

Transit Bus Operator Distraction Policies

DETAILS

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TRANSIT COOPERATIVE RESEARCH PROGRAM

TCRP SYNTHESIS 108

**Transit Bus Operator
Distraction Policies**

A Synthesis of Transit Practice

CONSULTANT

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TRANSPORTATION RESEARCH BOARD

WASHINGTON, D.C.
2013
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TRANSIT COOPERATIVE RESEARCH PROGRAM

The nation's growth and the need to meet mobility, environmental, and energy objectives place demands on public transit systems. Current systems, some of which are old and in need of upgrading, must expand service area, increase service frequency, and improve efficiency to serve these demands. Research is necessary to solve operating problems, to adapt appropriate new technologies from other industries, and to introduce innovations into the transit industry. The Transit Cooperative Research Program (TCRP) serves as one of the principal means by which the transit industry can develop innovative near-term solutions to meet demands placed on it.

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The TCRP provides a forum where transit agencies can cooperatively address common operational problems. The TCRP results support and complement other ongoing transit research and training programs.

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Cover figure: NYMTA posted this and 23 other posters in facilities throughout the system where bus operators could readily see them throughout the workday. The posters are part of a system-wide effort to reduce and eventually eliminate distracted driving incidents through employee awareness and enforcement of a zero-tolerance policy. (*Courtesy: NYMTA.*)

FOREWORD

Transit administrators, engineers, and researchers often face problems for which information already exists, either in documented form or as undocumented experience and practice. This information may be fragmented, scattered, and unevaluated. As a consequence, full knowledge of what has been learned about a problem may not be brought to bear on its solution. Costly research findings may go unused, valuable experience may be overlooked, and due consideration may not be given to recommended practices for solving or alleviating the problem.

There is information on nearly every subject of concern to the transit industry. Much of it derives from research or from the work of practitioners faced with problems in their day-to-day work. To provide a systematic means for assembling and evaluating such useful information and to make it available to the entire transit community, the Transit Cooperative Research Program Oversight and Project Selection (TOPS) Committee authorized the Transportation Research Board to undertake a continuing study. This study, TCRP Project J-7, “Synthesis of Information Related to Transit Problems,” searches out and synthesizes useful knowledge from all available sources and prepares concise, documented reports on specific topics. Reports from this endeavor constitute a TCRP report series, *Synthesis of Transit Practice*.

This synthesis series reports on current knowledge and practice, in a compact format, without the detailed directions usually found in handbooks or design manuals. Each report in the series provides a compendium of the best knowledge available on those measures found to be the most successful in resolving specific problems.

PREFACE

By Donna L. Vlasak
Senior Program Officer
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The objective of this synthesis is to provide transit agencies with information about transit bus operator distraction policies and outcomes to aid them in developing their own policies and programs to address and prevent distracted driving incidents. Transit bus operations continue to be an increasingly “distracted” occupation, based on a variety of conditions, and further study is suggested to help address and mitigate conditions.

A review of the relevant literature of a variety of state and federal government, academic, and professional publications was conducted for this effort. Thirty-five of 39 transit agencies surveyed responded, a 92% response rate. Case examples further document the efforts of three transit agencies (New York City Transit/NYMTA; Metropolitan Atlanta Rapid Transit Authority, Atlanta; and Metro Transit, Minneapolis) to identify and catalog their processes and results. These examples highlight more in-depth and additional details on successful practices, challenges, and lessons learned.

Christopher A. Kozub, Kozub Transportation Consulting, LLC, Woodbridge, New Jersey, collected and synthesized the information and wrote the report, under the guidance of a panel of experts in the subject area. The members of the topic panel are acknowledged on the preceding page. This synthesis is an immediately useful document that records the practices that were acceptable within the limitations of the knowledge available at the time of its preparation. As progress in research and practice continues, new knowledge will be added to that now at hand.

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Note: Many of the photographs, figures, and tables in this report have been converted from color to grayscale for printing. The electronic version of the report (posted on the Web at www.trb.org) retains the color versions.

TRANSIT BUS OPERATOR DISTRACTION POLICIES

SUMMARY Since 2009, addressing distracted driving across all modes has become one of the U.S.DOT's top safety initiatives. That year, President Obama signed an executive order prohibiting text messaging by federal government employees and contractors while operating vehicles on government business or government-funded business activities. Similarly, by 2012, 18 states and the District of Columbia have passed laws specifically forbidding the use of any hand-held or hands-free cellular phone by public transit, school, and commercial bus operators while driving a bus.

The objective of this study is to report the state of knowledge and practice in public transit bus operations intended to address and prevent distracted driving incidents. The areas covered in this study include: research that has or is being conducted to examine behavioral science factors and intergenerational or other demographic issues in an attempt to define distracted driving causes; the development and enforcement of existing and proposed policies and disciplinary actions; the development and implementation of employee training programs; practices to mitigate on-board distractions such as passenger interaction, mobile data terminal and other integral electronic device use; and the evaluation and monitoring of policies and programs that have been put in place, to determine the overall effectiveness. It will also highlight some of the external forces—positive and negative—of state laws and/or the action by some states to prohibit locally created laws related to distracted driving activities among all drivers or specifically bus operators. The ultimate goal of this synthesis is to provide public transit agencies with information about bus transit operator distraction policies in order to assist them in evaluating and developing their own policies and programs to address and prevent distracted driving incidents.

The study methodology included a literature review of U.S.DOT/FTA documents and resources, available transit agency policies, state laws, state-level accident statistics, industry standards, research studies, and training programs; and a survey of transit system operations, safety, and labor representatives. The survey was sent to 39 individuals, representing 35 public transit agencies. Thirty-six participants, representing 33 agencies, submitted a completed survey, a response rate of 92%. The survey was followed by the development of case examples documenting the efforts of three public transit systems to identify and catalog their processes and results.

Several key findings were identified through this survey. First, 27 of the 33 systems that participated in the survey had conducted workplace and job-duty assessments of bus operators to identify conditions, factors, and behavioral patterns that cause or contribute to distracted-driving practices and incidents. Nineteen of the 33 systems that participated in the survey have already implemented policies addressing and prohibiting distracted driving practices while operating a vehicle, prohibitions that include but are not limited to the use of cell phones or other electronic devices.

APTA has issued a comprehensive Recommended Practice, as part its Standards Development Program, entitled “Reducing Driver-Controlled Distractions While Operating a Vehicle on Agency Time.” A number of studies on the topic of distracted driving have been published,

including reports by the National Safety Council, Virginia Tech Transportation Institute, and the University of Utah; and DriveCam, Inc. conducted a study specifically on transit bus operators. All of these concluded that drivers in collisions were, on average, two times more likely to be distracted by cell phones or behaviors such as eating or drinking while driving. The Virginia Tech study concluded that the risk of a crash or near crash is six times greater for drivers who are dialing a cell phone and 23 times greater for those who text and drive.

There are technologies currently available that can prevent cell or smart-phone use with the installation of hardware and/or software uploads. Lastly, the Center for Urban Transportation Research (CUTR) at the University of South Florida, in conjunction with the Florida Department of Transportation and the FTA, has developed a 30-minute on-line instructional course, specifically for transit operators, on the dangers of distracted driving.

Although these practices, legislative and research efforts, and training and outreach programs are making progress in addressing the issue, additional work needs to be done at all levels to better define and mitigate distracted driving behaviors and other factors in public transit bus operations. Unlike personal vehicle usage or even commercial truck driving—which involves a separate and unique set of factors—transit bus operations has been and remains an increasingly “distracted” occupation. Ever-present passenger populations, driving environments, work/rest schedules and breaks, increased implementation of cameras, monitors, alarms, radios, and automatic vehicle location; and the individual driver’s desire or need to be in communication with children or other dependents have significantly increased the level of distraction. Before targeted steps can be taken to address and mitigate these and possibly other factors, additional research needs to be done to identify and prioritize the factors in order of severity and frequency of occurrence.

Future research efforts that could benefit bus transit systems in their efforts to increase operator and passenger safety include:

- An analysis of the effectiveness of distracted driving policies and penalties to determine successful models for discouraging distracted driving behaviors and enforcing associated rules;
- The development of a standardized process for evaluating policies, enforcement procedures, intervention methods, and training programs to determine successes and areas of needed improvement;
- The development of a model plan for a distracted driver program that addresses all types of distractions through work-space and job-duty assessments, rules, training, technological improvements, and intervention programs;
- A pilot program to evaluate some of the barrier or “geofencing” technologies on the market or in development for their effectiveness in preventing the use of cell phones and other electronic devices.

CHAPTER ONE

INTRODUCTION

In May 2011, a video of a transit bus driver in Rome, Italy, was picked up by a number of major media outlets and popped up all over the Internet. The video clearly showed the driver talking on a hand-held cell phone and using the keypad and screen of a second phone, all while steering only with his elbows. The posting by Italian newspaper *La Repubblica Roma* went viral within days, and was often accompanied by comic or sarcastic commentary.

Two seminal accidents further illuminated the issue of distracted operating behaviors in the United States and specifically in the public transit sector. In September 2008, a Metrolink commuter rail train ran a red signal in Chatsworth, California, and collided with a Union Pacific freight train, which resulted in 25 fatalities and more than 100 injuries. The NTSB concluded that the collision and derailment was caused by the commuter train engineer's prohibited use of a wireless device while operating the train. The NTSB reported that the engineer failed to respond appropriately to a red signal at Control Point Topanga (1) because he was engaged in text messaging at the time. Massachusetts Bay Transportation Authority (MBTA) Green Line train 3612 struck the rear of a standing westbound train in a tunnel near the underground Government Center station in May 2009. Following the investigation, the NTSB determined that the probable cause was the failure of the pilot operator of the striking train to observe and appropriately respond to the red signal aspect at 744A (2, p. 10) because the operator was engaged in the prohibited use of a wireless device, specifically text messaging, that distracted him from his duties.

In 2009, U.S.DOT Secretary Ray LaHood testified before a Senate committee (1, pp. 1–4) that distracted driving had become a deadly epidemic, and that research indicated that without action the problem would only get worse. In the same year, the U.S.DOT held the first summit specifically devoted to the topic of distracted driving and launched a new website, *Distraction.gov*, to address this epidemic. A Presidential Executive Order (2, pp. 1–3) that went into effect on December 30, 2009, prohibited all federal employees from text messaging when driving government-owned vehicles or when driving privately-owned vehicles while on official government business. On the *Distraction.gov* website, the U.S.DOT defines distracted driving as “any activity that could divert a person’s attention away from the primary task of driving.”

Within the public transit sector, the FTA has further defined distracted driving in a training course (3, p. 6) developed by

the Center for Urban Transportation Research (CUTR) and available through the Transportation Safety Institute (TSI), as “Any non-driving activity a person engages in that has the potential to distract him or her from the primary task of driving and increase the risk of crashing.” This definition encompasses any activities, not limited to talking or texting on mobile phones, which take an operator’s attention away from operating the vehicle. However, the FTA’s initial efforts to address distracted driving have focused primarily on the newest and most prevalent factor in distracted driving incidents: talking or texting on mobile phones.

PROJECT OBJECTIVES AND BACKGROUND

The objective of this study is to provide public transit agencies with information about bus operator distraction policies and outcomes in order to assist them in developing and evaluating their own policies and programs to address and prevent distracted driving incidents.

The discussion of effective safety practices for addressing distracted driving begins with an understanding of all of the factors contributing to distracted driving behaviors. Table 1 comes from NHTSA’s National Center for Statistics and Analysis’ report DOT HS 811 379, *Distracted Driving 2009*. The table lists attributes of driver distractions from the General Estimates System (GES) of the National Automotive Sampling System (NASS). Any effective federal, state, or agency-level plan to prevent distracted driving incidents would have to address most if not all of these factors.

These factors can be grouped into three broader categories of driver distractions: visual, manual, and cognitive. Visual distractions refer to incidents when a driver takes his or her eyes off the road for any period of time. Mechanical distractions occur when the driver’s hands have been taken off the wheel to attempt to perform another function or task. Cognitive distractions refer to any situation in which a driver is not focusing on driving, but is preoccupied or distracted by conversation with another occupant of the vehicle or with someone over a phone, or by external elements such as the weather, the schedule, or pre- or post-driving activities. The fact that texting or emailing while driving could be included in all three categories emphasizes why they are potentially so dangerous.

In the initial panel discussion for this project, it was determined that the study would include all sizes and types of pub-

TABLE 1
ATTRIBUTES FOR “DRIVER DISTRACTED BY . . . ” IN THE GES DATABASE

Attribute	Examples
By other occupant	Distracted by occupant in driver’s vehicle; includes conversing with or looking at other occupant
By moving object in vehicle	Distracted by moving object in driver’s vehicle; includes dropped object, moving pet, insect, cargo
While talking or listening to cellular phone	Talking or listening on cellular phone
While dialing cellular phone	Dialing or text messaging on cell phone or any wireless e-mail device
Other cellular phone-related (2007 and later)	Used when the police report indicated the driver is distracted from the driving task due to cellular phone involvement, but none of the specified codes are applicable (reaching for cellular phone, etc.). This code is also applied when specific details regarding cellular phone distraction/usage are not provided.
While adjusting climate controls	Adjusting air conditioner or heater
While adjusting radio, cassette, or CD	Adjusting radio, cassette, or CD in vehicle
While using other devices/controls integral to vehicle	Adjusting windows, door locks, rear view manual, seat, steering wheel, adjusting seat belts, etc.
While using or reaching for device/object brought into vehicle	Radar detector, CDs, razors, portable CD player, headphones, cigarette lighter, etc.
Distracted by outside person, object, or event	Animals on roadside or previous crash; do not use when driver has recognized object/event and driver has taken evasive action.
Eating or drinking	Eating or drinking or actively related to these actions
Smoking-related	Smoking or involved in activity related to smoking
Distraction/inattention, details unknown	Distraction and/or inattention are noted on the PAR but the specifics are unknown.
Inattentive or lost in thought	Driver is thinking about items other than the driving task (e.g., daydreaming).
Other distraction	Details regarding the driver’s distraction are known but none of the specified codes are applicable.

GES = General Estimates System.

lic transit bus operations, including paratransit, fixed route, bus rapid transit, commuter bus, rural, and on-demand. Consequently, a variety of agencies, ranging in size from 12,000 operators to those with fewer than 70, was selected for the survey. Specific topics discussed in the initial project conference call included the following:

- A broad consensus definition of distraction that includes electronic devices as well as other personal activities (i.e., eating, grooming, reading) and external factors;
- Existing and proposed agency policies as well as real-world enforcement efforts and consequences/disciplinary actions associated with violations and evaluative measure to determine the overall effectiveness of the policies;
- Behavioral science research that has been conducted specifically focusing on distractions in a bus operator’s environment and the operator’s ability to safely mitigate these distractions;
- Employee training and education programs on addressing distractions;
- Programs, technological advancements, and/or policies addressing external factors ranging from dense or erratic pedestrian behaviors in urban areas to deer and other wildlife encounters in rural areas;
- Specific measures, including an assessment of operator work areas and duties, to address on-board devices, such as mobile data terminals, radios, destination or stop indicators, and visual and audible vehicle status warnings;
- Programs and/or research on reversing cultural trends, such as the increasing use of electronic devices when operating vehicles;

- Communications and/or education programs for the general public and transit riders to inform them of the hazards of distracted driving and of interfering with or distracting on-duty bus operators;
- Technological applications of signal blocking or phone-disabling software and/or hardware.

STUDY METHODOLOGY

Information for this synthesis was gathered through a literature review, a survey, and the development of case examples.

Literature Review

As part of the initial review, a literature review was conducted to identify relevant documents and resources. The search revealed a range of documents, including federal documents, state laws and accident statistics, agency regulations, public transit distracted driving incident reports in the media, academic and industry-based studies, recommended practices, and training materials. A complete listing and brief description of the materials identified in this process are included in chapter two.

Survey

A survey questionnaire was developed regarding transit agency policies and practices designed to reduce the number of distracted driving incidents. A draft set of questions was

submitted to the panel and, following its input, was finalized and sent electronically to 39 individuals, representing 35 public transit agencies. Thirty-six participants, representing 33 agencies, submitted a completed survey (a 92% response rate). Four of the initial 39 transit systems asked to participate were represented by both a management-level employee from operations, administration, or safety, and an official from the labor union local that represents the bus operators in the agency. As such, the number of participants in the survey and the number of agencies represented in the survey will not be equal. The goal of reaching out to a small sample of labor representatives was to survey their knowledge and perceptions of their respective systems' rules, policies, and processes.

Three of the four systems represented by both management and labor union officials were ultimately selected as case examples. This decision was based not just on the fact that there were two participants from each of these systems but that the similarity in responses between labor officials and management representatives was greater than 90%, demonstrating an effective process of communicating policies, and to some degree, processes to the workforce. The findings of the survey are discussed in chapter three and the complete survey instrument is presented in Appendix A.

Case Examples

The case examples highlight New York City Transit (NYCT), Metropolitan Atlanta Rapid Transit Authority (MARTA), and Metro Transit in Minneapolis–St. Paul. Each of these examples presents a more detailed description of the system's practices in deterring distracted driving. The examples were conducted through phone interviews and a review of agency documents, including their policies pertaining to mobile phone use/possession and other distracted driving factors.

