

A Preliminary Review of English Proficiency and Safe Commercial Vehicle Operation



U.S. Department of Transportation
Federal Motor Carrier Safety Administration

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FOREWORD

The mission of the Federal Motor Carrier Safety Administration (FMCSA) is to reduce crashes, injuries, and fatalities involving large trucks and buses. FMCSA, an agency of more than 1,000 employees, has offices in all 50 States, the District of Columbia, and Puerto Rico. FMCSA's programs contribute to ensuring safety in motor carrier operations through enforcement of the Federal Motor Carrier Safety Regulations (FMCSR), targeting of high-risk carriers and commercial motor vehicle (CMV) drivers, improvements in safety information systems and CMV technologies, strengthening of CMV equipment and operating standards, and efforts to increase safety awareness.

§391.11 of the FMCSR outlines the general qualifications for CMV drivers, including a requirement that they be proficient in English:

...a person is qualified to drive a motor vehicle if he can read and speak the English language sufficiently to converse with the general public, to understand highway traffic signs and signals in the English language, to respond to official inquiries, and to make entries on reports and records ... §391.11(b)(2)

The purpose of this report is to present the results of a preliminary research study designed to review English proficiency in relation to safe CMV operation. The study endeavored to learn:

- The tasks CMV drivers perform that require language comprehension in the interest of safety.
- The extent to which selected Federal and State enforcement personnel, motor carrier industry groups, individual motor carriers and drivers, State driver licensing agencies and highway departments, and highway safety advocacy groups believe that English language proficiency is necessary for the safe operation of trucks and buses by CMV drivers.
- How these stakeholders interpret the current FMCSA rule concerning English-language proficiency, and how they believe that a driver's level of English proficiency could be assessed in the licensure and hiring processes, in the daily work environment, and during roadside inspections.
- Whether stakeholder groups believe that the English-language standard, as currently written, can be applied in a fair and uniform manner.

This study took a three-pronged approach of examining available data, observing commercial motor vehicle drivers during their regular schedules, and interviewing a wide range of stakeholders.

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SI* (MODERN METRIC) CONVERSION FACTORS

Table of APPROXIMATE CONVERSIONS TO SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
LENGTH				
in	Inches	25.4	Millimeters	mm
ft	Feet	0.305	Meters	m
yd	Yards	0.914	Meters	m
mi	Miles	1.61	Kilometers	km
AREA				
in ²	square inches	645.2	square millimeters	mm ²
ft ²	square feet	0.093	square meters	m ²
yd ²	square yards	0.836	square meters	m ²
ac	Acres	0.405	Hectares	ha
mi ²	square miles	2.59	square kilometers	km ²
VOLUME				
fl oz	fluid ounces	29.57	1000 L shall be shown in m ³ Milliliters	mL
gal	gallons	3.785	Liters	L
ft ³	cubic feet	0.028	cubic meters	m ³
yd ³	cubic yards	0.765	cubic meters	m ³
MASS				
oz	ounces	28.35	Grams	g
lb	pounds	0.454	Kilograms	kg
T	short tons (2000 lb)	0.907	megagrams (or "metric ton")	Mg (or "t")
TEMPERATURE				
°F	Fahrenheit	$5 \times (F-32) \div 9$ or $(F-32) \div 1.8$	Temperature is in exact degrees Celsius	°C
ILLUMINATION				
fc	foot-candles	10.76	Lux	lx
fl	foot-Lamberts	3.426	candela/m ²	cd/m ²
Force and Pressure or Stress				
lbf	poundforce	4.45	Newtons	N
lbf/in ²	poundforce per square inch	6.89	Kilopascals	kPa

Table of APPROXIMATE CONVERSIONS FROM SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
LENGTH				
Mm	millimeters	0.039	inches	in
M	meters	3.28	feet	ft
m	meters	1.09	yards	yd
km	kilometers	0.621	miles	mi
AREA				
mm ²	square millimeters	0.0016	square inches	in ²
m ²	square meters	10.764	square feet	ft ²
m ²	square meters	1.195	square yards	yd ²
ha	hectares	2.47	acres	ac
km ²	square kilometers	0.386	square miles	mi ²
VOLUME				
mL	milliliters	0.034	fluid ounces	fl oz
L	Liters	0.264	gallons	gal
m ³	cubic meters	35.314	cubic feet	ft ³
m ³	cubic meters	1.307	cubic yards	yd ³
MASS				
g	grams	0.035	ounces	oz
kg	kilograms	2.202	pounds	lb
Mg (or "t")	megagrams (or "metric ton")	1.103	short tons (2000 lb)	T
TEMPERATURE				
°C	Celsius	$1.8c + 32$	Temperature is in exact degrees Fahrenheit	°F
ILLUMINATION				
lx	Lux	0.0929	foot-candles	fc
cd/m ²	candela/m ²	0.2919	foot-Lamberts	fl
Force & Pressure Or Stress				
N	newtons	0.225	poundforce	lbf
kPa	kilopascals	0.145	poundforce per square inch	lbf/in ²

* SI is the symbol for the International System of Units. Appropriate rounding should be made to comply with Section 4 of ASTM E380.
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LIST OF ABBREVIATIONS AND SYMBOLS

Acronym	Definition
AAMVA	American Association of Motor Vehicle Administrators
AASHTO	American Association of State Highway and Transportation Officials
ABA	American Bus Association
ACLU	American Civil Liberties Union
ADA	Americans With Disabilities Act
Advocates	Advocates for Highway and Auto Safety
ANPRM	Advance Notice of Proposed Rulemaking
ATA	American Trucking Association
BASIC	Behavior Analysis and Safety Improvement Category
BIT	Biennial Inspection of Terminals program
CDL	Commercial Driver's License
CFR	Code of Federal Regulations
CMS	changeable message sign
CMV	commercial motor vehicle
CR	compliance review
CSA	Comprehensive Safety Analysis
CVSA	Commercial Vehicle Safety Alliance
CY	calendar year
DA	Division Administrator
DIR	Driver Information Resource
DMS	dynamic message sign

DMV	Department of Motor Vehicles
DOT	Department of Transportation
EEOC	Equal Employment Opportunity Commission
FAA	Federal Aviation Administration
FDOT	Florida Department of Transportation
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
FMCSR	Federal Motor Carrier Safety Regulations
FR	Federal Register
FRA	Federal Railroad Administration
Hazmat	hazardous materials
HMR	Hazardous Materials Regulations
HOS	hours of service
IACP	International Association of Chiefs of Police
ICAO	International Civil Aviation Organization
ICC	Interstate Commerce Commission
ICCTA	Interstate Commerce Commission Termination Act of 1995
IIHS	Insurance Institute for Highway Safety
IOO	Independent Owner Operator
LEP	limited English proficiency (references FMCSA Regulation 49 CFR 391.11(b)(2))
LSA	Language Services Associates
MCMIS	Motor Carrier Management Information System
MCS-150	Motor Carrier Identification Report

MCSAP	Motor Carrier Safety Assistance Program
MCSR	Motor Carrier Safety Regulations
MUTCD	Manual on Uniform Traffic Control Devices
MVA	Motor Vehicle Administration
NAFTA	North American Free Trade Agreement
NCUTD	National Committee on Uniform Traffic Control Devices
NPRM	Notice of Proposed Rulemaking
NTSB	National Transportation Safety Board
NTTC	National Tank Truck Carriers
NYSDOT	New York State Department of Transportation
OOS	out of service
PHMSA	Pipeline and Hazardous Materials Safety Administration
PTDI	Professional Truck Driver Institute
PU	power units
TCA	Truckload Carriers Association
TCD	traffic control device
UMCA	United Motor Coach Association
US	United States
USC	United States Code
VMS	variable message sign

EXECUTIVE SUMMARY

BACKGROUND

The mission of the Federal Motor Carrier Safety Administration (FMCSA) is to reduce crashes, injuries, and fatalities involving large trucks and buses. FMCSA, an agency of more than 1,000 employees, has offices in all 50 States, the District of Columbia, and Puerto Rico. FMCSA's programs contribute to ensuring safety in motor carrier operations through enforcement of the Federal Motor Carrier Safety Regulations (FMCSR), targeting of high-risk carriers and commercial motor vehicle (CMV) drivers, improvements in safety information systems and CMV technologies, strengthening of CMV equipment and operating standards, and efforts to increase safety awareness.

§391.11 of the FMCSR outlines the general qualifications for CMV drivers, including a requirement that they be proficient in English:

...a person is qualified to drive a motor vehicle if he can read and speak the English language sufficiently to converse with the general public, to understand highway traffic signs and signals in the English language, to respond to official inquiries, and to make entries on reports and records ... §391.11(b)(2)

PURPOSE

The purpose of this report is to present the results of a preliminary research study designed to review English proficiency in relation to safe CMV operation. The objectives of the research were to determine:

- The tasks that a CMV driver performs that require language comprehension in the interest of safety.
- The extent to which selected Federal and State enforcement personnel, motor carrier industry groups, individual motor carriers and drivers, State driver licensing agencies and highway departments, and highway safety public interest groups believe that the English language is necessary for the safe operation of trucks and buses by CMV drivers.
- How these stakeholders interpret the current FMCSA rule concerning English-language proficiency, and how they believe that a driver's level of English proficiency could be assessed in the licensure and hiring processes, in the daily work environment, and during roadside inspections.
- Whether stakeholder groups believe that the English-language standard, as currently written, can be applied in a fair and uniform manner.

With these objectives in mind, this report presents a preliminary assessment of the extent to which English is needed and used by CMV drivers operating in the U.S., and of how Federal and State enforcement personnel and motor carriers determine whether a driver is capable of understanding and communicating in English sufficiently to ensure safety.

The report is organized into four sections. The first three sections coincide with tasks outlined in the research project statement of work, while the fourth section presents the findings:

- **Data Analysis:** Examining the inspection, violation, and crash records of carriers and drivers provides insight into the magnitude and scope of limited English proficiency (LEP) among drivers, as reported through FMCSA safety programs.
- **Observations:** Observing CMV drivers during their daily working hours and at roadside inspections identifies the circumstances and specific tasks for which language comprehension is required.
- **Interviews:** Conducting structured discussions with contacts from specified stakeholder groups helps gain insight into their general thoughts, opinions and understanding concerning drivers' English proficiency in relation to safe CMV operation.
- **Findings:** The results of the above tasks are synthesized. Each of the findings is supported by results from one or more tasks and summarizes important highlights from the research effort.

DATA ANALYSIS

The objectives of the data analysis were to:

- Determine the magnitude and overall trends in the reporting of LEP violations.
- Determine variations in State reporting of LEP violations.
- Support the selection of States for the observation component of this project.
- Explore any apparent associations between driver compliance regarding English proficiency and safety performance.

The objectives were accomplished through analysis of data in the FMCSA-maintained Motor Carrier Management Information System (MCMIS) and FMCSA Analysis Division's Driver Information Resource (DIR). Violations of FMCSR §391.11(b)(2), referred to as limited English proficiency (LEP) violations, are stored in MCMIS and DIR.

The data analysis component of the project was divided into two parts. The first part consisted of an initial data review to assess trends in national reporting of LEP violations, characteristics of carriers receiving LEP violations, and variations in State reporting of LEP violations.

In the 5-year period from June 2002 through June 2007, a total of 39,265 inspections reported an LEP violation.

- These violations were received by 11,911 carriers.
 - 64 percent of these carriers were U.S. domiciled and active as of June 2007.
 - 37 percent of these carriers received more than one LEP violation.
 - 61 percent of these carriers reported five or fewer power units.

- Between 2005 and 2007:
 - The number of driver inspections reporting LEP violations decreased.
 - The percentage of LEP violations reported as out of service (OOS) increased, coinciding with the release of the CVSA OOS standards on LEP.
- The reporting rate of LEP varied dramatically among the States, the District of Columbia, and on the U.S. border, with localities reporting LEP in a maximum of 1.6 percent of driver inspections.
- The reporting of LEP as OOS varied dramatically among the States, District of Columbia, and on the U.S. border, with localities reporting a maximum of 54 percent of LEP violations as creating an OOS condition.

The second part of the data analysis was a review of carriers with LEP violations and various safety metrics, to determine whether associations exist between English-language proficiency and safe CMV operation. The analysis was designed to determine whether associations exist between regulatory compliance and safety performance but was not intended to determine the root cause of any observed associations. Therefore, the results do not imply a causal relationship as they may be due to several contributing factors.

The analysis indicated that, for all but the Improper Loading/Cargo-Related BASIC violation rate, the U.S.-licensed LEP population had higher mean crash, OOS, and other BASIC violation rates than did the U.S.-licensed non-LEP population. All differences were statistically significant at greater than a 95 percent confidence level (see Table 1 and Table 2).

Table 1. Driver Related Measures Comparison of Safety Performance Rates for LEP and Non-LEP CMV Drivers Licensed in the United States

Basic Rate Category	LEP 8,504 Drivers Mean Rates	Non-LEP 1,016,123 Drivers Mean Rates	Significant t Statistic (p<.005)
Crash	0.218	0.185	p<.0005
Driver OOS	0.175	0.065	p<.0005
Unsafe Driving Violation	1.588	0.989	p<.0005
Fatigued Driving Violation	0.655	0.278	p<.0005
Driver Fitness Violation	0.1	0.058	p<.0005
Controlled Substance/Alcohol Violation	0.014	0.01	p<.0005

Table 2. Vehicle-Related Measures Comparison of Safety Performance Rates for LEP and Non-LEP CMV Drivers Licensed in the United States

Basic Rate Category	LEP 6,597 Drivers Mean Rates	Non-LEP 711,846 Drivers Mean Rates	Significant t Statistic (p<.05)
Vehicle OOS	0.27	0.232	p<.0005
Vehicle Maintenance Violation	1.866	1.356	p<.0005
Improper Loading/Cargo Related Violation	1.588	0.989	p<.0005

OBSERVATIONS

The objective of the observations portion of this study was to develop an inventory of those tasks performed by a CMV driver that require language comprehension in the interest of safety.

This was accomplished through ride-alongs with U.S.-based CMV large-truck and passenger-carrier drivers during their regular shifts and through the observation of driver and vehicle inspections performed on CMVs. The focus of the observations was to determine the extent to which drivers engage in tasks that require language comprehension.

Language-related tasks performed by large-truck and passenger-carrier drivers as part of their daily activities and during inspections are summarized the following describes tasks that were observed during the large-truck ride-alongs.

Ride-Alongs: observed tasks performed by large-truck Drivers that require language comprehension

- Pre-Trip Activities.
 - Complete pre-trip inspection form.
 - Make logbook entry.
 - Read bill of lading and other paperwork regarding load and content.
 - Read paperwork providing location of and directions to delivery/pick-up stations.
 - Read and interpret maps and/or directions provided to plan trip.
- En-Route Activities.
 - Drive to delivery stop.
 - › Read and operate primary and secondary controls and instruments.
 - › Read traffic signs (permanent and temporary; stationary, dynamic, and variable messages) pertaining to parameters such as speed limits, traffic conditions, construction areas, and lane restrictions.
 - › Communicate with other drivers and dispatchers through communication devices such as radios, cell phones, and computer-input devices.
 - › Listen to radio to obtain information (e.g., on weather and traffic conditions).
 - Arrive at store or receiving/shipping facility.
 - › Read safety procedures/policies of facility.
 - › Talk to security (sometimes through intercom) to gain access to facility.
 - › Update logbook (electronic or paper) to note arrival at destination.
 - › Communicate with facility representative (e.g., store manager) regarding delivery details such as parking location and load.
 - Unload truck.
 - › Count and check off number of items (e.g., totes or pallets).
 - › Sign bill of lading.
 - Depart for next stop.
 - › Ask for directions to next location.

- › Call dispatcher or store manager at next stop to provide status information (e.g., whether driver is ahead of/behind schedule or is en route).
 - › Update logbook (electronic or paper) to indicate change in duty status.
- Post-Trip Activities.
 - Complete logbook.
 - Announce return to dispatcher.
 - Write up and submit repair request.
 - Sign paperwork to accept responsibility for contents and delivery.

The following presents tasks observed during the passenger-carrier ride-alongs.

- Pre-Trip Activities.
 - Read terminal safety policies and signs (e.g., “No idling over 5 minutes”).
- En-Route Activities.
 - Pick up passengers.
 - › Welcome passengers onboard (e.g., invite passengers to board, provide introductions).
 - › Explain procedures: provide instructions regarding luggage storage, cell-phone usage, and smoking; identify locations (of restrooms or trash receptacles); advise caution when passengers move about while vehicle is in transit; explain actions required during emergencies.
 - › Answer passengers’ questions.
 - › Inform passengers about stops and final destination.
 - Depart for destination.
 - › Read traffic signs (permanent and temporary; stationary, dynamic, and variable messages) pertaining to parameters such as speed limits, traffic conditions, construction areas, and lane restrictions.
 - › Communicate with other drivers and dispatcher through communication devices such as radios, cell phones, and computer-input devices.
 - › Communicate with passengers (e.g., respond to their questions and issues).
 - Stop for break.
 - › Make intermittent announcements (e.g., announce a lunch stop).
 - › Provide passengers with information (e.g., time for reboarding).
 - › Announce departure and time remaining in journey.
 - Arrive at destination.
 - › Announce arrival and state current stop.
 - › Thank passengers for traveling with the company.
 - › Instruct passengers to take their personal belongings and tell them how to retrieve their luggage.

Inspections: Observed Large-Truck and Passenger-Carrier Inspection Tasks That Require Language Comprehension

- Driver Component.
 - Respond to inspector’s questions (e.g., tell inspector if vehicle is carrying passengers or co-drivers and advise with regard to load type and size and origin/destination).
 - › Confirm if vehicle is carrying any hazmat.
 - › Communicate with inspector to understand why vehicle is undergoing inspection.
 - › Confirm if vehicle has been inspected in recent past.
 - › Give logbook and other paperwork (license, medical card, bills of lading, insurance, registration papers, gas receipts) to inspector as requested.
- Vehicle Component.
 - Follow inspector’s instructions to:
 - › Pull over or park.
 - › Open doors.
 - › Show fire extinguisher and other safety devices.
 - › Open hood.
 - › Start engine.
 - › Put vehicle into neutral
 - › Pull emergency brake.
 - › Place key in specific position in ignition.
 - › Honk horn.
 - › Activate right- and left-turn indicators.
 - › Turn on lights (high- and low-beam).
 - › Turn on windshield wipers.
 - › Engage and hold brakes.
 - › Release brakes and pressure.
 - › Rotate wheels to right and left.
 - › Release brakes while wheels are rotated.
 - › Rotate steering wheel.
 - › Turn off engine.
 - › Open emergency windows (passenger carriers only).
- Post-Inspection Activities.
 - Meet with inspector to:
 - › Answer remaining questions about logbook, work hours, lease agreement, etc.
 - Produce additional paperwork.
 - › Review violations and citations.
 - Sign inspection papers.
 - Respond to inspection outcome as needed (e.g., update logbook, contact company, arrange for repairs).

The broad and varied use of language in CMV operations has important safety implications. In addition to its safety benefits, ease of communication aids drivers, inspectors, passengers, and facility operators. While the analyses focused on the importance of language comprehension,

several tasks highlight the need for English proficiency for CMV operations in the United States. In particular, the driver's ability to read, understand, and respond to road signs in a timely manner is critical. Lack of English proficiency may lead to a failure to respond to nonstandard signage, such as VMS or customized signs at facilities, thus posing a safety hazard.

- Emergencies occur infrequently, but when they do it is important that the driver be able to interact effectively with enforcement and emergency personnel as well as with the public. These interactions can be quite complex and can require a certain level of language proficiency.
- Drivers should have sufficient language comprehension to be able to update and complete their logbooks. This task is required by FMCSA regulations, and—while it may not have a direct impact on safety—the logbook provides the inspector with information on a driver's fitness and compliance with HOS regulations.
- Finally, the observations highlight the need for drivers to be able to communicate effectively with inspectors. Inspectors performing vehicle inspections subject themselves to potentially dangerous conditions, and it is important that drivers understand what inspectors are doing so that mishaps can be prevented.

INTERVIEWS

For the third part of this study, the authors interviewed various stakeholder groups to obtain information on the following:

- The extent to which interviewees—selected Federal and State personnel; safety associations and public interest groups; individual drivers, carriers, and motor carrier industry associations; and independent owner-operators—believe that a driver's proficiency in the English language is necessary for the safe operation of a CMV.
- How they interpret the current FMCSA regulation, and how they think a driver's level of English proficiency could be assessed during the hiring process, in the daily work environment, and during inspections.
- Their opinions on whether the English language proficiency regulation, as currently written, can be applied in a uniform manner while avoiding the potential for discrimination against individuals for whom English is a foreign language.

Because the study was intended to be a scoping exercise, the interviews were limited in number and designed to produce qualitative findings rather than numerical material suitable for quantitative analysis.

Organizations targeted for interviews fell into the following major categories:

- Federal Government agencies.
- State Government agencies.
- Safety associations.

- Industry associations.
- Public interest groups.
- Motor carriers and drivers.

Based on information acquired through initial background research, the interview process was divided into three phases, each designed to add incrementally to the considerations that would subsequently be built into the next phase. The interviews conducted in Phase I, with Federal staff and contacts from professional associations and public interest groups, provided a broad array of insights into the issues, factors, and considerations regarding LEP among CMV drivers. They also generated questions to be explored in interviews with State enforcement, licensure, and signage officials (Phase II) and with motor carriers and drivers in the trucking and passenger carrier industries (Phase III).

The Interview results covered a variety of topics. Insights gleaned from interviewees ranged from their perspective of the extent of the problem to suggested changes to current policies. Additional topics discussed were the impact of limited English proficiency on safety, inspection procedures used by enforcement personnel, and potential Title VI and Title VII concerns.

The Phase I results suggested that there are a number of languages other than English being spoken by CMV drivers, and that the practice of employing drivers who lack English proficiency might not be uniform across industry sectors or similarly sized operations. Interviewees had three major areas of concern:

- Safety of enforcement personnel.
- Driver inability to communicate in emergency situations; English proficiency in these circumstances was felt to be especially important for hazmat and passenger-carrier drivers.
- Driver inability to understand and respond to signage.

Finally, interviewees said that the current regulatory framework impedes both compliance and enforcement. The reasons cited included:

- Absence of critical tools.
- Differences between licensure requirements and language proficiency requirements for drivers.
- Variation in approach to enforcement among States.

These insights informed the questions in Phase II put to State interviewees, who were responsible for signage, commercial driver licensing, and CMV enforcement activity.

Interviews with State signage personnel concentrated on the comprehensibility of road signs, both conventional and DMS. Also discussed were multilingual signage and the relationship between English-language signage comprehension and roadway safety. In addition, the interviews focused on how States assess proposed signs for readability and comprehensibility.

Overall, signage contacts who commented on the subject agreed that some amount of English proficiency is needed for safety on the roads.

The interviews with State CDL personnel revealed considerable variation in State policies with respect to:

- Whether written and skills tests are offered in English only.
- Other languages in which the written and skills tests are offered.
- Whether interpreters or other aids to comprehension are permitted during testing.
- Other languages in which special endorsement testing is offered.
- Whether third parties are authorized to administer testing.
- Whether the State requires re-testing of drivers with out-of-State CDLs who want to transfer their licenses.

There was some consensus among the CDL interviewees with regard to the need for drivers to have sufficient English proficiency to communicate with emergency personnel and be able to read and respond to both fixed and dynamic signage. The States differed widely in how they test drivers' understanding of signage, and not all of them evaluate drivers' comprehension of signs that use words.

The interviews of State enforcement officials revealed some commonalities and many differences in policies and procedures with regard to English proficiency among CMV drivers. All nine States reported encountering foreign languages; the total number reported was more than 23. Most, but not all, interviewees viewed lack of English proficiency to be a safety issue. The enforcement practices described by those who did hold this belief varied greatly. Some States enforce the English proficiency requirement but to varying degrees of strictness (reporting violations vs. issuing citations vs. putting drivers out of service). Others take the CVSA Out-of-Service criterion ("communicate sufficiently") literally and use gestures and other visual aids (as well as interpreters) in order to complete the inspection successfully.

The Phase III interviews, with individual motor carriers and CMV drivers, provided the opportunity to obtain information on procedures that carriers follow so as to comply with the regulation. The company interviewees represented a few large and medium-sized carriers and one large passenger carrier; the drivers were employees of these companies.

The companies interviewed have the financial wherewithal to operate extensive human resource operations to recruit, screen, and train drivers, and all of them view hiring non-English-speaking drivers as an unacceptable regulatory and legal risk. They, as well as the drivers who were interviewed, shared the opinion that drivers must have sufficient proficiency in English to be able to read signs and understand and respond to enforcement personnel. They also believed that hazmat and passenger carrier drivers need more advanced levels of English proficiency in order to do their jobs safely.

FINDINGS

Limited English proficiency in the CMV driver population does exist. In the 5 years of MCMIS data examined, more than 39,000 inspections reported a violation of §391.11(b)(2).

The broad and varied use of language in CMV operations has important safety implications. In particular, the ability to read, understand, and respond appropriately to road signs is critical. In addition to the safety benefits, ease of communication helps drivers, inspectors, passengers, and facility operators. It should be noted that lack of “English proficiency” as defined in §391.11(b)(2) is not limited to non-native English-speaking drivers; native English-speaking drivers who are not able to read or write and who are untrained in or unaware of specific terminology used in CMV operations also encounter problems in English-language comprehension.

This section of the report highlights findings for each of the research objectives below and considers the implications of these findings for public safety. Each objective is presented, along with a number of summary points and followed by a brief discussion of the information gathered to support each point. It is important to remember that much of what was done as part of this research was *qualitative* in nature. The study endeavored to learn:

- The tasks CMV drivers perform that require language comprehension in the interest of safety.
- The extent to which selected Federal and State enforcement personnel, motor carrier industry groups, individual motor carriers and drivers, State driver licensing agencies and highway departments, and highway safety groups believe that English language proficiency is necessary for the safe operation of trucks and buses by CMV drivers.
- How these stakeholders interpret the current FMCSA rule concerning English-language proficiency, and how they believe that a driver’s level of English proficiency could be assessed in the licensure and hiring processes, in the daily work environment, and during roadside inspections.
- Whether stakeholder groups believe that the English-language standard, as currently written, can be applied in a fair and uniform manner.

