA Inspections: *Level I, North American Standard (NAS)*—The most complete and thorough of the standardized inspections. It includes extensive vehicle checks, including measurement of brake performance and inspection of driver qualifications, licensing, and hours-of-service. *Level II, Walk Around Driver Vehicle Inspection*—Covers both the driver and vehicle aspects but is conducted without inspecting underneath the vehicle. *Level III, Driver Only Inspection*—The primary on-highway examination of all driver-related issues (medical card, licensing, waivers, etc.). The vehicle is not looked at during the inspection. *Level IV, Special Inspection*—Includes a one-time examination of a particular item (e.g., hazardous material cargo tank inspection) and is normally conducted in support of a study or to verify or refute a suspected trend. *Level V, Terminal Inspection*—A vehicle-only inspection at a carrier's terminal facility, which may be done in conjunction with a compliance review.

Electronic Clearance: The process that allows commercial vehicles to pass a checkpoint (e.g., weigh station) at mainline speeds without stopping to be checked for proper credentials, weight, and safety status.

Electronic Screening: An ITS/CVO program area that includes programs and services designed to facilitate the verification of size, weight, safety, and credential information of commercial motor vehicles.

Electronic Trip Recorders: Also known as onboard computers, these recorders automatically monitor and record information on the performance of the vehicle and/or driver.

GPS (Global Positioning System): A system that locates vehicles using trilateration from multiple satellite-based transmitters.

ITS (Intelligent Transportation Systems): Transportation systems that integrate advanced computer information processing, communications, sensors, electronic technologies, and management strategies to increase the safety and efficiency of the surface transportation system.

ITS/CVO (Intelligent Transportation Systems/ Commercial Vehicle Operations): A voluntary effort involving public and private partnerships focused on improving highway safety and motor carrier productivity through the use of ITS technology.

ISS (Inspection Selection System): Provides an easy means of selecting vehicles for roadside inspection, based on SafeStat indicators and the carrier's history of past inspections.

MCMIS (Motor Carrier Management Information System): A central repository of comprehensive safety data maintained by FMCSA.

MCSAP (Motor Carrier Safety Assistance Program): A Federal program administered by FMCSA, providing funds to U.S. States and territories for activities in support of commercial motor vehicle safety. To received MCSAP funds, States must adopt interstate and intrastate regulations compatible with the Federal Motor Carrier Safety Regulations (FMCSR) and the Hazardous Materials Regulations (HMR).

MCSIP (Motor Carrier Safety Improvement Process): Part of the PRISM project, which is used to monitor the safety improvement of a motor carrier.

Motor Carrier: An entity (individual, partnership, association, corporation, business trust, or any other organized group of individuals) responsible for the safety fitness of a commercial motor vehicle engaged in commerce on roads and highways.

PRISM (Performance and Registration Information Systems Management): A project that links safety fitness to vehicle registration.

SAFER (Safety and Electronic Fitness Records): A Federal system that facilitates the electronic exchange of carrier, vehicle, and driver safety and credential information among users and State and Federal systems.

SafeStat: An algorithm used by FMCSA to prioritize carriers for compliance reviews. Uses census and safety data.

SAFETYNET: A distributed system developed by FMCSA, used by States and Federal motor carrier safety enforcement offices for managing safety data on both interstate and intrastate motor carriers and for electronically exchanging the data nationally.

SafeVUE (SAFER and CVIEW Visual User Environment): A software application designed to allow third-party users access to data within the SAFER and/or CVIEW systems.

SEA (Safety Evaluation Area): The areas included in the SafeStat algorithm: driver SEA, vehicle SEA, safety management SEA, and crash SEA.

Transponder: An electronic tag mounted in a motor vehicle that has electronically stored information that can be retrieved by a roadside reader.

UCR (Unified Carrier Register): A national system that will serve as a clearinghouse and repository of information on and identification of all foreign and domestic motor carriers, brokers, and freight forwarders, and others required to register with the U.S. Department of Transportation, as well as information on safety fitness and compliance with required levels of financial responsibility.

WIM (Weigh-in-Motion): Measures dynamic axle weight at highway or slower speeds. Refers to various technologies that enable vehicle weights to be determined without the need for a vehicle to physically stop on a scale.