ORGANIZATION OF REPORT

The report is organized in a way that reflects the three phases of review that were conducted in the study. Specific categories of information or data found within each phase are further broken out in each chapter. Specific charts, tables, and graphs salient to the primary focus of the study are included within the body of the report. Tangential information supporting the objective of the report is presented in appendices. The intention of organizing the review and the report in this manner is to provide the reader with a synthesis of the current practices for deterring distracted driving incidents in the public transit bus sector in a user-friendly format that will initiate and support future in-depth research on the topic.

CHAPTER TWO

LITERATURE REVIEW**INTRODUCTION**

In the years leading up to the U.S.DOT's distracted driving initiative launch in 2009, public transportation systems had already begun developing and implementing rules to prohibit the use or carrying of cell phones while operating agency vehicles. States were also enacting laws specifically addressing texting, and in some cases talking, on a cell phone while driving.

The literature review identified several federal documents related to the 2009 initiative as well as more recent programs and regulations from the U.S.DOT. Lists and maps of state texting/cell phone laws were also quite common on the web but many were outdated and inaccurate. By cross-checking sites that listed laws against legislative updates from several states, it was possible to identify credible sources for current information. State-level accident statistics, along with many other documents and resources, were identified and accessed through the Transportation Research International Documentation (TRID) service of the National Academies, which includes records from the TRB Transportation Research Information Services (TRIS) database and the Organization for Economic Cooperation and Development (OECD) Joint Transport Centre's International Transport Research Documentation (ITRD) database. Although TRID and other online sources provided a wealth of knowledge and information on the topic of distracted driving, the literature review, like the study, focused on public transit practices and relevant documents.

FEDERAL RESOURCES AND DOCUMENTS

As of May 2012, the U.S.DOT website homepage included an article on distracted driving in the primary banner, a "button" on distracted driving—one of four—in its "Highlights" section, and a conspicuous link to the Distraction.gov website along the right column. At that time, however, the FTA home page had no mention of distracted driving, no links to any other pages or resources, and no buttons or scrolling banners related to the topic. Navigating the FTA website pages for Safety and Security, Transit Safety and Oversight, and Training and Conferences likewise uncovered no mention of distracted driving. Ultimately, using the "search" mechanism on the FTA page and entering the phrase "distracted driving" produced 85 results. The vast majority of these were announcements regarding the release and availability

of the Transportation Safety Institute/Florida Department of Transportation/Center for Urban Transportation Research (TSI/FDOT/CUTR) online course, which will be discussed in greater detail in the "Training" section of this chapter, or non-transit-specific documents from the U.S.DOT or the Center for Disease Control (CDC). Approximately 30% of the results were not related to the topic of distracted driving but contained the words in the heading or description of a document.

Using an Internet search engine and the phrase "FTA Distracted Driving" opens a Resource Library page on the FTA's Transit Bus Safety and Security Program webpage. The link to this page is inconspicuously placed on the FTA Safety and Security page under the bulleted heading—among five others—"Voluntary guidance for bus safety and security." Searching this library identified 15 results with some duplicates. There were: three copies of externally sponsored/produced studies or white papers; two NHTSA documents; a "Dear Colleague" letter from the FTA Administrator (4, pp. 1–2); the text of Secretary LaHood's remarks at a 2010 press event (5, pp. 1–2); copies of the APTA Recommended Practices on Distracted Driving (which are included in appendices E and F of this report); a sample distracted driving policy from the About.com: Human Resources website; links to the U.S.DOT Distracted.gov page, the NHTSA distracted driving page, and the new TSI/CUTR course; and an FTA guidance document (6) on handling distracted driver text messaging concerns in reference to safe vehicle operation. The text of the last document is included here:

GUIDANCE ON TRANSIT DRIVER TEXT MESSAGING

On January 27, 2010, the Federal Motor Carrier Safety Administration (FMCSA) published regulatory guidance in reference to the prohibition of texting while driving a Commercial Motor Vehicle involved in interstate service. This guidance, which takes effect immediately, applies to truck and bus drivers of services that cross state lines. A bus is defined as a passenger-carrying vehicle designed to seat 8 or more passengers, including the driver. Even if transit drivers are not part of interstate service delivery, they are subject to both state and local laws, regulations, and ordinances addressing general cell phone use and texting.

It is important to note that continued attention is being given to the issue of distracted driving as a major concern in transit safety. Transit systems have the prerogative to develop agency policy that addresses distracted driving concerns including driver cell phone use and texting. Many transit agencies around the nation already have such policies in place. Those transit agencies that have not yet considered developing policies on distracted driving are strongly encouraged to do so.

Further, the Office of the Senior Procurement Executive of the US Department of Transportation issued a Financial Assistance Policy Letter (FAPL) #2010-10, dated 02/02/10, that addresses texting while driving a motor vehicle. This FAPL states that each DOT (Department of Transportation) Operating Administration should encourage federal financial assistance recipients and sub-recipients to adopt and enforce policies that ban text messaging while driving company vehicles. The FAPL also encourages financial assistance recipients and sub-recipients to provide education to employees about the safety risks associated with texting while driving.

Further study in the FTA National Transit Database revealed that, at this time, there are no provisions for reporting incidents that were caused by distracted driving behaviors or other factors that would allow identification of patterns or trends associated with these primary or secondary causes.

STATE LAWS

Information on state motor vehicle laws pertaining to texting and talking on cell phones while driving is available through a multitude of online sites. By cross-referencing state-level legislative news with online lists of laws, the synthesis team identified the Insurance Institute for Highway Safety (IIHS) as the source of the most current information regarding laws that have been passed or amended in states or the District of Columbia. The information from its website (<http://www.iihs.org/laws/cellphonelaws.aspx>) as of May 2012 is presented

here in its entirety to provide a factual, comprehensive, and current inventory of state laws that directly influence public transit bus operator cell phone practices:

- Talking on a hand-held cell phone while driving is banned in 10 states (California, Connecticut, Delaware, Maryland, Nevada, New Jersey, New York, Oregon, Washington, and West Virginia) and the District of Columbia.
- The use of all cell phones by novice drivers is restricted in 31 states and the District of Columbia, and the use of all cell phones while driving a school bus is prohibited in 19 states and the District of Columbia.
- Text messaging is banned for all drivers in 38 states and the District of Columbia. In addition, novice drivers are banned from texting in five states (Mississippi, Missouri, New Mexico, Oklahoma, and Texas) and school bus drivers are banned from text messaging in three states (Mississippi, Oklahoma, and Texas).
- Many localities have enacted their own bans on cell phones or text messaging. In some but not all states, local jurisdictions need specific statutory authority to do so.

Table 2 shows the states that have cell phone laws, whether they specifically ban text messaging, and whether they are enforced as primary or secondary laws. Under secondary

TABLE 2
LAWS RESTRICTING CELL PHONE USE AND TEXTING: MAY 2012

State	Hand-Held Ban	Young Drivers All Cell Phone Ban	Bus Drivers All Cell Phone Ban	Texting Ban	Enforcement
Alabama	no	16-year-old drivers and 17-year-old drivers who have held an intermediate license for fewer than 6 months	no	all drivers (effective 08/01/12)	primary
Alaska	no	no	no	all drivers	primary
Arizona	no	no	school bus drivers	no	primary
Arkansas	drivers 18 or older but younger than 21; school and highway work zones	drivers younger than 18	school bus drivers	all drivers	primary: texting by all drivers and cell phone use by school bus drivers; secondary: cell phone use by young drivers, drivers in school and work zones ¹
California	all drivers	drivers younger than 18	school and transit bus drivers	all drivers	primary: hand held and texting laws; secondary: hands-free cell phone use by young drivers ¹

(continued on next page)

TABLE 2
(continued)

State	Hand-Held Ban	Young Drivers All Cell Phone Ban	Bus Drivers All Cell Phone Ban	Texting Ban	Enforcement
Colorado	no	drivers younger than 18	no	all drivers	primary
Connecticut	all drivers	drivers younger than 18	school bus drivers	all drivers	primary
Delaware	all drivers	learner's permit and intermediate license holders	school bus drivers	all drivers	primary
District of Columbia	all drivers	learner's permit holders	school bus drivers	all drivers	primary
Florida	no	no	no	no	not applicable
Georgia	no	drivers younger than 18	school bus drivers	all drivers	primary
Hawaii	no ²	no	no	no ²	not applicable
Idaho	no	no	no	all drivers (effective 07/01/12)	primary (effective 07/01/12)
Illinois	drivers in construction and school speed zones	drivers younger than 19 and learner's permit holders younger than 19	school bus drivers	all drivers	primary
Indiana	no	drivers younger than 18	no	all drivers	primary
Iowa	no	learner's permit and intermediate license holders	no	all drivers	primary for learner's permit and intermediate license holders; secondary for texting
Kansas	no	learner's permit and intermediate license holders	no	all drivers	primary
Kentucky	no	drivers younger than 18	school bus drivers	all drivers	primary
Louisiana	with respect to novice drivers, see footnote ³	all novice drivers, see footnote for detail ³	school bus drivers	all drivers	primary ³
Maine	no	learner's permit and intermediate license holders	no	all drivers	primary
Maryland	all drivers	drivers younger than 18 (effective 10/01/12)	school bus drivers (hand-held ban)	all drivers	secondary; primary for texting

TABLE 2
(continued)

State	Hand-Held Ban	Young Drivers All Cell Phone Ban	Bus Drivers All Cell Phone Ban	Texting Ban	Enforcement
Massachusetts	no	drivers younger than 18	school bus drivers and passenger bus drivers	all drivers	primary
Michigan	no	no	no	all drivers	primary
Minnesota	no	learner's permit holders and provisional license holders during the first 12 months after licensing	school bus drivers	all drivers	primary
Mississippi	no	no	school bus drivers	learner's permit and intermediate license holders and school bus drivers	primary
Missouri	no	no	no	drivers 21 and younger	primary
Montana	no	no	no	no	not applicable
Nebraska	no	learner's permit and intermediate license holders younger than 18	no	all drivers	secondary
Nevada	all drivers	no	no	all drivers	primary
New Hampshire	no	no	no	all drivers	primary
New Jersey	all drivers	learner's permit and intermediate license holders	school bus drivers	all drivers	primary
New Mexico	no	learner's permit and intermediate license holders	no	learner's permit and intermediate license holders	primary
New York	all drivers	no	no	all drivers	primary
North Carolina	no	drivers younger than 18	school bus drivers	all drivers	primary
North Dakota	no	drivers younger than 18	no	all drivers	primary
Ohio	no	no	no	no	not applicable
Oklahoma	learner's permit and intermediate license holders	no ⁴	no	learner's permit holders, intermediate license holders, school bus drivers and public transit drivers	primary

(continued on next page)

TABLE 2
(continued)

State	Hand-Held Ban	Young Drivers All Cell Phone Ban	Bus Drivers All Cell Phone Ban	Texting Ban	Enforcement
Oregon	all drivers	drivers younger than 18	no	all drivers	primary
Pennsylvania	no	no	no	all drivers	primary
Rhode Island	no	drivers younger than 18	school bus drivers	all drivers	primary
South Carolina	no	no	no	no	not applicable
South Dakota	no	no	no	no	not applicable
Tennessee	no	learner's permit and intermediate license holders	school bus drivers	all drivers	primary
Texas	drivers in school crossing zones	drivers younger than 18	bus drivers when a passenger 17 and younger is present	bus drivers when a passenger 17 and younger is present; drivers in school crossing zones; drivers younger than 18	primary
Utah	no ⁵	no	no	all drivers	primary ⁵
Vermont	no	drivers younger than 18	no	all drivers	primary
Virginia	no	drivers younger than 18	school bus drivers	all drivers	secondary; primary for school bus drivers
Washington	all drivers	learner's permit and intermediate license holders	no	all drivers	primary
West Virginia	all drivers (effective 07/01/12)	drivers younger than 18 who hold either a learner's permit or an intermediate license	no	all drivers (effective 07/01/12)	primary; secondary for hand-held ban until 7/1/13, then primary
Wisconsin	no	learner's permit and intermediate license holders (effective 11/01/12)	no	all drivers	primary
Wyoming	no	No	no	all drivers	primary

¹The laws in Arkansas and California prohibit police from stopping a vehicle to determine if a driver is in compliance with the law. Clearly, that language prohibits the use of checkpoints to enforce the law, but it has been interpreted as the functional equivalent of secondary provisions that typically state the officer may not stop someone suspected of a violation unless there is other, independent, cause for a stop.

²Hawaii does not have a state law banning cell phones or text messaging. However, all Hawaii counties have enacted ordinances addressing distracted driving.

³In Louisiana, all learners' permit holders, irrespective of age, and all intermediate license holders are prohibited from driving while using a hand-held cell phone and all drivers younger than 18 are prohibited from using any cell phone. Effective April 1, 2010, all drivers, irrespective of age, issued a first driver's license will be prohibited from using a cell phone for one year. The cell phone ban is secondary for novice drivers age 18 and older.

⁴In Oklahoma, learner's permit and intermediate license holders are banned from using a hand-held electronic device while operating a motor vehicle for non-life-threatening emergency purposes.

⁵In 2007, Utah defined careless driving as committing a moving violation (other than speeding) while distracted by use of a hand-held cell phone or other activities not related to driving. IIHS reported this as the functional equivalent of a secondary law. 2012 Utah law states that a person is not prohibited from using a hand-held wireless device while operating a moving motor vehicle when making or receiving a telephone call.

laws, an officer must have some other reason to stop a vehicle before citing a driver for using a cell phone. Laws without this restriction are called primary. These data are current as of May 2012. From state to state, this is an evolving process where new laws are being passed, existing laws are being modified, and the status of laws (as primary or secondary) is changing. While some changes may have occurred and been publicized since then, the absence of a complete updated list and the lack of access to information validating the status of every state's laws dictated that the synthesis team limit any updates so as to maintain the integrity of the complete list of data.

RECOMMENDED PRACTICES

The only public transit industry-based standards or recommended practices identified in the literature review were issued by APTA in 2009 as part of the APTA Standards Development Program. The first document, entitled "Reducing Driver-Controlled Distractions While Operating a Vehicle on Agency Time," established best agency practices concerning mitigating or minimizing driver-controlled distractions while operating a vehicle on company business. The second practice, "Reducing Agency-Controlled Distractions While Operating a Vehicle on Agency Time," guides transit agencies in mitigating or minimizing agency-controlled distractions for drivers while they operate vehicles on company business. These APTA documents are included in the report in Appendices E and F.

RESEARCH STUDIES

As previously mentioned, there have been a number of studies done on the topic of distracted driving, primarily focusing on cell phone usage. Only one, conducted by DriveCam, Inc. (7), focused on distracted driving behaviors in the public transit sector: After reviewing more than 100,000 risky driving events in a sampling of 10,000 transit vehicles, the researchers determined that distractions, including hand-held and hands-free cellular devices, food and/or drink, passengers, and other electronic devices only accounted for 4% of recorded behaviors in risky driving events. (The number one and two risky behaviors, not looking far enough ahead and following too close or tailgating, accounted for 37% and 32%, respectively.)

The Virginia Tech Transportation Institute (VTTI) (8, pp. 1–4), and the University of Vermont (9, pp. 1–8) have conducted a few often-referenced studies on distracted driving, but their focus has been on differentiating vehicle size/weights, driver age, and specific behaviors or distractions with no clear distinction between public transit and other sectors. The National Safety Council released a white paper in 2010: "Understanding the distracted brain—Why driving while using hands-free cell phones is risky behavior." As indicated by the title, the subject of the paper is research demonstrating that hands-free devices are still contributing to distracted behaviors. The NHTSA also released a report

in 2010 (10, pp. 1–40) following the National Motor Vehicle Crash Causation Survey, which collected on-scene information on several crash factors, including those related to driver inattention.

Another study by the Highway Loss Data Institute (HLDI), which is part of IIHS, concluded that laws banning cell phone use while driving failed to reduce the number of crashes. A news release, issued by the HLDI in January 2010, stated:

As state legislators across the United States enact laws that ban phoning and/or texting while driving, a new Highway Loss Data Institute study finds no reductions in crashes after hand-held phone bans take effect. Comparing insurance claims for crash damage in 4 US jurisdictions before and after such bans, the researchers find steady claim rates compared with nearby jurisdictions without such bans. The Highway Loss Data Institute (HLDI) is an affiliate of the Insurance Institute for Highway Safety.

HLDI researchers calculated monthly collision claims per 100 insured vehicle years (a vehicle year is 1 car insured for 1 year, 2 insured for 6 months each, etc.) for vehicles up to 3 years old during the months immediately before and after hand-held phone use was banned while driving in New York (Nov. 2001), the District of Columbia (July 2004), Connecticut (Oct. 2005), and California (July 2008). Comparable data were collected for nearby jurisdictions without such bans. This method controlled for possible changes in collision claim rates unrelated to the bans—changes in the number of miles driven because of the economy, seasonal changes in driving patterns, etc.

Month-to-month fluctuations in rates of collision claims in jurisdictions with bans didn't change from before to after the laws were enacted. Nor did the patterns change in comparison with trends in jurisdictions that didn't have such laws.

"The laws aren't reducing crashes, even though we know that such laws have reduced hand-held phone use, and several studies have established that phoning while driving increases crash risk," says Adrian Lund, president of both the Insurance Institute for Highway Safety and HLDI. For example, an Insurance Institute for Highway Safety study that relies on driver phone records found a 4-fold increase in the risk of injury crashes. A study in Canada found a 4-fold increase in the risk of crashes involving property damage. Separate surveys of driver behavior before and after hand-held phone use bans show reductions in the use of such phones while driving.