The tasks that CMV drivers perform that require language comprehension in the interest of safety

Information in support of this research objective was obtained through firsthand observations of CMV drivers both on the road and during inspections. These observations provide a basis for examining the extent to which large-truck and passenger carrier drivers perform activities requiring language comprehension in a workday. As discussed earlier, depending on the job, much of this interaction requires that drivers be able to speak and understand a common language with the public (i.e., other drivers and customers), enforcement and emergency response personnel, and other employees of their companies. The complexity of these interactions varies, and it is important to note that even seemingly simple conversations—for example, those in which inspectors instruct drivers during vehicle inspections—can have

important safety implications. The findings from the task analysis can be summarized as three main points:

- A driver's lack of proficiency in English has a potential adverse impact on reaction time even in standard situations. This increased reaction time can lead to the unsafe operation of a CMV.
- English language comprehension is critical in non-standard situations.
- The ability to communicate effectively in a common language is essential to the investigative nature of an inspection.

The extent to which selected Federal and State enforcement personnel, motor carrier industry groups, individual motor carriers and drivers, State driver licensing agencies and highway departments, and highway safety advocacy groups believe that English language proficiency is necessary for the safe operation of trucks and buses by CMV drivers

Information in support of this research objective was obtained primarily through interviews with stakeholders. The findings can be summarized as three main points:

- All CMV drivers must be able to read and respond appropriately to signage in standard and nonstandard situations.
- English proficiency is especially important for drivers of hazmat and passengers.
- If an inspector or other officer and the driver are unable to communicate, the safety of both is potentially at risk.

How these stakeholders interpret the current FMCSA rule concerning English-language proficiency, and how they believe that a driver's level of English proficiency could be assessed in the licensure and hiring processes, in the daily work environment, and during roadside inspections

This research objective was explored in two parts. First, the study team wanted to find out how stakeholders interpret the current regulation. Second, it wanted to ascertain stakeholders' opinions regarding how a driver's level of English proficiency could be assessed in the licensure and hiring processes, in the daily work environment, and during roadside inspections.

Information concerning stakeholders' interpretations of the current rule was obtained through firsthand observations and through telephone interviews. The findings can be summarized as two major points:

- Interpretation of the regulation and associated policies varies among States, among agencies within a State, and among inspectors.
- The wide variation in State policies with regard to testing in foreign languages often results in a separation of the English-proficiency qualification from the CDL process.

Information pertaining to the second part of the research objective, concerning how stakeholders believe that drivers' English proficiency could be assessed in the licensure and hiring processes,

in the daily work environment, and during roadside inspections, was obtained primarily through interviews. The findings are summarized as three major points:

- Assessment of English proficiency should take place during the licensing process.
- Current processes should be refined and made more consistent.
- Specific standards should be developed and applied.

Whether stakeholder groups believe that the English language standard, as currently written, can be applied in a fair and uniform manner

Information in support of this research objective was obtained primarily through data analysis and interviews with stakeholders. The findings can be summarized as two major points:

- There is no nationwide standard or test for English proficiency; therefore the regulation cannot be applied in a uniform manner by either motor carriers or enforcement officials.
- The argument has been made that, as written, the broadness and lack of specificity in the regulation is at odds with Titles VI and VII of the Civil Rights Act.

CONCLUSION

This study was initiated to obtain a preliminary assessment of the extent to which the English language is needed and used by CMV drivers operating in the US, and also of the extent to which Federal and State enforcement personnel and motor carriers determine whether drivers are capable of understanding and communicating in English sufficiently to ensure safety. The study's data analysis, observations, and interviews examined:

- The tasks CMV drivers perform that require language comprehension in the interest of safety.
- The extent to which selected Federal and State enforcement personnel, motor carrier industry groups, individual motor carriers and drivers, State driver licensing agencies and highway departments, and highway safety advocacy groups believe that English proficiency is necessary for the safe operation of trucks and buses by CMV drivers.
- How these stakeholders interpret the current FMCSA rule concerning English-language proficiency, and how they believe that a driver's level of English proficiency could be assessed in the licensure and hiring processes, in the daily work environment, and during roadside inspections.
- Whether stakeholder groups believe that the English-language standard, as currently written, can be applied in a fair and uniform manner.

The issue of English proficiency among CMV drivers is complex and not confined to FMCSA. It spans multiple agencies at both Federal and State levels and involves millions of CMV drivers.¹ All three parts of this study—data analysis, observations, and interviews—provide insight into the importance of English proficiency in safe CMV operation. To have a true impact on public safety, FMCSA will need to partner with stakeholders and other agencies to develop a systems approach for setting standards and assessment methods that can be uniformly applied.

¹ <http://ai.fmcsa.dot.gov/International/border.asp?redirect=GenStats.asp>

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1. INTRODUCTION

This report presents the results of a research study conducted by the John A. Volpe National Transportation Systems Center (Volpe Center) for the Federal Motor Carrier Safety Administration's (FMCSA) Office of Policy and Program Development. At present, §391.11(b)(2) of the Federal Motor Carrier Safety Regulations (FMCSR) States that:

... a person is qualified to drive a motor vehicle if he . . . can read and speak the English language sufficiently to converse with the general public, to understand highway traffic signs and signals in the English language, to respond to official inquiries, and to make entries on reports and records . . .

This study was initiated to obtain a preliminary assessment of the extent to which the English language is needed and used by commercial motor vehicle (CMV) drivers operating in the United States, and of how Federal and State enforcement personnel and motor carriers determine whether a driver is capable of understanding and communicating in English sufficiently to ensure safety.

FMCSA, an agency of over 1,000 employees, is dedicated to improving motor carrier safety on the Nation's highways. It has offices in all 50 States, the District of Columbia, and Puerto Rico. FMCSA's programs contribute to ensuring safety in motor carrier operations through strong enforcement of safety regulations, targeting of high-risk carriers and CMV drivers, improvements in safety information systems and CMV technologies, strengthening of CMV equipment and operating standards, and efforts to increase safety awareness.

1.1 HISTORICAL BACKGROUND

1.1.1 Institutional Oversight of the Motor Carrier Industry

In August 1935, the Bureau of Motor Carrier Safety (the Bureau) was established within the Interstate Commerce Commission (ICC) pursuant to provisions of the Motor Carrier Act (subsequently cited as Part II of the Interstate Commerce Act).

In 1967, various motor carrier regulations were moved from the Bureau to the newly established Federal Highway Administration (FHWA), which comprised entities transferred from the Bureau of Public Roads and the National Highway Safety Bureau within the Department of Commerce. Three decades later, as a result of the Interstate Commerce Commission Termination Act of 1995 (ICCTA), FHWA assumed additional commercial interstate truck and bus regulatory functions.

The Department of Transportation and Related Agencies Appropriations Act of 2000, signed by then-President Bill Clinton on December 9, 1999, also contained language prohibiting the use of funds appropriated or limited in the Act to carry out the functions and operations of the "Office of Motor Carriers" within FHWA. This effectively resulted in the transfer of motor carrier functions and operations out of FHWA, including the interstate truck and bus

regulatory functions previously assumed under ICCTA, by action of then-Secretary Rodney Slater. On that same date, President Clinton also signed the Motor Carrier Safety Improvement Act of 1999, which established the Federal Motor Carrier Safety Administration within the U.S. Department of Transportation (USDOT), effective January 1, 2000.²

1.1.2 Evolution of the English-Language-Proficiency Regulation for CMV Drivers

In 1936, as part of its newly promulgated Motor Carrier Safety Regulations (MCSR), the Bureau of Motor Carrier Safety established an English-language requirement for drivers of CMVs being operated in interstate or foreign commerce by common and contract carriers. The original wording in Part I.3 required that:

*. . . no motor carrier shall drive, or require or permit any person to drive, any motor vehicle operated in interstate or foreign commerce, unless the person so driving possesses the following minimum qualifications: (k) Ability to read and speak the English language, unless the person was engaged in so driving on July 1, 1937 or within 1 year prior thereto, but in any case ability to understand traffic and warning signs.*³

In 1939, the Bureau made changes and additions to the MCSR, including elimination of the exceptions granted by the original rules for drivers unable to read or speak English, provided that they could understand traffic and warning signs.⁴

In 1969, FHWA, which was considering a complete revision of the MCSR relative to qualifications of CMV drivers, issued a Notice of Proposed Rulemaking (NPRM) and a request for comments. FHWA proposed that §391.11(b)(2) be revised to read:

*. . . a person is qualified to drive a motor vehicle if he . . . can read, write, and speak the English language sufficiently to converse with the general public, to understand highway traffic signs and signals in the English language, to understand oral and written directions in the English language, to respond to official inquiries, and to make entries in the English language on reports and records.*⁵

The following year, FHWA issued a Final Rule that announced substantive amendments to §391 and §392 of the FMCSR. It was thought that retention of the requirement that a driver must be able to *write* English would lead to unnecessary loss of employment by experienced, capable drivers who were perhaps literate only in a language other than English. §391.11(b)(2), General qualifications of drivers, was thus revised to read:

. . . a person is qualified to drive a motor vehicle if he . . . can read and speak the English language sufficiently to converse with the general public, to

² FHWA Order M 1100.1A, Ch. 27, Introduction, May 30, 2002;
<http://www.fhwa.dot.gov/legregs/directives/orders/m11001a/introduction.htm>.

³ 1 MCC 1, at 18-19.

⁴ 14 MCC 669, at 675.

⁵ 34 FR 9082.

*understand highway traffic signs and signals in the English language, to understand oral and written directions in the English language, to respond to official inquiries, and to make entries on reports and records.*⁶

Almost 30 more years elapsed until, in 1997, FHWA published an Advance Notice of Proposed Rule Making (ANPRM), requesting comments on certain proposed revisions to the English-language requirement in §391.11(b)(2).⁷ The proposed revisions were prompted by a number of factors:

- The American Civil Liberties Union (ACLU) had raised the concern to FHWA's Office of Civil Rights that, as written, the English-speaking requirement was in conflict with Title VI of the Civil Rights Act of 1964, which prohibits discrimination in the administration of Federally funded programs on the basis of race or national origin.⁸ The ACLU was also of the opinion that, as written, the English-speaking requirement was overly broad and subject to arbitrary enforcement, causing potential interference with constitutional guarantees of due process and equal protection.
- The State of Utah had specifically requested guidance from FHWA relative to enforcement of the English-language requirement. FHWA noted that the ICC's intent, at the time the rule was originally promulgated, was that the regulation not be enforced at the roadside. The employer (motor carrier) was presumed to know which communications skills may be necessary because of the type of cargo being handled, the route to be taken, and/or the nature of needed contact with the public.
- In 1995, Working Group 1 of the Land Transportation Standards Subcommittee, established by the North American Free Trade Agreement (NAFTA), adopted the following resolution:⁹

That in recognition of the three countries' language differences it is the responsibility of the driver and the motor carrier to be able to communicate in the country in which the driver/carrier is operating so that safety is not compromised.

FHWA was considering replacing the general requirement that drivers exhibit English proficiency and establishing a set of performance-oriented standards based on tasks that drivers are expected to perform that require knowledge of English. This change reflected the agency's position that drivers should possess the basic functional communications and comprehension abilities necessary to ensure safety.

FHWA further noted that it had never made speaking English a specific prerequisite for the Commercial Driver's License (CDL) and that in fact it had proposed and later authorized administration of the CDL test in foreign languages. It added that "States, however, do

⁶ 35 FR 6458.

⁷ 62 FR 45200.

⁸ 42 USC §2000d.

⁹ <http://www.maeci-dfait.gc.ca/nafta-alena/report13-en.asp>.

administer some form of test to all license applicants which is intended to demonstrate their ability to read or recognize warning signs.”

FHWA invited comment in response to five questions:

- Are there known instances in which a safety problem occurred that could be attributed, in whole or in part, to the driver not being able to read or speak English sufficiently to understand traffic signs or written or verbal instructions relative to the operation, loading, or unloading of the vehicle? Commenters are encouraged to give a detailed description of such an occurrence, the likelihood of repetition, and how the inability to read or speak the English language played a role.
- Do any of the States require drivers who operate CMVs exclusively in intrastate commerce to read and speak the English language? If so, was the requirement established only to achieve compatibility with the FMCSR? If there were other reasons for establishing such a requirement, please elaborate.
- How do States typically determine whether or not a driver or motor carrier is in violation of Section 391.11(b)(2) or an equivalent State provision? Are there particular English phrases or terms that are used to test the driver’s comprehension of the English language? Are there specific highway signs or messages that are shown to the driver?
- Are there any cases in which State officials, exercising their authority under State law, have placed drivers out of service for being unable to read or speak the English language, after making a determination that the driver’s inability to comprehend the language created a safety risk that was too great to be ignored? If so, how did the State official determine that the safety risk was at a level that would warrant placing the driver out of service? Was the enforcement action subsequently challenged in court? What was the outcome?
- How does one measure an individual’s level of “English proficiency” or whether that individual has a “working knowledge of English”? Alternatively, what language tasks should a driver be able to perform, and what “performance-oriented” language standards should we impose to guarantee this performance?

In 2003, FMCSA issued a Notice of Withdrawal of the 1997 proposed rulemaking on the English-language requirement.¹⁰ After analysis and review, FMCSA concluded that there were no quantifiable data to support modifying the regulation to require a more stringent or definitive standard, or to require State motor vehicle agencies to administer a specific test for English proficiency.

FMCSA observed that very few of the comments filed in response to the ANPRM had addressed the five questions posed; rather, the vast majority of those commenting had misconstrued the request as a proposal to lower the current English-proficiency standard. Comments were received from groups representing the trucking industry, labor groups, and

¹⁰ 68 FR 43889.

insurance companies, as well as from motor carriers and drivers. Nine States and 20 public commenters recommended either retaining the current standard or imposing a more stringent one.

The ACLU Foundation of Northern California and the U.S. Equal Employment Opportunity Commission (EEOC) addressed civil rights concerns in their comments. The ACLU submitted its legal analysis of the regulation in relation to Titles VI and VII of the Civil Rights Act of 1964, 42 USC §2000d. The ACLU analysis provided arguments to support its conclusions that the criteria in the regulation:

. . . broadly and vaguely define the qualifications of a vehicle driver on behalf of a motor carrier, require an unnecessarily high level of fluency in the English language, and have an unjustifiable discriminatory impact upon national origin and ethnic minorities. . . . To meet the necessity standard [under Title VII] in this case, the English fluency requirements of 49 CFR 391.11(b)(2) must be necessary to achieve a “legitimate, important and integral” goal of the institutional mission of the Department of Transportation and Federal Highway Administration. . . . However, the criteria of the regulation are overbroad, requiring a level of English not necessary to the actual task of “safe and efficient” operation of a motor carrier vehicle.¹¹

EEOC, in its comments, said that it shared:

. . . the concern of the American Civil Liberties Union that, as currently written, the FMCSR English fluency requirement may conflict with the Federal civil rights laws. . . . With regard to Title VII, the current fluency regulation may require abilities that are not, in fact, necessary to perform the duties of a particular interstate commercial motor vehicle driving job for a particular employer. For example, it is possible that satisfactory performance of a particular job might not require the ability to converse with the general public, or might not require fluency in English to converse with the general public. In this way, the current fluency requirement might conflict with Title VII.¹²

In its decision, FMCSA rejected the arguments of ACLU and EEOC, stating as follows:

*The information introduced in response to the ANPRM does not establish that the current regulation requires an unnecessarily high level of **English** fluency that has resulted in a discriminatory impact or effect based upon national origin, color, or ethnicity. . . .*

In analyzing Sec. 391.11(b)(2) in today’s climate, the FMCSA believes that the regulation was, and remains, a requirement imposed to ensure that persons who drive commercial motor vehicles operate safely. As written, the regulation sets forth the qualifications of drivers of CMVs to read and speak the English

¹¹ FMCSA Docket Entry FMCSA-1997-2759-33.

¹² FMCSA Docket Entry FMCSA-1997-2759-35.

language and allows each motor carrier employer the flexibility to determine the extent of proficiency needed to enforce it. It provides carriers with the flexibility to individually determine whether a driver has communication skills and English fluency to operate safely on the highway. There is no data available to suggest that this flexibility has caused discrimination or to conclude that motor carriers are employing the English language requirement in anything other than an evenhanded manner, tailored to the requirements of each particular company's operations. Nor do we have evidence to suggest that our State and local partners are subjecting limited English speakers to discrimination based on their race, color or national origin. The intent of the English-only regulation is not to discriminate, but to advance public safety and this is an essential aspect of our program.

Specifically, with regard to concerns about arbitrary or discriminatory enforcement, the FMCSA has found no evidence to suggest that enforcement officers routinely issue citations for lack of English proficiency. To the extent that such enforcement discretion is exercised, the FMCSA believes that such instances are exceedingly rare and may be occasioned by a misunderstanding of the provisions of Sec. 391.11(b)(2). From the comments and the data available, the FMCSA believes that the discretion of enforcement officials to place a driver out of service when he or she constitutes a safety hazard is, and has been used judiciously.

Further, FMCSA finds no inconsistency in its authorization to States to offer CDL tests in languages other than English, while at the same time requiring motor carrier employers to ensure a level of English proficiency for drivers on our public highways. The tests, training and study manuals associated with obtaining a CDL are complex. Therefore, the administration of the CDL test in languages other than English is justified. However, in actual operation on the highway, the CDL driver must be able, based on the needs of the carrier's operation, to have a sufficient command of English to ensure that safety is not compromised.

1.1.3 CVSA North American Standard Out-of-Service Criteria

The Commercial Vehicle Safety Alliance (CVSA) is an association of State, local, provincial, and Federal officials responsible for the administration and enforcement of motor carrier safety laws and regulations in the United States, Canada, and Mexico. CVSA provides a mechanism for the development of consensus on issues of common concern. The North American Standard Out-of-Service Criteria (OOS Criteria), issued on April 1, 2005, is a detailed list of conditions that CVSA members have agreed are sufficiently hazardous to justify restricting further operations by a driver or a CMV. Each year, CVSA reviews the OOS Criteria and makes necessary changes.

According to FMCSA:

Most safety violations found during roadside inspections relate to the condition of CMVs. Some of these violations can be corrected at the roadside; for example, a driver can repair a turn signal that is not functioning. Others

must be corrected at a repair facility. If a particular safety violation presents no immediate or undue threat to public safety, it would be an unnecessary interruption in the flow of commerce and perhaps even cause a traffic safety problem to require the motor carrier to undertake corrective action on site. In such cases, the assessment of a warning, fine, or other penalty is sufficient; the repairs necessary to prevent further deterioration or ultimately to correct the condition may safely be deferred to another time and place. In this sense, the OOS Criteria are usually less stringent than the FMCSR.¹³

State inspectors with general police powers have authority under State law to stop and seize summarily. All States participating in the Motor Carrier Safety Assistance Program (MCSAP) have agreed that their inspectors will use the OOS Criteria when exercising this power. If an inspector observes inherently dangerous conditions that are identified in the OOS Criteria, then he or she may issue an OOS order.

Although the regulation had been in effect since 1970, a violation of §391.11(b)(2) was not a driver OOS item in the OOS Criteria until recently. In October 1997, CVSA submitted comments on the August 1997 ANPRM. CVSA requested that the 1995 language be incorporated into §391.11(b)(2), stating that this language, “coupled with appropriate performance-oriented standards based on tasks a driver is expected to perform which require knowledge of the English language, will be sufficient to ensure safe highways in the U.S.”¹⁴

At CVSA’s 2001 Annual Meeting in San Diego, California, the Driver-Traffic Enforcement Committee discussed this issue at length and then sent a letter on January 28, 2002, to FMCSA, which stated:

At the request of our Driver-Traffic Enforcement Committee, CVSA respectfully requests that the Federal Motor Carrier Safety Administration convene a working group to develop clear and concise policy direction to roadside law enforcement personnel on how to address the English language regulation in the field. 49 CFR 391.11(b)(2) States that each driver is qualified to drive a commercial motor vehicle if he/she “can read and speak the English language sufficiently to converse with the general public, to understand highway traffic signs and signals in the English language, to respond to official inquiries, and to make entries on reports and records.” The problem with this regulatory language is that it is nebulous and non-descriptive, leaving open the opportunity for interpretation. The result of this ambiguity is that the regulation is not enforced properly or uniformly. A reasonable and practical standard must be developed and applied to determine whether or not a driver can meet this requirement and whether or not the driver should be allowed to continue to operate the commercial motor vehicle.

With NAFTA implementation imminent, it is of critical importance that there be clear guidance issued on this matter, and CVSA offers our assistance in

¹³ July 20, 1998 *Federal Register* (68 FR 38791).

¹⁴ FHWA-97-2759-21.

helping the Agency craft a reasonable solution. This is not only important for enforcement, but also for industry as it gives more direction on what is expected of them. We urge the Agency to work with CVSA and others to act swiftly on this, as it directly impacts safety and security on the roadways.¹⁵

On September 10, 2003, CVSA submitted its petition for rulemaking to FMCSA for amending 49 CFR Part 391 to facilitate adequate language proficiency for commercial drivers. Included in the petition was documentation on a number of situations where communication had been an issue with field inspectors.

In 2004, CVSA amended the OOS Criteria to include §391.11(b)(2), adding the following language:

Driver is unable to communicate sufficiently to understand and respond to official inquiries and directions. Place driver Out-of-Service.

The wording of the new entry followed that of the June 1995 NAFTA resolution. FMCSA advised its field personnel to cite drivers and motor carriers for violations of §391.11(b)(2) but not to place them out of service.

On July 20, 2007, FMCSA issued a guidance memorandum to field staff, effective immediately, ordering enforcement of the OOS criterion:¹⁶

The confirmation of a driver's ability to communicate in English sufficiently to understand and respond to official inquiries and direction will be made by the CMV inspector on the basis of a driver interview conducted during the driver/vehicle inspection. The **driver interview must be conducted in English** and should include, at a minimum, the following inquiries:

- The origin and destination of the trip.
- The amount of time spent on duty, including driving time, and the record of duty status (or logbook).
- The driver's license.
- Vehicle components and systems subject to the FMCSR.

If the inspector determines the driver is unable to **understand and respond to official inquiries and directions in English**, the driver should be cited for a violation of section 391.11(b)(2) and placed out of service in accordance with CVSA OOS Criteria.

¹⁵ CVSA, *Language Proficiency Chronology of Events*. Undated.

¹⁶ FMCSA Memorandum MC-ECE-0005-07, July 20, 2007.

1.2 RESEARCH OBJECTIVES

The objectives of this research were to determine:

- The tasks that a CMV driver performs that require language comprehension in the interest of safety.
- The extent to which selected Federal and State enforcement personnel, motor carrier industry groups, individual motor carriers and drivers, State driver licensing agencies and highway departments, and highway safety public interest groups believe that the English language is necessary for the safe operation of trucks and buses by CMV drivers.
- How these stakeholders interpret the current FMCSA rule concerning English-language proficiency, and how they believe that a driver's level of English proficiency could be assessed in the licensure and hiring processes, in the daily work environment, and during roadside inspections.
- Whether stakeholder groups believe that the English-language standard, as currently written, can be applied in a fair and uniform manner.

To achieve the stated objectives, the study team undertook three major activities:

- Data analysis: MCMIS inspection and crash data were examined, and a series of analyses were performed to better understand the state of reporting of §391.11(b)(2) and to investigate the potential link between violations and driver performance.
- Observations: CMV drivers were observed during their daily working hours and during inspections to determine which of their tasks required language comprehension.
- Interviews: A range of stakeholders (Federal agencies, professional associations, public interest groups, States, carriers, and drivers) were interviewed to determine which situations they believe require knowledge of the English language, to identify any testing methods that might currently be in use to assess drivers' English proficiency, and to generate ideas on how to fairly and uniformly enforce the regulation.

These assessment activities began in January 2007 and continued through August 2007.

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2. METHODS AND RESULTS

2.1 DATA ANALYSIS

2.1.1 Overview

Insight into the magnitude and scope of limited English proficiency (LEP) among drivers, as reported through FMCSA safety programs, was gained by examination of the inspection, violation, and crash records of carriers and drivers. The objectives of the data analysis were to:

- Determine the magnitude and overall trends in the reporting of LEP violations.
- Determine variations in State reporting of LEP violations.
- Support the selection of States for the observation component of this project.
- Explore any apparent associations between driver compliance regarding English proficiency and safety performance.

The tasks were accomplished through use of the FMCSA-maintained Motor Carrier Management Information System (MCMIS). MCMIS contains data on inspections, compliance reviews (CRs), enforcements, and crashes for all motor carriers and hazardous materials (hazmat) shippers subject to Federal Motor Carrier Safety Regulations (FMCSRs) and Hazardous Materials Regulations (HMRs).

The analysis covered reported activity in MCMIS related to FMCSR §391.11(b)(2), General qualifications of drivers, which States:

Can read and speak the English language sufficiently to converse with the general public, to understand highway traffic signs and signals in the English language, to respond to official inquiries, and to make entries on reports and records.

Violations of this regulation found during FMCSA safety program activities (inspections, CRs, and enforcements) are recorded in MCMIS and are linked to the carrier and driver who received the violation. MCMIS was also used as the basis for the Driver Information Resource (DIR) database, which provides individual CMV-driver crash and inspection histories.

The data analysis component of this project was divided into two efforts:

- Initial Data Review
 - An initial data review was performed to assess:
 - › Trends in national reporting of LEP violations
 - › Characteristics of carriers receiving LEP violations
 - › Variations in State reporting of LEP violations
- Regulatory Compliance and Safety Performance Associations—A review of English proficiency and various safety metrics was performed to determine whether associations exist between regulatory compliance and safety performance.

2.1.2 Initial Data Review

2.1.2.1 Analysis Approach

The analysis consisted of a review of inspection, violation, and census records reported in MCMIS. It included a determination of the frequency of inspections reporting LEP violations by State, calendar year (CY), and OOS status as well as the characteristics of carriers receiving such violations.

Data Source

The data source for this carrier-level analysis was MCMIS inspection records between June 22, 2002, and June 21, 2007. For inspections between January 1, 2005, and June 21, 2007, the June 22, 2007 MCMIS snapshot was used. For inspections between June 22, 2002, and December 31, 2004, the December 23, 2005 MCMIS snapshot was used.

Only inspections that provided an opportunity to identify LEP violations (during the driver component) were used. For the data analysis, Inspection Levels I (North American Standard), II (Walk Around Driver/Vehicle), and III (Driver Only) were included. Another criterion for inclusion was that carrier information noted on the inspection records had to be matched to a carrier in the MCMIS census.

2.1.2.2 Analysis Results

National Reporting

Approximately 3 million driver inspections are conducted annually. Figure 1 shows the numbers of driver inspections reported in MCMIS between 2002 and 2007 that resulted in a LEP violation. As previously stated, inspection records between June 22, 2002, and June 21, 2007, were used in this analysis; however, since inspection records for 2002 and 2007 did not contain data for the entire 12-month period, estimates for these years were derived by doubling the values for the 6-month periods that were available. This allowed for a 6-year trend analysis.

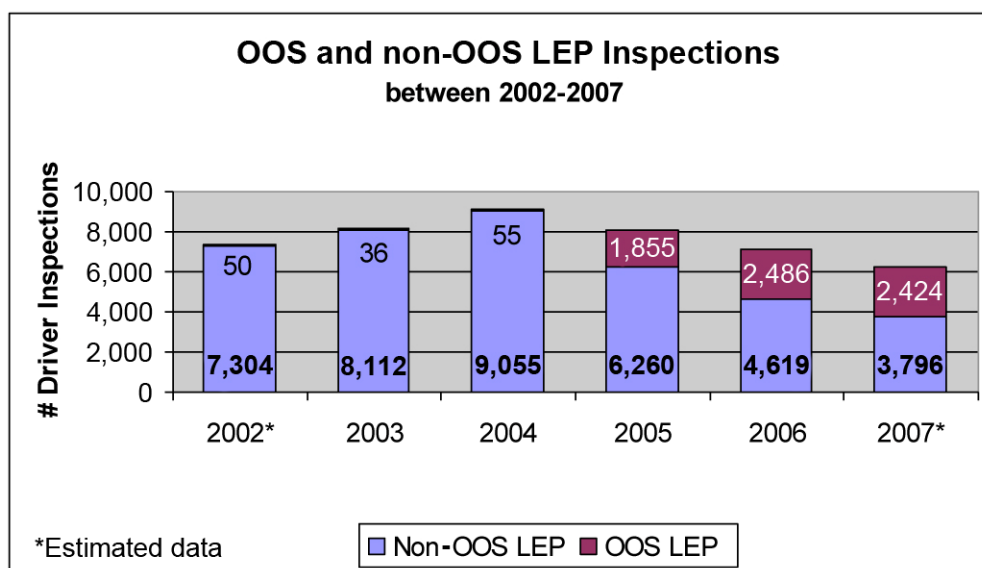


Figure 1. Inspections reporting LEP non-OOS and OOS violations, 2002–2007

2.1.2.3 LEP Violations

In the 5-year period between June 22, 2002 and June 21, 2007, a total of 39,265 inspections reported a LEP violation.

During the timeframe examined, CY 2004 had the greatest number of inspections, 9,110, reporting a LEP violation. The highest percentage was in 2004, with 3.1 (0.31 percent) of 1,000 reporting at least one violation. The lowest percentage was in 2006, with 2.0 (0.20 percent) of 1,000 reporting a violation.

LEP OOS Violations

In some instances, LEP violations were recorded as creating an OOS condition. The number of LEP OOS violations fluctuated between 36 and 55 per year between 2002 and 2004; from 2004 to 2005, the number increased dramatically, reaching 1,855 in 2005. This corresponded to the release, in April 2005, of the CVSA OOS Criteria regarding enforcement of LEP violations as an OOS condition. The number of driver inspections with LEP OOS violations continued to increase throughout 2006.

Carrier Characteristics

Between June 2002 and June 2007, 11,911 carriers received a LEP violation. As of June 22, 2007, these carriers consisted of:

- 7,705 U.S.-domiciled active carriers.
- 1,257 non-U.S.-domiciled active carriers.
- 2,949 inactive carriers.

Figure 2 shows the domicile and status of carriers who received a LEP violation between June 2002 and June 2007.

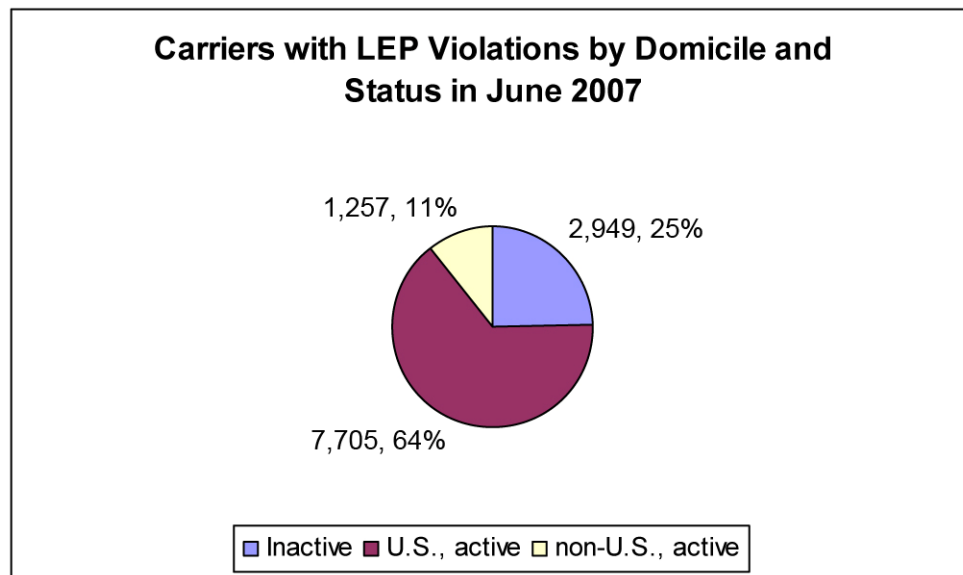


Figure 2. Carriers with LEP violations since 2002

Approximately 25 percent of carriers issued a LEP violation during the study period were inactive by its close. Of active carriers issued a LEP violation, non-U.S.-domiciled carriers represented approximately one-seventh of the total.

Table 3 shows the numbers of LEP violations for the active, U.S.-domiciled carrier population.

Table 3. LEP Violations per Carrier

Number of Violations	Number of Carriers	Percentage
1	4,875	63.27
2	1,292	16.77
3	537	6.97
4	283	3.67
5 or more	718	9.32

As shown in Table 3, of the active U.S. carriers with LEP violations, approximately 63 percent received only one violation. Carriers receiving two or more LEP violations numbered 2,830; of these, 718 received five or more violations.

2.1.2.4 State Reporting

Inspectors in all 50 States and the District of Columbia reported LEP violations.

LEP Violations

Table 4 presents MCMIS data on LEP violations by State (ranked by number of driver inspections) between June 22, 2002, and June 21, 2007.

Table 4. LEP Violations by State, June 2002–June 2007

State	Driver Inspections	Driver Inspections with LEP Violation	% Driver Inspections with LEP Violation	Driver Inspections with LEP OOS Violation	% LEP Inspections with LEP as OOS
CA	2,328,545	6	0	0	0
TX	1,502,164	9,610	0.64	42	0.44
WA	612,107	1,082	0.18	139	12.85
U.S. ¹⁷	548,311	75	0.01	3	4
NY	507,409	886	0.17	222	25.06
MD	467,691	2,025	0.43	1,084	53.53
KY	442,358	349	0.08	101	28.94
GA	434,823	2,102	0.48	419	19.93
IL	417,256	860	0.21	162	18.84
NM	397,596	1,263	0.32	26	2.06
PA	386,303	2,011	0.52	480	23.87
FL	382,736	498	0.13	0	0
MO	376,214	995	0.26	254	25.53
OH	374,422	473	0.13	128	27.06
IA	338,160	964	0.29	134	13.9
TN	321,778	359	0.11	56	15.6
IN	310,492	862	0.28	257	29.81
CO	304,160	79	0.03	2	2.53
AR	271,834	487	0.18	28	5.75
NC	268,821	511	0.19	175	34.25
OR	266,568	935	0.35	71	7.59
KS	258,708	471	0.18	87	18.47
MI	244,505	1,126	0.46	239	21.23
LA	242,614	301	0.12	89	29.57
AZ	221,398	3,554	1.61	266	7.48
MS	194,274	226	0.12	46	20.35
WI	188,817	165	0.09	65	39.39
NJ	185,834	1,051	0.57	57	5.42
VA	182,295	341	0.19	61	17.89
MT	181,973	307	0.17	11	3.58
SC	172,031	194	0.11	28	14.43
MN	162,403	210	0.13	40	19.05
NE	160,998	919	0.57	258	28.07
AL	155,999	271	0.17	110	40.59

¹⁷ Inspections conducted by Federal personnel.

State	Driver Inspections	Driver Inspections with LEP Violation	% Driver Inspections with LEP Violation	Driver Inspections with LEP OOS Violation	% LEP Inspections with LEP as OOS
UT	152,668	714	0.47	47	6.58
SD	131,546	190	0.14	7	3.68
NV	120,424	552	0.46	73	13.22
WY	97,546	230	0.24	0	0
CT	96,432	551	0.57	93	16.88
MA	87,893	176	0.2	51	28.98
WV	87,127	67	0.08	8	11.94
OK	84,994	139	0.16	64	46.04
ND	83,359	54	0.06	1	1.85
ME	59,686	145	0.24	18	12.41
AK	44,095	9	0.02	8	88.89
ID	43,370	97	0.22	29	29.9
VT	42,655	261	0.61	25	9.58
NH	41,345	110	0.27	27	24.55
DC	30,686	88	0.29	48	54.55
DE	25,551	51	0.2	11	21.57
RI	18,920	209	1.1	17	8.13
HI	17,184	1	0.01	1	100

As shown in

Table 4, California and Texas reported the most driver inspections—2,328,545 and 1,502,164, respectively—over the 5-year period, and Rhode Island and Hawaii reported the fewest: 18,920 and 17,184, respectively. The rate of LEP reporting is not necessarily proportional to the size of the State inspection program; California and Hawaii, at opposite ends of the range of number of driver inspections reported, both had fewer than 0.01 percent of inspections resulting in LEP violations.

Texas and Arizona reported the most driver inspections with a LEP violation: 9,610 and 3,554, respectively.

On average, States reported LEP violations in 0.29 percent of driver inspections; however, as

Table 4 shows, there was wide variation among States, with rates ranging from zero to 1.61 percent. The State with the lowest LEP reporting rate was California, which reported only six violations (0.0025 percent) out of 2,328,545 driver inspections. Arizona and Rhode Island had the highest LEP reporting rates, with more than 1 percent of driver inspections reporting LEP violations.

LEP OOS Violations

As shown in

Table 4, 53.53 percent of Maryland's 2,025 LEP violations were reported as OOS. In contrast, in the State with the most LEP violations, Texas, only 0.44 percent resulted in an OOS order; none of the six LEP violations reported by California resulted in an OOS order; Florida and Wyoming also reported no LEP OOS violations.

2.1.3 Associations between Regulatory Compliance and Safety Performance

The objective of this analysis was to determine whether associations exist between English-language proficiency and safe CMV operation. The analysis was not intended to determine the root cause of any observed associations. Such relationships may be the result of several contributing factors.

2.1.3.1 Analysis Approach

This analysis compared the safety performance data between two populations: CMV drivers who received an English proficiency violation and CMV drivers who did not. For the purpose of this analysis, safety performance comprises:

- Crash rates.
- Driver and vehicle OOS rates.
- Behavior Analysis and Safety Improvement Category (BASIC) violation rates.

Data Source

The data source for these driver-level analyses was a March 23, 2007 snapshot of DIR. Three years of inspection data (March 23, 2004 through March 22, 2007) and 5 years of crash data (March 23, 2002 through March 22, 2007) were used. Only inspections that included a driver component (Levels I [North American Standard], II [Walk Around Driver/Vehicle], and III [Driver Only]) were included.

Driver Population

For this analysis, a driver was assumed to have limited English proficiency if he or she was linked to a roadside inspection that resulted in a violation of §391.11(b)(2). In determining whether a driver had received an English proficiency violation, only inspections that provided an opportunity to identify LEP violations during the driver component were used. The analyses were performed on CMV drivers licensed in the United States.

The driver population that received an English-proficiency violation as the result of an inspection is referred to as *LEP drivers*, while the population with no inspections resulting in an English-proficiency violation was considered to have met English-proficiency requirements and is referred to as *non-LEP drivers*. Because enforcement and reporting of LEP violations varied by State during the reporting period, it is possible that some drivers classified in this analysis as non-LEP may in fact have had limited English proficiency.

The analysis focused only on drivers with three or more inspections, thereby providing a control for exposure to inspection to mitigate the impact of variability in the inspection program. This approach makes any associations between English proficiency and safety performance more reliable and robust than the results of the same analysis including drivers with fewer inspections.

Table 5 lists the English proficiency classification (LEP and non-LEP) of drivers with three or more inspections. These drivers served as the population groups for the safety performance analysis.

Table 5. Number of US-Licensed Drivers with Three or More Inspections, by English Proficiency Category

No. of LEP Drivers	No. of Non-LEP Drivers	Total
8,504	1,016,123	1,024,627

Behavior Categories

The Comprehensive Safety Analysis (CSA) 2010 team (now known as Compliance, Safety, Accountability) developed the BASICS under the premise that CMV crashes can ultimately be traced to the behavior of motor carriers and drivers. The BASICS, with examples of violations from each, are summarized below. Violation rates for each category laid the basis for the BASIC metrics.

- Unsafe Driving: Dangerous or careless operation of a CMV. Example violations: speeding, reckless driving, improper lane change, inattention.
- Fatigued Driving: Driving a CMV while tired or drowsy. Incidents related to this BASIC are distinguished from those where unconsciousness or inability to react is brought about by the use of alcohol, drugs, or other controlled substances. **Example violations: hours of service (HOS), logbook falsification or failure to complete; operating a CMV while ill or fatigued.**
- Driver Fitness: Operation of a CMV by a driver who is unfit due to lack of training or experience or to medical qualifications. **Example violations: failure to have a valid and appropriate CDL, failure to have proper medical documentation.**
- Controlled Substances and Alcohol: Operation of a CMV while impaired due to alcohol, illegal drugs, or misuse of prescription or over-the-counter medications. **Example violations: use or possession of controlled substances or alcohol.**
- Vehicle Maintenance: CMV failure due to improper or inadequate maintenance. Example violations: faulty brakes, lights, and other mechanical defects; failure to make required repairs.
- Improper Loading/Cargo-Related: Shifting loads, spilled or dropped cargo, and unsafe handling of hazmat. *Example violations: improper load securement, cargo retention, unsafe hazmat handling.*

Rate Calculation

The analysis compared the driver safety performance of two populations: LEP and non-LEP drivers. For all safety measures, an individual rate was calculated for each driver in the population. The population rate is the sum of individual driver rates normalized by the number of drivers within the population.

For individual rate calculations involving violations, the inspections that were used depended on the type of metric. Driver-related metrics used all inspections that included a driver component, while vehicle-related metrics were calculated on the basis of a subset of driver inspections. Only driver inspections that included a vehicle component were used. The inspection levels relevant to each rate appear in Table 6.

Table 6. Inspection Levels Used to Calculate Individual Driver Rates

Metric Type	Individual Driver Rates	Inspection Type	Inspection Levels
Driver-related	Driver OOS, unsafe driving, fatigued driving, driver fitness, controlled substances/alcohol	Those with driver component	I, II, III
Vehicle-related	Vehicle OOS, vehicle maintenance, improper loading/cargo-related	Those with both driver and vehicle components	I, II

Crash Rates

The population's crash rate was calculated as the number of crashes involving members of the population for the five-year period divided by the number of drivers within the population.

Driver and Vehicle OOS Rates

The population's driver or vehicle OOS rate is the sum of the driver or vehicle OOS rates of individuals within a population normalized by the total number of drivers within the population. This calculation assumes equal exposure for all drivers.

The individual driver OOS rate was calculated as the number of inspections in which the driver was placed OOS divided by the number of inspections that the driver received. LEP violations were excluded from this calculation since they are used to define the populations and are sometime cited as OOS. Inclusion of LEP OOS violations would have biased the LEP population's driver OOS rate upward.

The individual vehicle OOS rate was calculated as the number of inspections where the vehicle was placed OOS divided by the number of vehicle inspections with a driver component that the driver received.

BASIC Violation Rates

For all BASICS, the population's BASIC violation rate is the sum of the BASIC violation rates of individuals within a population normalized by the total number of drivers within the population. Only violations in which a driver could be held responsible were used in these calculations.

In calculating BASIC violation rates for the individuals within a population, a distinction was made between Unsafe Driving and Controlled Substance/Alcohol BASIC violation rates and other individual BASIC violation rates. Unsafe driving behavior, when observed by law enforcement officers, typically *triggers* a roadside inspection; therefore, the Unsafe Driving violation rate was not linked to exposure to inspections. This approach was also applied to the calculation of individual Controlled Substance/Alcohol BASIC violation rates. The other BASICS, which are *discovered* upon inspection, were linked to individual exposure to inspections.

For the reason given above, Unsafe Driving and Controlled Substance/Alcohol BASIC violation rates for individuals were not normalized by the number of relevant inspections; rather, they were calculated as the straight sum of violations of that BASIC for the individual.

For the other BASICs, individual BASIC violation rates were calculated on the basis of a driver's total number of violations in the category normalized by the number of relevant inspections that the driver experienced. The inspection levels relevant to each BASIC appear in

Table 6.

LEP violations, which were classified into the Driver-Fitness BASIC, were excluded from the calculation of that BASIC violation rate since they were used to define the populations. Inclusion of LEP violations would have biased the LEP population's driver-fitness BASIC violation rate upward.

Statistical Significance Tests

Differences in mean crash rates, OOS rates, and BASIC violation rates between LEP and non-LEP driver populations were tested for statistical significance. For each comparison, the null hypothesis that the mean violation rates of the two groups were equal was tested using the t-test. The t-test provides a measure of significance for the differences between two sample means. The differences observed in the comparisons reported in the following sections were statistically significant at a 95 percent confidence level unless otherwise noted.

2.1.3.2 Analysis Results

CMV Drivers Licensed in the United States

Variations in the reporting of LEP violations limited the determination of whether regulatory compliance and safety performance associations exist between LEP and non-LEP driver populations. The results presented below are based on these limited data.

This analysis focused on the population of CMV drivers who are licensed in the United States. It investigated whether the crash, OOS, and BASIC violation rates of drivers who received a LEP violation in roadside inspections were significantly higher than those of drivers who did not receive a LEP violation. Table 7 compares the driver-related safety performance rates for the LEP and non-LEP populations licensed in the United States and Table 8 compares the vehicle-related safety performance rates for the LEP and non-LEP populations licensed in the United States.

Table 7. Driver Related Measures Comparison of Safety Performance Rates for LEP and Non-LEP CMV Drivers Licensed in the United States

Basic Rate Category	LEP 8,504 Drivers Mean Rates	Non-LEP 1,016,123 Drivers Mean Rates	Significant t Statistic (p<05)
Crash	0.218	0.185	p<.0005
Driver OOS	0.175	0.065	p<.0005
Unsafe Driving Violation	1.588	0.989	p<.0005
Fatigued Driving Violation	0.655	0.278	p<.0005
Driver Fitness Violation	0.1	0.058	p<.0005
Controlled Substance/Alcohol Violation	0.014	0.01	p<.0005

Table 8. Vehicle-Related Measures Comparison of Safety Performance Rates for LEP and Non-LEP CMV Drivers Licensed in the United States

Basic Rate Category	LEP 6,597 Drivers Mean Rates	Non-LEP 711,846 Drivers Mean Rates	Significant t Statistic (p<05)
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Basic Rate Category	LEP 6,597 Drivers Mean Rates	Non-LEP 711,846 Drivers Mean Rates	Significant t Statistic (p<05)
Vehicle OOS	0.27	0.232	p<.0005
Vehicle Maintenance Violation	1.866	1.356	p<.0005
Improper Loading/Cargo Related Violation	1.588	0.989	p<.0005

The analysis indicated that, for all but the Improper Loading/Cargo-Related BASIC violation rate, the US-licensed LEP population had higher mean crash, OOS, and other BASIC violation rates than did the US-licensed non-LEP population. All differences were statistically significant at greater than a 95 percent confidence level.

Figure 3 compares the ratio of the LEP to the non-LEP population for each safety-performance rate category. Ratios above the baseline indicate that the LEP rate was higher than the non-LEP rate, while ratios below the baseline indicate that the non-LEP rate was lower than the LEP rate.

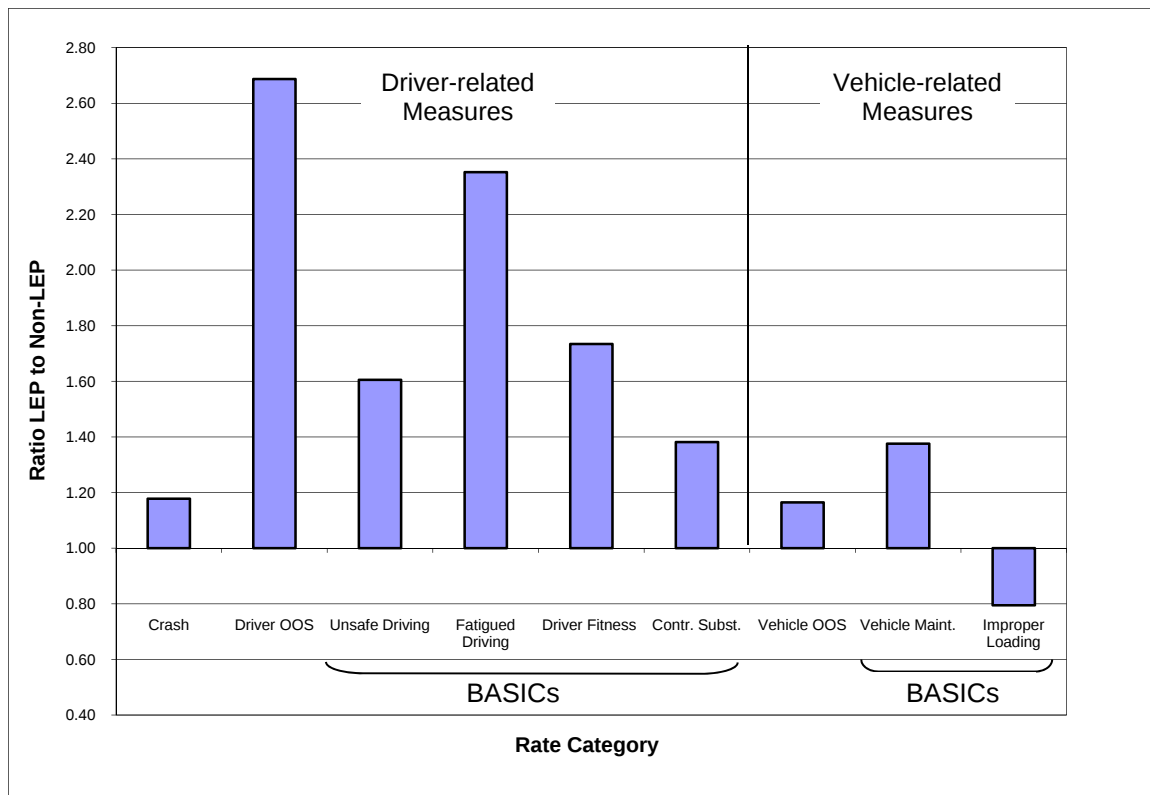


Figure 3. Comparison of safety-performance rates for U.S.-licensed LEP and non-LEP CMV drivers

The two rate categories showing the greatest proportional differences were the driver OOS rate and the Fatigued Driving BASIC violation rate. This implies that, on average, U.S.-licensed LEP drivers were more than two times as likely to be placed out of service during a driver inspection and more than two times as likely to incur Fatigued-Driving violations than were U.S.-licensed non-LEP drivers.

While the results indicated differences between LEP and non-LEP drivers, it is important to note that the analysis was not designed to identify the root cause of such differences. Therefore, the results do not imply a causal relationship between English proficiency and safety performance. Various contributing factors may exist that impact the differences in the rate categories between the two populations. Further examination of these factors is important to gain a fuller understanding of the issue of English proficiency and safe CMV operation.

2.1.4 Summary

Examination of the inspection, violation, and crash records of carriers and drivers provides insight into the magnitude and scope of LEP as reported through FMCSA safety programs. In summary:

In the 5-year period from June 2002 through June 2007, a total of 39,265 inspections reported an LEP violation. These violations were received by 11,911 carriers; of these:

- 64 percent were U.S. domiciled and active as of June 2007.
- 37 percent received more than one LEP violation.
- 61 percent reported five or fewer power units.
 - Between 2005 and 2007:
 - The number of driver inspections reporting LEP violations decreased
 - The percentage of LEP violations reported as out of service (OOS) increased, coinciding with the release of the CVSA OOS standards on LEP.
- The reporting rate of LEP varied dramatically among the States, the District of Columbia, and on the U.S. border, with localities reporting LEP in a maximum of 1.6 percent of driver inspections.
- The reporting of LEP as OOS varied dramatically among the States, District of Columbia, and on the U.S. border, with localities reporting a maximum of 54 percent of LEP violations as creating an OOS condition.

2.2 OBSERVATIONS

2.2.1 Overview

The study team observed CMV drivers during their daily working hours and at roadside inspections to identify the circumstances and specific tasks for which language comprehension was required. The term *comprehension* in this case refers to any form of reading, writing, speaking, or listening; it was preferred to the term *proficiency*, as the latter implies a judgment about driver competencies. The results of the observations formed the basis for developing an inventory of tasks requiring language comprehension.

2.2.2 Approach/Methodology

The study team conducted *ride-alongs* with U.S.-based CMV large-truck and passenger-carrier drivers during their regular shifts and also observed driver and vehicle inspections. All

observations were conducted over a 4-month period, from March through July 2007, throughout the United States.

Observation teams comprised one to four observers, depending on conditions. Having more than one observer per event allowed for more robust data collection and interpretation since observations were based on more than one individual's understanding of an event. In all cases, observers were asked to record the tasks performed by drivers that required some level of language comprehension. The list was supplemented by a narrative that described the tasks or the specific situations surrounding them in more detail. Observers were instructed not to disturb the drivers and inspectors during their work activities but to capture their actions and conversations throughout the day. These recorded observations were used to develop the task inventory.

2.2.2.1 Ride-along Observations

Ride-along observations were made by study team members accompanying large-truck or passenger-carrier drivers during the course of their regular shifts. For the large-truck ride-alongs, tasks performed during the pre-trip, enroute, and post-trip portions were observed, including those executed during delivery and pick-up of goods. Only one observer was present for the large-truck ride-alongs due to constraints on cab space. The ride-alongs ranged from approximately 8 to 10 hours.