The HLDI database doesn't identify drivers using cell phones when their crashes occur. However, reductions in observed phone use following bans are so substantial and estimated effects of phone use on crash risk are so large that reductions in aggregate crashes would be expected. In New York the HLDI researchers did find a decrease in collision claim frequencies, relative to comparison states, but this decreasing trend began well before the state's ban on hand-held phoning while driving and actually paused briefly when the ban took effect. Trends in the District of Columbia, Connecticut, and California didn't change.

"So the new findings don't match what we already know about the risk of phoning and texting while driving," Lund points out. "If crash risk increases with phone use and fewer drivers use phones where it's illegal to do so, we would expect to see a decrease in crashes. But we aren't seeing it. Nor do we see collision claim increases before the phone bans took effect. This is surprising, too, given what we know about the growing use of cell phones and the risk of phoning while driving. We're currently gathering data to figure out this mismatch."

HLDI researchers compared the District of Columbia's collision claim frequency trend not only with statewide trends in Virginia and Maryland but also with the trend in the nearby city of Baltimore. Again, the finding is no difference in the pattern of collision claims. Nor were

any differences apparent when the researchers applied a time-based regression model to claims data for each of the study and comparison jurisdictions.

Lund points to factors that might be eroding the effects of hand-held phone bans on crashes. One is that drivers in jurisdictions with such bans may be switching to hands-free phones because no US state currently bans all drivers from using such phones. In this case crashes wouldn't go down because the risk is about the same, regardless of whether the phones are hand-held or hands-free. Twenty-one states and the District of Columbia do prohibit beginning drivers from using any type of phone, including hands-free, but such laws are difficult to enforce. This was the finding in North Carolina, where teenage drivers didn't curtail phone use in response to a ban, in part because they didn't think the law was being enforced.

"Whatever the reason, the key finding is that crashes aren't going down where hand-held phone use has been banned," Lund points out. "This finding doesn't auger well for any safety payoff from all the new laws that ban phone use and texting while driving."

This study clearly questioned the viability and effectiveness of laws banning hand-held cell phone use but, as stated in the press release, may also substantiate the findings of the National Safety Council and others that the distracted behavior is not just holding the phone but engaging in conversation. None of the states currently enforcing cell phone bans while driving includes hands-free devices in the laws. California and Massachusetts are the only two states in the country that have a law specifically prohibiting transit bus drivers from using any cellular devices, including hands-free phones, while operating a vehicle.

Steve Vidal of New York City Transit (NYCT) also pointed out that, from that agency's research, legislated bans on the use of hand-held phones did not necessarily result in commensurate enforcement. He also noted that HDLI has been silent on how, or even if, enforcement had been studied.

Another white paper that addressed cell phone usage while operating transit vehicles was written by Michael Conlon of Metro Transit and published in 2011 (11, pp. 25–29). The paper contains a brief historical overview of the problems in transit within the United States, some international trends, and tables for estimating probability and severity.

The Research and Innovative Technology Administration of the U.S.DOT sponsored a survey, conducted by the University of California at Berkley (12, pp. 1–10), to identify existing commercial technology, applications, products,

and services on the market that are related to "geofencing," which in this case is technology that reduces distracted driving caused by mobile-phone usage while driving.

TRAINING

The literature review identified three training programs specifically designed for and/or marketed to transit systems:

- "Curbing Transit Operator Distracted Driving" developed initially by the Florida DOT and CUTR at the University of South Florida was then modified in a collaborative effort with the TSI and offered under FTA sponsorship as a 30-minute online course. The Instructor Guide is reproduced in Appendix D. CUTR and TSI plan on offering an instructor-led version of a train-the-trainer course in the near future.
- "Distracted Driving: At What Cost?" Transit Version was developed by Aurora Pictures in Minneapolis. The course is a 14-minute video-based program commercially available directly from Aurora or from several training material suppliers.
- Metro Transit worked with Aurora in 2008 and produced a modified version of the "Distracted Driving: At What Cost?" video and training program specifically for its needs, with additional footage and dialogue to make it relevant to Metro Transit bus operators.

SUMMARY

The literature review process did identify a few resources to help guide and/or support the development of an agency-based program to deter distracted driving behaviors and to reduce the number and frequency of distractions under agency control. The training materials, particularly the program developed and offered through CUTR and TSI, offer transit systems a relatively easy-to-implement program that can begin addressing the issue of problematic behaviors contributing to distract driving. Based solely on content, the CUTS/TSI course and the two APTA recommended practices are the most comprehensive resources for the transit industry because they were all developed specifically for this sector and cover the full range of behavioral and environmental factors that cause or contribute to distracted driving.

CHAPTER THREE

SURVEY FINDINGS**INTRODUCTION**

As part of the study, an online link to a 60-question survey was sent to 39 individuals, 35 transit system representatives from operations, safety, or administration, and four local labor union officers, representing a total of 35 transit systems. Thirty-three agency representatives and three labor union officers responded (92%). As previously mentioned, the responses from the three labor union officers were very much in line with their respective management counterparts (approximately 90%); hence the universe of participants will be limited to 33. However, the follow-up interviews with the labor representatives did provide insightful observations and will be discussed, as appropriate, in chapter four: Case Examples.

BASIC SURVEY DATA

Table 3 shows the geographical dispersal—over 20 states—of the 33 participating agencies represented by staff and local labor union officials. Agencies ranged in size from New York City Transit, which employs 12,000 bus operators, to Chittenden County Transportation Authority in Burlington, Vermont, which provides suburban and rural fixed-route and on-demand services with 66 operators. The breakdown of services provided by surveyed systems is illustrated in Figure 1.

DEFINITIONS AND ASSESSMENT

Each system was asked if it had a definition of distracted driving behaviors. All participants responded to the question, with 19 saying that they did have a definition and 14 acknowledging they did not. If the agency did have one, respondents were asked to provide a copy. Three submitted copies of their policies containing their definition, and eight others entered the definition into the survey. The definitions submitted in the survey are listed here:

- Any non-driving activity that takes the focus away from the primary task of driving
- Cell phone [use], eating, excessive conversation, texting, and [use of] electronic devices
- Inattention to duty by any employee
- We recreate various distractions in our simulator which the operators can experience.
- The closest thing we have to this is an executive order which states: Transit employees shall operate agency

vehicles defensively in an effort to reduce risk and with a goal of zero accidents. While operating agency vehicles, all employees will . . . keep their minds focused on the task of driving. Eating, drinking, talking on a radio and with passengers distracts even the most seasoned driver.

- Any activity, electronic device, or other form of communication not associated with an operator's normal expected duties and tasks while on the road as outlined in the operator's handbook, which interferes with an operator's ability to provide 100% focus to the safe operation of his or her bus while en route, or that interferes with an operator's ability to be attentive to customers' needs shall be considered a distraction.
- Distracted driving is a specific type of inattention that occurs when a driver diverts attention from the driving task to focus on some other activity instead. Examples of distracted driving include texting while driving, talking on a cell phone, adjusting music, distractions with children or pets, eating, drinking, checking messages, or other activities that take your focus off driving.
- A distraction is anything that takes your eyes off the road ahead or your mind-focus away from your job of safety operating the bus.

Eight of the agencies surveyed reported that bus operators were included in the development and/or review phases of creating their definition.

Agencies were also queried about whether an assessment of the bus operators' work environment and behavioral patterns was conducted to determine the full universe of distracted driving hazards, contributing factors, and outcome. Twenty-five had conducted such an assessment and 21 had included representatives from the bus operator workforce in the assessment process.

STATE LAWS AND AGENCY POLICIES

Of the 20 states represented in the survey, seven have laws banning cell phone use for calls and texting while driving a motor vehicle. Nine have laws addressing only texting while driving and four have no laws restricting or prohibiting the use of cell phones by transit bus operators. Arizona has a law prohibiting cell phone use by school bus drivers and Missouri's law addresses texting by drivers 21 or younger. Ohio and Florida have no laws restricting or prohibiting cell phone use and/or texting for any drivers of any age.

TABLE 3
AGENCIES PARTICIPATING IN THE PROJECT SURVEY

State	No. of Agencies That Responded to the Survey
Arizona	1
California	4
Colorado	1
Connecticut	1
Florida	4
Georgia	1
Illinois	2
Maryland	1
Massachusetts	2
Minnesota	1
Missouri	1
New York	2
North Carolina	1
Ohio	3
Oregon	1
Pennsylvania	3
Utah	1
Vermont	1
Virginia	1
Washington	1
Total	33

As previously mentioned in the report, California and Massachusetts have laws specifically banning any cell phone use, hand-held or hands-free, by transit bus operators while operating a vehicle. Participants in Florida, Pennsylvania, Arizona, and Washington reported that there were laws in their states prohibiting local governments—or transit systems affiliated with local governments—from passing laws or creating regulations beyond what is, or, in Arizona and Florida, what is not covered in the state law.

All of the systems but one had specific rules pertaining to the possession and/or use of cell phones while operating a bus, but only six of the agencies specifically prohibit operators from carrying a cell phone while on duty. Twenty-one of the participating systems require an operator carrying a cell phone to have the power turned off while driving. Six agencies have a policy that limits or prohibits the use of hand-held phones while allowing the use of hands-free devices. Four of the participating agencies issue cell phones to their operators. Procedures for family members to contact operators through the control center, in the event of an emergency, are in place in 29 of the 33 systems.

Rules addressing other distracting behaviors were also included in the survey. Table 4 lists the types of behavior and the number of participating agencies that have rules prohibiting operators from engaging in those activities while driving a vehicle.

Thirty of the 33 agencies, or 91%, also have rules that address passenger behavior and conduct that could be distracting, such as attempting to question or converse with the operator while he or she is driving. All 33 systems post these rules on the bus; in some cases they are also on the agency’s website and/or on printed bus maps/guides. The “first offense” penalties for violating these rules range from nothing to a 30-day prohibition from riding the bus. The most common are verbal warnings delivered by the operator and/or a street supervisor.

Nineteen of the agencies (58%) have instituted a formal process to measure the effectiveness of distracted driving policies, incorporating, but not limited to, a reduction of distracted driving incidents, operator retention rates, and on-time performance statistics. Employee or labor union

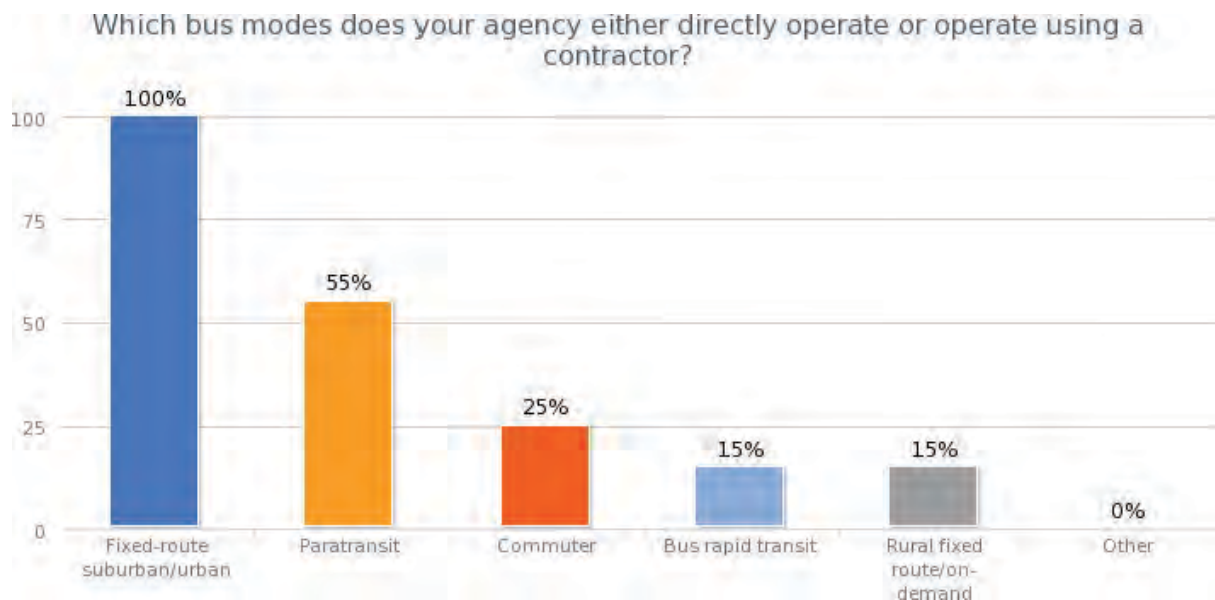


FIGURE 1 Distribution of bus operation modes within participating agencies.

TABLE 4
DISTRACTED DRIVING BEHAVIORS PROHIBITED BY
PARTICIPATING AGENCIES

Behavior/Activity: While Bus Is Moving	No. of Agencies Prohibiting the Activity
Use of hand-held cell phones	32
Use of hands-free cell phone	26
Use of hand-held radios	24
Eating	29
Drinking (water, coffee, soft drinks, etc.)	29
Using an MP3 player with headphones	30
Using an MP3 player without headphones	30
Having a conversation with passengers	26

TABLE 5
METHODS OF REPORTING OR ENFORCING DISTRACTED DRIVING RULES

Method of Reporting or Enforcement	No. of Systems Using This Method
Direct street supervisors to look for distracted behavior policy violation	31
Use on-board cameras to enforce distracted driving policies	24
Use on-board cameras to investigate reports of distracted driving policy violations	27
Use stop-light and/or traffic cameras to enforce distracted driving policies	6
Use stop-light and/or traffic cameras to investigate reports of distracted driving policy violations	6
Encourage passengers to report distracted driving behaviors demonstrated by operators	26
Provide passengers with a specific contact number for reporting operators demonstrating distracted driving behaviors	29

representatives are part of the assessment process at seven (21%) of the systems.

REPORTING AND ENFORCEMENT

The systems in the study use a variety of methods to report, investigate, and enforce cell phone and other distracted driving behavior rules, as illustrated in Table 5. The survey identified specific enforcement methods and the number of systems using each. As such, transit agencies participating in the survey could be included more than once. As the table illustrates, the most common methods are the use of supervisors, passenger reports, and on-board cameras.

“First offense” penalties for operators who violate cell phone rules range from written warnings to termination. At some agencies, these rules also include some or all other distracted driving behaviors. At one participating agency, the use of any personal electronic device (PED) is considered the same as using a cell phone and therefore the penalties are the same; however, eating or drinking while operating a bus on this system is not included in the policy and so is not punished at all. At another participating system, drinking a bottle of water or cup of coffee while operating a bus is considered as egregious as talking or texting on a cell phone and is punished equally, while yet another system provides cup holders installed on their buses for the operators. Even the four systems that issue cell phones to their operators have policies and rules identifying and governing the use and misuse of the agency-issued phones.

Table 6 lists the first-offense penalties and the number of systems enforcing specific penalties. This table only covers policies that specifically include cell phone use, and in some cases, possession of a phone. Each system that has a policy—32 of the 33—is included. Some of the systems use a combination of penalties, such as a written warning and a one- or five-day suspension; in those cases, the more severe penalty—a suspension as opposed to a warning—is listed. None of the systems is counted more than once.

All of the 33 participating agencies have some mechanism with which to document and address distracted driving behaviors and activities other than cell phone use or possession; these penalties tend to be much more lenient. Only two systems in the study use consistent disciplinary actions for

TABLE 6
FIRST-OFFENSE PENALTIES FOR CELL PHONE
RULE VIOLATIONS

Cell Phone Violation First-Offense Penalty	No. of Systems
Written warning	8
1-day suspension	2
3-day suspension	1
5-day suspension	3
10-day suspension	2
20-day suspension	6
30-day suspension	1
Variable suspension (typically 5 to 20 days)	4
Termination	3
Other	2
Total	32

TABLE 7
FIRST-OFFENSE PENALTIES FOR DISTRACTED DRIVING (NON-CELL PHONE)
RULE VIOLATIONS

Distracted Driving Behavior Rule Violation First-Offense Penalty	No. of Systems
Counseling	7
Written warning	13
5-day suspension	6
Progressive discipline	2
Other	5
Total	33

policies specifically addressing cell phone usage/possession and policies addressing other distracted driving activities: Both use 5-day suspensions. Several agencies classify distracted driving behaviors other than cell phone use and possession as safety infractions and not as rule or policy violations, leading to the implementation of less harsh penalties.

The types of penalties and number of agencies that apply them for first non-cell phone violations are listed in Table 7. Each system is represented only once, and in cases where there may be a combination of interventions and/or penalties, the most severe penalty within that combination is identified.

Many of the agencies have a progressive-discipline process that considers other rules violations and work history when determining punitive actions. All but one of the 33 systems participating in the survey also have a process for operators to explain their behaviors and/or appeal or grieve decisions.

Survey responses indicate that new or revised policies regarding cell phones or distracted driving behaviors are communicated to operators in a variety of ways. The most common

methods are through training programs, the issuance of new SOP manual/rule-books or revisions, and postings or bulletins.

TRAINING PROGRAMS AND PROACTIVE MEASURES

Every system in the study but one has a training program that addresses distracted driving behaviors and consequences. The training is delivered to new operators at all of the systems and to existing operators at every agency but two. The chart (Figure 2) identifies the specific behaviors covered in the training programs:

Of the 32 training programs, 27 (84%) discuss laws, policies, and punitive actions; all cover the real-world consequences such as accidents, fatalities, injuries, and extensive property damage. The courses came from a variety of sources: 17 (53%) customized or modified acquired programs; 10 (32%) developed its materials internally; and five (16%) use unmodified, commercially available training packages.

Other agencies have taken steps to address behaviors as well as environmental factors contributing to distract driving.

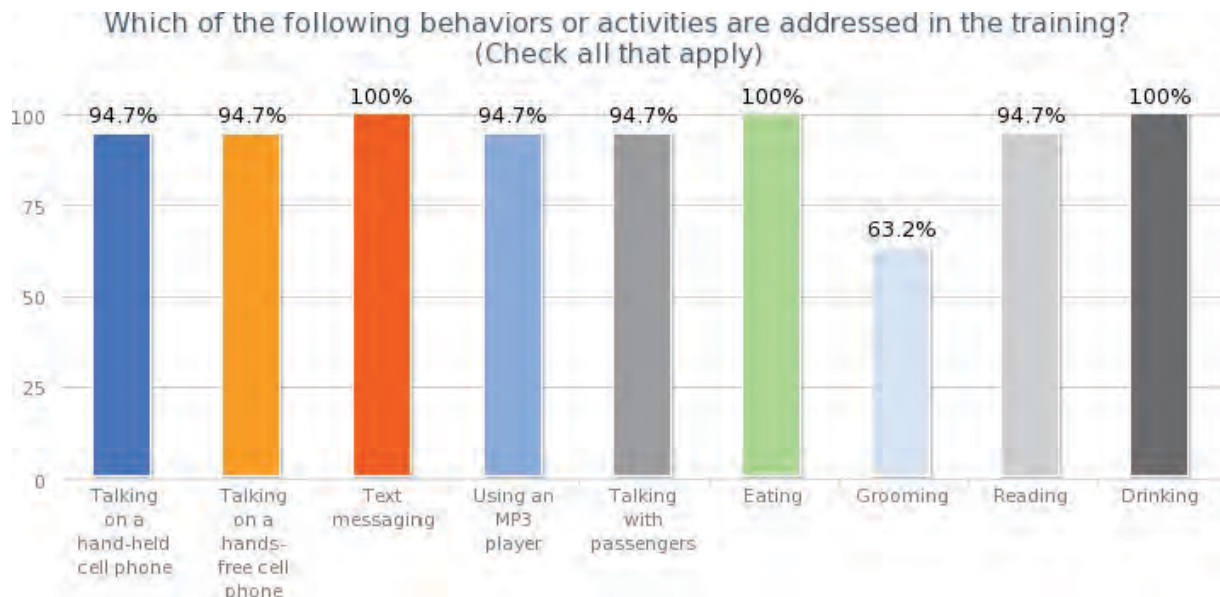


FIGURE 2 Distracted driving behaviors addressed in agency training programs.

TABLE 8
MITIGATION ACTIONS TO ADDRESS DISTRACTED DRIVING BEHAVIORS AND CONDITIONS

Mitigation Action	No. of Systems
Examine and/or modify schedules to allow for sufficient time during breaks to eat and use restroom facilities	30
Examine on-board duties such as fare collection, making announcements/calling stops, and communicating with passengers and the control center to identify possible modifications	24
Modify or remove one- or two-way communication or alarm devices, monitors, and other instruments from the operator's work-space to reduce operator distractions	9
Install software or hardware on buses to interrupt/prevent cell phone signal transmission	0
Employ intervention or assistance programs for first-time violators, if allowed by law	18

Table 8 lists these actions and the number of systems in the study that are using them.

SUMMARY

Given the size of the industry sample, the data shows a wide range of policies, practices, and punitive actions in place at agencies, with no clear correlation between agency size and

geographic location. Further discussions with agencies that have taken steps to examine and modify operators' schedules, duties, and work spaces would be beneficial in identifying the process and results for such activities.

The information from the survey may also present justification for an industry-sponsored joint labor/management initiative to move toward some level of standardized practices and policies for like-sized systems and services.

CHAPTER FOUR

CASE EXAMPLES**NEW YORK CITY TRANSIT**

NYCT, an agency of the New York Metropolitan Transportation Authority (NYMTA), is the nation's largest transit system, operating both the largest subway system and the largest fleet of buses: 5,600 in 2011. Working out of 28 depots and garages, NYCT buses serve all five boroughs of New York City, with over 15,000 stops along 310 separate routes. The average daily ridership of NYCT buses in 2011 was 2.5 million, more than double that of the second largest system transit bus system in the country, Los Angeles.

The New York City Transit Authority was created by the state legislature in 1953 as a public corporation to manage and operate all city-owned bus, trolley, and subway routes. In 1968, the New York Legislature created the NYMTA to oversee transportation operations in 12 counties; it became the parent agency to NYCT.

Given the sheer size of the system and the service area, NYCT has always been challenged to manage risk through very proactive measures. In a system such as NYCT, a safety problem on one bus route or out of one bus depot could quickly become systemic and ultimately catastrophic, affecting public safety as well as mobility and the economy of the region. Unlike most transit bus systems, which can illustrate their service on one or two maps, NYCT issues a map for each borough. Any other approach would result in maps too large and cumbersome to use or printed in fonts too small to read. The five service maps are included to illustrate the extent of NYCT bus operations (Figures 3–7).

In 1995, NYCT initiated a performance monitoring program to address up to 5% of the bus operators involved in the highest number of collisions and/or customer accidents. The operators in this program typically experienced four or more incidents in a one-year period, or three or more incidents over a two-year period, involving at least one personal injury. This program utilizes “undercover rides,” performed by NYCT supervisors, to identify and report problematic behaviors specifically related to safety and customer relations. The goal of the program is not to discharge employees but to correct problems through re-training, counseling, and other response measures, followed by continued monitoring.

It was through this program that the role of cell phones in problematic behaviors became apparent. In response to this

growing trend, NYCT issued a permanent bulletin (Bulletin Order No. 02.34.00), dated January 31, 2000, from the Chief Transportation Officer to all managers, supervisors, bus operators, and “all concerned” on the subject of “Pager and Cellular Phone Restrictions.” The bulletin stipulated that pager messages must not be viewed while operating a bus, and that cellular phones must be turned off while operating a bus and must not be visible to the general public. This order stated that compliance was mandatory, and that operators in violation might be subject to disciplinary action. It also directed assistant general managers to ensure that all managers, supervisors, 19/A safety superintendants, and road operation dispatchers monitor bus drivers for compliance with the bulletin. The complete two-page bulletin is presented in Figure 8.

The bulletin was updated in February 2002 to clarify that cellular phones with hands-free devices were covered by the restriction. In April 2003, the order was updated again to reflect the implementation of new state laws restricting the use of cell phones while operating motor vehicles. The update also addressed emerging texting technology and activities. Although the earlier orders spelled out a process for the emergency notification of operators, the updated version also included a list of emergency contact numbers that operators could provide to persons who might need to contact them with an emergency message. Possibly the most significant addition to this version was the change in wording to state that operators who violate this order will be subject to disciplinary action. Typical penalties for violations of the cellular phone policy during this period were reprimands on the first offense followed by progressive disciplinary actions.

The order was updated again in November 2003 and July 2008 with clarifications and updated contact information but no significant changes in policy. Another update in November 2009 emphasized a statewide ban on texting while driving that became effective on November 1, 2009, forbidding all drivers from using mobile devices for reading, typing, and/or sending text messages from behind the wheel. This update also included language restricting the use of pagers, cellular phones—with or without a hands-free device—or any other PED. Through all of these versions, the order stipulated that, “At the terminal, after the bus has been properly secured, bus operators may view messages and use cellular phones, provided it does not contribute to or cause a delay of service or inconvenience customers.”



FIGURE 3 NYCT Bronx bus map (NYCT).

According to NYCT policy, this order was set to expire or “sunset” in August 2010 unless updated/reissued. In early 2010, recognizing that the existing policy failed to serve as a deterrent to continued use of cell phones, as well as the incidents in 2008 in California and 2009 in Boston, NYCT management notified the labor unions representing bus operators that it intended to let the existing regulation/order sunset and implement a zero-tolerance policy concerning cell phone and PED use.

In August 2010, an arbitration was conducted in Maryland between the Maryland Transit Administration and an

operator who violated that agency’s cell phone policy. The arbitrator sided with the agency, and the resulting documents from the arbitration case, including a copy of the existing MTA policy, provided the groundwork for developing a fair and defensible policy. A copy of the MTA policy is included in Appendix G. In December 2010, NYCT issued another update stating that, “Effective Wednesday, January 12, 2011, a *ZERO TOLERANCE* policy will be in effect for bus operators found to be in violation of the pager, cellular phone, and personal electronic device restrictions specified in this bulletin.” Absent from this bulletin was the



FIGURE 4 NYCT Brooklyn bus map (NYCT).



FIGURE 5 NYCT Manhattan bus map (NYCT).

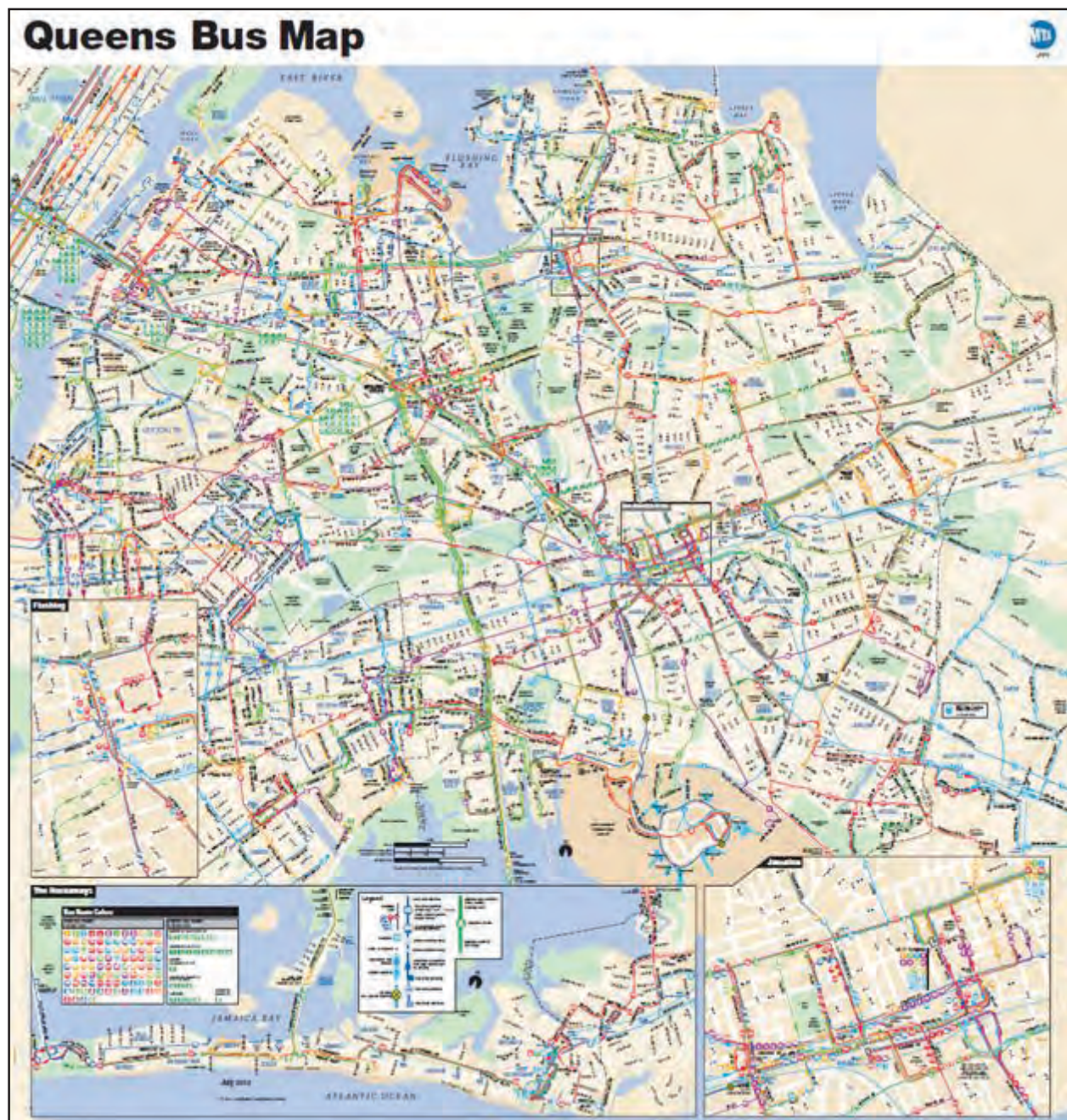


FIGURE 6 NYCT Queens bus map (NYCT).



FIGURE 7 NYCT STATEN Island bus map (NYCT).

Permanent Bulletin

January 31, 2000

To: Managers, Supervisors, Bus Operators and All Concerned

From: 
 K. Jennifer Sinclair, Chief Transportation Officer

Subject: **PAGER AND CELLULAR PHONE RESTRICTIONS**

The use of pagers and cellular phones is restricted while operating a bus. Pagers and cellular phones can cause distractions that reduce an operator's ability to operate a bus safely. Furthermore, these devices can interfere with customer service. Operators, with pagers and cellular phones in their possession, are to strictly adhere to the following restrictions:

- Pager messages **MUST NOT** be viewed while operating a bus.
- Cellular phones **MUST** be turned off while operating a bus and **MUST NOT** be visible to the general public.

Note: At the terminal, after the bus has been properly secured, bus operators may view pager messages and use cellular phones, provided this does not contribute to or cause a delay of service or inconvenience customers.

While pagers and cellular telephones represent a way for operators to receive transmissions, these pages and messages may momentarily disrupt an operator's concentration. Consequently, bus operators must keep their cellular phones shut off and minimize all pager activity while operating a vehicle. Operators should inform persons who might want to contact them with an emergency message to call their respective crew dispatcher's office.

Procedures and resources at the crew dispatcher's disposal enable a coordinated, rapid and appropriate response to an emergency, which include removing an operator from service. A rapid and appropriate response will allow the bus operator to quickly and safely attend to the emergency while minimizing customer disruption.

Critical and timely responses can only be executed when proper notification is given to the crew dispatcher. Crew dispatchers receiving notification should process emergency messages according to the following procedures:

ADMINISTRATION/PERSONNEL

Bulletin Order No. 02.34.00

FIGURE 8 NYCT permanent bulletin—Bulletin order no. 02.34.00 (NYCT).
 (continued)

language that clarified when/where cell phone and pager use was permissible.

That order was revised less than two months later to include a definition of operating a bus: “actively driving the bus (i.e., bus moving or standing) in revenue or non-revenue service; sitting in the driver’s seat at any time with the bus engine on or off; servicing or assisting customers using the wheelchair lift or ramp.” The language which clarified when and where cell phone use was permissible was also revised and reinserted into the bulletin.

NYCT continued to enforce zero tolerance policy by means of “undercover rides.” In the first 18 months of enforcement, 13 operators were terminated and one, who was initially discharged, was reinstated following arbitration. The policy has also resulted in an 80% decrease in cell phone use rule violations. Although the policy gives NYCT the option to terminate an employee on the first offense, the standard process is for an employee who violates the rule to receive a 20-day suspension after the first offense and be terminated on the second offense. Additionally, road dispatchers may be subject to disciplinary

Pager and Cellular Phone Restrictions
 January 31, 2000
 Page 2

Personal Emergency Notification Procedure

- The crew dispatcher will identify whether the operator is on the property or on the road.
- If the bus operator is on the property, the crew dispatcher will notify the bus operator of the emergency message.
- In the event the operator is on the road, the Bus Command Center (BCC), with prior notification from the crew dispatcher, will communicate the emergency message to the operator via bus radio and/or initiate an appropriate response to the emergency.

Compliance with these restrictions is mandatory. Operators observed in use of a pager or cellular phone while operating a bus may be subject to disciplinary action. Assistant General Managers will ensure that all Managers, Supervisors, 19A/Safety Superintendents, and Road Operation Dispatchers monitor for compliance with this bulletin.

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ADMINISTRATION/PERSONNEL

Bulletin Order No. 02.34.00

FIGURE 8 (Continued).

actions for failing to report/document operator violations that they witness. A copy of the revised bulletin dated February 3, 2011, minus the specific agency contact numbers, is shown in Figure 9.

NYCT has also been using the relatively new 30-minute online training course developed by CUTR and now delivered by the FTA through TSI. The feedback from operators, supervisors, and managerial-level employees who have taken the course, “Curbing Transit Operator Distracted Driving,” has been very positive, indicating that the program addresses both rules compliance and the behavioral/cultural shifts necessary to reduce distracted driving.

METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

MARTA was created by the Georgia state legislature in 1965. Although the initiative was originally spurred on by plans for a regional rapid transit rail system, it was not until 1972 that MARTA was in a position to purchase the Atlanta Transit System and take control of the area’s primary bus transportation system. Today MARTA operates more than 500 buses, serving more than 740 stops along 91 routes throughout the City of Atlanta and Fulton and DeKalb counties. Annual bus ridership on MARTA in 2009 was over 72 million, making it the 16th-largest public transit bus system in the country.

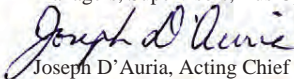


Permanent Bulletin

*** REVISED ***

February 3, 2011

To: Managers, Supervisors, Bus Operators and All Concerned

From:  Joseph D' Auria, Acting Chief Transportation/Labor Relations Officer

Subject: **PAGER, CELLULAR PHONE, AND PERSONAL ELECTRONIC COMMUNICATION DEVICE RESTRICTIONS**

For safe vehicle operation, New York State Law places restrictions on the use of cellular phones while driving. *This includes a statewide ban on texting-while-driving that forbids drivers from using mobile devices for reading, typing and/or sending text messages behind the wheel.*

Safety is the first priority when operating buses and other Metropolitan Transportation Authority (MTA) vehicles. When operating MTA vehicles, all employees must obey the laws governing cellular phone use. Although New York State Law does not restrict hands-free cellular phone use while driving, the MTA imposes even greater restrictions to ensure public safety.