For the passenger-carrier ride-alongs, observers met the driver en route at a regularly scheduled stop and departed elsewhere on the route; therefore, no pre-trip or post-trip activities were recorded. There were no space constraints for these ride-alongs, so two observers were present. The observation times ranged from 4 to 6 hours.

The focus of the observation was on tasks performed by drivers that required language comprehension. While the purpose of this portion of the project was to understand the safety impacts of limited *English* proficiency, it was also important to document tasks that required any language use.

Motor carriers throughout the United States and spanning a variety of industries were selected to participate in the ride-alongs on the basis of a number of criteria and methodologies. Participating motor carriers included companies with long-standing relationships with the study team, those recommended by other companies, and those suggested from FMCSA Division Administrators (DAs).

Each ride-along required a high level of coordination with the participating motor carrier. Details that needed to be arranged included the choice of an appropriate meeting time and place and the resolution of any applicable legal issues (generally those regarding rider liability). In some cases, negotiations with motor carriers failed and other carriers were invited to participate in the study instead.

A total of eight ride-alongs were conducted, six involving large trucks and two involving passenger carriers. Information on participating companies and carriers, origins and destinations, and types of trips is provided in Table 9.

2.2.2.2 *Inspection Observations*

Inspection observations involved spending a shift at various locations and watching the interactions between drivers and safety inspectors. As with the ride-along observations, particular attention was paid to driver tasks that required language comprehension. Data were collected by a team of two to four observers, who traveled to the pre-specified location and remained there for 4 to 8 hours.

These firsthand observations were used to create an inventory of tasks requiring language comprehension. Capturing the context in which the tasks were performed provides a better understanding of the specific situations that arise and the potential safety impacts of limited English-language comprehension.

Table 9. Information on the Eight Ride-Along Observations, by Type of Company

Type and Name of Company	Services Provided by Company	Base of Operations	Origin, Destination, and Type of Trip
CFI, Inc. (Contract Freighters, Inc.)	Provides tractor-trailer service throughout North America	5 US terminals	Several delivery stops in Laredo, TX
CVS	Distributes products for retail pharmacy chain	~6,200 stores in 38 States	One ride-along in Austin, TX, and one in La Habra, CA, each consisting of several delivery stops
Haney Truck Line	Irregular-route carrier; carries products from many different industries, including hazmat	Pacific Northwest	Roundtrip between Oregon and Washington, with mail deliveries (to USPS facility in Tacoma, WA, and Seattle Bulk Mail Center in Federal Way, WA), and pick-up of shipment from soft-drink company in Tukwila, WA
Jet Express	Handles >500 truckloads per day throughout US, primarily for "just-in-time" auto industry	5 terminals, including home terminal in Dayton, OH	Roundtrip between Dayton and Toledo, OH
Petroleum Transport	Distributes light-oil products for Chevron, Exxon, and Ashland, and line of lubricants and greases for Chevron, Mobil, Exxon, and Conoco	5 warehouse locations in VA and WV	Originating in Nitro, WV; included deliveries of low-grade diesel to two coal-mining facilities (in Boone and Kanawha Counties) and stop at diesel terminal to reload
C&J Trailways	Commuter bus	Connects Newburyport, MA, and two NH communities to Boston/Logan Airport	From Boston to Dover, NH
Megabus USA	Low-cost	Routes in 14 midwestern cities, with Chicago as hub of operations	Between Cincinnati, OH and Chicago

States for roadside-inspection observations were selected to represent a variety of geographic, demographic, and regulatory characteristics, such as:

- Location/region.

Level and frequency of reporting of §391.11(b)(2) violations in the past 5 years (see

Table 4)¹⁸.

- Potential for observing drivers with limited English proficiency.
- Whether the State had been identified for the interview portion of this project.

The States of Texas, Arizona, Maryland, New Hampshire, and Ohio were selected for roadside-inspection observations, for reasons summarized below.

- Texas, which has a major border crossing between the United States and Mexico, was selected because of its high number of reported violations of §391.11(b)(2)—9,610 in 5 years.¹⁹ Therefore, its likelihood of having drivers with limited English proficiency was high compared with that of other States. Because Texas was also selected for the interview portion of this project, it was thought that observations of its approach to enforcement of §391.11(b)(2) could provide insight for the interviews.

Arizona has the second-highest number of reported violations of §391.11(b)(2) and the nation's highest percentage of inspections with a §391.11(b)(2) violation, 1.61 percent (see

- Table 4). Therefore, the likelihood of inspections involving drivers with limited English proficiency being observed was higher than it would be in other States.
- Maryland has the fifth-highest level of §391.11(b)(2) reporting as well as the highest percentage of inspections citing §391.11(b)(2) violations that resulted in an OOS order, 53.53 percent. Therefore, it offered the opportunity to observe factors contributing to inspectors' decisions to place drivers out of service and increased the geographic scope of the observations.
- New Hampshire was selected to provide geographic balance to the roadside-inspection observations. This State has a high prevalence of motor carriers traveling between Canada, Boston, and New York City.
- Ohio was selected to provide geographic and demographic balance to the roadside-inspection observations.

Locations for observations of passenger-carrier inspections, known as *destination inspections*, were determined by contacting the States that conducted the highest number of such inspections each year. Two locations were selected, one in Arizona and the other in Minnesota.

¹⁸ Further information can be found in the Data Analysis section (2.1) of this report.

¹⁹ See the Data Analysis section (2.1.2.2, State Reporting) of this report.

Inspection observations were derived from roadside inspections of large trucks and destination inspections of passenger carriers. The study team contacted the FMCSA DA in each State for assistance in scheduling and arranging other logistics for the observation periods. Often, the DA put study team staff in contact with their State counterparts, who then helped to arrange a variety of observation experiences. One State, Texas, provided the opportunity to observe differences between inspections that were near the border and those that were not (e.g., those in central Texas). Table 10 summarizes the eight observed inspections.

Table 10. Information on the Eight Inspection Observations, by Type of Company

State	Inspection Location	Enforcement Agency	Inspection Details
Arizona Large Trucks	Rest area on I-19 northbound near Tucson	Arizona Department of Public Safety	Two-day concentrated enforcement effort; all CMVs had to exit interstate via rest area; flagged for inspection after driver-inspector interaction
Maryland Large Trucks	Weigh station on I-95 southbound near Perryville, MD	Maryland State Police	Part of regularly scheduled enforcement activities
New Hampshire Large Trucks	Weigh station on I-93 southbound near Windham	New Hampshire Department of Safety	Part of regularly scheduled enforcement activities
Ohio Large Trucks	Weigh station on I-71 southbound near Wilmington	Ohio State Highway Patrol	Part of regularly scheduled enforcement activities
Texas Large Trucks	Laredo (on US-Mexican border)	Federal Motor Carrier Safety Administration	Part of regularly scheduled enforcement activities
Texas Large Trucks	San Marcos (central) weigh station on I-35 southbound	Texas Department of Public Safety	Part of regularly scheduled enforcement activities
Arizona Passenger Carriers	Grand Canyon National Park	Arizona Department of Public Safety and US National Park Service	One-day joint operation; inspections conducted on all passenger carriers arriving at South Rim of park
Minnesota Passenger Carriers	Minneapolis at the Metrodome and in downtown area	Minnesota State Patrol	Inspections of all passenger carriers entering Metrodome parking lot on two consecutive evenings; additional, mobile inspections throughout downtown Minneapolis

2.2.3 Task-Analysis Results

The focus of the observations was to determine the extent to which drivers engage in tasks that require language comprehension. These observations provide a starting point for understanding the different language-comprehension tasks that may need to be performed. It is important to note that not all drivers who were observed performed all listed tasks because some tasks were specific to a particular company or industry. For example, a driver carrying a hazmat load from one site to another performed different activities from those of a large-truck driver delivering pharmaceuticals from store to store.

The observations focus on language comprehension in general rather than on tasks that specifically require English proficiency. The need to be proficient in English to perform the tasks is discussed in more detail following the tables. The task descriptions are general; for example, rather than identify each specific traffic sign that a driver may have seen, the corresponding activity in the task list is “Read traffic signs.” Specific instances of the task are considered in order to assess its complexity and potential safety impact under the different circumstances in which it may be performed.

2.2.3.1 Results of Large-Truck Ride-alongs

The pre-trip activities listed below highlight the need to be able to read and write in order to complete paperwork. Some of this paperwork is required to comply with FMCSA regulations, such as keeping a logbook, and must be updated throughout the day. Other paperwork, such as the bill of lading, provides instructions to the driver and lists trip destinations. It is important that drivers be able to read sufficiently to understand and note any errors in the information they are given, as some companies require drivers to provide a signature accepting responsibility and liability for load contents.

While driving is primarily a physical act, the truck cab contains substantial amounts of written information that the driver must understand in order to operate the vehicle effectively. The driver must be able to read and operate the primary and secondary controls and various instruments. For example, a series of identical-looking switches on the dashboard may be distinguishable only by their labels, and instructions for flares, safety triangles, and fire extinguishers may be read for the first time during an emergency.

Ride-alongs: Observed Tasks Performed by Large-Truck Drivers That Require Language Comprehension

Pre-Trip Activities

- Complete pre-trip inspection form.
- Make logbook entry.
- Read bill of lading and other paperwork regarding load and content.
- Read paperwork providing location of and directions to delivery/pick-up stations.
- Read and interpret maps and/or directions provided to plan trip.

En-Route Activities

- Drive to delivery stop.
- Read and operate primary and secondary controls and instruments.
- Read traffic signs (permanent and temporary; stationary, dynamic, and variable messages) pertaining to parameters such as speed limits, traffic conditions, construction areas, and lane restrictions.
- Communicate with other drivers and dispatchers through communication devices such as radios, cell phones, and computer-input devices.
- Listen to radio to obtain information (e.g., on weather and traffic conditions).
- Arrive at store or receiving/shipping facility.
- Read safety procedures/policies of facility.
- Talk to security personnel (sometimes through intercom) to gain access to facility.
- Update logbook (electronic or paper) to note arrival at destination.
- Communicate with facility representative (e.g., store manager) regarding delivery details such as parking location and load.
- Unload truck.
- Count and check off number of items (e.g., totes or pallets).
- Sign bill of lading.
- Depart for next stop.
- Ask for directions to next location.
- Call dispatcher or store manager at next stop to provide status information (e.g., whether driver is ahead of/behind schedule or is en route).
- Update logbook (electronic or paper) to indicate change in duty status.
- Sign paperwork to accept responsibility for contents and delivery

Post-Trip Activities

- Complete logbook.
- Announce return to dispatcher.
- Write up and submit repair request.

It also highlights the need for the driver to be able to read traffic signs and other safety information while en route. Most traffic signs are standard, including those providing information about speed limits, stops, and freeway entrances and exits. While the shape and color of the sign, and its icons, convey some information, knowledge of English may still be required to understand its content. For example, freeway entrances and exits are typically marked on green rectangular signs, but the driver must be able to read the sign in order to

identify the correct entrances and exits. The concern is whether drivers who may not be proficient in the English language are able to respond in a timely manner if they encounter unfamiliar or variable-message signs (VMS) that provide valuable information regarding road conditions. Road conditions are dynamic, and drivers must be able to identify and react to construction signs, closed exits, detours, and accidents. The task of reading and comprehending, combined with high freeway speeds and the inability for large trucks to make sudden movements, require that drivers be ready to react.

Upon reaching the receiving or shipping facility, the driver may encounter signs detailing special procedures for delivery. Unlike most signs encountered en route, these signs may be nonstandard and specific to the facility. For hazmat operations, it is especially important that drivers be able to read signs that describe required actions and to respond appropriately.

The other tasks listed indicate that drivers interact frequently with others, including other drivers, store managers, dispatchers, and security personnel. While the messages conveyed in some of these interactions are important, it must be emphasized that not all of the interactions occur in English. For example, one observer noted that a driver making deliveries in Laredo often communicated with store managers in Spanish rather than English. Regional or industry-specific needs can influence the level of English needed by a CMV driver. What is important is that drivers are able to communicate with others with use of a common language.

It was of interest to determine whether the task inventory was comprehensive, since a limited number of ride-alongs (eight) were conducted and they covered a wide variety of operations. Consequently, observers may have captured only a glimpse of the activities that large-truck drivers perform on a typical day. A comparison of the observations collected during the various ride-alongs highlighted differences in the nature of operations for each carrier and each type of load.

To evaluate the validity of the observations, the task list was compared with tasks listed by the Professional Truck Driver Institute (PTDI),²⁰ with a focus on tasks that could require language comprehension. Many of the skills described by PTDI addressed physical tasks, such as vehicle inspection or basic vehicle control.

A task identified by PTDI as requiring language comprehension but not included in the Volpe Center task inventory was that of dealing with accident scenes and reporting procedures. According to PTDI, if an accident occurs, the driver must be able to alert police and provide the appropriate officials with details. The driver must also be able to clean up any spilled cargo and, if hazmat is involved, to notify the appropriate authorities. This task reflects the need to communicate during emergency situations, although no such events were observed during the ride-alongs. Emergencies such as breakdowns and accidents occur infrequently, but when they do take place it is important that the driver be able to interact effectively with the public and with enforcement and emergency personnel. The nature of these interactions can be quite complex and can require a certain level of language proficiency, particularly if the circumstances surrounding the accident must be explained.

²⁰ *Skill Standards for Entry-Level Tractor-Trailer Drivers*, 1999.

2.2.3.2 Results of Passenger-Carrier Ride-alongs

Tasks performed by passenger-carrier drivers that require language comprehension are listed below. It is important to note that these observations began en route at regularly scheduled stops. Consequently, no activities performed by the driver at the origin of the trip, such as completing a pre-trip inspection form or making a logbook entry, were recorded.

Before a trip begins, the driver must read and understand the safety policies at the terminal or stop; signs may vary in complexity and familiarity, ranging from “No Parking” to the more detailed “No Idling Over 5 Minutes.” English proficiency may be needed to comprehend and obey both standard and nonstandard signs.

Ride-alongs: Observed Tasks Performed by Passenger-Carrier Drivers That Require Language Comprehension

Pre-Trip Activities

- Read terminal safety policies and signs (e.g., “No idling over 5 minutes”).

En-Route Activities

- Pick up passengers.
- Welcome passengers onboard (e.g., invite passengers to board, provide introductions).
- Explain procedures: provide instructions regarding luggage storage, cell-phone usage, and smoking; identify locations (e.g., of restrooms or trash receptacles); advise passengers to use caution when moving around while vehicle is in transit; explain actions required during emergencies.
- Answer passengers’ questions.
- Inform passengers about stops and final destination.
- Depart for destination.
- Read traffic signs (permanent and temporary; stationary, dynamic, and variable messages) pertaining to parameters such as speed limits, traffic conditions, construction areas, and lane restrictions.
- Communicate with other drivers and dispatcher through devices such as radios, cell phones, and computer-input devices.
- Communicate with passengers (e.g., respond to their questions and issues).
- Stop for break.
- Make intermittent announcements (e.g., of a lunch stop).
- Provide passengers with information (e.g., time for reboarding).
- Announce departure and time remaining in journey.
- Arrive at destination.

- Announce arrival and state current stop.
- Thank passengers for traveling with the company.
- Instruct passengers to take their personal belongings and tell them how to retrieve their luggage.
- Assist passengers in identifying their luggage.

En route, drivers of passenger carriers interact extensively with passengers and with drivers of other vehicles. Initially, the driver greets passengers, explains procedures, answers any questions, and conveys information about the stops and the final destination. The complexity of this interaction may vary; greetings may be fairly simple and standard, whereas effectively communicating the passenger carrier's procedures may be more involved. In particular, the driver must be clear in cautioning passengers to avoid moving around while the vehicle is in transit and in providing instructions about what to do in the event of an emergency. Depending on the complexity of the instructions, some passengers may have questions, to which the driver must be able to respond.

The importance of being able to communicate effectively with passengers was highlighted during one ride-along when passengers complained of a smell of fumes and a buzzing alarm-type noise. The driver assured the passengers that he would look into these issues. He tried to reach the company several times while on the road. He then pulled the vehicle over and discovered that the fumes and alarm were due to a gas cap not being properly seated. He was able to fix the problem and to continue on the route. During the incident, observers noted that the driver provided passengers with information regarding whom to contact to complain about the problem. While this problem was fairly minor, the importance of being able to communicate with passengers would become more significant in a critical, emergency situation.

During a trip, the driver continues to interact with passengers, providing intermittent announcements. For example, if a break stop occurs, the driver must tell passengers the duration of the stop and the time by which they must reboard.

Upon reaching the destination, the driver may make an announcement to passengers, thanking them for their patronage. The driver then should remind passengers to collect their personal belongings and should instruct them on how to collect their other luggage. As part of this task, the driver may assist passengers in identifying their luggage.

Most interactions with passengers will require some degree of English proficiency, but these interactions will vary greatly in complexity. While en route, the driver may talk with dispatch personnel or others on a phone or radio, but this conversation does not necessarily need to be in English; it requires only a common language.

Drivers of passenger carriers must also communicate with drivers of other vehicles. Typically, this communication involves the obeying of traffic laws, such as signaling an intention to change lanes, but it also requires that the driver be able to read and respond to traffic signs. As noted earlier, signs may vary in complexity and familiarity, and some English proficiency may be needed to respond in a timely manner.

The tasks listed vary in the level of language comprehension that they require and in the safety impacts of performing them incompletely or incorrectly, but there are important safety implications for two tasks in particular: the ability to read and respond to road signs in a timely manner, and the ability to provide passengers with instructions during an emergency. Both tasks highlight the need for effective language comprehension. In addition to their own safety and that of people in other vehicles, passenger-carrier drivers are entrusted with their passengers' safety.

2.2.3.3 Results of Large-Truck and Passenger-Carrier Inspections

The actual selection of a driver or vehicle for an inspection is often made without any action being required on the driver's part. While the selection process can vary from State to State and from inspector to inspector, the inspection process itself varies little. Therefore, the task analysis focused on the responsibilities of large-truck and passenger-carrier drivers during an inspection rather than on the inspectors.

Tasks performed during an inspection that require language comprehension by both large-truck and passenger-carrier drivers are listed below. It underscores the extensive amount of interaction required during an inspection. Much of this interaction involves the driver responding to the inspector's commands and questions.

Observed Tasks Performed by Large-Truck and Passenger-Carrier Inspection Drivers That Require Language Comprehension

Driver Component

- Respond to inspector's questions (e.g., tell inspector if vehicle is carrying passengers or co-drivers and advise with regard to load type and size and origin/destination).
- Confirm if vehicle is carrying any hazmat.
- Communicate with inspector to gain understanding of why vehicle is undergoing inspection.
- Confirm if vehicle has been inspected in recent past.
- Give inspector logbook and other paperwork (license, medical card, bills of lading, insurance, registration papers, gas receipts) as requested.

Vehicle Component

- Follow inspector's instructions to:
- Pull over or park.
- Open doors.
- Show fire extinguisher and other safety devices.
- Open hood.
- Start engine.
- Put vehicle in neutral

- Pull emergency brake.
- Place key in specific position in ignition.
- Honk horn.
- Activate right- and left-turn indicators.
- Turn on lights (high- and low-beam).
- Turn on windshield wipers.
- Engage and hold brakes.
- Release brakes and pressure.
- Rotate wheels to right and left.
- Release brakes while wheels are rotated.
- Rotate steering wheel.
- Turn off engine.
- Open emergency windows (passenger carriers only).

Post-Inspection Activities

- Meet with inspector to:
- Answer remaining questions about logbook, work hours, lease agreement, etc.
- Provide additional paperwork.
- Review violations and citations
- Sign inspection papers.
- Respond to inspection outcome as needed (e.g., update logbook, contact company, arrange for repairs).

Typically, the inspector starts by conducting the driver component of an inspection. The inspector asks the driver what he or she is carrying, explains the inspection process, and examines the driver's paperwork, including license, medical card, bills of lading, insurance, and registration. The driver's ability to communicate effectively can facilitate the inspection. Some drivers are not trained in the inspection process, and many are not familiar with the paperwork that they are required to present—they may simply have submitted a stack of papers for the inspector to sort through. The process of going through the paperwork often leads to a dialogue between the inspector and the driver, aimed at helping the inspector to understand what is being examined.

The driver's ability to read, write, and speak English also helps the inspector to assess driver fatigue. The driver's logbook provides one measure for checking whether the driver is getting appropriate rest, but if the driver does not understand English and therefore cannot mark what is required, the inspector may be unable to make an accurate assessment. Even if the driver understands some English, the logbook inspection often requires a constant dialogue between

the driver and the inspector, and this process can be difficult if the driver is unable to comprehend specific questions.

The inspector may also conduct an inspection of the vehicle, during which the driver is told to perform specific tasks, such as opening the hood, starting the engine, putting the vehicle into neutral, and honking the horn.

It is worthwhile to note the importance of good communication between the inspector and the driver during a vehicle inspection. As part of the process, the inspector often must move behind and underneath the vehicle and is therefore not visible to the driver, who is waiting for instructions. Consequently, a misinterpreted instruction could have important safety implications. Miscommunication is not limited to interactions between drivers and inspectors who speak different languages. For example, during an inspection in Laredo, Texas, one observer noted a miscommunication between an inspector and a driver who both spoke Spanish. The inspector, who was standing next to the driver, asked the driver to open the hood. The driver did so without realizing that the inspector wanted to conduct further examination under the hood and tried to close it immediately, narrowly missing the inspector.

Post-inspection, the inspector reviews the inspection report and (if applicable) the OOS order with the driver. It is important that the driver understand the information being conveyed by the inspector so that he or she can take appropriate action.

2.2.4 Summary

The broad and varied use of language in CMV operations has important safety implications. In addition to its safety benefits, ease of communication aids drivers, inspectors, passengers, and facility operators. While the analyses focused on the importance of language comprehension, several tasks presented in the tables highlight the need for English proficiency for CMV operations in the United States.

- In particular, the driver's ability to read, understand, and respond to road signs in a timely manner is critical. Lack of English proficiency may lead to a failure to respond to nonstandard signage, such as VMS or custom signs at facilities, thus posing a safety hazard.
- Emergencies occur infrequently, but when they do, it is important that the driver be able to interact effectively with enforcement and emergency personnel as well as with the public. These interactions can be quite complex and can require a certain level of language proficiency.
- Drivers should have sufficient language comprehension in order to be able to update and complete their logbooks. This task is required by FMCSA regulations, and while it may not have a direct impact on safety, the logbook provides the inspector with information on driver fitness and compliance with HOS regulations.

Finally, the observations highlight the need for drivers to be able to communicate effectively with inspectors. Inspectors performing vehicle inspections subject themselves to potentially dangerous conditions, and it is important that drivers understand what inspectors are doing so that mishaps can be prevented.

2.3 INTERVIEWS

2.3.1 Overview

For the third portion of this study, the authors interviewed various stakeholder groups to obtain information on the following:

- The extent to which interviewees—selected Federal and State personnel; safety associations and public interest groups; individual drivers, carriers, and motor carrier industry associations; and independent owner-operators—believe that a driver’s proficiency in the English language is necessary for the safe operation of CMVs.
- How they interpret the current FMCSA regulation, and how they think that a driver’s level of English proficiency could be assessed during the hiring process, in the daily work environment, and during inspections.
- Their opinions on whether the English language proficiency regulation, as currently written, can be applied in a uniform manner while avoiding the potential for discrimination against individuals for whom English is a foreign language.

Because the study was intended to be a scoping exercise, the interviews were limited in number and designed to produce qualitative findings rather than numerical material suitable for quantitative analysis.

2.3.2 Approach/Methodology

2.3.2.1 Stakeholder Categories and Interview Targets

For the preliminary assessment, FMCSA limited the number of interviews. After discussions with FMCSA, the following list of interview targets was generated.

Federal Agencies

Regulatory agencies with CMV interests:

- Federal Motor Carrier Safety Administration (FMCSA).
- Pipeline and Hazardous Materials Safety Administration (PHMSA).
- Federal Highway Administration (FHWA) (with regard to the use of English on signs covered by the Manual on Uniform Traffic Control Devices [MUTCD]).

Agencies with other industry oversight in which English proficiency could be a consideration:

- Federal Railroad Administration (FRA).
- Federal Aviation Administration (FAA).

Associations

- Commercial Vehicle Safety Alliance (CVSA).
- International Association of Chiefs of Police (IACP).

- American Trucking Association (ATA).
- Truckload Carriers Association (TCA).
- National Tank Truck Carriers (NTTC).
- Owner-Operator Independent Drivers Association (OOIDA).
- American Bus Association (ABA).
- United Motor Coach Association (UMCA).
- American Association of Motor Vehicle Administrators (AAMVA).
- American Association of State Highway and Transportation Officials (AASHTO).

Public Interest Groups

- Public Citizen.
- Advocates for Highway and Auto Safety (Advocates).
- Insurance Institute for Highway Safety (IIHS).

State Agencies

- Enforcement and safety agencies.
- CMV licensure agencies.
- Highway agencies concerned with signage.

Motor Carriers and Drivers

- Company officials from motor carriers (including passenger carriers), with consideration given to geographic distribution and size of operations.
- Drivers from these companies.
- Independent owner-operators .

2.3.2.2 Strategy: A Phased Approach

After compiling a preliminary list of interview targets, the authors determined the order in which to contact them. Agencies and organizations, and the primary information that could be obtained from them, fell into two categories:

- *Government regulators, related professional associations, and safety-oriented public interest groups:* Information on how the regulation was being implemented; their viewpoints regarding what was/was not working, and why; and their thoughts about the status quo and what could be done to improve it.
- *The regulated industries (motor carriers):* Input on how they were attempting to comply with the regulation; their response to enforcement activity; their perspective

on what was/was not working, and why; and their thoughts on what could be done to improve the situation.

Before starting the interview phase, the interview team reviewed in depth the history of the regulation and the docket from the 1997 ANPRM. The team researched the general background of each agency and organization to be interviewed and any specific involvement or interest in the English-language proficiency of CMV drivers.

On this basis of the information acquired through this initial background research, the interview process was divided into three phases. Each phase was designed to add incrementally to the considerations that would be built into the next phase.

Phase I

Phase I interview targets fell into two categories. The first category consisted of regulatory and enforcement entities, including:

- Federal agencies directly involved with motor carrier regulation and enforcement.
- Other Federal agencies that may have taken different approaches to comparable challenges.
- State and local enforcement bodies as represented by CVSA and IACP .