A ZERO TOLERANCE policy is in effect for bus operators found to be in violation of the pager, cellular phone and personal electronic communication device restrictions specified in this bulletin. Pagers, cellular phones, and personal electronic communication devices can cause distractions that reduce an operator's ability to operate a bus safely. Furthermore, the use of such devices can interfere with an operator's responsibility to provide quality customer service.

Bus operators with pagers, cellular phones and personal electronic communication devices in their possession, must adhere to the restrictions specified in this bulletin while operating buses. Operating a bus is defined as: actively driving the bus (i.e., bus moving or standing) in revenue or non-revenue service; sitting in the drivers seat at any time with the bus engine on or off; servicing or assisting customers using the wheelchair lift or ramp. The pager, cellular phone and personal electronic communication device restrictions are as follows:

- **While operating a bus, operators MUST NOT use pagers, cellular phones (with or without a hands-free device) or any other personal electronic communication device.**
- **While operating a bus, cellular phones, pagers and personal electronic communication devices MUST NOT be carried in any manner in which they are visible to supervision or the general public.**
- **Cellular phones, pagers and personal electronic communication devices MUST be turned off while operating a bus.**

ADMINISTRATION/PERSONNEL

Bulletin Order No. 02.34.06

FIGURE 9 NYCT permanent bulletin—Bulletin order no. 02.34.06 (NYCT).
(continued)

Pager, Cellular Phone, and Personal Electronic Communication Device Restrictions
 February 3, 2011
 Page 2

Restrictions (cont'd)

- Any text message, voice mail, e-mail or other pager/cellular phone message, **MUST NOT** be viewed or acknowledged while operating a bus.
- Hands-free audio devices for telephones, pagers and/or other equipment **MUST NOT** be used, worn, or displayed while operating a bus. Such devices include, but are not limited to: earpieces, earphones, headphones, mouthpieces, etc.

Note: At the terminal, after the bus has been properly secured, bus operators may view messages and use cellular phones, provided this does not contribute to or cause a delay of service or inconvenience customers.

Personal Emergency Notification Procedure

Bus operators should direct persons who may need to contact them in an emergency to call their respective crew dispatcher's office. If they are unable to reach the crew dispatcher, they should contact the respective Bus Command Center (BCC) console dispatcher. **The depot crew dispatcher and BCC console phone numbers are provided in this bulletin (see page 3). Bus operators should write their name, employee ID number and depot in the spaces provided on page 3 and give a copy to the persons who may attempt to contact them.**

A rapid and appropriate response will allow the bus operator to quickly and safely attend to the emergency while minimizing customer disruption. Critical and timely responses can only be executed when proper notification is given to the crew dispatcher or the BCC console dispatcher. Crew dispatchers and BCC console dispatchers receiving notification should process emergency messages according to the following procedures:

- The dispatcher will identify whether the operator is on the property or on the road.
- If the bus operator is on the property, the dispatcher will notify the bus operator of the emergency message.
- In the event the operator is on the road, the BCC will communicate the emergency message to the operator via bus radio and/or initiate an appropriate response to the emergency. **Bus operators that are in service must be properly logged onto the bus radio to facilitate the BCC in locating them.**

Compliance with these restrictions is mandatory. Failure to fully comply will subject you to disciplinary action, up to and including dismissal in the first instance.

Personnel must be guided accordingly. All managers and supervisors will monitor to ensure full compliance with this bulletin.

ADMINISTRATION/PERSONNEL

Bulletin Order No. 02.34.06

FIGURE 9 (Continued).

Depot and Bus Command Center (BCC) Telephone Numbers

DIVISION	DEPOT	CREW DISPATCHER	CONSOLE (800#/866#)	CONSOLE (718#/516#)
BROOKLYN NORTH	Grand Avenue	(347) 694-1577	(800) 393-8909	(718) 927-7850
	East New York	(718) 927-7447	(800) 393-8911	(718) 927-7852
	Fresh Pond	(718) 334-8600	(800) 393-8909	(718) 927-7850
	Spring Creek	(718) 348-8690	(866) 561-8756	
BROOKLYN SOUTH	Flatbush	(347) 643-5702	(800) 393-8910	(718) 927-7851
	Ulmer Park	(347) 694-3447	(800) 393-8909	(718) 927-7850
	Jackie Gleason	(347) 643-5255/5256	(800) 393-8910	(718) 927-7851
QUEENS NORTH	Casey Stengel	(347) 694-1400	(800) 393-8912/8913	(718) 927-7853/7854
	La Guardia	(718) 565-3526/3527	(866) 561-8752	
	College Point	(718) 888-6010	(866) 561-8751	
QUEENS SOUTH	JFK Depot	(718) 553-4293	(866) 561-8754	
	Jamaica	(347) 694-3351	(800) 393-8912/8913	(718) 927-7853/7854
	Baisley Park	(718) 557-6800/6850	(866) 561-8753	
	Queens Village	(347) 694-2222	(800) 393-8912/8913	(718) 927-7853/7854
	Far Rockaway	(718) 318-3900/3901	(866) 561-8755	
STATEN ISLAND	Yukon	(347) 694-2505/2506	(800) 237-2490	(718) 927-7855
	Castleton	(718) 273-1790	(800) 237-2490	(718) 927-7855
	Meredith	(347) 694-2640	(800) 237-2490	(718) 927-7855
	Charleston	(347) 694-2697/2698	(800) 237-2490	(718) 927-7855
MANHATTAN	Manhattanville	(212) 712-4330/4331	(800) 393-8904	(718) 927-7845
	Michael J. Quill	(212) 712-5012/5013	(800) 393-8907	(718) 927-7848
	126 th Street	(212) 712-5620	(800) 393-8911	(718) 927-7852
	100 th Street	(212) 712-4662	(800) 393-8904	(718) 927-7845
	Gun Hill	(718) 430-4866	(800) 393-8906	(718) 927-7847
BRONX	Eastchester	(718) 696-3600	(866) 561-8757	
	Yonkers	(914) 964-7200/7201	(866) 561-8758	
	West Farms	(718) 319-7547	(800) 393-8905/8906	(718) 927-7846/7847
	Kingsbridge	(212) 544-3436	(800) 393-8908	(718) 927-7849
LONG ISLAND BUS	Norman J. Levy	(516) 542-0761	(800) 560-7425	(516) 542-1415
	Rockville Centre	(516) 763-4020	(800) 560-7425	(516) 542-1415

NAME	EMPLOYEE ID #	DEPOT

Bus operators should complete the above information and provide a copy of this page to the persons that may attempt to contact them in an emergency.

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ADMINISTRATION/PERSONNEL **Bulletin Order No. 02.34.06**

FIGURE 9 (Continued).

Like many transit system, MARTA experienced a convergence of external and internal situations which drove the issue of distracted driving to the forefront of their operations. The previously mentioned rail incidents in 2008 and 2009 were accompanied by a sharp rise in customer complaints, media reports, and incidents regarding MARTA bus and rail operators demonstrating various distracted driving behav-

iors, including cell phone usage, eating and drinking, and reading.

Early in 2009, MARTA's general manager directed the Office of Safety to develop a policy addressing distracted driving behaviors in both bus and rail operations. In December of that year, MARTA issued the following news release:

System Updates

FOR IMMEDIATE RELEASE CONTACT: Cara Hodgson
December 31, 2009 404-848-5157

MARTA Revises Effective Date for New Distraction Avoidance Policy

MARTA has revised the effective date of its new distraction avoidance policy to February 1, 2010, to ensure the successful implementation of what is one of the strictest such policies in the nation. Given the stringent and comprehensive nature of the policy, it's critical that the approximately 4,500 employees who are covered by it fully understand its provisions and the consequences of noncompliance.

MARTA's current policies governing distracted activities will remain in effect until February 1, 2010, and any violations will result in the appropriate disciplinary action.

MARTA approved its zero-tolerance distraction avoidance policy on December 10, 2009, reinforcing its long-standing commitment to ensuring the safety of customers, employees and the general public. The new policy will apply to nearly every MARTA employee – including bus, rail and mobility van operators who carry passengers. In addition, the policy will cover employees operating “non-revenue” vehicles such as staff cars, trucks, and moving equipment as well as those performing safety sensitive functions. MARTA employees operating personal vehicles while conducting Authority business are also subject to the new policy.

Distractions include, but are not limited to, the use of cell phones and other electronic devices, eating, drinking, reading, reaching for fallen items, and other activities that take attention away from driving or operating equipment. After an investigation of a distracted driving incident, MARTA employees who are found to have violated the policy will face immediate termination.

Owing to the specialized training and national certification that MARTA Police officers receive, they are exempt from the electronic device provisions.

While bus and rail public transit services remain one of the safest modes of transportation, a series of high-profile mass transit accidents across the country linked to distracted driving—including several that resulted in fatalities—have underscored just how serious this threat has become to safe operations. In response, MARTA toughened its distracted driving policy based on a review of these incidents as well as recommendations made by the U.S. Department of Transportation Federal Transit Administration (FTA).

While implementing the policy in rail operations has required some modifications, the implementation of the original policy into the bus system, which became effective on February 1, 2010, has not been changed or revised. Since its implementation, there have been fewer than 20 violation incidents in bus operations and no bus incidents in which distracted driving activities played a primary or secondary role. The negative media reports have ceased and the number of customer complaints about distracted driving behaviors has dropped significantly.

Both the labor union representative and the safety department official from MARTA who participated in the survey reported that there has been a significant change in the culture regarding distracted driving and that bus operators, as well as other employees, take it very seriously. Both participants cited cases of peer enforcement, in which drivers have reminded other operators about the rules and/or have pointed out behaviors or actions before they became reportable offenses. The policy applies whether employees are operating a revenue or non-revenue agency vehicle.

Any employee found in violation of the rule prohibiting the use of cell phones or PEDs, eating, drinking, reading,

smoking, or any other distracting behaviors while operating a vehicle are subject to discharge on the first offense. Violators of the policy prohibiting employees from carrying cell phones, PEDs, or drinks or food while operating a vehicle are given a five-day suspension after the first offense and discharged after the second offense.

A MARTA system map, including bus and rail operations, is reproduced in Figure 10, and a copy of the MARTA Distraction Avoidance Policy in Figure 11.

METRO TRANSIT

Metro Transit traces its roots back to 1967, when the Minnesota State Legislature created the Metropolitan Transit Commission. In 1994, its operations were transferred to the Metropolitan Council, which was created by legislative action to serve as a regional government agency and metropolitan planning organization to serve the seven-county metropolitan area of Minneapolis and Saint Paul. In 1998, the name was officially shortened to Metro Transit. Metro Transit's bus operations are the outgrowth of its 1970 acquisition of the private Twin City Lines bus company.

Map Legend

MARTA Buses

- Bus Route
- Park-and-ride
- Nonstop express

MARTA Rail

- Rail Line and station, no parking
- Station with free daily parking
- Station with long-term and free daily parking

Symbols

- Landmark
- Hospital
- Park and Ride
- Interstate
- US Highway
- State Highway
- Express and Limited (Blue Rapid Transit)

© January 2012 Metropolitan Atlanta Rapid Transit Authority

marta SYSTEM MAP

COLLEGES AND UNIVERSITIES

- Agnes Scott College
- Atlanta Area Technical School
- Atlanta Christian College
- Atlanta Metropolitan College
- Columbia Theological Seminary
- GA Perimeter College Cherokee
- GA Perimeter College Dunwoody
- GA Perimeter College Decatur
- Emory University
- Morehouse College
- Oglethorpe University

CULTURAL FACILITIES

- Atlanta History Center
- Calumet Fine Art
- Center for Puppetry Arts
- DeKalb County Library-Decatur
- Lakewood Amphitheater
- Michael C. Carlos Museum
- Perimeter Center
- Riverside Mall

HOTELS AND MOTELS

- Crowne Plaza Airport
- Crowne Plaza Reams
- Days Inn Airport South
- Doubletree Atlanta Buckhead
- Embassy Suites-Buckhead
- Hyatt Atlanta Airport
- Holiday Inn-Airport North
- Holiday Inn-Decatur
- Holiday Inn-Perimeter
- Lenox Inn
- Marriott Airport
- Marriott JW at Lenox
- Marriott Perimeter Center
- Grand Hyatt Atlanta
- Ritz-Carlton Buckhead
- Sherraton Airport
- Sherraton Buckhead
- Renaissance Airport
- Westin Buckhead
- Westin Airport

MEDICAL FACILITIES

- Decatur Hospital
- DeKalb Medical Center
- Children's Healthcare of Atlanta at Egleston
- Emory University Hospital & Clinic
- Georgia Regional Hospital
- North Fulton Medical Center
- Northside Hospital-Atlanta
- Charter Healthcare
- Piedmont Hospital
- St. Joseph's Hospital
- Children's Healthcare of Atlanta at Scottish Rite Hospital
- Dunwoody Medical Center
- Shepherd Special Center
- South Fulton Medical
- Southwest Medical Center
- W.T. Brooke Medical Center
- Veterans Administration Hospital

PARKS AND RECREATION

- Anderson Park
- Atlanta Memorial Park
- Buckhead Park
- Murray Center Park
- Chastain Memorial Park
- Lakewood Stadium
- Midtown Park
- Six Flags Over Georgia
- Stone Mountain Park
- John A. White Park
- Georgia International Convention Center

SHOPPING CENTERS

- Ansley Mall
- Atlantic Station
- Beltwood Plaza
- Camp Creek Marketplace
- DeKalb Farmers Market
- Greentree Mall
- Lenox Square
- Lindbergh Plaza
- Peachtree Center Shopping Center
- North Decatur Mall
- Northside Plaza
- Northlake Mall
- North Point Mall
- Outlet Square Mall
- Perimeter Mall
- Phlips Plaza
- Sally's at South DeKalb
- Suburban Plaza
- Mall at Stone Mountain
- Cumberland Mall
- Union Station Mall

TRANSPORTATION FACILITIES

- Amtrak-Peachtree Station
- Charlie Brown Fulton Airport Park
- DeKalb Peachtree Airport
- Hartsfield-Jackson International Airport
- MARTA Headquarters (Lindbergh Center Station)

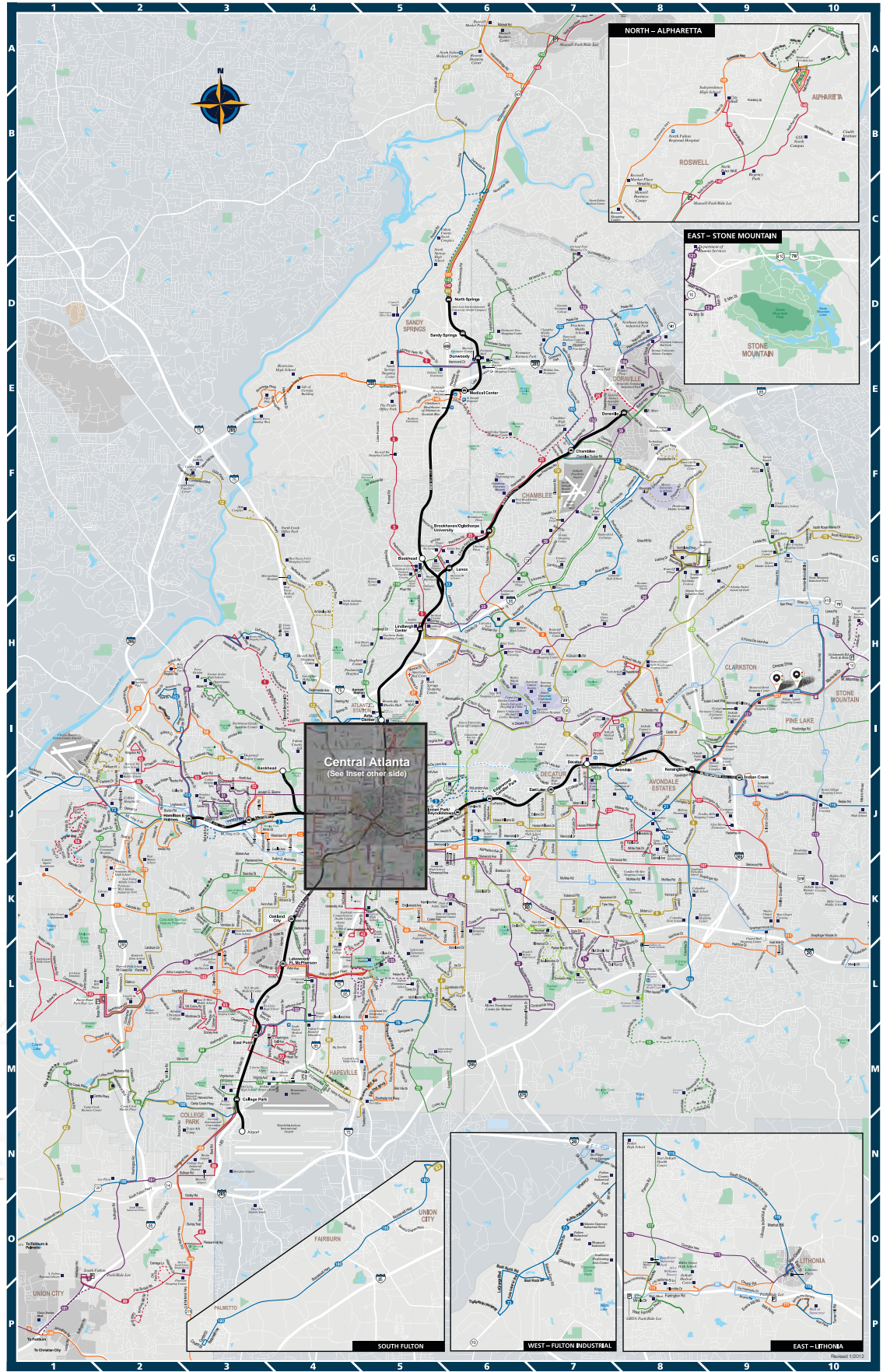

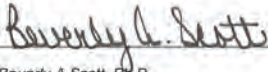


FIGURE 10 MARTA system map (MARTA).

		POLICY	ISSUE DATE 01-04-2010 EFFECTIVE DATE 02-01-2010	POLICY NO. 10.1.69	Page 1 of 7
NAME: DISTRACTION AVOIDANCE					
ISSUING DEPARTMENT:	Office of Safety				
PREPARED BY:	Timothy K. White, Acting Executive Director, Office of Safety				
APPROVED BY:	 Beverly A. Scott, Ph.D. GM/CEO		1/5/2010 Date		
SUPERSEDES:	This policy supersedes any existing policies, notices, bulletins, or rules that contain language regarding restrictions for use of cellular phones and other personal electronic equipment, eating, drinking, smoking and other distracting behavior while operating vehicles or equipment or performing safety critical functions.				

I. Background

Operator distraction is a diversion of attention away from activities critical for safe operation of vehicles, equipment and other safety critical functions. Inattention represents diminished attention to activities that are critical for safe driving.

Numerous studies have shown that distractions when operating trains, buses, motor vehicles, and equipment can lead to serious accidents. Recent public transportation accidents, including one that has claimed 25 lives, have prompted MARTA to actively re-emphasize the importance of remaining fully focused while operating a vehicle.

- Sept. 12, 2008 – Metrolink Commuter Train Crash – Train Engineer was text-messaging; 25 killed, 135 injured.
- May 8, 2009 – MBTA Green Line Train Crash – Train Engineer was text-messaging; 40 injured.
- 2000-2006 – Federal Railroad Administration identified six (6) train accidents where cellular phone usage was a factor; 4 of the accidents resulted in deaths.

On June 26, 2009, the Federal Transit Administration (FTA) issued a letter, urging all transit agencies to closely review their policies, procedures, and enforcement mechanisms targeting the inappropriate use of cellular phones and other personal electronic devices by safety critical personnel.

On September 30 & October 1, 2009, U.S. Transportation Secretary Ray LaHood hosted a summit in Washington, DC to address the dangers of text-messaging and other distractions behind the wheel. This series of meetings was attended by senior transportation officials, elected officials, labor officials, safety advocates, law enforcement representatives and academics where ideas about how to combat distracted driving were discussed.

FIGURE 11 MARTA Distraction Avoidance Policy (MARTA).



 POLICY	ISSUE DATE 01-04-2010 EFFECTIVE DATE 02-01-2010	POLICY NO. 10.1.69	Page 2 of 7
NAME: DISTRACTION AVOIDANCE			
<p>MARTA currently has rules and operating procedures that prohibit or restrict eating, drinking, smoking, reading, use of cell phones, use of other electronic devices and other distracting behaviors while operating vehicles because of the possible danger to passengers, the general public, and the employees themselves.</p>			
<p>While the use of cellular phones and other electronic devices is a growing cause of driver distraction, other types of distractions also have the potential to cause accidents when an employee's attention to their job is diverted.</p>			
II. General			
<p>All personnel are reminded that activity that distracts from the operation of a vehicle or equipment, or the performance of other safety critical functions, can be a hazard and may potentially lead to an accident. Distracted driving can result when performing an activity that shifts full attention from the driving or equipment-operating task.</p>			
<p>Engaging in activities that distract from the safe operation of a vehicle or equipment, or the performance of other safety critical functions is prohibited. Distractions include, but are not limited to, use of electronic devices, eating, drinking, smoking, reading, reaching for fallen items, and other activities that take attention away from driving or operating equipment. Safe driving and operation of equipment requires good judgment and focus. Managing all aspects of safe vehicle and equipment operation are important components of this policy and part of everyone's safety responsibilities.</p>			
<p>Electronic devices are defined as wireless and/or portable electronic handheld equipment that may be hands-free or not. This includes, but is not limited to, cellular phones, smartphones (including BlackBerry and iPhone), two-way pagers, portable internet devices, MP3 players, iPods, Bluetooth devices or any headphones or earbuds of any type, and any other portable electronic devices. Use of an electronic device includes, but is not limited to, making or receiving telephone calls, texting, playing games, reading, e-mailing, internet browsing, or listening to music or other audio content.</p>			
<p>Business communication during transit operations is an essential safety and operational function. MARTA-issued two-way radios and PTT-only (Push-To-Talk) cellular phones issued in lieu of a two-way radio are provided for this vital communication. Accordingly, these devices are to be used exclusively for business communication. Use of a MARTA issued two-way radio (or PTT-only cellular phone issued in lieu of a two-way radio) for communication necessary for the operation of the transit vehicle or equipment, or the performance of a safety-sensitive function is excluded from this prohibition. Personnel that have been issued two-way radios and personnel operating a vehicle equipped with a two-way radio must always use the radio as the primary business communications system.</p>			
A. Purpose			
<p>The purpose of this policy is to establish the regulations, guidelines, and disciplinary actions for all MARTA personnel related to avoiding unnecessary distractions while operating MARTA vehicles, operating personal vehicles while conducting MARTA business, operating equipment and performing other safety critical functions.</p>			
<hr/> <p style="text-align: center;">METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY www.itsmarta.com</p>			

FIGURE 11 (Continued).

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NAME: DISTRACTION AVOIDANCE				

B. Scope

This policy applies to all employees (represented and non-represented) including bus, paratransit (Mobility), and rail operators; personnel driving non-revenue vehicles; personnel driving personal vehicles while conducting MARTA business; operating MARTA equipment; and performing safety critical functions. MARTA vehicles and equipment includes vehicles and equipment rented or leased.

Electronic device provisions of this policy DO NOT apply to the MARTA Police (see Section III. F).

This policy supersedes all other existing policies, procedures, rulebooks or guidelines pertaining to avoiding distractions, including the use of cellular phones and other existing electronic devices, eating, drinking, smoking, and reading by MARTA personnel while operating MARTA vehicles and equipment.

C. Review

This policy will be reviewed by the Office of Safety annually or as circumstances dictate. Any supporting Rulebooks, General Notices, or Standard Operating Procedures (SOPs) will be updated to ensure consistency with this policy and its requirements.

III. Policy

A. Revenue Vehicles

An operator of a revenue vehicle is prohibited from engaging in activities that distract from safe operation of vehicles and equipment. Distractions include, but are not limited to, use of electronic devices, eating, drinking, smoking, reading, reaching for fallen items, and other activities that take attention away from driving or operating equipment.

Revenue vehicle operators may engage in activities such as using electronic devices, eating, drinking, reading, and so forth, provided the vehicle is parked in a safe location with the parking brake engaged. The exception is train operators who must exit the operator's cab before engaging in any prohibited activity. Smoking in revenue vehicles is prohibited at all times. In case of an emergency, or if radio communications fail, a personal cellular phone may be used as backup only if the vehicle is safely stopped and secured.

Vehicle operators are NOT allowed to wear or carry personal electronic devices on their person. Electronic devices must be in a bag or purse and must be in the OFF position (not "silent" or "vibrate").

The above requirements apply to the operation of all revenue vehicles including trains, buses, and Mobility vehicles, regardless of whether or not the vehicle is in revenue service.

B. On-Track Equipment

MARTA on-track equipment includes, but is not limited to, locomotives, rail cars, high-rail vehicles, rail-bound maintenance equipment, contractor test vehicles, etc.

FIGURE 11 (Continued).


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NAME: DISTRACTION AVOIDANCE			
<p>An operator of MARTA on-track equipment is prohibited from engaging in activities that distract from safe operation of vehicles and equipment. Distractions include, but are not limited to, use of electronic devices, eating, drinking, smoking, reading, reaching for fallen items, and other activities that take attention away from driving or operating equipment.</p>			
<p>Employees operating on-track equipment are NOT allowed to wear or carry personal electronic devices on their person. Personal electronic devices must be in a bag, purse, glove box, console, trunk, or toolbox and must be OFF (not "silent" or "vibrate").</p>			
<p>On-track equipment operators may engage in activities such as eating, drinking, and reading, provided the vehicle is parked in a safe location, with the parking brake engaged. In case of an emergency, if radio communications fail, a personal cellular phone may be used as backup only if the equipment is safely parked and/or secured and the operator is outside of the equipment cab, off the equipment, and has moved away from the controls.</p>			
<p>C. Equipment Operation and Other Safety Critical Functions</p>			
<p>MARTA equipment operation is defined as the use of any mechanically powered equipment; including, but not limited to, forklifts, backhoes, mowers, scrubbers, sweepers, utility vehicles (such as tugs, golf carts, and four-wheelers), powered lifts, and platforms.</p>			
<p>Safety critical functions are defined in this policy as working on a console at the Rail Services Control Center or Bus Communication Center and any functions and/or activities performed on the rail wayside.</p>			
<p>Employees operating equipment or performing safety critical functions are prohibited from engaging in activities that distract from safe operation of the equipment or the safety critical functions they are performing. Distractions include, but are not limited to, use of electronic devices, eating, drinking, smoking, reading, reaching for fallen items, and other activities that take attention away from driving or operating equipment.</p>			
<p>Employees operating equipment or performing safety critical functions are NOT allowed to wear or carry personal electronic devices on their person while operating the equipment or performing the safety critical functions. Personal electronic devices must be in a bag, purse, glove box, console, trunk, or toolbox and must be OFF (not "silent" or "vibrate").</p>			
<p>In case of an emergency, if radio communications fail, a personal cellular phone may be used as backup only if the equipment is safely parked and/or secured and the operator is outside of the equipment cab, off the equipment, and has moved away from the controls.</p>			
<p>D. Non-Revenue/Fleet Vehicles</p>			
<p>An operator of a non-revenue vehicle is prohibited from engaging in activities that distract from the safe operation of the vehicle. Distractions include, but are not limited to, use of electronic devices, eating, drinking, smoking, reading, reaching for fallen items, and other activities that take attention away from driving or operating equipment. Use of any electronic device in a non-revenue vehicle is strictly limited to times when the vehicle is stopped and safely parked off the roadway.</p>			
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FIGURE 11 (Continued).


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<p>Non-revenue vehicle operators, for whom the vehicle is their primary work place, may engage in activities such as eating, drinking, and reading in the vehicle, provided the vehicle is parked in a safe location with the parking brake engaged.</p>			
<p><i>E. Personal Vehicles When Conducting MARTA Business</i></p>			
<p>Employees are encouraged to use MARTA vehicles while conducting MARTA business. Any employee operating a personal vehicle, while conducting MARTA business is prohibited from engaging in activities that distract from the safe operation of the vehicle. Distractions include, but are not limited to, use of electronic devices, eating, drinking, smoking, reading, reaching for something that fell, and other activities that take attention away from driving or operating equipment.</p> <p>Use of a MARTA issued electronic device constitutes conducting MARTA business. Additionally, writing, talking, or texting about MARTA business on any electronic device constitutes conducting MARTA business. Use of any electronic device in a personal vehicle while conducting MARTA business is strictly limited to times when the vehicle is stopped and safely parked off the roadway.</p>			
<p><i>F. MARTA Police</i></p>			
<p>MARTA Police are exempt from the provisions of the policy regarding cellular phones and similar electronic devices due to the unique nature of their duties and the specialized training they receive specifically on the operation of electronic devices and vehicle use. MARTA Police have established internal cellular phone and electronic device usage policies (MPD General Order 26.106) that comply with CALEA (<i>Communications Assistance for Law Enforcement Act</i>). However, Police will comply with all other aspects of the distraction policy (eating, drinking, reading, smoking, etc.).</p>			
<p><i>G. Emergency Contact Procedures</i></p>			
<p>In conjunction with the issuance of this policy MARTA will ensure that emergency communication procedures are developed and implemented to ensure that all on-duty employees can be contacted and provided with urgent information (through a supervisor, communication center, or dispatch center for example).</p>			
<p><i>H. Access to Records</i></p>			
<p>As part of any investigation of an accident MARTA employees must:</p>			
<ol style="list-style-type: none"> 1. Cooperate with the investigation, identify any personal electronic devices in their possession at the time of the accident, and willingly provide cellular phone number information. 2. Allow investigators to examine any and all personal electronic devices in their possession at the time of an accident. 			
<hr/> <p style="text-align: center;">METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY www.itsmarta.com</p>			

FIGURE 11 (Continued).


 POLICY	ISSUE DATE 01-04-2010 EFFECTIVE DATE 02-01-2010	POLICY NO. 10.1.69	Page 6 of 7
NAME: DISTRACTION AVOIDANCE			
<ol style="list-style-type: none"> 3. Agree to allow MARTA access to personal cellular phone records from their service provider. 			
<ol style="list-style-type: none"> 4. Relinquish any rights of refusal to provide personal cellular phone records and related information related to the accident investigation. 			
<ol style="list-style-type: none"> 5. Only information related to the investigation must be provided and the information is not to be used for any other purpose. Information obtained in an investigation shall be properly safe-guarded to limit access to that information, as appropriate. 			
<p>I. <i>Roles and Responsibilities</i></p>			
<ol style="list-style-type: none"> 1. It is the responsibility of any MARTA employee to immediately report any accident, incident or other safety policy violation to their supervisor. 			
<ol style="list-style-type: none"> 2. Office of Safety is responsible for facilitating a formal data review of the policy at least annually and revision of the policy on an as-needed basis. 			
<ol style="list-style-type: none"> 3. Division of Operations is responsible for: <ul style="list-style-type: none"> • Implementation of the requirements of this policy through the issuance of Authority-wide rules and procedures governing distracted driving, including the use of electronic devices. • Enforcing the provisions of this policy and the associated rules and procedures, including but not limited to, the investigation of reported or observed violations of this policy and/or the associated rules and procedures. 			
<ol style="list-style-type: none"> 4. All other departments are responsible for: <ul style="list-style-type: none"> • Enforcing the provisions of this policy and the rules and procedures governing distracted driving, including the use of electronic devices in conjunction with the operation of non-revenue vehicles and other equipment and the performance of any safety critical function. 			
<p>J. <i>Violations and Disciplinary Actions</i></p>			
<ol style="list-style-type: none"> 1. Employees are prohibited from engaging in employee-controlled distractions including the use of electronic devices, eating, drinking, smoking, reading, and other activities that take attention away from driving or operating equipment or performing any safety critical function. Employees found in violation are subject to the following disciplinary action: <p style="margin-left: 40px;"><i>First Offense:</i> Discharge</p> 			
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FIGURE 11 (Continued).


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<p>NAME: DISTRACTION AVOIDANCE</p>			
<p>2. Employees are prohibited from wearing or carrying personal electronic devices on their person while operating any revenue vehicle or equipment, or performing a safety critical function. Employees found in violation are subject to the following disciplinary actions:</p> <p style="padding-left: 40px;"><i>First Offense:</i> Suspend five (5) days <i>Second Offense:</i> Discharge</p> <p>3. Employees are required to provide requested mobile telephone records. Employees who fail to provide requested records are subject to the following disciplinary action:</p> <p style="padding-left: 40px;"><i>First Offense:</i> Discharge</p>			
<p>IV. REFERENCES</p>			
<ul style="list-style-type: none"> • <i>System Safety Policy (10.1.60)</i> • <i>System Safety Program Plan</i> • <i>Office of Safety Accident/Incident Investigation Procedure</i> 			

FIGURE 11 (Continued).