The second category consisted of associations representing the regulated industries: ATA, NTTC, TCA, ABA, and UMCA. The intent in speaking to representatives from these groups was to obtain a look into the industry and the business environment.

Phase II

At the completion of Phase I, the interview team consolidated its findings along major themes and developed questions to be posed to interview contacts in Phase II. Interview contacts in this phase included personnel from State agencies responsible for CMV regulation and enforcement, issuance of CDLs, and highway signage. The goals of this phase were to:

- Ascertain whether and how selected States were implementing the language-proficiency regulation.
- Understand how State processes for licensing commercial drivers worked, and, in particular, learn how they dealt with applicants whose primary language was not English.
- Determine language considerations pertaining to both fixed signs and DMS.

The interview team researched each State's approach to CMV enforcement to better determine which agencies and individuals could provide the most substantive information.

At the close of Phase II, the team again discussed its findings and then consolidated them into a matrix to support comparison of the States' approaches.

Phase III

In Phase III, the focus of the interviews shifted from the regulators to the regulated: individual motor carriers and drivers. These interviews drew on collective insights gained from the previous background research and interviews.

2.3.2.3 Methods

The overall approach to conducting the interviews is described below.

Interview Prospects

For each category of contact, a list of specific agencies and individuals was submitted to FMCSA for prior approval. Substitute agencies and individuals were identified and contacted as needed.

Interviewers

The authors assembled a team of five interviewers with experience in telephone interviewing. Team members received additional training in specific techniques needed for effective qualitative interviewing.

Questionnaires and Invitations to Interview

Each category of contact had its own questionnaire; Federal agencies had separate, targeted questionnaires. Inputs to questionnaire development included past questions and comments that had been posed to FMCSA or raised in the 1997 ANPRM, a literature search for narratives and news stories on relevant events, and information from ride-alongs and inspections derived from the observations part of this study.

Questionnaires were developed in two forms: an interviewer version, which included highlighted probe questions, and an interviewee version, expunged of the probes. Draft questionnaires and invitation letters were submitted for FMCSA review, modified if requested, and finalized. These submissions and reviews took place on a rolling basis.

Invitation letters were distributed via email and included a “respond by” date; follow-up by email and telephone was conducted as necessary. After an interview prospect accepted the invitation, the interviewer arranged a specific date and time for the interview and sent a confirming email with the questionnaire attached.

Interviews

All interviews were conducted by telephone. Typically, interviews were conducted by a two-person team in order to enhance active listening and follow-up during the process, to enable extensive notes to be obtained in real time, and to lay the basis for a cross-checking of understanding and interpretation during the later analysis.

Interview Records

For interviews involving extensive note-taking, the note-taker was responsible for generating a clean draft of the interview. The primary interviewer then reviewed and made changes to correct and augment the record as needed. Discrepancies in interviewers’ interpretations and

gaps in relation to the interviewee's responses were noted. The interviewee was then contacted by email or telephone for clarification, and the responses were entered into the final record.

Analysis of Interviews

For each interview phase, the written results for respondents were reviewed by all interview team members and then discussed and analyzed for congruent and differing opinions.

2.3.3 Phase I Interviews: Federal Agencies, Associations, and Interest Groups

Phase interview subjects were Federal Government regulators and contacts from professional associations and safety-oriented public interest groups. The Federal interviewees provided valuable background information, along with insight into how other Federal regulatory agencies deal with similar language needs in other regulated industries. Additional information included how the regulation was being implemented; viewpoints regarding what was and was not working, and why; and thoughts on the status quo and what could be done to improve it.

2.3.3.1 Approach/Methodology

Federal Interview Contacts

The interview team developed the list of specific Federal interview targets in collaboration with FMCSA. Table 11 shows the final list of interviewees' agencies and departments and the interview dates.

Table 11. Federal Interview Contacts

Agency	Department	Date of Interview
Federal Motor Carrier Safety Administration (FMCSA)	- Commercial Drivers License - Western Service Center - Commercial Passenger Carrier Safety - North American Borders	3/6/07 3/6/07 3/7/07 3/16/07
Pipeline and Hazardous Materials Safety Administration (PHMSA)	Office of Hazardous Materials Safety/Enforcement	03/7/07
Federal Highway Administration (FHWA)	MUTCD	03/28/07
Federal Railroad Administration (FRA)	Locomotive Engineer Certification	03/19/07
Federal Aviation Administration (FAA)	- FAA—Long Beach Flight Standards District Office - Linguistics Consultant to the International Civil Aviation Organization (ICAO)	04/19/07 03/16/07

Association Interview Contacts

The associations to be interviewed were largely specified from the outset by FMCSA. In order to identify the most knowledgeable individuals within each organization, the team went to the organizations' Web sites; names were also solicited from and informally validated with the Federal interviewees. The list of proposed contacts was then vetted with FMCSA before the team proceeded further. Table 12 shows the final list of associations, the expertise of the interview contacts, and the interview dates.

Table 12. Association Interview Contacts

Association	Area of Specialization	Date of Interview
Commercial Vehicle Safety Alliance (CVSA)	Policy and Programs	4/26/07
International Association of Chiefs of Police (IACP)	IACP Research Center Directorate	04/27/07
American Trucking Associations (ATA)	Safety	04/30/07
National Tank Truck Carriers (NTTC)	Association Management	04/30/07
Truckload Carriers Association (TCA)	Safety	05/3/07
Owner-Operator Independent Drivers Association (OOIDA)	Regulatory Affairs	05/1/07
United Motor Coach Association (UMCA)	Industry Relations	04/23/07
American Bus Association (ABA)	Regulatory and Industry Affairs	05/4/07
American Association of Motor Vehicle Administrators (AAMVA)	Driver Programs	05/8/07
AASHTO (with regard to MUTCD)	Engineering and MUTCD	05/14/07

Public Interest Groups

Table 13 shows the final list of public interest groups that were interviewed, the expertise of the interview contacts, and the interview dates.

Table 13. Public Interest Group Interview Contacts

Group	Area of Specialization	Date of Interview
Public Citizen	Consumer safety	Cancelled by interviewee ²¹
Advocates for Highway and Auto Safety	Research	05/18/07
Insurance Institute for Highway Safety	Research	05/25/07

2.3.3.2 Results

The interviews conducted with Federal staff and contacts from professional associations and public-interest groups provided a broad array of preliminary insights into the issues, factors, and considerations involving LEP among CMV drivers. These results also generated many

²¹ The day before the scheduled interview, the interviewee's assistant informed the interviewers that the interviewee would be on travel and unable to participate but had reviewed the comments of the interviewee from Advocates for Highway and Auto Safety and concurred completely with those positions.

questions to be explored in subsequent interviews with State enforcement, licensure, and signage officials and with motor carriers and drivers in the trucking and passenger-carrier industries.

What follows is a summary of key discussions with interviewees by topic. The information is qualitative in nature and is based on interviewees' experiences with and understanding of the topic.

Prevalence of languages other than English

The MCMIS data on LEP violations as presented in

Table 4 imply that CMV drivers lacking English proficiency are on the road. The first question that the interview team sought to answer was: What languages other than English are primary to some CMV drivers?

Interviews were conducted in the early spring of 2007; at this time, the Administration's effort to launch the NAFTA cross-border demonstration project was under challenge in Congress and the courts and was receiving coverage in the popular and trade press. When asked about English-language proficiency among CMV drivers, a number of interviewees brought up the demonstration project immediately, offering opinions and concerns regarding Spanish-speaking drivers at the southern border.

After interviewers clarified that the study was looking broadly at language proficiency among drivers operating in all areas of the United States, interviewees mentioned languages in addition to Spanish that they or their organizations were aware of. Interviewees from FMCSA enforcement, CVSA, and IACP reported a substantial number of drivers from Eastern European bloc countries with limited or no English proficiency; ATA and OOIDA interviewees echoed this observation. Languages being spoken by these Eastern European drivers included Russian, Ukrainian, Polish, Czech, and "Bosnian." Other languages and dialects encountered were Chinese (Mandarin and Cantonese), Haitian Creole, French, "Indian" (Punjabi), "Pakistani" (Urdu), Laotian, and Jamaican English.

Extent of problem by industry sectors and size of operations

There are numerous reports of a CMV driver shortage, but the trucking industry associations had different perspectives on whether or not this is actually the case. The carrier associations supported the contention; ATA had commissioned a research report on the subject.²² OOIDA was skeptical because of the high number of new drivers that it said seek CDLs each year.

Interviews with industry association contacts gave the impression that the practice of employing drivers who lack English proficiency might not be uniform across industry sectors or similarly sized operations.

- Trucking association interviewees said that hazmat carriers are likely to demand a higher level of proficiency because of the paperwork and other communications

²² Global Insight for the American Trucking Associations. *The US Truck Driver Shortage: Analysis and Forecasts*. May 2005.

needed for safe operations, and that the additional testing required for a hazmat endorsement would weed out candidates who lacked English proficiency.

- The OOIDA contact said that independent owner-operators tend to be seasoned drivers and that often, when another driver is needed, they find candidates by word of mouth or call on individuals they already know. The economics of running a small operation are such that hiring a driver who could be put out of service is regarded as risky: if, for example, an owner-operator runs three power units and the driver of one of them is put out of service, the proportional impact on the bottom line is huge.
- Although passenger carriers face a driver shortage, language proficiency has not yet been a widespread issue. The business necessity of having a driver who can communicate constantly and in widely varying ways with passengers has kept many operators with English-speaking customers from hiring drivers who are not proficient in the language. The conspicuous exception has been a string of recent safety-related incidents involving culturally targeted carriers.

The size of the operation, whether of a carrier of goods or of passengers, may also make a difference. Trucking association contacts described how some of their members screen job applicants, making use of recruiters or their human resource departments to identify problems early in the hiring process. After an applicant has been brought on board for additional training, the safety manager or training personnel will also watch for signs of language difficulty. These interviewees acknowledged, however, that even though this is the ideal scenario, smaller operators, who make up the majority of the industry, would not have the same capacity to screen out problem applicants.

Language proficiency and safety

Phase I interviewees spoke of three major areas of concern:

- Safety of enforcement personnel.
- Driver inability to communicate in emergency situations.
- Driver inability to understand and respond to signage.

Safety of enforcement personnel

This concern was typically but not always the first mentioned by safety association and Federal interviewees. Perhaps not surprisingly, it was also at the top of the list for CVSA and IACP interviewees. It was a primary concern for some but not all Federal safety and enforcement interviewees. Interviewees offered a variety of anecdotes, usually describing instances in which an inspector had instructed a driver to do something and the driver clearly had not understood and had taken some inappropriate action that put the inspector at physical risk. The IACP interviewee noted that, in an enforcement stop, the driver's response to the officer's instruction has an effect on how the officer reacts; depending on the circumstances, a misunderstanding could be dangerous for both parties.

The FMCSA field-staff interviewee had a somewhat skeptical perspective on the inspection anecdotes. As a former inspector and trainer of inspectors, his view was, "Why would you put yourself in that position?" His point was that it's a matter of judgment: "If you've established

that the driver doesn't communicate sufficiently well, why are you getting under that truck? Why would you do it if you didn't think it was safe?" Inspections are not done in isolation; the inspector is in communication with the driver at all times. The contact recommended that the inspector put the driver out of service, park the truck, and wait until a driver who could speak English showed up. He concluded, "Is it a safety issue? Yes, but only because of a lack of due diligence."

Driver inability to communicate in emergency situations

Interviewees' concerns about driver inability to communicate in emergency situations fell into two categories: the ability of CMV drivers to communicate with emergency response personnel in the event of a hazmat incident, and communication by passenger-carrier drivers with passengers in an emergency situation.

The PHMSA interviewee relayed his understanding of situations that arise along the southern border, especially at Laredo, where vehicles come into the United States from Mexico. He said that some drivers do not speak or read English and the shipping documents are in English; such drivers do not know what they are carrying or how hazardous the materials are, and they cannot communicate with emergency responders. Alternatively, drivers may know what they are carrying but may not realize that an accidental mixture of the materials can be dangerous. Fortunately, he added, many of the emergency response personnel in this area are fluent in Spanish; for those who are not, communication is very difficult, posing safety issues. The OOIDA interviewees agreed with this point in general; the NTTCC interviewee, in contrast, seemed to feel that, given the hazmat placard system and the availability of shipping documentation, a driver's inability to communicate in English was not a major concern.

FMCSA's passenger-carrier-safety interviewee and the passenger-carrier association contacts agreed that a bus driver's ability to communicate with passengers and emergency responders is essential. This issue received enormous public and regulatory attention following a tragedy that occurred in Wilmer, Texas, during the evacuation of Houston in advance of Hurricane Rita. Although National Transportation Safety Board (NTSB) investigators concluded that the driver's language proficiency was not a determining factor in the accident,²³ two interviewees, one of them a Federal official, nevertheless cited the Wilmer event as an example of why bus drivers must speak English. Other recently publicized safety incidents involving ethnically targeted passenger carriers—for example, the so-called Chinatown buses—have also raised public and regulatory consciousness about what happens when a driver and passengers or a driver and emergency response personnel do not speak the same language in an emergency. (An emergency in this context might refer to a passenger experiencing medical difficulty or to something wrong with the bus itself.)

The regulation is based on an assumption that passengers and emergency response personnel all speak English, but, as interviewees pointed out, this is not necessarily the case. Passenger carriers that cater largely to populations speaking languages other than English employ drivers who speak those languages, and depending on where an emergency arises, the location

²³ National Transportation Safety Board. Motor Coach Fire on Interstate 45 During Hurricane Rita Evacuation Near Wilmer, Texas, September 23, 2005. Accident Report. NTSB/HAR-07/01 PB2007-916202. p. 69.

might be one in which the driver, local residents, and emergency responders all speak the same non-English language. However, when the passenger carrier is operating in interstate travel, drivers are likely to encounter emergency responders who speak only English. The general sense was that, from a regulatory perspective, while drivers need to be able to communicate emergency information in English; the ability to communicate with passengers in another language was a business decision for the carrier.

Driver inability to understand and respond to signage

When the motor carrier regulation first took effect in 1936, the fundamental requirement for language proficiency among CMV drivers, even those otherwise exempted from having to be able to read and speak English, was “the ability to understand traffic and warning signs.” While this concern was not the first that was spontaneously mentioned by Phase I interviewees, it was the one topic on which there was universal agreement. As one interviewee said:

For me, as a traffic engineer with thirty years of experience, and also as a member of the NCUTCD [National Committee on Uniform Traffic Control Devices], I believe it is absolutely essential for drivers to understand the signs and signals they see on the roadways. It is important for their safety and the safety of others on the road.

MUTCD defines the standards used by road managers to install and maintain traffic control devices on streets and highways nationwide. MUTCD is published by FHWA under 23 CFR Code 655, Subpart F. The version currently in use is the 2003 Edition with Revision Number 1 Incorporated, dated November 2004. States are required to adopt the National Manual or to have a State MUTCD or supplement that is in substantial conformance with it encompasses regulatory, warning, guide, and special service signs as well as road markings, temporary traffic controls, and a range of signage and markings for special situations, including railway crossings. Signs may contain symbols or wording, or both; all words are in American English only.

The interviewer team wanted to ascertain whether data from accidents in which language insufficiency in relation to signage was a factor were available as an input to the revision process. MUTCD interviewees said that they work closely with FHWA’s Office of Safety, “so if issues come up, we’re aware of it. We work closely with FRA as well. We work with a number of partners, and we get our data from different sources.”²⁴ One contact added, however, that:

The level of detail in accident reports varies greatly. Whether language was an issue is a piece of information that may or may not have been collected or be included. Whenever there’s a railroad-crossing accident, if NTSB investigates it will be very thorough and every avenue will be explored. The comprehensiveness in investigations below the NTSB level varies.

²⁴ The TCD team responsible for MUTCD works within FHWA’s Office of Transportation Operations.

MUTCD interviewees advised the interviewer team that, while there is no one set of internationally recognized traffic control device (TCD) standards, nations do not operate in a vacuum. There are international scanning programs, in which the United States participates, for viewing and comparing standards. FHWA staff involved with MUTCD periodically review standards and best practices from around the world to decide what should be incorporated during the next update of the manual.

According to interviewees, Canada and Mexico have their own standards for TCDs. Experts from those two nations as well as the United States attend each others' meetings to share information. (Participation tends to be somewhat higher proportionally for Canada than for Mexico.)

While NAFTA was being negotiated, a publication for comparing major types of signs among Canada, the United States, and Mexico was produced.²⁵ Many similarities were found, but there were considerable differences as well. Broadly, U.S. signage was found to combine words with symbols far more than that in Mexico or Canada.

MUTCD contacts went on to describe how the manual approaches the use of English. They reported a deliberate effort to keep the language very brief (without being cryptic), simple, and understandable so that people can have time to react. MUTCD does not have a standard list of words to be used on signs, but language is kept to an elementary level of comprehension, and if new language is proposed it is put through operational tests prior to acceptance. When States create their own signage, interviewees added, they must adhere to the same guidelines for readability.

Signage may be in a fixed format or it may take the form of dynamic message signs (DMS), also known as changeable message signs (CMS) and variable message signs (VMS). DMS is a relatively recent development in the history of traffic signage and is being used increasingly around the country, largely on highways and arterials in the vicinity of metropolitan areas. DMS is intended primarily for use in managing travel, controlling and diverting traffic, identifying current and anticipated roadway conditions, and regulating access to specific lanes or the entire roadway.²⁶ It may also be used to transmit emergency security messages²⁷ and AMBER Alerts²⁸ to drivers under specified conditions. DMS is operated by local and State transportation agencies; by its nature, it conveys a wide array of messages. According to the AASHTO interviewee, the States do not share a common lexicon for message language at this time.

Some enforcement and industry interviewees voiced serious doubts about the ability of drivers with limited English to understand any U.S. signage involving words. They said that fixed signage—for example, at railroad crossings—can contain detailed language that is

²⁵ Federal Highway Administration, US Department of Transportation. *Road User Guide for North America*. FHWA-SA-99-020 Revised HOTO/4-99(22M)E.

²⁶ FHWA Policy Memorandum, INFORMATION and ACTION: Dynamic Message Sign (DMS) Recommended Practice and Guidance, 7/16/04.

²⁷ FHWA Policy Memorandum, INFORMATION: Use of Changeable Message Sign (CMS) for Emergency Security Messages, 3/21/03.

²⁸ INFORMATION: AMBER Alert—Use of Changeable Message Sign (CMS), 8/16/02.

sometimes hard even for native English speakers to follow.²⁹ The FMCSA licensure interviewee recounted how a railroad-crossing sign in Florida was misunderstood by the heavily foreign tourist population until the more widely recognizable red stop sign was added.

DMS was a point of specific concern for interviewees, presenting a major challenge to English-speaking and LEP drivers alike. According to FHWA³⁰:

DMS must be readable and understandable by motorists in the amount of time that the DMS can be viewed. Factors such as prevailing travel speeds, letter height, lighting, and roadway geometrics approaching the DMS (i.e., when motorists can see the DMS) must all be considered in developing the messages to be displayed. Also the messages must consider the desired actions or response by the motorists.

The AAMVA (American Association of Motor Vehicle Administrators) Policy Provisions and recommends that “a test to determine an applicant’s knowledge of road signs and signals³¹” be included in the driver license examination. AAMVA’s recommendations, which are advisory and not binding, were discussed with the AAMVA interviewee, who said that States do test for understanding of signage, both on the written test and during the road test. On the subject of DMS, he did not recommend putting these types of signs into the road test because the routes selected at each test location might or might not include such signage and, where they did so, there would be no guarantee that the sign would be displaying a message at the time of a particular road test.

Impediments to compliance and enforcement

According to Phase I interviewees, the current regulatory framework impedes both compliance and enforcement. The reasons cited included:

- Absence of critical tools for compliance and enforcement.
- Differences between licensure requirements and language proficiency requirements for drivers.
- Variation in approach to enforcement among States.

Absence of critical tools for compliance and enforcement

While the regulation puts the responsibility for compliance on the motor carrier, neither the carrier nor the enforcing authorities are provided with tools that support compliance or provide a structure for enforcement activity. Comments provided by interviewees included:

²⁹ See *MUTCD Part 8 Traffic Controls for Highway-Rail Grade Crossings*, <http://mutcd.fhwa.dot.gov/pdfs/2003r1/Ch8.pdf> for the signage in question.

³⁰ FHWA Policy Memorandum, INFORMATION: Use of Changeable Message Sign (CMS) for Emergency Security Messages, 3/21/03.

³¹ American Association of Motor Vehicle Administrators (AAMVA). *Policy Positions and Bylaws of the American Association of Motor Vehicle Administrators Reflecting action taken by the Membership through the 2006 Policy Process*. Undated. p. 8.

- **There are no explicit, consistent criteria for assessing a driver’s language proficiency.** Efforts to develop such criteria were reported as being ad hoc and subjective. Without defensible criteria, there is legal exposure under Title VII^{32,33}. As stated by one industry contact, “I’ve spoken to folks with a . . . 20-truck operation and folks with a 200-truck operation. The owners are concerned that they might get sued for implying that the candidate doesn’t speak enough English.”
- There is no requirement under §391.11(b)(2) for the motor carrier to document when and how the required assessment of the driver candidate’s English proficiency was performed or its outcome. Section 49 CFR 391.51, which stipulates the driver qualification records that must be maintained by the motor carrier, is silent on this point. As a result, there is nothing that an inspector or safety investigator can evaluate to determine what the carrier is and is not doing. There is also no baseline that the safety investigator could use to help in educating the carrier on appropriate assessment methods. As an FMCSA interviewee said, “Even though in theory we have the authority to cite during a compliance review, we never do. So where is the incentive for a motor carrier to be proactive and promote English proficiency among his drivers?” In the words of an OOIDA interviewee, “So much of the enforcement is centered on the driver. That’s akin to treating a symptom rather than the disease.”³⁴
- Nowhere in the regulation is there any specified duration or set of actions, which, if successfully completed, will enable a driver put out of service to return to service. Asked what a carrier does if a driver is put out of service, trucking association interviewees said that the driver would be fired. However, the OOIDA contact suggested that the driver might continue to drive once he or she was out of the view of the inspector.
- Basic assumptions about the regulation’s assignment of testing responsibility to the motor carrier apparently don’t correlate with how the trucking industry works today. The regulation is based on an implicit assumption dating back to 1936 that the motor carrier has English proficiency. It also reflects an assumption that the motor carrier has hiring authority over, and direct contact with, every driver. Neither is necessarily the case. According to the CVSA interviewee:

We’ve had some cases, anecdotally, when a driver is put out of service, and the officer contacts the carrier to send a new driver. “Oh, by the way, how did you hire this guy?” “Well, he had a CDL.” “Did you talk to him?” “Yeah!” “Who did? Because we can’t talk to him.” That happens every day. . . . They’re certainly liable if he doesn’t [speak English]. How can you put a truck with half a million worth of freight in the hands of a person who doesn’t understand “open the door”? This industry is very diverse. There are very distributed drivers and operators. All they do is contract to have someone come to their facility and drive [the vehicle] away. Not every carrier gets

³² Ibid.

³³ FMCSA Docket Entry FMCSA-1997-2759-35.

³⁴ It should be noted that, according to MCMIS, violations of 391.11(b)(2) have been recorded during CRs.

eyeball-to-eyeball with their drivers all the time. There's also leasing and drivers working for multiple carriers. It's not a simple thing.

- The AAMVA interviewee made a parallel point:

[When the law was made] you were dealing with a totally different time; there was less diversity of languages, and an honor-based system tended to work. Companies were run differently then. We're in an industry now where drivers are very hard to acquire. We have an aging driver population. But you've also got companies out there that will hire anybody who's got a pulse and put them behind the wheel. You've got both good and bad companies. . . .

Differences between licensure requirements and language proficiency requirements for drivers

From the outset in 1936, regulations addressing limited English proficiency (FMCSR Part 391, Qualifications of Drivers) stood outside of and apart from those governing commercial driver licensing (Part 383, Commercial Driver's License Standards, and Part 384, State Compliance with Commercial Driver's License Program). While 49 CFR 391.11(b)(2) requires a certain level of English proficiency in order to drive a CMV legally, Part 383 does not provide for evaluation of this proficiency when granting a CDL. Therefore, while obtaining a CDL is necessary, it does not signify qualification for being permitted to drive a CMV.

The licensure regulations in 49 CFR 383 and 384 establish minimum requirements for the States in relation to the written and skills tests, and States may go beyond them. Consequently, individual State policies vary considerably with regard to the written, skills, and endorsement testing that they offer in languages in addition to English.

The separation of licensing from English-proficiency requirements puts companies in an untenable position. As noted above, if a State issues a CDL to an individual who is not proficient in English, the company is at risk of a lawsuit under Title VII if it fails to hire the person on the grounds of language insufficiency because of the appearance of discrimination (absent demonstrable justification for not doing so in the context of the job's requirements).

Variation in approach to enforcement among States

Some industry association interviewees made comments to the effect that States are responding in various ways to the 2005 CVSA OOS Criteria. Some States are actively enforcing the criteria while others are not. Some States reportedly have inspectors who speak Spanish and consider communication in that language to be completely in line with the CVSA OOS Criteria, which use NAFTA language and do not mention English proficiency per se. Other States strictly interpret and enforce the regulation.

Proposed improvements to current system

Almost all Phase I interviewees were of the opinion that a baseline level of English proficiency should be established for all CMV drivers. Some suggested that the baseline

should be developed by FMCSA; in contrast, a trucking association interviewee said that some members had requested guidelines directly from the association. On the industry side, there was a tone of caution on where to set a baseline and a suggestion that this would directly impact the extent of carrier support for the idea.

There was considerable agreement among interviewees that passenger-carrier and hazmat endorsements should require demonstration of a higher level of English proficiency than the baseline requirement. However, at least one interviewee thought that a higher proficiency level for these endorsements would be difficult to achieve from a political standpoint because some States with large Spanish-speaking populations administer the hazmat-endorsement test in Spanish and permit Spanish-speaking hazmat drivers to operate intrastate. A public interest-group interviewee was hesitant to buy into the idea of the higher proficiency standard for hazmat unless it would be possible to avoid an initial political compromise that “dumbed down” the baseline to the point where neither standard served public safety.