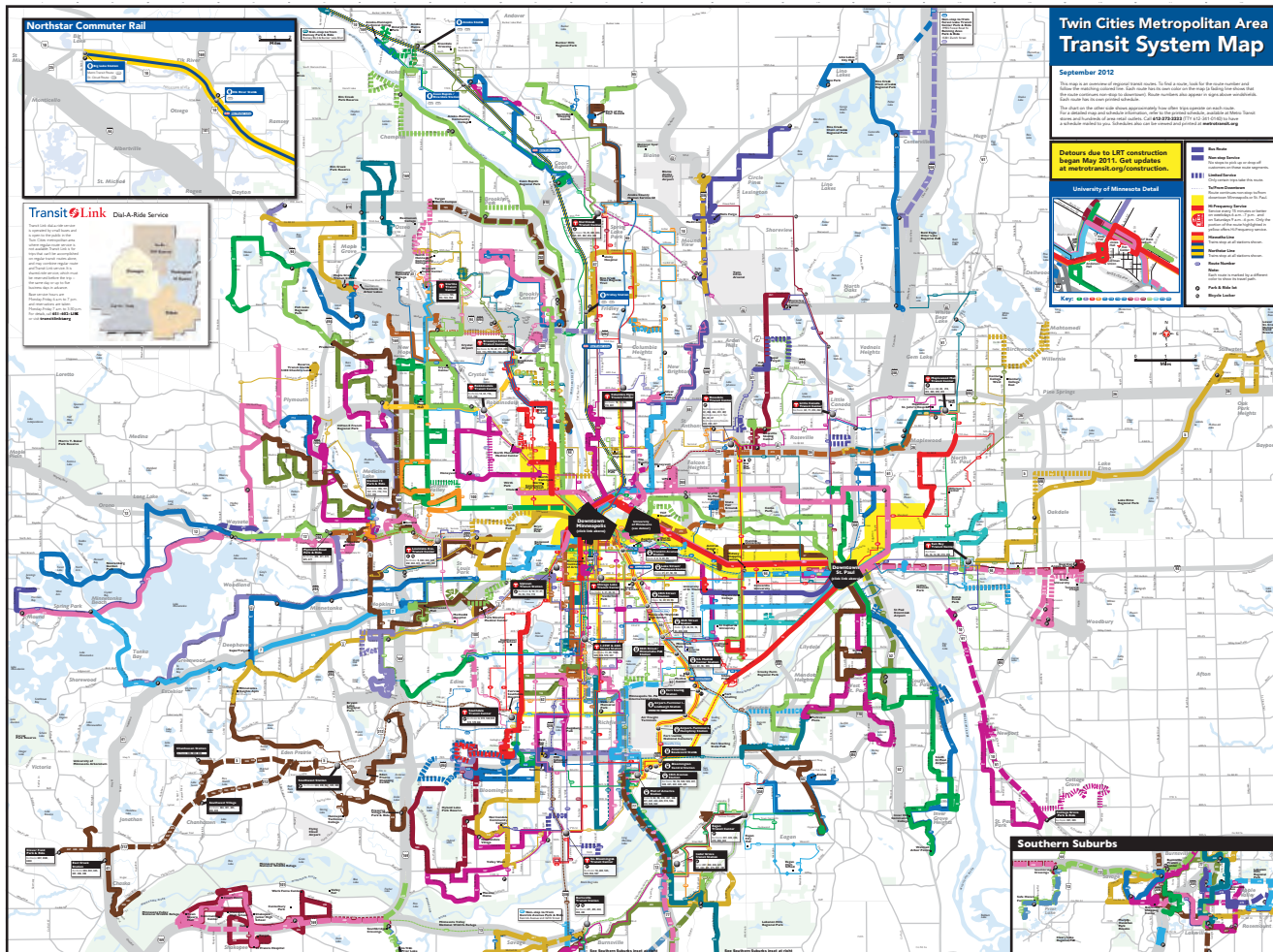


FIGURE 12 METRO transit system map (METRO Transit).

In 2011, Metro Transit was the 18th-largest public transit bus system in the country, serving over 66 million riders per year. Metro Transit operates a fleet of 882 buses out of four garages, serving over 700 stops along 123 bus routes. A Metro Transit System Map is reproduced in Figure 12.

Like MARTA, Metro Transit escalated actions to reduce and prevent distracted driving following the incidents of 2008 and 2009. Even before these accidents, Metro Transit had experienced two incidents within its system caused by two different bus operators using a cell phone. Thankfully, in neither case was someone injured. However, customers, front-line supervisors, and top management at Metro Transit began observing and reporting an increased usage of cell phones by bus operators.

In 2009, Metro Transit considered developing a new procedure to address restrictions regarding cell phones and PED use while operating a bus or light rail vehicle. The contract between the labor unions and Metro Transit requires that the unions are notified whenever Metro Transit intends to change

or implement a rule and disciplinary actions. Accordingly, management met with labor representatives to confer on the intended changes.

What was previously a Class A (originally a Class B) safety violation, resulting in warnings and suspensions, was going to be elevated to a much more severe violation and penalty. Using its drug and alcohol program as a model, Metro Transit developed and implemented the new procedure by the end of 2009 and revised it in June 2011. Penalties for violating the new rule are a Final Record of Warning that remains on file for 36 months and a 20-day unpaid suspension. Employees found in violation for a second time within that 36-month period are subject to termination.

Since the implementation at the end of 2009, there have been approximately 35 first violations and no second violations. Consequently, no driver has been discharged, and none of the cases which have been brought to arbitration has been reversed, a testament to the policy's effectiveness. A copy of the policy is included here:



**PROCEDURE—Restrictions Regarding Cell Phone and Personal Electronic Devices
While Operating a Bus or Light Rail Vehicle**

Section/Number:	4-7 f	Total Pages: 3
Dept. Responsible:	Bus and Rail Operations - Metro Transit	Effective Date: 12/14/2009
Special Note:	All Metro Transit Bus and Rail: Operators, Coordinators, Miscellaneous Operators, Instructors, Relief Instructors and All Students	Revision No: 1 Revised Date: 06/04/2011

Supersedes Operator Rule Book and Guide and all prior Cell Phone and
Electronic Device Bulletins

I. Policy:

The primary focus for Metro Transit's Operating Policy is to maintain the capacity of the workforce to meet the mission of the organization. Metro Transit will use the Operating Policy in communicating the Agency mission and purpose, to clearly define performance expectations, and provide feedback to support work efforts linked to work unit and agency business goals. As a provider of public transportation, Metro Transit is held to the highest degree of care in safety in the delivery of its services. This responsibility leads to certain rules that must be taken outside the Operating Policy; the Cell Phone and Personal Electronic Device Procedure and the Drug and Alcohol Policy are just two examples where this is necessary.

II. Procedure:

Metro Transit is dedicated to providing safe, dependable transportation services to the public and providing a safe work environment for Metro Transit employees. Distracted operators pose a serious safety threat to themselves, their patrons, the public and their coworkers.

Metro Transit bans cell phones and other personal electronic devices while operating a bus or light rail vehicle. Violations of the procedure are being taken outside the Operating Policy for both Bus and Rail Operators.

A personal electronic device is defined as an electronic or electrical device used to conduct oral, written, or visual communication; place or receive a telephone call; send or read an electronic mail message or text message; look at pictures; read a book or other written material; play a game; navigate the Internet; navigate the physical world; play, view, or listen to a video; play, view, or listen to a television broadcast; play or listen to a radio broadcast; play or listen to music; execute a computational function; perform any other function that is not provided or approved by management.

While operating any bus or light rail vehicle, all cell phones and other personal electronic devices must be powered off—not on vibrate or silent—stowed off the person in such a manner that it is not visible to either the operator or a passenger. Suggestions for stowing include but are not limited to placing the device in the approved operator bag, personal backpack or purse; stowing in a mesh pocket of such an item will not be considered a violation of this procedure.

Lost and Found cell phones and other electronic devices should be turned off and stowed in a similar manner. If you are unable to turn off or stow the phone, contact the Transit Control Center or Rail Control Center to see if a Transit Supervisor can meet your bus/train to pick up the cell phone or electronic device, as well as document the event.

Failure to comply with this rule will result in a Final Record of Warning for 36 months and up to a 20 day unpaid suspension for the first offense. Day off overtime will not be allowed during the unpaid suspension. The second time an employee is found in violation of this procedure, within 36 months, they will be terminated from employment.

Should an employee be involved in an accident while violating this procedure, further disciplinary action up to and including discharge may be applied.

Bus or Rail Instructors and Relief Instructors, and all students must have all cell phones and other personal electronic devices powered off—not on vibrate or silent- stowed off the person in such a manner that it is not visible to either the operator or a passenger both in the classroom and on the bus or light rail vehicle, during training sessions. Suggestions for stowing include but are not limited to placing the device in the approved operator bag, personal backpack or purse; stowing in a mesh pocket of such an item will not be considered a violation of this procedure.

- Bus or Rail Instructors and Relief Instructors found in violation of this procedure will receive a Final Record of Warning for 36 months and up to a 20 day unpaid suspension. Day off overtime will not be allowed during the unpaid suspension.
- New Hire Students that violate the procedure will be disqualified.
- All other students will receive Final Record of Warning for 36 months and up to a 20 day unpaid suspension. Day off overtime will not be allowed during the unpaid suspension.

Bus and Rail Operations probationary employees that violate the procedure will be disqualified.

An employee who receives a Final Record of Warning for violating this procedure will be allowed to apply for and transfer to another position after one year (see Transfer Policy). Since the violation of this procedure is a serious safety violation, any camera images including reflections and audio may be used to verify a complaint or violation. Third party observations regarding violation of this procedure when verified with audio, video or a picture will be considered a violation of the procedure.

Bus and Rail Operators will be able to use cell phone and personal electronic devices only at designated layovers. At all other times, cell phone and other personal electronic devices must be powered off—not on vibrate or silent—stowed off the person in such a manner that it is not visible to either the operator or a passenger. Suggestions for stowing include but are not limited to placing the device in the approved operator bag, personal backpack or purse; stowing in a mesh pocket of such an item will not be considered a violation of this procedure.

Metro Transit recognizes that there are agency-controlled distractions that may impact an Operator's attention. In order to assist in reducing these types of distractions, Bus Operations management will limit text messages from TCC, Street Operations and Dispatch. Messages should be read only at terminals or layovers.

Buses should be safely stopped at curbside or a terminal when speaking on the radio; TCC and Street Operations will make every effort not to call when a bus is operating on the freeway; however circumstances may dictate the necessity of contact based on the information to be relayed. Unless specified otherwise in this procedure, the radio procedures in the Rail Operator rulebook remain in full force and effect.

Bus and Rail Operations Management has emergency procedures in place for family and other serious emergencies. Emergency Contact Information cards are available for operators at each garage. If appropriate, another Operator will be sent out to replace the Operator with the emergency.

Use the following procedure for **Transit-Related** emergencies if the radio is not working. This procedure will apply to both Bus and Rail Operators:

- Stop the vehicle in a safe location
 - Secure the vehicle
 - Get out of the seat
 - Retrieve the phone and make the call
- Then power off and stow the phone before moving the vehicle

If an operator is unable to get out of the operator's seat, the vehicle must be stopped, in neutral and the emergency brake on.

Definitions:

Personal Electronic Device—an electronic or electrical device used to conduct oral, written, or visual communication; place or receive a telephone call; send or read an electronic mail message or text message; look at pictures; read a book or other written material; play a game; navigate the Internet; navigate the physical world; play, view, or listen to a video; play, view, or listen to a television broadcast; play or listen to a radio broadcast; play or listen to music; execute a computational function; perform any other function that is not provided or approved by management.

New Hire Students—applies to Bus and Rail Operators from their original date of hire to their turn in date.

Unpaid Suspension—suspension will be served consecutively. Day off overtime will not be allowed during the unpaid suspension.

Part-time weekday	20 days
Part-time weekend	28 calendar days
Full-time eight hours and extraboard	20 days
Full-time nine hours	20 days
Full-time 10 hours	160 hours

CHAPTER FIVE

CONCLUSIONS

Federal initiatives, state laws, and transit agency policies have been enacted to address distracted driving behaviors. Aside from some of the agency-level practices, the literature review and the survey results show that most of these efforts have focused on deterring or prohibiting drivers from talking and texting on cell phones. Clearly, as several academic studies have demonstrated, cell phone use—including the use of hands-free devices—is a highly-distracting and dangerous behavior while driving. The review and the data also identify a number of other behaviors and factors that could cause or contribute to distracted driving incidents. Any non-driving activities that encompass two or all three of the main types of distractions—visual, manual, and cognitive—should be considered just as risky as talking on a hand-held phone and addressed appropriately in policies and practices.

In reviewing empirical data specifically for this study, authors identified two categories of sources but neither was of much help. At the state level—through state police, departments of motor vehicles, departments of transportation, highway departments, or offices of public safety—records of incidents involving distracted driving are maintained through recording local and state police accident reports. Unfortunately, none of these data sources categorically identifies, beyond the possible narrative in a specific accident report, the involvement of a bus or other transit vehicle. At the federal level, the FTA maintains the National Transit Database. At this time, despite the U.S.DOT's focus on reducing distracted driving incidents, there is no causation category within the National Transit Database that identifies cell phone use or other distracted driving behaviors on the part of the operator. This lack of data makes it difficult to identify any national or regional trends in public transit bus incidents related to distracted driving.

One indication of the timeliness of this synthesis is that 14 of the 33 transit system participating in the survey, representing the whole range of size and geographic areas, reported that they were in the process of developing—or, in most cases, modifying or revising—their agency's policies on distracted driving. However, there were no identifiable patterns or trends based on system characteristics. Neither location, number of employees, age of system, presence (or lack thereof) of other operating modes, nor unionization influence the agencies' activities in developing and enforcing distracted driving policies.

Outside the survey instrument, one participant indicated that his public transit agency has not taken any steps to implement a policy because the contract operator who provides all the bus operators for the agency has a zero-tolerance policy for all of its employees. In situations where there are state laws prohibiting local laws addressing the issue, such an arrangement could potentially circumvent the prohibition, because it is would not be a local ordinance but rather a private corporation policy that establishes the rule and punitive actions.

Following the survey, 15 of the 33 transit system participants were contacted and asked if there was one specific event or a combination of events that initiated the process of developing and implementing a policy. An overwhelming majority, 14 of the 15, cited a combination of four factors: the September 2008 fatal commuter rail collision and derailment in Chatsworth, California; the May 2009 light rail collision in Boston; a rise in distracted driving-related customer complaints and media investigations of their respective systems; and the presentations and programs put forth by Secretary LaHood and the U.S.DOT. The first three, with the Chatsworth incident being by far the most frequently mentioned, were referred to during follow-up interviews as the primary reasons for developing and implementing a cell phone and/or distracted driving policy.

Two of the three labor participants independently offered similar perceptions on the evolution of the operator's work space. The steady increase in technological equipment being installed in the driver's area has increased the number of distractions and interfered with carrying out fundamental principles of defensive driving. Both cited visual-message radio heads, audible and visual alarms, and turning camera monitors and other displays as examples of technological advancements that may compromise safe driving practices.

The survey results indicated that some agencies are not only implementing and enforcing policies to address distracted driving behaviors but are also proactively examining and modifying bus operator schedules, duties, and work spaces to reduce the number of distractions inherent in the job. Industry-wide research in this area may yield constructive processes for conducting similar evaluations at transit systems across the country. Any such studies would benefit significantly from collaboration between agency management representatives and organized labor.

Additionally, research into the variety and potential severity of distracted driving factors and behaviors for public transit bus operators would help identify and prioritize possible remedies. Although this type of study would require greater efforts of research and analysis, it might ultimately provide a cost-effective path for the industry to reduce the severity and frequency of accidents in which distracted driving was a primary or contributing cause.

The pair of recommended practices from APTA that address distracted driving (see Appendices E and F) would also be beneficial in developing model programs, policies, or plans to deter and prevent risky behaviors and conditions. Developing and disseminating “models” at the national or state level—either through trade associations or offices such as the Rural Transit Assistance Program or Local Technical Assistance Program/Tribal Technical Assistance Program—would not only be a cost-effective process for the transit industry, particularly smaller systems, but would also begin to interject some level of standardization in policies, practices, and punitive actions. The most striking disparity in any data category of the survey is in cell phone possession policies, with three agencies in the study prohibiting operators from carrying cell phones while driving and three systems issuing cell phones to their operators.

The CUTR/TSI training program has been hailed as a good step in the process of developing and delivering training on

the topic, but additional efforts to present and discuss the hazards and potential outcomes associated with distracted driving behaviors would enhance bus operators’ understanding of and respect for the possible ramifications of their actions on their own lives and the lives of others. As with other current training initiatives, the primary challenge is finding a way to deliver the message in an environment that is not particularly conducive to formal, instructor-led courses. The fact that the CUTR/TSI program was launched as an on-line course demonstrates the organizations’ resourcefulness and the sponsoring agencies’ (the FTA and Florida DOT) sense of urgency in trying to deliver the program and its message to the industry as effectively and expeditiously as possible.

Another approach that supports but doesn’t supplant traditional training initiatives is illustrated by the series of 24 posters that New York City Transit has developed continually to remind their 12,000 operators of the seriousness of deterring distracted driving behaviors (reproduced in Appendix C).

Whether through national initiatives or training programs, industry-based recommended practices, or agency-level efforts to implement policies and practices, the literature review and synthesis survey illustrate that while much has been done to address the problem of distracted driving behaviors in the public transit sector, much more could be done to reach the goal of New York City Transit: zero tolerance.

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APPENDIX A

Survey

Introduction

Dear Survey Recipient,

The American Public Transit Association (APTA), through its nonprofit research organization, the Transit Development Corporation, Inc. (TDC), is cooperating in a research project to prepare a synthesis of current practice on *Transit Bus Operator Distraction Policies and Outcomes*. This is part of the Transit Cooperative Research Program (TCRP), which was authorized in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), to be managed by the Transportation Research Board (TRB) in cooperation with the Federal Transit Administration (FTA) and TDC. The synthesis will provide practical information and guidance for transit agencies of all sizes in profiling innovative and successful practices, lessons learned, and gaps in information.

The purpose of this study is to provide public transit agencies with information about transit bus operator distraction policies and outcomes in order to assist them in developing and evaluating their own policies and programs to address and prevent distracted driving incidents.

This survey questionnaire is being distributed to *public transit bus systems*. If you are not the appropriate person at your *agency* to complete this survey, please forward it to the correct person.

Please complete and submit this survey questionnaire by April 30, 2012. If you have any questions, please do not hesitate to contact our principal investigator *Christopher Kozub* at *ckozub@comcast.net* or *732-261-4170*.

Thank you very much for participating in this survey!