A major difference of opinion emerged when interviewees were asked “Who should test for English proficiency?” With the exception of FMCSA headquarters enforcers, a considerable number of interviewees thought that the best solution would be to turn over at least some of this responsibility to States as part of the CDL testing process. As stated by the AAMVA interviewee:

[You should] take these safety provisions out of [the motor carriers’] hands and put them . . . into the licensing process. Then, when a driver applies for a job, you have a better sense that if they hold that license you’re getting someone who is qualified. It’s supposed to be a qualification document. The State is guaranteeing to FMCSA that you are qualified. Right now we’re in the process of merging the medical certification with the CDL, so you’ll have to take the license at face value that the driver is medically qualified. You should be able to do the same thing with language.

Interviewees expressed openness about continuing to permit States to offer the written test in languages in addition to English, but there was also a strong feeling that the skills-test components should be conducted only in English. One interviewee called for “a strict test of comprehension of signs and traffic control devices.”

The OOIDA contact recommended that the establishment of English proficiency begin higher in the pipeline for new entrants into the CMV driving profession, saying that driver training schools should be required to ensure that drivers be allowed to graduate only if their proficiency has been demonstrated satisfactorily. The interviewee added that there is currently no incentive for driving schools to screen out applicants who lack English proficiency.

2.3.4 Phase II Interviews: State Agencies

On the basis of the Phase I interviews, the authors recommended to FMCSA that the study explore three categories of activity at the State level: the design of signage, the issuance of commercial vehicle licenses and special endorsements, and the roadside enforcement of §391.11(b)(2).

2.3.4.1 Approach/Methodology

State governments vary considerably in their organization; therefore, the correct administrative units in each State and the appropriate individuals within each agency had to be identified. Each selection was confirmed through email and telephone calls.

While the questionnaires for each of the three categories of activity were standardized, the interviewers tailored probe questions, based on research on State Government and on relevant news items, to each State and agency.

Table 14 lists the agency affiliations of State interviewees, their areas of expertise, and the date of the interview.

Table 14. Information on Phase II Interviewees' Agencies, by Category

State	Area	Agency/Department	Date of Interview
CA	Enforcement	California Highway Patrol Enforcement Services Division	06/12/07
CA	Signage	Signs and Work Zones Branch, Caltrans	06/14/07
CA	Licensure	CDL, Department of Motor Vehicles	06/22/07
FL	Licensure	CDL Coordinator	06/21/06
FL	Signage	State Traffic Engineering and Operations Office	06/27/07
FL	Enforcement	Office of Motor Carrier Compliance, FDOT	07/3/07
IL	Licensure	CDL, Office of the Secretary of State	06/20/07
IL	Signage	IDOT Bureau of Operations/Sign Shop	06/25/07
IL	Enforcement	Illinois State Police, Commercial Vehicle Section	06/26/07
MD	Licensure	Maryland Motor Vehicle Administration, Driver and Vehicle Policies and Programs	06/28/07
MD	Enforcement	Maryland State Police Transportation Safety Command	07/2/07
MD	Signage	Office of Traffic and Safety, Maryland State Highway Administration	07/10/07
NY	Signage	Traffic Operations, NYS Department of Transportation/MUTCD	06/26/07
NY	Enforcement	Motor Carrier Safety Bureau, NYS Department of Transportation	06/28/07
NY	Licensure	CDL, NYS Department of Motor Vehicles	06/29/07
OR	Signage	Traffic Standards and Asset Management Unit, Traffic Roadway Section, Oregon DOT	06/22/07
OR	Licensure	CDL, Oregon DOT	06/27/07
OR	Enforcement	Safety/Investigations/Federal Programs, Motor Carrier Transportation Division, Oregon DOT	06/29/07
TX	Licensure	CDL, Department of Public Safety	06/20/07
TX	Enforcement	Texas Department of Public Safety Highway Patrol Division	06/28/07
TX	Signage	Policy and Standards Branch, TxDOT Traffic Operations	06/29/07
UT	Licensure	CDL, Driver License Division, Department of Public Safety	06/15/07
UT	Enforcement	Utah Highway Patrol	06/18/07
UT	Signage	Motor Carrier Operations, Utah DOT	06/28/07
VT	Licensure	CDL, Department of Motor Vehicles	06/21/06
VT	Enforcement	Motor Vehicle Safety, Department of Motor Vehicles	06/26/07
VT	Signage	Traffic Research Section, VT Agency of Transportation	06/28/07

2.4 RESULTS

2.4.1 Findings in each of the three areas (signage, licensure, and enforcement) are discussed below.

2.4.1.1 State Signage Summary

Under 49 CFR 391.11(b)(2), CMV drivers are required to be able to “understand highway traffic signs and signals in the English language.” In the Phase I interviews, multiple interviewees expressed concern about the ability of drivers with limited English to understand signage in the United States, especially DMS, which is becoming increasingly common. These issues informed the design of questions for signage contacts during the Phase II interviews with State personnel.

Interviews with State signage personnel concentrated on the comprehensibility of road signs, both conventional and DMS. Also discussed were multilingual signage and the relationship between English-language signage comprehension and roadway safety.

In addition, the interviews focused on how States assess proposed new signs for readability and comprehensibility. Although none of the States in the study reported using an English-reading grade level as a benchmark, all indicated a desire to make signs as short, simple, and easy to read as possible.

Overall, signage contacts who commented on the subject agreed that some amount of English proficiency is needed for safety on the roads.

Comprehension and Safety

Most signage contacts did not report knowledge of specific accidents or incidents caused by a driver’s lack of ability to comprehend an English-language road sign, but two such events were mentioned. One contact reported an incident in which a Russian-speaking driver, cited for failure to stop at a stop sign, claimed not to have understood what the sign had meant. Another contact related a case in which a French-speaking bus driver from Quebec who failed to stop at a border-patrol checkpoint claimed not to have understood the signage. The driver had passed back and forth across the border many times before, which led the contact to doubt the driver’s assertion. The New York contact reported that a general reduction in the prevalence of trucks tipping due to excessive speed was observed after symbolic warning signs were installed. Additional overhead and electronic warning signs were also installed, so it is possible that both English-speaking truck drivers and those with limited English proficiency paid more attention and benefited from the warnings.

Interviewees also discussed the comprehensibility of DMS. One contact said that personnel at the State level expect that any message that can be displayed within the technological constraints of a DMS is likely to be understandable on the basis of the assumption that FHWA conducted appropriate tests when setting the specifications for such signs.

Several States have developed guidelines for messages used on DMS. New York has a “playbook” of specific abbreviations and phrases that should be used under given conditions; therefore, signs across the State that describe similar situations should use the same wording. Each State has standards for the length of messages on a DMS and the number of “screens” of

text that may be rotated. Several States reported researching the use of symbols and graphics on DMS. One contact expressed the opinion that additional testing will be needed before such use is widespread.

Multilingual Signage

Only one State, New York, has developed a formal policy for bilingual signage. This was in response to requests from Quebec 6 years ago for such signage in the Interstate 87 corridor through the Adirondack Mountains, along which many French-speaking Canadians travel.

The eight remaining States have no formal policy requiring bilingual signage; signs in English only are the norm. California and Vermont reported exceptions that they have made for practical reasons; the former State permits English-Spanish signage in areas along the Mexican border only, confining such use to important messages regarding safety and mobility, while the latter has limited English-French signage along the Canadian border.

Maryland has considered displaying temporary conventional work-zone signs in multiple languages but has not developed an official policy. Although permanent bilingual signage has not been posted, Spanish-language pedestrian signage has been installed in areas with large Spanish-speaking populations in response to safety concerns that were voiced following a specific accident.

Some contacts reported that they had received requests for signage in languages other than English, which they have generally turned down; they attributed this resistance to a concern that accommodating one request for a non-English sign would, for the sake of fairness, necessitate granting all such requests or posting signs in all possible relevant languages. They worried that such a development would be prohibitively expensive and that it might cause confusion for drivers. One signage contact, from a State that carefully follows Federal signage rules to protect itself from liability claims, said that both new laws and new MUTCD standards would have to be developed at the Federal level before it would increase the number of bilingual signs or deploy them throughout the State.

Assessment of New Signs

For the most part, State interviewees reported relying on standards developed at the Federal level and contained in MUTCD, published by FHWA. Several indicated that public meetings or focus groups are held to test the comprehensibility of any new signage developed by the State. Contacts from Oregon and New York mentioned that symbolic signs are preferred whenever possible. The Florida signage interviewee said that the State has set up a research laboratory to test symbols and word messages for comprehensibility by all road users, including non-English speakers; the results of these experiments have not yet been published. Another contact stated that sign comprehension should depend more on shape recognition than on reading skills; other contacts agreed that certain signs, such as the stop sign, have universal shapes that should be recognized by all.

State Licensure Summary

The Phase I interviews generated a number of questions to be posed to State licensure contacts:

- In what language(s) are the CDL written test and skills tests offered? The hazmat and passenger-endorsement tests?
- Is third-party testing allowed?
- Are there special safety concerns associated with a CMV driver's limited English proficiency?
- How does the State test for a driver's understanding of signage, either fixed or dynamic?
- How might testing for proficiency during licensure exams be accomplished?
- Does the State have Title VI/VII concerns?
- Has the State experienced problematic regulatory inconsistencies between CDL requirements and §391.11(b)(2)?

Languages Used in CDL Testing

What follows is a summary of each topic, by State.

Table 15 lists the languages and formats in which the nine States interviewed offer their written and skills tests and special endorsements. The use of interpreters or third parties for testing and any policies regarding retesting of drivers with CDLs from other States are also shown. There was a considerable range in States' policies with regard to offering written and skills testing in languages other than English.

Illinois, Maryland, Oregon, and Vermont. At one end of the spectrum, these four States offer all levels of testing in English only, tending to use the AAMVA automated testing system for the written test. According to the Illinois contact, the State's policy on testing is straightforward: "The State's view is that a person must be able to speak English, to speak with the public, and to read English. Our logic is that law enforcement and people at DMV speak English. If applicants speak other languages, that's great, but they must be able to speak English." The Vermont contact made a similar comment. The Maryland interviewee said that State is considering offering testing in Spanish. The State of Illinois, further strengthening its oversight over commercial driver licensing, has enacted the "Cite to Re-Exam" law: If any authorized source (e.g., law enforcement, medical practitioners, other States' DMVs, judges) notifies the Secretary of State's office that a safety problem with a driver has been observed, the Secretary's office is empowered to call the driver in to retake the written and skills tests. If the driver does not appear or fails the tests, the driver's license is canceled.

Oregon, in contrast to these States, has been offering testing exclusively in English for just a short time; prior to 2006, testing was also available in Spanish and translators were provided. The licensure contact reported that the State was troubled by the fact that enforcement personnel, who are employees of the same State agency, were putting CMV drivers who lacked English proficiency out of service. A policy core group within the Oregon DMV reviewed the issue and agreed to align State policy with §391.11(b)(2) and to offer the CDL test in English only, to enable the agency to operate with internal consistency.

Florida. This State falls at the other end of the spectrum, offering the written test in automated format in English, Spanish, and Haitian Creole. Polish and Russian applicants may take a written version of the test, and speakers of other languages (for example, Bosnian) may request oral testing with an interpreter provided by the State. The pre-inspection, basic-maneuvers, and road tests are all available in English, Spanish, and Haitian Creole, and an interpreter is permitted on the skills tests. The Florida interviewee said that interpreters are not permitted for pre-trip-inspection testing because this could lend itself to the interpreter's providing answers. Florida offers the hazmat-endorsement test in English, Spanish, and Creole.

California. More than one Phase I interviewee disparaged California for offering CDL testing in a "vast array" of languages, while, in fact, California tests only in English and Spanish and has done so for more than 30 years. (California does test in 31 languages for the basic driver's license, which is probably the basis for the urban legend.) The written test is automated using a system designed by the State. No interpreters are allowed at the skills tests. While the passenger-endorsement test is available in both English and Spanish, the hazmat-endorsement test is offered in English only.

Table 15. State Commercial Driver Licensure Practices

Test Category	CA	FL	IL	MD	NY	OR	TX	VT	UT
Written Languages	English, Spanish	English, Spanish, Haitian Creole, Polish, Russian, other (e.g., Bosnian)	English	English	English and Spanish by law	English	English and Spanish by law; other languages if requested (through interpreter)	English	English; Bosnian and Spanish if dictionary is provided to help with translation
Written Formats	Automated (not AAMVA)	Automated (English/Spanish); Creole; written (Polish/Russian only); others orally with interpreter	Automated	*	*	Automated (AAMVA) and audio	Choice of automated (ATLAS), paper, or oral test	Automated (AAMVA) and oral	*
Pre-trip inspection Skills	English, Spanish	English, Spanish, Haitian Creole	English	English	English	English	Written, "virtual" test; English, Spanish	English	English
Basic-manuevers skill test	English, Spanish	English, Spanish, Haitian Creole	English	English	English	English	English, Spanish	English	English
Road test skills	English, Spanish	English, Spanish, Haitian Creole	English	English	English	English	English, Spanish	English	English
Is interpreter permitted?	No	Pre-trip inspection: no; basic-manuevers and road tests: yes	N/A	N/A	No	No	No	N/A	N/A

Test Category	CA	FL	IL	MD	NY	OR	TX	VT	UT
Hazmat Endorsement	English	English, Spanish, Haitian Creole	English	English	English (written) only; no oral test or foreign languages; interpreters not permitted	English	English, Spanish	English	English
Passenger Endorsement	English, Spanish	*	English	English	English, Spanish	English	English, Spanish	English	English
Third party permitted to test?	Pre-trip inspection: no; basic-manuevers and road tests: yes	Pre-trip inspection: no; basic-manuevers and road tests: yes	No	Community colleges and employer-sponsored programs only	No	Pre-trip inspection: no; basic-manuevers and road tests: yes	No	No	Skills tests only
Retest out-of-State applicants?	*	*	Yes	*	No	*	*	Out-of-State CMV drivers required to take basic rules-of-the-road test; same for all applicants, basic and CDL	*

* Due to the dynamic nature of the interviews, the questions listed above were not posed to interviewees from each State.

New York. As required by State law, New York offers the written test in both English and Spanish. The skills tests, however, are available in English only, and no interpretation is permitted. As in California, the passenger endorsement is available in English and Spanish. The hazmat-endorsement test must be taken in written form, in English; no oral testing or interpretation is permitted.

New York State has areas with large Spanish-speaking populations. The New York State Vehicle and Traffic Law §503(2)(a)(ii)(B) and Commissioner's Regulations §3.4 require that written knowledge tests for driver licenses, permits, and endorsements be administered in Spanish as well as English. In 2005, in response to these regulations, the State DMV arranged for all CDL written-knowledge tests except the hazmat-endorsement test to be translated into Spanish by Language Services Associates (LSA) under an Office of General Services contract. The DMV provided LSA with the then-current Spanish-language translation of the New York CDL manual to use as a guide for consistency of technical vocabulary and expressions. Native Spanish-speaking DMV employees proofread the LSA translation and recommended changes to make the questions and answers easier to understand by the average Spanish-speaking applicant.

Texas. Like New York, Texas must, under State law, offer CDL testing in English and Spanish. Applicants have a choice of formats: automated, paper, audio (responding to recorded questions), or oral (one-to-one contact between examiner and applicant). Applicants speaking other languages may request an interpreter. According to the interviewee, applicants who are unable to speak English sufficiently to communicate with the examiner are restricted to intrastate driving. Unlike in other States included in the study, the pre-trip inspection in Texas is primarily a sit-down, "virtual" test and may be taken in English or Spanish. (A few basic components, such as brakes and lights, are tested on the vehicle.) The basic-maneuvers and road tests are conducted in English or Spanish without interpretation.

Utah. In Utah, the written test is offered in English; however, applicants speaking Spanish or Bosnian may provide their own dictionaries to help with translation. The dictionary is reviewed before the test to ensure that there are no notes in it. At the DMV counter, applicants may be accompanied by someone who can speak for them, but these helpers may not assist during the testing. All skills tests are available in English only. The same is true for the hazmat and passenger-endorsement tests

Third-party testing

With regard to permitting third parties such as driving schools or employers to administer any part of a CDL test, the nine States were split in terms of their practices.

California. California has no third-party CDL testing program per se, but it does allow large businesses to train and test their own employees. Approximately 400 employers participate in the program, including transit authorities, bus companies, large carriers, and some smaller companies. However, according to the interviewee, the CDL testing requirements for these organizations, which are the same as State licensing requirements, are so stringent that most smaller companies drop out of the program. Company examiners must receive the same training as State examiners, and if they are inactive for 90 days they must repeat the CDL examiner training.

The employer-administered testing program involves the skills tests only. Participating companies may hire and train employees, send them to the licensing agency for the CDL written test, and then conduct their own pre-trip inspection and road tests. The program includes a monitoring component to audit the examiners, the test route, and the recordkeeping on an annual basis. If a major problem is discovered during the audit, the State can discontinue the program. A larger sample or all of the drivers may be tested if there is just cause. The contact recalled one case where it was questionable as to how the CDL tests were conducted; consequently, all drivers were required to be retested.

All employer-run testing programs must comply with the English-language CDL test. California has driver-training schools that teach in various languages; however, the CDL test is conducted in English only. Although the DMV does not regulate training schools, the assumption is that the schools “teach to the test” to some degree. The contact could not provide statistics but believed that formally trained drivers had better test scores than those who did not attend driver training schools. Truck-driving schools have been out of the DMV’s jurisdiction for approximately 18 years. This organizational structure is being reconsidered; the issue under discussion is whether truck-driver training should be moved back to the DMV.

Florida. In Florida, all CDL written tests are administered in a DMV office. However, approximately 90 percent of all skills tests are given by third-party administrators, which has been the case since 2001. There are 800 certified CDL skills testers in 200 third-party companies. In order to be a certified third-party administrator, the company must post bond and prospective testers must meet all Federal requirements. The CDL training class is offered by seven community colleges and technical schools with commercial vehicle programs.

The contact noted that the DMV recently tried to modify the regulatory language covering third parties to make it more stringent. However, third-party companies in Florida have an occupational license, and the most that the DMV could negotiate was that the CDL tester must have “no history of criminal convictions . . . felonies, [and] misdemeanors.” The tester’s record is then forwarded to a committee for evaluation and approval. The contact was not aware of any third-party testers in Florida who do not speak English. Many testers are bilingual or trilingual, with fluency in English, Spanish, and/or Haitian Creole.

Each test route, including signage, is set up in advance and approved by the State. All third-party testers have different routes and alternate roadways. A staff of nine State inspectors monitors and approves the third-party test routes. Once a route has been approved, the tester must not deviate from it.

Florida conducts an annual onsite inspection and audit of each third-party school and its inspection system database, including assessment of password protection, test pass-fail information, and technical data. State officers also observe the CDL testing process covertly and verify information entered into the database, looking for suspicious activity, such as test results entered for dates when no tests were conducted. The detection of suspicious activity may trigger closer surveillance, interviewing of customers, or investigation by the State Highway Patrol, which would then send in an undercover applicant.

Illinois. All CDL testing in Illinois is conducted by State employees on State property, which facilitates management control over the testing process. Although there are third-party driving schools in the State, they are not permitted to conduct CDL testing. Similarly, New York,

Texas, and Vermont do not contract out any phase of CDL testing to third parties, the rationale for this approach being that it reduces the risk of fraud.

Maryland. Maryland has no walk-in third-party testing facilities but rather “career school” testing, which takes two forms. Large companies may work with the Motor Vehicle Administration (MVA); individuals who have been trained to serve as MVA representatives then teach the company’s employees. A few career schools are located at community colleges; these, too, have trained instructors who are permitted to teach college-enrolled students. Maryland executes an agreement between each third-party administrator and the MVA, empowering the third party to administer CDL tests. The interviewee noted that this approach was taken to maintain control over the testing process. She recalled that, when third-party testing was initiated in the industry, there were numerous problems in Florida, Ohio, and Illinois. Maryland elected not to utilize third-party testers and instead to assist the State’s employers. Consequently, the MVA began the employer testing program, and gradually added community colleges. The Maryland contact reported that this program has been very successful.

Oregon. The majority of CDL applicants in Oregon go to third-party examiners for the skills tests. During the pre-trip inspection, the examiner must ask the applicant to demonstrate knowledge of the vehicle and its operation in English only. However, the Oregon interviewee noted that it is not the responsibility of the tester (either State or third-party) to evaluate English proficiency; consequently, some third-party testers do only the “bare minimum” in terms of testing. To detect this and other problematic practices, the State conducts on-site audits of third-party examiners annually to ensure that tests are being administered properly and to determine whether applicants are being probed sufficiently. Allegations of insufficient evaluation of CDL applicants have necessitated more frequent inspections. The interviewee commented, “We’re constantly on the lookout for that—it’s difficult.”

In the interviewee’s opinion, third-party testers should not approve CDL students who would not pass an English-language skills test. She was concerned that such applicants would spend a significant amount of money during the licensing process only to be told that they cannot be licensed to drive commercially or to have their license taken away. She believed it would be more fair not to give these individuals a license in the first place if they cannot speak English sufficiently.

With regard to the passenger endorsement, bus drivers employed by the Department of Education and other public agencies must be tested in English. Private motor carrier examiners are permitted to test their own employees. Private truck-driver training schools cannot test their own students, although they are permitted to test another school’s students or to contract with a different third-party tester. The State reviews private schools’ student logs.

Safety concerns related to English-language proficiency

There was some consensus among the States with regard to two themes that had also been mentioned by Phase I interviewees:

- **Emergency situations.** The California, Florida, Oregon, Vermont, and New York contacts all believed that a driver’s English-language proficiency is particularly

important in any kind of emergency situation in order to communicate with emergency personnel; several mentioned hazmat drivers in particular.

- **Ability to comprehend signage.** In the opinion of the California contact, “times have changed;” the increased variety of signage, including fixed and portable DMS, has made English-language proficiency and comprehension more critical. The Vermont contact offered a similar viewpoint. The New York contact thought that a long-haul driver needs to understand the English language at a reasonable level because not every sign can be converted into a symbolic-message format. The Oregon contact emphasized the importance of a driver’s ability to understand bridge-height restrictions.

The States had additional concerns that had not been mentioned in Phase I interviews.

- Texas law-enforcement personnel on State highways are involved in drug interdiction and immigration control activity. If a driver cannot understand the requests of a State trooper or border control officer, a relatively routine stop may escalate unnecessarily, putting all involved at potential risk.
- The California contact said that trucking companies contact the licensure office to complain that they have drivers who do not understand the English language sufficiently to follow loading instructions, resulting in shifting loads.

Not all interviewees shared the view that English-language proficiency among CMV drivers is essential for highway safety. The Florida contact said he was not convinced that there is a relationship between language ability and crash avoidance. He asserted that few if any accidents are caused by a driver’s lack of knowledge or ability, but rather by a failure to react appropriately—for example, a driver’s not stopping at a stop sign despite understanding what it means. He further stated that there is no body of data demonstrating a strong correlation between English-language proficiency and safety.

Testing for knowledge of signage

AAMVA’s Policy Positions and Bylaws recommends that “a test to determine an applicant’s knowledge of road signs and signals” be included in the driver’s license examination.³⁵

Interviewees revealed considerable variation in how States tested and the extent to which the ability to comprehend English signage was assessed. No one described any systematic attempt to gauge drivers’ ability to read DMS.

In California, the basic driver’s test (which everyone, including CMV drivers, must take) includes a section in which applicants must complete signs, shapes, and words. CDL applicants also take a “words and phrases” test, in which they must verbally explain the meaning of a sign to an examiner in English. Testing for signage comprehension on the road course is conducted according to AAMVA standards. Examiners do not question drivers while they are operating the vehicle; rather, they observe whether drivers comply with signs

³⁵ AAMVA. Op. cit., loc. cit.

and traffic laws. The contact explained, “I don’t think that it’s a fair question, to ask someone 30 seconds later, ‘What did that sign back there say?’ A driver of a moderate-height truck will ignore height limits that don’t apply to him.”

In contrast, in Florida there are parts of the CDL test during which the examiner will ask the applicant “What did that sign say?” with regard to a sign that was just passed. As the contact explained, what the sign says and what it means are two different questions. For example, the examiner may ask, “This sign says ‘stop’—what does ‘stop’ mean?” During the road test, drivers must respond appropriately to all signage; drivers who run a stop sign will fail the test, not because they did not understand the sign but because they disobeyed a traffic law.

In Oregon, there are no signage-comprehension questions in the written test. During the skills test, however, the examiner might ask, “What did that sign back there say?” or order, “Go up to the next stop sign and turn left.” Similarly, CDL examiners in Vermont ask applicants about the meaning of various signs during road tests, although there is no preset questioning procedure.

New York tests for signage comprehension in the road-test phase of the CDL skills test, which is conducted on public streets and highways. To complete the test, applicants must demonstrate safe-driving practices (termed in-traffic driving), including obeying all traffic signs and TCDs. Examiners also ask drivers about CMV-specific signs (e.g., those pertaining to height clearances and weight restrictions) as part of the testing procedure.

In Texas, the automated written test presents questions that depict roadway signage and provides multiple choices regarding meaning from which applicants must select a response. In a face-to-face oral test, the examiner points to a sign and the applicant is required to explain its meaning. In the skills test, signage comprehension per se is not evaluated; however, as in New York, the applicant is expected to obey all traffic regulations and to respond appropriately to signage, including any DMS on the road course. (While there is DMS in the region in which the Texas interviewee works, it was not clear whether all Texas road-test courses are mapped to include it.)

In Utah, the written test contains questions asking the meaning of depicted signs. The skills test includes signs to which the applicant must respond while driving. The examiner will also ask questions about signs as they are passed.

Illinois also tests for signage comprehension on both the written and skills tests. According to the contact, the written test presents pictures of signs minus the words, and the applicant must give a written explanation of each. During the road test, the applicant must understand the terms being used and obey all traffic regulations.

Maryland requires that applicants pass a knowledge test in order to get a noncommercial motor vehicle driver’s license prior to obtaining the CDL. The test includes questions that relate to comprehension of signage. CDL testing for signage and traffic-signal comprehension also takes place during the skills test, which is conducted on public roads.

Assessing English proficiency during the licensure process

Practically speaking, States that offer CDL testing only in English on written and/or skills tests are already assessing the English proficiency of the applicants. In Illinois, for example, the pre-trip test represents the first one-on-one interaction between the applicant and the examiner. During the road test, the applicant must understand the terms being used and obey all traffic regulations.

Similarly, in Vermont, English-language proficiency can be assessed by means of the applicant's aptitude on the written test, communication during the pre-trip inspection, and knowledge displayed on the skills test, when commands are issued and the applicant's understanding of them is evaluated. Before an applicant is allowed to go on the road, the CDL examiner establishes communication to ensure that the applicant understands commands such as "stop." By providing study materials in English and administering the test in English only, licensing officials can straightforwardly determine whether there is a language-proficiency issue. The pre-trip inspection involves review of the entire truck, during which the applicant must answer at least 57 of more than 80 questions correctly to obtain a Class A CDL. By the time that the pre-trip inspection has been completed, the examiner usually can determine whether the applicant has a good understanding of English.

In Maryland, the language-proficiency assessment essentially begins when the CDL examiner meets the applicant. The interviewee felt that examiners can "pick up on a lot" during that initial interaction. She added, however, that explicit language-proficiency standards are needed to facilitate the assessment and to remove the burden from examiners.

The Oregon contact was of the opinion that English-language proficiency can be assessed during the licensing process but, like the Maryland contact, believed that language proficiency is too subjective for agency staff to assess. The contact suggested that the only way an assessment would be consistent throughout the United States would be if FMCSA were to require CDL testing in English only and also to develop a language-proficiency test.

In States that offer the written test in other languages but the skills tests in English only, the latter tests provide an opportunity to assess language proficiency. The Utah contact said that some applicants appear to be pretending they do not understand English well when they come to the DMV for the skills test. The presumption is that these applicants believe that this might give them an advantage or perhaps that they will get help on the test; applicants have been known to ask questions during the test to see whether the examiner will guide them toward the correct answers. In other cases, applicants may not be comfortable with the English language and may not want to speak for themselves; they may bring friends or family members to the test site to help them respond to questions. However, once they have passed the counter and are actually taking the test, they realize that they are on their own and that they must do their best; they will usually "step it up" and pass the test.

In New York, the DMV essentially assesses language proficiency throughout the three phases of the skills test, when the applicant must understand the examiner's instructions and respond to questions, all of which are asked in English. To complete the test, an applicant must explain to the examiner why he or she believes that the vehicle is in safe operating condition and must demonstrate safe driving practices, including obeying all traffic signs and traffic controls.

CDL examiners also ask drivers about CMV-specific signs (e.g., those pertaining to height clearances and weight restrictions) as part of the testing procedure.

In Texas, most of the pre-trip examination is conducted in a written, “virtual” form. However, some basic elements of the examination, such as testing the air brakes, are performed on a vehicle. The licensure interviewee said that this part of the test was the point at which the applicant’s level of English proficiency would become evident to the examiner.

In California, the examiner uses words and phrases, signage-comprehension tests, and traffic-law tests to assess drivers’ proficiency in English. The State is considering adding sample logbook entries to the CDL test.

Although Florida offers the skills test in English, Spanish, and Haitian Creole, the interviewee thought that the easiest way to assess a CMV applicant’s proficiency in speaking, listening, and/or reading English would be to simply administer the test in English only. He had heard that many people comment that the written test adds a dimension of difficulty if the applicant does not speak English or speak it well, and he noted that it seemed reasonable to require language proficiency. Florida has promulgated the Plain English Initiative, which requires an eighth-grade reading level. The contact suggested that the AAMVA CDL written test be targeted to that level of reading comprehension. He thought that States would be willing to conduct a separate language-proficiency test if AAMVA were to review the current test and revise it to the appropriate comprehension level for applicants to be able to “communicate sufficiently.” In any case, he believed that FMCSA should “take that bull by the horns” and develop a language-proficiency level for States to follow, with CDL testing allowed in English only.

Title VI and Title VII Concerns

Asked whether there was a concern that requiring English-language proficiency might be discriminatory, only a few interviewees responded in the affirmative. The Utah and Maryland contacts indicated that potential Title VI and VII violations (stemming from enforcing the language-proficiency requirement) were not issues in their States.

The California interviewee asserted that it is critical for a driver to understand English well enough to be able to read VMS, to deal with inspection and enforcement officers and weigh-station personnel, and to maintain logbooks. While this level of proficiency is not equivalent to complete proficiency (which she defined as the ability to read entire sentences), she believed that it is adequate for being able to safely drive a CMV.

The Illinois contact indicated that there have been two potential Title VI lawsuits since 1990, neither of which succeeded. The State’s response was that drivers with limited but sufficient English proficiency should still be able to obtain a CDL; fluency is not needed.

In complete contrast, the Florida contact said that the State’s attorney general had determined that the English-language-proficiency requirement cannot be enforced because it would violate the civil rights of applicants.

Conflicting Regulations

As noted above, Oregon felt compelled by the inconsistencies between Federal CDL and driver qualification regulations to limit its CDL testing to English only:

The only way it would be consistent throughout the U.S. is if FMCSA says tests will be in English only or if it develops an English-proficiency test. It's way too subjective for our people. I struggle with requiring all testing in English—this is tough for non-native speakers who could function at driving but freeze during test-taking. Of course, that happens with English speakers, too. But the policy makes the two halves of our agency work together, and it would be a disservice to drivers not to make sure they speak enough English to drive commercially. I feel bad for those that don't realize they did anything wrong [being passed through by a third-party tester who did not ensure they can pass the skills test in English]. They spend all that money and somebody tells them they can be licensed and drive commercially, but then the license gets taken away. It would be more fair not to give them a license in the first place if they don't speak enough English.

The New York contact touched on the same issue:

It doesn't make a lot of sense for the Feds to require some sort of English-language conversancy and yet allow the States.[to test in other languages] First of all, what's wrong with it is they don't set a level, or a method to determine a level, for States to test with alternate methods and languages. So it would seem that they're looking at cross purposes, to allow you to have a driver population that is "completely conversant" in English.

State Enforcement Summary

From the Data Analysis portion of this study, it was known that the nine States varied substantially in their relationship between the number of driver inspections they reported and their rates of LEP violations and consequent OOS orders. Table 16 presents these data.

Table 16. LEP Violations by Interviewed States, June 2002–June 2007

State	Driver Inspections	Driver Inspections with LEP Violation	% Driver Inspections with LEP Violation	Driver Inspections with OOS LEP Violation	% LEP Inspections with LEP as OOS
CA	2,328,545	6	0	0	0
TX	1,502,164	9,610	0.64	42	0.44
NY	507,409	886	0.17	222	25.06
MD	467,691	2,025	0.43	1,084	53.53
IL	417,256	860	0.21	162	18.84
FL	382,736	498	0.13	0	0
OR	266,568	935	0.35	71	7.59
UT	152,668	714	0.47	47	6.58
VT	42,655	261	0.61	25	9.58

To get a sense of what State enforcement personnel were encountering and to determine related State policies, interviewees were asked the following questions:

- Is the Federal English-proficiency regulation incorporated into State law?
- Does the State see problematic regulatory or policy inconsistencies?
- What languages other than English are most often encountered during inspections and traffic stops?
- How do inspection personnel decide whether a driver has adequate English language proficiency during the inspection process?
- What is done to ensure that the regulation is enforced in a uniform and nondiscriminatory manner?
- What happens once the driver is out of service? What does the driver need to do to drive legally?
- How is the English-proficiency requirement enforced during a compliance review?
- Are there situations in which English proficiency is especially necessary?
- How should the current regulatory framework change to improve safety?
- What is your experience with motor carriers' assessment of drivers' English proficiency?
- Does the State collect any data related to incidents (crashes, hazmat spills, etc.) and a driver's English proficiency?

English Proficiency and State Laws

Eight of the nine States targeted for this study have either incorporated §391.11(b)(2) into State law or have enacted equivalent legislation. California has neither incorporated §391.11(b)(2) into its own regulations nor created equivalent rules at the State level.

Conflicting regulations and policies

Florida. The enforcement interviewee believed that the inconsistencies between Federal CDL regulations and the English proficiency requirement are a problem:

I think it's inconsistent in the first place for Feds to say it's OK to give and take the CDL test in a language other than English but then to turn around and say you can't actually drive—I think that's highly inconsistent. It looks like they're not really serious about one or the other, and in this case it'd be the actual requirement to be able to speak English, if they allow the test to be taken.

Oregon. The interviewee pointed to conflicting State policies as part of the problem of inadequate motor carrier compliance with §391.11(b)(2):

As a regulatory group in Oregon, we are encouraged to accommodate all other business areas in their own language, but we have to ensure driver English proficiency. When company people call, they are not required to speak English [so] how can they ensure the driver can speak English? They don't have the tools.

Languages typically encountered

Languages that were encountered among CMV drivers at inspections and during other roadside enforcement activity, according to State enforcement interviewees, are presented in Figure 4 and are listed in order of reported prevalence. What is striking is the number of foreign languages that interviewees reported and their consistent dispersion throughout the country. Two interviewees made telling comments in this regard. The New York contact stated, “What languages do we *not* encounter is the question.” The contact from Utah said, “I think a lot of people would suspect that we encounter mostly Spanish-speaking drivers, but lately it's been people from the Eastern European bloc—Russian, Bosnian, and Czechoslovakian—that we have had the most problems with.”

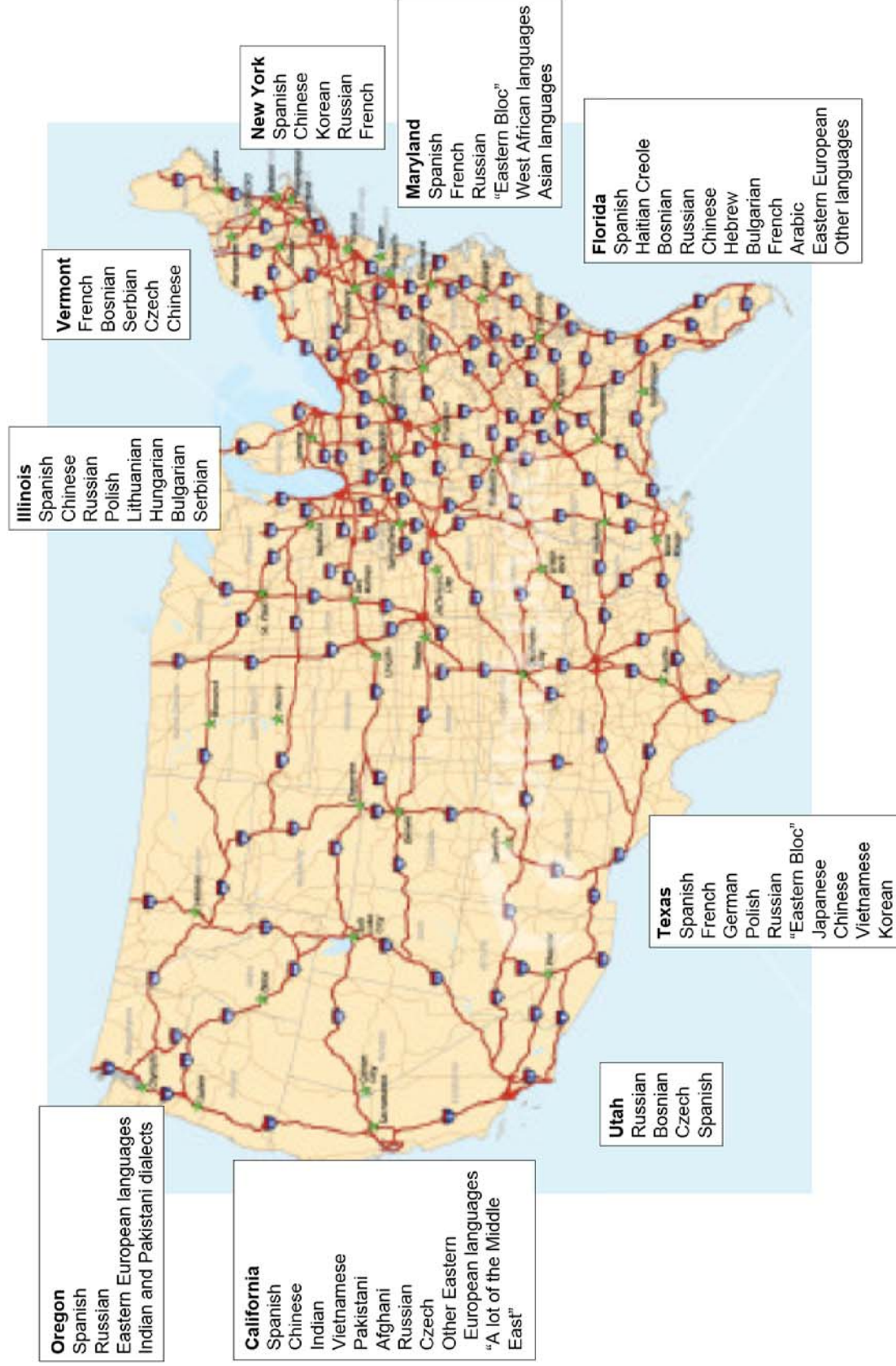


Figure 4. Foreign languages spoken by CMV drivers during roadside enforcement, as reported by interviewees.

Inspection procedures

California. The enforcement interviewee described his State's position this way:

Our system of providing translators and officers who speak other languages, along with our ability to communicate gesturally, would be a basis for saying that requiring English is unjustifiable. I doubt it would get through our legislature, and if it did it would probably be struck down as unconstitutional by our courts.

He said that, before NAFTA took effect, California put its CMV enforcement officers who would be deployed to the border through training in conversational Spanish. The State now does this for all officers at its training academy. Under California's interpretation of the CVSA OOS criterion that a driver must "communicate sufficiently to understand and respond to official inquiries and directions," enforcement personnel go to great lengths to communicate with drivers in various ways, including using a toll-free number that reaches a staff of translators who have been screened by the State. If an inspector still feels unable to perform an inspection safely, he or she will remove the driver from the vehicle and conduct the vehicle's inspection with another inspector at the wheel. Only in extreme cases is a driver placed out of service for a failure to communicate.

Florida. The most important consideration affecting potential enforcement of English-proficiency regulations in Florida is the 1999 settlement between State officials and truck driver Antonio Cuba. At the time, Florida Statute 316.302(1) fully incorporated the English-proficiency language in §391.11(b)(2). Mr. Cuba was cited under this statute after a minor traffic accident, when he admitted to the officer that he spoke English only "a little bit." A county judge ordered him to learn to read, write, and speak English within 6 months in order to keep his CDL. Mr. Cuba sued in U.S. District Court, and his lawyer argued that the regulation invited arbitrary and discriminatory enforcement. At the time, an administrator with the Florida Department of Transportation (FDOT) was quoted as saying that such citations were not routinely issued anymore.³⁶

The lawsuit resulted in a settlement, approved by Florida's attorney general, stipulating that FDOT and the Florida Department of Highway Safety and Motor Vehicles would cease any roadside enforcement of §391.11(b)(2). The heads of the two departments were ordered to issue a memorandum to this effect to all law-enforcement agents under their control; additional guidance was provided to clerks of courts to advise them in handling any citations generated by municipal enforcement officers. Under the settlement, the State was required to agree to the following statement:

³⁶ *Palm Beach Post*, Feb. 20, 1998, page 1B.

The State of Florida maintains that Florida Statute §316.302(l) was designed for safety reasons and not to deprive non English speaking persons from driving.³⁷

Today, Florida Statute 316.302 no longer quotes the language §391.11(b)(2).³⁸

1)(a)All owners and drivers of commercial motor vehicles that are operated on the public highways of this State while engaged in interstate commerce are subject to the rules and regulations contained in 49 C.F.R. parts 382, 385, and 390-397.

(b)Except as otherwise provided in this section, all owners or drivers of commercial motor vehicles that are engaged in intrastate commerce are subject to the rules and regulations contained in 49 C.F.R. parts 382, 385, and 390-397, with the exception of 49 C.F.R. s. 390.5 as it relates to the definition of bus, as such rules and regulations existed on October 1, 2005.

The enforcement interviewee said that, if communication problems occur during the driver inspection, the inspecting officer would try to connect the driver with another officer having proficiency in the driver's primary language, either by telephone or by directing the driver to another location.

Illinois. The interviewee said that, although drivers are expected to be able to speak English, the State police emphasize to inspectors that the language-proficiency requirement means that drivers must be "able to communicate sufficiently:

The guidance we provide is that the person should be able to communicate well enough to be able to understand your directions so that you can complete an inspection. We use a lot of hand gestures. In the inspection process, you're going to point left and right and you're going to yell when you want the brake applied. We have officers who speak some Spanish, and if they run into somebody with broken English they can still do the inspection because they can still communicate with that person—even though it may not be 100 percent English, they're still able to communicate.

If the officer believes, during the course of the inspection, that safety is being compromised due to the driver's inability to speak English, then the driver will be cited and placed out of service. The interviewee added that officers have used hand signals for years simply because the noise generated by the trucks makes it nearly impossible to hear. He also stated that, in his experience, most CMV drivers can understand the hand signals used by officers.

During the driver inspection, once the driver has provided the logbook, the inspector will start with questions regarding origin, destination, and locations of stops and other breaks. The driver's

³⁷ US District Court, Southern District of Florida, 98-8098-CIV-SEITZ.

³⁸ 2007 Florida Statutes, Title XXIII Motor Vehicles, Ch. 316, State Uniform Traffic Control, http://www.flsenate.gov/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=Ch0316/SEC302.HTM&Title=-.

answers may lead to further questions. If the driver's English proficiency is limiting the inspector's ability to obtain the answers needed to complete the inspection:

I don't want to see an inspector come in here and someone be placed out of service for not being able to speak English and they were able to complete the entire inspection, because I believe that was the intent. That person has to be able to communicate well enough for us to do our job. If you feel during the course of the inspection that safety is being compromised because of this person's inability to speak, then we're going to cite that person for not speaking English, for not being able to meet the language-proficiency [requirement].

During both vehicle and driver inspections, a translator may be used if one is available. In the past, inspectors were able to call a commercially available service that provided translation services; the interviewee was uncertain whether this service still existed.

The interviewee described instances he'd heard of with Chinese-speaking drivers carrying cell phones:

The minute they were stopped they had a translator on the phone. They'd hand you the cell phone and you were able to converse with them through the translator. I'm not sure if this was the actual intent of the regulation, but we are able to do that so we were accepting that for awhile, and now that FMCSA has changed the rules we're looking at that again. The driver is the one that needs to be able to speak [English] because if you can't get hold of the other person then you're up a creek again.

Maryland. According to the interviewee, inspectors "don't expect or demand that [drivers] have a fluent understanding, but we break it down for them. They should be able to understand simple instructions. Basically, the threshold is usually "Can you show me your fire extinguisher? Can you turn on your lights? Hit your horn."

New York. The interviewee felt that enforcement officers need to understand and be aware of directions they are conveying and that they must also feel comfortable with the CMV driver's level of English-language comprehension and proficiency. Verbal communication is preferred. He added that his personnel place drivers out of service only if they are unable to communicate whatsoever:

We have interpreted the regulation and OOS Criteria liberally; if a driver cannot speak English but can understand our commands, we would consider that acceptable. As soon as a safety risk is determined on our part, denoting that a Level 2 inspection could not be accomplished without the risk of the investigator being harmed, the driver would be placed out of service.

Once a driver hands over the logbook to the inspector, he or she may be subjected to a wide variety of questions. According to the interviewee, if the driver's English proficiency is limited and an interpreter is available onsite, that service will be used. The interpreter could be a New York State Department of Transportation (NYSDOT) employee or another driver; alternatively,

the company might be called and asked to interpret. He said that NYSDOT inspectors often use an online translator, www.worldlingo.com.

While inspectors have not encountered logbooks in foreign languages, it is common to see drivers with shipping documents in Chinese in the New York City area and, occasionally, French shipping documents in the possession of drivers from Quebec.

Oregon. According to the interviewee, roadside inspectors, rather than looking for English proficiency, apply the CVSA OOS Criteria, interpreting the “communicate sufficiently” rule broadly. Completing the review of the logbook in a driver inspection is the secondary objective. The primary goal is to complete the vehicle inspection safely, and, to this end, words, gestures, flashcards, and interpreters may all be used. Whenever possible, the inspector will take advantage of the informal translation services of a co-driver, another driver at the inspection site, or a bilingual inspector to complete the review. Extreme breakdowns in communication have led to OOS orders, but in most cases the driver is issued a violation without being put out of service.

Texas. The interviewee said that the State bases its LEP enforcement policy on the 2003 FMCSA Federal Register notice,³⁹ which indicates FMCSA’s intent that English-language proficiency be assessed by motor carriers and not at roadside.

With respect to driver inspections, the interviewee said that most of the conversation usually revolves around determining the veracity and accuracy of the entries in the logbook. The total HOS worked on the day of inspection are calculated, as well as the total hours worked in the previous 7 days, to determine if there are any current HOS violations or if any violation occurred during the previous 7 days worked. The inspector will look at any dated or time-stamped documents the driver may have in his or her possession to see if the logbook reflects the same dates and times. Using computer software, the inspector can also calculate the amount of time necessary to travel from point A to point B to determine if the logbook reflects the appropriate amount of time for the trip to be completed within posted speed limits.

Encountering a logbook in a language other than English is quite uncommon, even at the southern border, whereas discovering other documents such as CDLs, registrations, bills of lading, and insurance cards in foreign languages is much more common. Again, at the southern border, this is not problematic due to the quantity and quality of bilingual capabilities available. Away from the border, the inspector would need to either rely on sample documents provided in training or to seek help with interpretation.

Spanish-speaking drivers form the largest proportion of CMV drivers with limited English proficiency. The interviewee said that the highway patrol has never had difficulty communicating with these drivers because all officers in training receive in-service instruction and reference materials in Spanish to facilitate communication with CMV drivers. In addition, many of the officers are bilingual; while this is not a specific requirement for the job, there is

³⁹ 68 FR 43889.

increased compensation (stipend pay) for those who can help nonbilingual officers by cell phone. He said that virtually all border officers are bilingual.

The interviewee said that, if the driver speaks a language other than Spanish, the inspector would probably arrest the driver and take him or her to the police station. Troopers basically work in assigned areas, so they are familiar with interpretive services that are available. Most State jail facilities also have interpreters.

The interviewee further explained that the driver would not be put out of service for LEP unless the communication problem was so great that it was a safety concern. When a driver is put out of service, the highway patrol notifies the motor carrier to send a replacement driver (which can take days), and the truck is escorted to an appropriate area. The interviewee commented that there is a tremendous amount of rural territory in the State, so finding a safe location is not a problem. If the cargo is live or perishable, the area will be a facility with appropriate safe storage. The motor carrier is responsible for all costs incurred, such as storage, maintenance, and feeding.

Utah. The enforcement interviewee stated that vehicle and driver inspections are conducted according to CVSA OOS Criteria. Utah's approach to English-language proficiency is that the driver must speak sufficient English to interact with inspectors, including the ability to tell them what is in the logbook. During the actual inspection, the driver needs to be able to respond to commands and to provide answers. Essentially, if the driver cannot understand the inspector, he or she is put out of service "until the company can produce a driver that can speak the English language sufficiently." The interviewee added, "If [the inspectors are] able to resolve the issue roadside they would probably not go to the trouble of placing someone OOS who can't understand what OOS is. In most instances, either a co-driver or replacement driver would be obtained through the company."

Vermont. The interviewee described his State's approach to the English-proficiency issue as "open-minded—we look at the totality of circumstances—we are cognizant of languages." He said that Vermont is active in CVSA and is attentive to the OOS Criteria but that it interprets "communicate sufficiently" broadly. "[The NAFTA language has] made it more palatable for the border States. You really have to have a hard time communicating with us before we take you OOS."

He added that Vermont largely tickets drivers for LEP violations rather than putting them out of service. This does not mean that inspectors are not looking for effective communication but rather:

When the inspector is doing his driver inspection and thinks the driver is just nodding and answering "yes" to everything, he might say, "Do pianos eat their dead?" If the driver answers "yes"—I've had this situation occur—I start the interview again. The incidents requiring an out of service are few and far between—it's kind of a last resort. Working with industry, we take a strong educational approach—we will write a ticket when have to, but we highlight it for the carrier with a notation of the violation information.

If a language problem arises while the logbook is being reviewed during the driver inspection, the inspector might seek interpretation:

With the Asian drivers, there are always two of them, and usually one speaks enough English. ... One time we had a Canadian driver talk on the phone to his dispatcher. I know some States say that if you can't deal with it, let them go, but we don't want to do that. We do whatever possible to get the information to do our job.

The interviewee added that Vermont inspectors have not had a problem with logbook entries in languages other than English. "You'd think we'd run into some in French, but we haven't. Typically, if there's an issue, it's because they left it blank." Asked whether inspectors had encountered illiterate drivers, he responded, "I haven't had one where he marks off his signature with an 'x' or anything. I have had some whose spelling was atrocious, but not to the point where you didn't know what he was trying to say, or any who said they were illiterate."

Uniformity of enforcement

Illinois. With regard to uniform and nondiscriminatory enforcement, the interviewee commented that, due to the lack of clear-cut guidance, the driver's language proficiency is subject to the inspector's interpretation. The regulation can be interpreted broadly, and meanings can vary widely:

The most uniform thing I can tell them at this point is to follow the guidance we can provide. If you don't feel that this person understands you well enough for you to crawl under that truck—when you're under that truck you're putting your life in that person's hands—if you don't feel safe enough to go under that truck, then we have a problem.

We have people in the United States who aren't the brightest people in the world, who have trouble conversing in English and English is their native language. I think that this is a tough one, and until the courts provide more guidance it's going to be tough to do it. We just have to rely on the integrity of our people to ensure that they're applying [the regulation] in a nondiscriminatory manner. We try to watch to see if an officer is putting a bunch [of drivers] out of service. We haven't become aware of too many instances of that.

The interviewee added that, "If you're able to complete an inspection, to go under [the truck], do process measurements and everything, and you've still put the person out of service for the language proficiency, I need an explanation as to why we're doing that, because I think he's met the criterion."

Texas. With regard to uniform enforcement, the interviewee said that Texas has no structured process that officers can use. They are advised to use their discretion to determine to their satisfaction that the driver lacks English proficiency. The citation must hold up in court, so the findings must be documented on the inspection report and the report forwarded to the first-line supervisor. The paperwork must then be filled out in order for the Motor Carrier Bureau to start

the CR process. In other words, officers must be able to articulate to their supervisors, judges, and juries why the LEP OOS order was issued.

Vermont. With regard to uniformity in enforcement, the interviewee said that, because of the small number of violations and OOS orders in his State (261 violations and 25 OOS in 5 years), he was not worried about inconsistency. He added that, if an officer has an issue in a particular circumstance, he or she can discuss it with the supervisor.

OOS Drivers

Oregon. The interviewee stated that, once drivers have been put out of service for lack of ability to communicate, they would need to learn enough English to communicate with inspection personnel before being allowed to go back behind the wheel legally.

Texas. The interviewee stated that the inspection report specifically explains whatever action drivers need to take and when they can drive again. In the case of a LEP OOS, the report might read, “You will be able to drive again when you can communicate in English to officials.” Motor carriers must submit a certified signature indicating that they have either trained or removed the driver from service.

The interviewee conjectured that one would not find many LEP OOS repeat violations in MCMIS but that, with the availability of wireless communications, field officers can access national records to determine if a driver had been put out of service in another State. A driver who is operating while out of service will be arrested.

Enforcement during compliance reviews

California. California has its own system for onsite audits of companies, known as the Biennial Inspection of Terminals (BIT) program. This program was enacted with the California Commercial Motor Vehicle Safety Act of 1988 and requires the participation of any person or organization directing the operation of certain trucks and/or trailers. A participant’s operations may be suspended immediately if the inspector finds any imminently dangerous condition. Every terminal location is inspected at least every 25 months; these inspections are usually scheduled in advance, but in the case of a complaint the inspection personnel may arrive unannounced. The resulting inspection rating will be deemed “satisfactory,” “unsatisfactory,” or “unsatisfactory/imminent danger,” and the inspector can suspend the operator’s license. California has a large staff of inspectors maintaining the BIT program. The enforcement contact said that the program is effective in generally encouraging good maintenance programs among State motor carriers. Consistent with State policy, the motor carrier is not evaluated with regard to assessing drivers’ English-language proficiency.

Maryland. The interviewee explained that a LEP citation or LEP OOS order can trigger a CR as quickly as within 30 days of the citation:

We try to get hold of them because the company may not be paying attention or the safety personnel may not know. A lot of times the driver is no longer with the company—it’s just “You can work for us till you get caught.” I think that’s the carrier’s way of distancing itself from the problem.

Asked how LEP is dealt with in a CR, the interviewee responded that he personally does not perform CRs (a separate unit handles this task), but:

From what I'm told about them, they'll sit down with the company and look at the driver-history files. Then they'll ask, "Did this person speak enough English to pass the inspection?" Of course, most of the time the carrier says that they did—they're just pulling your chain. They're trying to distance themselves. Some of these people don't even know the carriers or the drivers. They're day hires.

If the motor carrier is located out of State, the interviewee said that his office notifies the local FMCSA DA and asks for help.

Oregon. The interviewee was not aware of any LEP violation that had triggered a CR of an Oregon-based motor carrier.

Texas. Enforcement activity in Texas is focused on the CR. If a driver is found to be lacking sufficient English proficiency, the highway patrol will take OOS action for LEP but the driver will not receive a citation. Instead, the interviewee said, the highway patrol will transmit the information to "our motor carrier folks, and they will pursue a compliance review of the carrier." In the CR, the motor carrier must show how it determined the driver's language proficiency and whether its approach was appropriate to the driver's licensure level and endorsements.

In the mandatory CR of a Texas-based carrier, the carrier is asked to articulate how it assesses drivers' language proficiency. If the carrier has a frivolous or nonexistent assessment criterion, it is assessed an administrative penalty. The interviewee added, however, that carriers are not required to keep records of their proficiency testing of applicants. Mandatory CRs notwithstanding, the interviewee believed that relying on carriers without issuing citations to drivers was not a particularly effective way of ensuring English proficiency: "We do not believe they are doing a good job because we do not aggressively enforce [the criterion]. There must be some certainty of sanction to get compliance."

If the motor carrier is located somewhere other than in Texas, the highway patrol refers the information to the FMCSA division office in Austin, providing all supporting paperwork and evidence. The division office then sends this information to the home State's division office for follow-up in a CR.

Utah. Asked whether a LEP violation or an OOS order for a driver working for a Utah-based carrier would trigger a CR, the interviewee responded, "If we encountered a driver that had a deficiency in the English language, we would ask for a CR, and I know that DOT would jump on that." However, because the Utah DOT rather than the State highway patrol conducts CRs, he was unable to give information on how LEP might be dealt with in that context.

If a motor carrier is located out of State, the interviewee said that his office would contact the FMCSA division office, which would then contact the division office in the home State and ask it to conduct a CR: "We work well with FMCSA, and they in turn conduct CRs in other States or suggest that their partners in other States conduct CRs. It happens all the time. I think that works well."

Vermont. According to the interviewee, an OOS order triggers a mandatory CR. The State does not conduct CRs but assists the FMCSA division office with this activity.

Tasks requiring English proficiency

Asked if there are situations in which adequate proficiency in English, whether spoken or in reading ability, was particularly important to ensure safety, State enforcement interviewees' responses were categorically consistent with those in the Phase I interviews and with those in the Phase II signage and licensure interviews. However, interviewees added some significant details.

- **Inspector safety.** The Maryland, New York, and Utah interviewees spoke specifically about concerns regarding the safety of officers during vehicle inspections. Breakdowns in communication at this point in the inspection could lead to an OOS order in these States.
- **Escalation during enforcement situations.** The Florida enforcement contact was especially concerned about the safety of law-enforcement and inspection personnel in relation to officer-driver misunderstandings. The most serious incident, according to the interviewee, occurred when an officer had advised a driver to remove his hands from his pockets. After several verbal requests went unanswered, the officer drew his service weapon. Luckily, the situation was resolved successfully, but that might not always be the case.

The Texas interviewee said that a major concern is what can happen when a State trooper tries to give specific directions to a driver in an enforcement stop and the driver is slow to respond. He explained:

We are the absolute number-one [illegal] drug-shipment State in the country, and we're also number one in drug apprehensions. Drug transporters are increasingly armed; if there is any suspicion of [illegal activity], the trooper must secure the scene to determine if weapons are present. Is a driver's slow reaction due to incomprehension, or is he reaching for a weapon? The situation may force a trooper to go to another level of force—"Put your hands on the dash, etcetera"—forcing escalation.

- **Signage.** Contacts from two States, Florida and Oregon, independently offered anecdotes related to CMV drivers' failure to respond to fixed or dynamic signage. In both cases, the accounts dealt with trucks violating weight restrictions on bridges. According to the Florida interviewee, "A rural bridge in Lee County has been restricted against truck traffic due to weight restrictions. A variable message sign announcing this restriction is present at the bridge, and there have been numerous violations by drivers who were unable to understand the sign."
 - The Oregon contact said that there has been considerable construction involving the interstate system, including much bridge replacement, and that these bridges have been assigned weight restrictions: "There was a period of time where we were writing a hellacious number of five-, six-, and seven-K bridge-weight-restriction tickets—up to 30,000 pounds overweight." He added that the cited drivers could not read either

static or DMS weight-restriction signs. The contact added that Spanish-speaking drivers frequently misunderstand VMS calling for trucks to pull into weigh stations.

- The Texas interviewee said that his agency believes that CMV drivers must be familiar with basic signs and that this is more of a concern away from the border, in San Antonio, Dallas, and Houston, as those cities have cloverleafs with informational signs that drivers misread, leading them to change lanes abruptly at the last minute. He added that this is a problem all over Texas, “even with our regular U.S. drivers,” as there is a tremendous amount of information to process in order to navigate safely.
- The Utah contact said that his agency is very much concerned about driver inability to read DMS as a potential problem. The State has DMS on both its east-west and north-south interstate systems.
- **Hazmat.** The Oregon and Texas contacts both raised potential issues related to hazmat. In the words of the Oregon interviewee, “A driver with a flatbed full of chickens can have a lower proficiency than a driver of an LNG tanker.” The State expects hazmat drivers to be better prepared to deal with hazards and safe handling than other CMV drivers, but he added, “I don’t know if it’s an English education issue or a regulatory education issue.”
 - Interestingly, both the California enforcement contact and the Vermont interviewee indicated that, in their experience, hazmat drivers have a higher level of English proficiency than basic CMV drivers. The California contact said that hazmat carriers tend to hire drivers with more experience. He believes that these drivers have learned to communicate in English over time. The Vermont interviewee said that hazmat drivers are more familiar with the paperwork and can communicate with officers, functioning at “definitely a higher level of proficiency.”

Passenger carriers. This topic was not frequently raised as a concern by enforcement interviewees. The Maryland contact said that there had been some problems with curbside carriers, although his concern appeared to be primarily with the safety and integrity of the vehicles.

- The New York interviewee brought up the same issue:

We’ve had major concerns, by which I mean in a rare case that happens. But we do have a very large community in the city of New York. For instance, in Chinatown there are many new bus companies that have cropped up offering services to major cities within the Northeast. We have concerns about the drivers’ ability to communicate in English. Certainly [they can communicate] in Chinese, but it’s questionable as to whether they can converse and communicate in English.

- The Vermont interviewee’s confidence in the advanced skill set of hazmat drivers extended to passenger carriers.

Recommended improvements to current regulatory framework

The Illinois interviewee described in detail the problems created by lack of uniformity among the States—in the languages in which they offer testing, whether or not they allow third parties to administer testing, and the extent to which they permit interpreters and how they monitor them. His point was that these inconsistencies leave the door open to fraud.

In the opinion of the New York interviewee, language proficiency is an issue that should be dealt with at the time of licensing rather than a roadside enforcement issue. Language proficiency can be assessed at a minimum of two separate points during the licensing process: the written test and the road test. He argued that it is reasonable to require that applicants for the CDL with a hazmat endorsement speak English proficiently. He added that language proficiency and comprehension are also issues among native English-speaking drivers. Although rarely encountered, some CMV drivers cannot read.

The Vermont interviewee was of the opinion that a standardized test of English proficiency to be offered during licensure testing “might be good.”

Motor carrier assessment of drivers

California. The interviewee said that, in general, he does not believe that motor carriers in California are doing much to assess the English proficiency of their drivers. He thinks that motor carriers take the approach of looking for communications ability appropriate to the tasks required. For example, agricultural and food-processing-sector companies typically deal with workers who speak only Spanish. In addition, the contact pointed out that carriers are asserting the existence of a driver shortage, so they would not fail to hire a candidate just because of lack of English-language skills.

Florida. The Florida interviewee said he believes that having the ability to do roadside enforcement would create an incentive for motor carriers to ensure that their drivers can communicate according to the regulations. He suggested that, in general, motor carriers based in his State are motivated to comply with the regulation:

Interstate carriers probably are more prone to ensure that their drivers can speak English—[otherwise] they can run into problems around the country even if they’re based in Florida. When drivers go to other States there is the possibility that they will be placed OOS because [lack of English proficiency] is an OOS condition.

He added that the likelihood of a motor carrier complying with the regulation and assessing a driver’s English proficiency is also determined by the company’s size:

For proficiency of the drivers, I’d say for small or local carriers, it’s not done very well at all. In fact, we do go in and do compliance reviews on those types of carriers when violations come to mind. We follow up with them to make sure that they know what they’re supposed to know, either on preventative maintenance, which is a State program, or on compliance review. If we see a history of issues,

that they just continue doing it anyway, then we take a harsher enforcement on the compliance review.

Illinois. It was the interviewee's perception that a motor carrier's ability to assess the English-language proficiency of its drivers does not so much depend on the carrier's desire to do this; rather, it varies depending on the carrier's own proficiency. The interviewee felt that language proficiency is less of a concern with regard to hazmat drivers, possibly because hazmat is a specialized area with an involved application process that requires background checks.

New York. On the basis of the number of times that the State DOT has cited carriers for lack of English-language proficiency, the interviewee gave the motor carrier industry high marks for assessing the proficiency of drivers.

Utah. The interviewee thought that, overall, motor carriers do not evaluate the English-language proficiency of their drivers very effectively: "Some companies are much more concerned about getting a load from point A to point B than others."

Vermont. The interviewee stated that "The vast majority [of motor carriers] do a good job assessing driver abilities." In his experience, longer-haul drivers have better English; he has observed more language issues with short-haul drivers who have driven in from major metropolitan areas such as New York, New Jersey, and Connecticut. "Motor-coach drivers usually have good English proficiency—they need to be able to talk to French- and English-speaking passengers."

State data collection

Asked whether States had data to back up their various concerns, interviewees' answers were almost always negative. Some gave specific reasons for this.

The Illinois enforcement interviewee was unaware of any instances in which a driver's inability to speak English had been a contributing factor in a crash. He added that driver distraction and inattention are key factors in the majority of crashes. Language proficiency and comprehension are also issues of concern among native English-speaking drivers. He suggested that, because miscommunication is more often the problem than any other factor in contributing to accidents, it has been difficult to determine whether there is a significant language-proficiency issue.

The New York contact was unaware of any traffic accidents or incidents in which a driver's lack of English-language proficiency was a contributing factor. Furthermore, he had no statistical data indicating that language proficiency was an issue that has been raised to a level of major concern for the agency.

The Texas interviewee said that his State doesn't record "limited English proficiency" as an accident cause; the report might instead read "inattentive" or "failed to take steps to prevent accident." He explained that roadway accidents are largely dealt with by local officers in metropolitan areas rather than by the State, although "we do have a small contingent of State enforcement there."

The Utah interviewee said that his State does not keep statistics on accidents or incidents directly attributable to drivers' inability to speak or understand English.

2.4.2 Phase III Interviews: Motor Carriers and Drivers

2.4.2.1 Approach

In Phase III, to gain further insight into the issue of limited English proficiency, it was important to hear the perspectives of individual motor carriers and drivers. The interview questions and discussions drew on the accumulated insights obtained from background research and previous interviews with Federal and State regulators and with contacts from safety and industry associations and public interest groups.

The interviewees were to consist of motor carrier company officials and drivers for these companies. Passenger carriers and independent owner-operators were also included. Given the range and variety of CMV operations, only a limited number of contacts were interviewed to gather initial impressions regarding the regulation.

Throughout the approximately 50 interviews conducted during Phases I and II of this study, interviewees had provided their opinions as to why there are CMV drivers with limited English proficiency on the nation's highways, whether and under what circumstances they perceived that the presence of these drivers could pose a risk to public safety, and how they thought that the current regulatory framework could be improved. The interviews with individual motor carriers and CMV drivers provided the opportunity to examine these opinions from their perspectives. The authors also wanted to obtain information on procedures that carriers follow to comply with the regulation.

The themes stated in the previous interviews raised questions that were of interest during the motor carrier and driver interviews. These questions included:

- How does the carrier resolve that §391.11(b)(2) requires the driver to have English proficiency but the State CDL tests may be administered in languages other than English?
- Does a driver shortage put pressure on carriers to hire whoever is available, even if the driver lacks English proficiency?
- Have carriers and drivers encountered situations where a driver whose English is hampered by an accent may be unfairly cited for violating §391.11(b)(2)?
- What company policies and programs are in place to address the issue of English proficiency during hiring and training?
- Specifically for carriers: What action is taken against a driver who is put out of service for being in violation of §391.11(b)(2)?
- Do carriers and drivers agree that hazmat drivers need to have a greater level of English proficiency than other CMV drivers due to the risk and potential impact of incidents involving these kinds of vehicles and shipments?

- Is there a concern regarding whether CMV drivers can understand and respond to roadway signage?
- How does the passenger-carrier industry differ?

Motor Carrier and Driver Selection

In order to obtain a diverse range of perspectives on those questions, interview candidates from various industries, company sizes, and geographic locations were identified. Prospective interviewees fell into one of four categories: trucking company, passenger carrier, driver, or independent owner-operator. Companies were selected through several methods. Those that had participated in the ride-along observation portion of this project were also asked to participate in interviews. Others were recommended by Phase I and II interviewees. The final selection method was made with use of MCMIS data. Driver interviews were arranged through companies participating in interviews.

Although the authors planned on interviewing independent owner-operators, no interviews in this category occurred. The interview team was unsuccessful at making arrangements with 20 potential contacts. All initial attempts to reach them were by telephone. In four cases, preliminary discussion led to faxing the questionnaire: one of these contacts subsequently declined, and three others were unresponsive. The team reached one individual who spoke mostly Spanish and only a little English; he declined through a family member who was interpreting the call. Another potential contact requested a callback at a specified time but was ultimately unreachable despite repeated attempts. Voicemails to eight potential contacts were not returned. Six other calls were made to numbers that were incorrect or no longer in service.

Table 17 lists carrier interview contacts and Table 18 lists driver interview contacts.

Table 17. Phase III Carrier Contacts

Carrier Size (in PUs)	Type of Cargo ⁴⁰	Hazmat ⁴¹	State of Domicile	Date of Interview
2,513	Contract carrier	No	MO	07/12/07
1,063	Chemicals	Yes	OK	07/31/07
400	Beverages and empties	Yes	WA	07/25/07
45	Petroleum products to surface mines	Yes	WV	07/12/07
28	Rock/sand/cement	Yes	PA	07/17/07
129	Passenger carrier	No	MA	08/13/07

⁴⁰ As represented by interviewee and discussed.

⁴¹ Ibid.

Table 18. Phase III Driver Contacts

Years of Experience	Years With Carrier	Hazmat Endorsement	IOO*	Language Spoken Regularly	Date of Interview
26	16	Yes	No	English, Spanish	08/8/07
40	40	Yes	No	English, Spanish	08/10/07
39	17	Yes	Yes	English	07/25/07
42	>20	Yes	No	English	07/30/07

*Independent owner-operator

2.4.2.2 Results

Phase III interviews did not touch on all themes raised in earlier interviews. On some points, however, carriers and drivers provided vivid examples and insights that gave additional perspective on the questions noted above.

All motor carriers that were interviewed indicated that they had a policy of hiring only drivers who are proficient in English. One reason given by interviewees was that carriers are required by regulation to hire drivers proficient in English; failing to comply leaves the carrier open to fines and, in the case of an accident, to legal liability. Other reasons included safety in relation to the cargo and its handling, and the ability to communicate with customers. Carrier interviewees also provided extensive background information on the availability, screening, training, and retention of drivers.

Consistent with the carrier statements, all of the drivers were English-speaking, although two reported Spanish as their primary language. All were extensively experienced, with an average of 39 years behind the wheel and at least a decade with their current employer. As a result, they were not able to describe current hiring practices.

Every driver interviewed believed that drivers need to have some ability to communicate in English. One interviewee had this response:

If you get on the scale and we've got 80,000 pounds of load and you're over [by] 4,000 to 5,000 pounds, you've got to pull over and go inside, and he'll tell you to bring your paperwork and permits. A lot of the time, you've got to pay a fine or to move your fifth wheel. You've got to even the load, equalize it. You need to speak English. Otherwise, I imagine, you'd be in trouble.

CDL requirement versus English proficiency

One carrier interviewee expressed frustration with the seeming contradiction between regulations that allow CDL tests to be offered in multiple languages and those that require CMV drivers to be proficient in English:

I was looking on the Internet yesterday, knowing that we were going to be making this call, and I read that the State senator of Wisconsin said that they allow the CDL test to be taken in English, Spanish, and Russian. I also read that in Missouri they allow interpreters. I just find it crazy that the States have the ability

to do what they want when the Federal regulations say that drivers have to be able to read and speak the English language.

It's partly a matter of conflicting regulations. At the State level, they're attempting to be consistent with the Civil Rights Act. Title VI and Title VII say that you can't deny employment to someone purely on the basis of national origin. And language supposedly is strongly correlated with national origin. So unless you can show that there's a compelling reason for requiring English . . .

The interviewee further indicated that he has not been challenged by any job applicant who had not been hired because of insufficient proficiency in English.

Driver shortage

The interviews provided insight into previous references to driver shortages in the trucking and passenger-carrier industries. Four of the five trucking interviewees said that finding applicants for open positions is not a problem; however, finding qualified candidates—good drivers with clean records, a professional demeanor, and a strong work ethic—is difficult. In addition, carriers are generally looking for drivers with some experience. Only the largest firms can run “finishing” programs that pair new graduates of training schools with mentor drivers to build the skills of the former group.

Both carrier and driver interviewees described a tendency among many drivers to move frequently from job to job. Companies that run long hauls, requiring that drivers be away from home and virtually live in their vehicles, experience tremendous employee turnover. One interviewee reported a 91 percent annual turnover, which, according to the company, is low compared with the industry average of 130 percent. Other drivers simply leave the profession. Some interviewees' comments suggested that the high turnover rate is the result of new entrants to the industry who are motivated by the high salary potential, the “romance of the road,” and so forth, and who then discover how hard a long-haul schedule is on their families and personal lives. Consequently, many drivers conclude that they need to find a job with a different schedule or to leave the industry. Short-haul carriers whose drivers can go home each evening apparently have better retention, but these carriers still reported turnover in the 25 to 30 percent range.

Interestingly, one medium-sized carrier reported a turnover rate of less than 1 percent annually. This carrier was highly specialized as well as geographically localized. The interviewee cited phenomenal driver loyalty and attributed it to the company's practice of hiring through personal referrals, offering very good pay and benefits, providing a short-haul schedule that allows drivers go home at night, and screening carefully for fit with the company culture. In other words, the carrier appeared to be exceptionally attentive to individual staff and their needs. The interviewee stated:

[Drivers] like the fact that we have company picnics and recognition dinners. You never know when the owner, the former owner, and myself and a couple other officers will show up with a barbecue grill and some hamburgers, hotdogs, and hot sauce as shifts change to just sit around and talk about things. We pride

ourselves on knowing every employee and their family and history because we want them to be part of the [company] family. That's probably the biggest thing.

While the retention rate is high, the interviewee noted that the hiring rate was low because the carrier had a difficult time finding the right people.

To summarize, with respect to the concern about a driver shortage, carrier interviewees indicated that they hire very carefully and screen for English proficiency.

Company hiring and training policy

Company policy related to English proficiency often begins with the screening process. There are a number of potential assessment points during the hiring and training process, including:

- During the recruiter's telephone conversation with the applicant.
- When the applicant fills out the application. (A sign of limited English proficiency is if the applicant asks someone else to help fill out the application form.)
- During the interview, if the applicant cannot understand or respond to questions.
- During orientation. (One company noted that, in its 2-day orientation process, new hires watch videos, read books, take written tests, and interact verbally with instructors, all of which makes it difficult to hide a lack of English proficiency.)
- When interacting with the mentor during "finishing" or the instructor during training.

The employer generally considers a driver who has completed this screening to have sufficient English proficiency to meet the criteria specified in §391.11(b)(2).

In several interviews, the question arose as to whether drivers' ability to read signage was assessed during the training process. One interviewee said yes, while another responded that this was tested during the CDL process and therefore was not assessed by the carrier.

Drivers receiving LEP violations

Interviewees varied considerably with respect to how their companies deal with drivers who have received a LEP violation and have been put out of service. (It should be noted that the number of incidents for all of these carriers was very low.) One interviewee stood by the company's screening process, suggesting that the few driver citations received reflected an inspector's impatience (for example, with a driver's accent or hesitant English) rather than a true inability to speak or comprehend the language. Another interviewee said that the carrier terminated drivers receiving violations of §391.11(b)(2) but offered to rehire them if they improved their English proficiency through school or training. A third interviewee, in contrast, said that the carrier had sent drivers with §391.11(b)(2) violations to school to improve their proficiency and transferred them to dispatch duties or other non-road activities until they could meet the proficiency regulation.

None of the drivers had ever received a LEP violation; they said they could not recall knowing anyone who had.

Hazmat-specific requirements

The comments of carrier and driver interviewees who deal with hazmat supported the argument that hazmat-endorsed drivers need a higher level of English proficiency than do the average CMV drivers. These carriers believe it is absolutely essential that the driver be able to read safety and warning signage, to communicate with other drivers and personnel during loading and unloading, to read and understand accompanying technical paperwork, and to communicate effectively with emergency responders in case of an accident or spill.

Signage

The comments of both carrier and driver interviewees supported the assertion that CMV drivers need to be able to read and respond to road signs, particularly those used for warning or traffic direction in atypical circumstances:

You drive down U.S. highways and you run into construction and trucks detouring and things like that. So it's important that drivers be able to read and understand what those signs are saying. It's kind of like the "over height" sign. Our trucks and trailers are 13½-feet long. If they're doing some bridge construction and they've got some scaffolding hanging over a bridge that's 12 feet tall and there's a sign that says "All trucks over 12 feet exit here"—if the driver doesn't understand what that sign says and he goes right on through and hits that scaffolding with three guys standing on top of it—that could be a bad, bad deal.

Passenger-carrier industry

The availability of driver candidates as well as hiring and training conditions appear to be different in the passenger-carrier industry than in other CMV sectors. The industry is made up of many small carriers and only a few large companies. The authors were unable to speak with any small-company contacts. Therefore, the interviewee's comments, while illuminating some of the issues facing small carriers, should not be generalized to apply to that sector of the industry.

The passenger-carrier interviewee reported annual turnover ranging from 40 to 60 percent. Applicants generally fall into one of three categories: those coming from another bus company, those with a CDL who have not previously been passenger-carrier drivers, and "green" recruits, who are in the majority. The interviewee attributed the high turnover to several factors. First, a large number of applicants drop out during training because they fail to meet the company's standards. Second, there are virtually no training schools for passenger-carrier driving; the company trains drivers to obtain a CDL and the passenger endorsement. Some applicants take the training and then leave for jobs elsewhere. Third, some drivers simply change jobs frequently. Finally, others discover that "it's not the life for them. They don't want to be behind the wheel driving and dealing with people all day."

High-quality customer service is the company's paramount goal. Its 5-to-8-week training program painstakingly tracks the progress of recruits and provides them with feedback. The

ability to communicate is a core element of training and includes English proficiency. Every aspect of training is documented.

The company takes particular care with respect to preparing drivers to deal with signage. As part of the training program, instructors and driver trainees are on the road 5 days a week. When trainees are driving, they must talk to the trainer and describe what they see and recognize:

An example would be a sign that says you're at a blind driveway or a railroad crossing. Our trainer wants to know, mentally, what you're processing: "Talk to me, go through that process." It's amazing what you find out, and what people are thinking.

Trainees are also extensively prepared to deal with inspections:

We tell them, if you go to a weigh station, these are the items that they're going to check, and you've got to be prepared. So our drivers know. If our driver gets pulled over at a weigh station for, let's say, a log that is an hour behind and he's placed out of service, that driver is subject to termination. So they know that ... logs, all their lights—everything's got to be there. It's usually checked prior to departure, but that doesn't mean to say that they always update the log, because they don't. But they are subject to discipline, up to termination.

The interviewee spoke about the need for passenger-carrier drivers to be proficient in English:

In the event of an emergency, we want our drivers to be able to communicate with the passengers. And because of ADA [the Americans with Disabilities Act], there are individuals on board who are hard of hearing, can't hear, or may need special instruction, and it's up to the driver to communicate . . .