QUESTIONNAIRE INSTRUCTIONS

1. To view and print the entire questionnaire, Click on the following link and print using “control p” http://surveygizmo.library.s3.amazonaws.com/library/64484/TCRP_Project_J07_Topic_SF17.docx
2. To save your partial answers, or to forward a partially completed questionnaire to another party, click on the “Save and Continue Later” link in the upper right hand corner of your screen. A link to the partially completed questionnaire will be e-mailed to you from *SurveyGizmo*. To return to the questionnaire later, open the e-mail from *SurveyGizmo* and click on the link. To invite a colleague to complete part of the survey, simply click on the “Save and Continue” link and enter your colleague’s e-mail address. Please note that the questionnaire can be saved and passed around multiple times, but respondents must use the link e-mailed from *SurveyGizmo*. *We suggest using the “Save and Continue Later” feature if there will be more than 15 minutes of inactivity while the survey is opened, as some firewalls may terminate due to inactivity.*
3. To view and print your answers before submitting the survey, click forward to the page following question 60. Print using “control p”.
4. To submit the survey, click on “Submit” on the last page.

Contact Information

Please enter the date (MM/DD/YYYY).*

Please enter your contact information.

First Name*: _____

Last Name*: _____

Title*: _____

Agency/Organization*: _____

Street Address: _____

Suite: _____

City*: _____

State*: _____

Zip Code*: _____

Country: _____

E-mail Address*: _____

Phone Number*: _____

Fax Number: _____

Mobile Phone: _____

URL: _____

Transit System Profile

1) Which bus modes does your agency either directly operate or operate using a contractor?*

Fixed-route suburban/urban

Paratransit

Commuter

Bus rapid transit

Rural fixed route/on-demand

Other

2) How many total riders does your system carry on an annual basis?*

3) How many bus operators does your system employ?*

Defining Distracted Driving

4) Does your system have a definition of distracted driving behaviors?*

Yes

No

5) If “Yes” please provide a copy of the definition

6) Were bus operators included in the development and/or review phases of creating this definition?

Yes

No

7) Was there an effort to assess bus operators work environment and behavioral patterns to determine the full universe of distracted driving hazards, contributing factors, and outcomes?

Yes

No

8) Were any individual bus operators or labor representatives included in this assessment effort?

Yes

No

Laws and Regulations

9) Within your state, are there laws or motor vehicle regulations prohibiting or limiting the use of cell phones while operating a vehicle?*

Yes

No

10) Are any of these laws or regulations specifically written to address bus operators?

- Yes
 No
 Not sure

11) Do these laws or regulations address other potentially distracting behaviors such as eating, reading, using MP3 players, using hand-held radios, or other similar activities?

- Yes
 No
 Not sure

12) Are there any laws in your state prohibiting your agency or local government from passing laws or creating regulations beyond what is covered in the state law?*

- Yes
 No

13) What are the penalties for breaking a distracted driving/cell phone law in your state?

1st Offense: _____

2nd Offense: _____

3rd Offense: _____

Agency Rules and Policies

14) Does your agency have specific rules that address the possession and/or use of cell phones while operating a bus?*

- Yes
 No

15) Do these rules prohibit an operator from carrying a personal cell phone while on duty?

- Yes
 No

16) Do these rules require an operator carrying a cell phone to have the power turned off while operating a bus?

- Yes
 No

17) Is there a policy that limits or prohibits the use of hand-held phones while allowing the use of hands-free devices?*

- Yes
 No

18) Is there a policy for using cell phones in an emergency situation?*

- Yes
 No

19) Provided it is allowed by law, does your agency issue cell phones to your operators?

- Yes
 No

20) Does your agency have a policy prohibiting or restricting the use of hand-held radios while a bus is in motion?*

- Yes
 No

21) Does your agency have a policy prohibiting an operator from eating while a bus is in motion?*

- Yes
 No

22) Does your agency have a policy prohibiting an operator from drinking (water, coffee, soft drinks, etc.) while a bus is in motion?*

- Yes
- No

23) Does your agency have a policy prohibiting an operator from using an MP3 player with headphones while a bus is in motion?*

- Yes
- No

24) Does your agency have a policy prohibiting an operator from using an MP3 player without headphones while a bus is in motion?*

- Yes
- No

25) Does your agency have a policy regarding operator/passenger conversations while a bus is in motion?*

- Yes
- No

26) Does your agency have rules for passengers that address behavior and conduct, covering behaviors that could be distracting to the operator such as attempting to question or converse with her/him while driving?*

- Yes
- No

27) If “Yes” where are these rules posted or how are they otherwise communicated to passengers?

28) What are the penalties for passengers who violate these rules?

1st Offense: _____
 2nd Offense: _____
 3rd Offense: _____

29) What is the penalty for an operator who violates a policy/rule on cell phone use and/or possession?*

1st Offense: _____
 2nd Offense: _____
 3rd Offense: _____

30) What is the penalty or penalties for an operator who violates any other rules covering distracted driving behaviors?

1st Offense: _____
 2nd Offense: _____
 3rd Offense: _____

31) How are policies regarding cell phone use and/or other distracting behaviors communicated to new operators?*

32) How are new or revised policies regarding cell phone use and/or other distracting behaviors communicated to existing operators?*

33) Were the aforementioned policies and relative penalties developed by: (Please check all that apply.)

- Management
- With input from other transit systems
- With input from active labor/management committees
- Copying an existing policy from another source

34) Is there a formal process for assessing the effectiveness of these policies that measures any reduction in distracted driving occurrences, operator retention, and on-time performance statistics?

Yes

No

35) Are employee or labor union representatives a part of this assessment process?

Yes

No

Reporting and Enforcement

36) Are street or route supervisors specifically directed to look for distracted behavior policy violations?*

Yes

No

37) Are on-board cameras used to enforce distracted driving policies?*

Yes

No

38) Are on-board cameras used to investigate reports of distracted driving policy violations?*

Yes

No

39) Are stop-light or traffic cameras used to enforce distracted driving policies?*

Yes

No

40) Are stop-light or traffic cameras used to investigate reports of distracted driving policy violations?*

Yes

No

41) Are passengers encouraged to report distracted driving behaviors demonstrated by operators?*

Yes

No

42) Are passengers given a specific contact number for making such reports?

Yes

No

43) Are operators given an opportunity to explain their behaviors and/or appeal decisions?*

Yes

No

Countermeasures

44) Are procedures in place for family members to contact operators through the control center in the event of an emergency?*

Yes

No

45) Have schedules been examined and/or modified to allow for sufficient time during breaks to eat and use restroom facilities?*

Yes

No

46) Have on-board duties such as fare collection, making announcements, or answering questions from passengers or the control center been examined for possible modification and adjustment?*

Yes

No

47) Have one-way or two-way communications or alarm devices, monitors or instruments been modified or removed from the operator's work-space to reduce operator distractions?*

Yes

No

48) Have technological advancements such as shielding or signal interrupters been installed on buses or around operator work spaces to prevent cell phone signal transmissions?*

Yes

No

49) If the law or policy permits for anything less than termination of employment on the first offense, is there any intervention or assistance program for the offending operator?*

Yes

No

50) If there is an intervention program, is it:

agency sponsored?

peer/union local sponsored?

combination of above?

Training

51) Does your agency have a training program that addresses distracted driving behaviors and consequences?*

Yes

No

52) If you do have a training program, is it offered to:

Existing Operators

New Operators

53) How long (in hours) is the course or module on distracted driving?

54) Which of the following behaviors or activities are addressed in the training? (Check all that apply.)

Talking on a hand-held cell phone

Talking on a hands-free cell phone

Text messaging

Using an MP3 player

Talking with passengers

Eating

Grooming

Reading

Drinking

55) Does the training material cover laws/policies/punitive actions such as suspension, termination, and/or loss of license?

Yes

No

50

56) Does the training material cover real-world consequences such as accidents involving fatalities, injuries, and extensive property damage?

Yes

No

57) Was the training material developed internally or acquired through an external source?

Developed internally

Acquired

Customized/modified acquired program

58) Were operators/labor representative involved in developing and/or reviewing the training material prior to implementation?

Yes

No

59) Has your agency used, conducted, or sponsored any behavioral or safety science research in connection with developing strategies, policies, and/or training materials to address distracted driving?*

Yes

No

60) If “Yes” please specifically list what has been used and/or done and, if possible, provide contact information for someone involved in the research:

Response Review

Thank You!

Thank you for taking our survey. Your response is very important to us. If you have any questions or comments, please feel free to contact Christopher Kozub at:

- **E-mail: ckozub@comcast.net**
- **Phone: 732-261-4170**
- **Mailing Address: 270 Church Street, Woodbridge, NJ 07095**

APPENDIX B

Systems Invited to Participate in the Survey

Bi-State Development Agency: St. Louis, MO
Capital Area Transportation Authority: Lansing, MI
Central Ohio Transit Authority: Columbus, OH
Champaign–Urbana Mass Transit District: Urbana, IL
Charlotte Area Transit System: Charlotte, NC
Chittenden County Transportation Authority: Burlington, VT
CT Transit: Hartford, CT
Dallas Area Rapid Transit District: Dallas, TX
Franklin Regional Transit Authority: Greenfield, MA
Gainesville Regional Transit System: Gainesville, FL
Greater Cleveland Regional Transit Authority: Cleveland, OH
Greater Richmond Transit Authority: Richmond, VA
Hillsborough Area Regional Transit Authority: Tampa, FL
Lee County Transit: Ft. Myers, FL
Lehigh and Northampton Transportation Authority: Allentown, PA
Los Angeles County Metropolitan Transportation Authority: Los Angeles, CA
Maryland Transit Administration: Baltimore, MD
Massachusetts Bay Transportation Authority: Boston, MA
Metro Regional Transit Authority: Akron, OH
Metro Transit: Minneapolis, MN
Metropolitan Area Rapid Transit Authority: Atlanta, GA
New York City Transit: New York, NY
Niagara Frontier Transit Authority: Buffalo, NY
Orange County Transportation Authority: Orange, CA
Pace Suburban Bus: Arlington Heights, IL
Port Authority of Alleghany County: Pittsburgh, PA
Regional Public Transportation Authority: Phoenix, AZ
Regional Transportation District: Denver, CO
Pierce Transit: Lakewood, WA
Sacramento Regional Transit District: Sacramento, CA
Santa Monica Big Blue Bus: Santa Monica, CA
Southeastern Pennsylvania Transportation Authority: Philadelphia, PA
Space Coast Area Transit: Cocoa, FL
TriMet: Portland, OR
Utah Transit Authority: Salt Lake City, UT

APPENDIX C

New York City Transit “Zero Tolerance” Posters



ZERO TOLERANCE

Distracted driving can end tragically!




How will you explain this work day to family and friends?

MTA Metropolitan Transportation Authority
NYCT Department of Transportation
MTA Bus Company
Long Island Rail Road

ZERO TOLERANCE

Your work day can end like this if you text and drive!



You won't want to share a day like this when you get home!

MTA Metropolitan Transportation Authority
NYCT Department of Transportation
MTA Bus Company
Long Island Rail Road

ZERO TOLERANCE

DISTRACTED DRIVING CAN RESULT IN TRAGEDY



TURN OFF THE CELL PHONE!

MTA Metropolitan Transportation Authority
NYCT Department of Transportation
MTA Bus Company
Long Island Rail Road

ZERO TOLERANCE

DISTRACTED DRIVING PUTS YOUR JOB AT RISK



Don't TALK or TEXT on your cell phone while driving!

MTA Metropolitan Transportation Authority
NYCT Department of Transportation
MTA Bus Company
Long Island Rail Road

ZERO TOLERANCE

NO CONVERSATION IS WORTH YOUR JOB OR YOUR LIFE

YOUR PHONE SHOULD NOT BE ON!

OR MAYBE EVEN SOMEONE ELSE'S!



Metropolitan Transportation Authority
NYCT Department of Business
MTA Bus Company
Long Island Rail Road

ZERO TOLERANCE

**Distracted driving can cost you your job!
If that happens...Who will pay your bills?
Your CELL Provider?**

EFFECTIVE January 12, 2011

TURN OFF THE CELL PHONE and PROVIDE FOR YOURSELF!



Metropolitan Transportation Authority
NYCT Department of Business
MTA Bus Company
Long Island Rail Road

ZERO TOLERANCE

**When you're in the drivers seat...
Where are you looking?**

DISTRACTION and TRAGEDY are only a second apart!



Metropolitan Transportation Authority
NYCT Department of Business
MTA Bus Company
Long Island Rail Road

ZERO TOLERANCE

**EVERYONE IS WATCHING!
PUT THE CELL PHONE AWAY**

EFFECTIVE January 12, 2011

IT COULD COST YOU YOUR JOB!



Metropolitan Transportation Authority
NYCT Department of Business
MTA Bus Company
Long Island Rail Road

ZERO TOLERANCE

TALKING
TEXTING
CHECKING FOR MESSAGES WHILE DRIVING
THESE ARE ALL...

DISTRACTIONS
THAT CAN END UP LIKE THIS OR WORSE



EFFECTIVE
January 12, 2011

...AND COST YOU YOUR JOB!

MTA Metropolitan Transportation Authority
NYCT Department of Transit
MTA Bus Company
Long Island Rail Road

ZERO TOLERANCE

HELP CONTROL YOUR FUTURE
AND THE SAFETY OF OTHERS



EFFECTIVE
January 12, 2011

TURN OFF THE CELL PHONE!

MTA Metropolitan Transportation Authority
NYCT Department of Transit
MTA Bus Company
Long Island Rail Road

ZERO TOLERANCE

NationWide EPIDEMIC!
BREAKING NEWS
2.5 BILLION READERS EVERY DAY
Driver Involved In Serious...
"TEXTING" Accident



DON'T
BECOME
FAMOUS
BY
TRAVELING
DOWN
THIS ROAD

EFFECTIVE
January 12, 2011

Don't TALK or TEXT on your cell phone while driving!

MTA Metropolitan Transportation Authority
NYCT Department of Transit
MTA Bus Company
Long Island Rail Road

ZERO TOLERANCE

Keep your eyes on the road




EFFECTIVE
January 12, 2011

Everyone will benefit from it!
Don't TALK or TEXT on your cell phone while driving!

MTA Metropolitan Transportation Authority
NYCT Department of Transit
MTA Bus Company
Long Island Rail Road

ZERO TOLERANCE

These are just some of the people that are hoping you don't...



... TALK, TEXT or CHECK for MESSAGES on your CELL PHONE! their lives may depend on it!

EFFECTIVE January 12, 2011

Metropolitan Transportation Authority
MTA Department of Public Safety
MTA Bus Company
Long Island Bus

ZERO TOLERANCE

What are you looking at?

THIS? OR THIS?



EFFECTIVE January 12, 2011

Metropolitan Transportation Authority
MTA Department of Public Safety
MTA Bus Company
Long Island Bus

ZERO TOLERANCE

Distracted Driving



Do you realize how many lives you put at risk?

EFFECTIVE January 12, 2011

Metropolitan Transportation Authority
MTA Department of Public Safety
MTA Bus Company
Long Island Bus

ZERO TOLERANCE

You know who you are!



...and so will everyone else!

EFFECTIVE January 12, 2011

Metropolitan Transportation Authority
MTA Department of Public Safety
MTA Bus Company
Long Island Bus

ZERO TOLERANCE

If you think this can be used as your timepiece...



... "Think Again"!

EFFECTIVE January 12, 2011

MTA Metropolitan Transportation Authority
NYCT Department of Transportation
NYCT Bus Company
Long Island Bus

ZERO TOLERANCE

If you're checking this message while driving...



...what are you missing?

EFFECTIVE January 12, 2011

MTA Metropolitan Transportation Authority
NYCT Department of Transportation
NYCT Bus Company
Long Island Bus

ZERO TOLERANCE

IT ONLY TAKES... ONE TEXT MESSAGE TO SHATTER YOUR DREAMS (and possibly someone else's too!)



EFFECTIVE January 12, 2011

MTA Metropolitan Transportation Authority
NYCT Department of Transportation
NYCT Bus Company
Long Island Bus

ZERO TOLERANCE

The message may start here...



...but it can very easily end here!

TURN OFF THE CELL PHONE!

EFFECTIVE January 12, 2011

MTA Metropolitan Transportation Authority
NYCT Department of Transportation
NYCT Bus Company
Long Island Bus

APPENDIX D

CUTR/TSI “Curbing Transit Operator Distracted Driving Training” Instructor Guide



CURBING TRANSIT OPERATOR DISTRACTED DRIVING TRAINING

INSTRUCTOR GUIDE



Acknowledgements

We would like to thank the Florida Department of Transportation (FDOT) for funding this project and Victor Wiley (FDOT) for his continued support and guidance as well as Steve Dallman at the U.S. DOT's Transportation Safety Institute for providing industry insight and instructional guidance.

In addition, we would like to thank David Kelsey at the Hillsborough Area Regional Transit (HART), the staff at Sarasota County Area Transit (SCAT) and Lakeland Area Mass Transit District (LAMTD) for helping us with filming of this project. We would also like to acknowledge the Utah Department of Transportation for the development of "*Utah Texting While Driving PSA 1085-Echo: A Texting Tragedy*."

Disclaimer

The opinions, findings, and conclusions expressed in this publication are those of the authors who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the views and policies of the Florida Department of Transportation or the Research and Innovative Technology Administration. This report does not constitute a standard, specification, or regulation.



CURBING TRANSIT OPERATOR DISTRACTED DRIVING

Requirements

In order to teach this course and be able to print certificates you must meet the following criteria:

- 1) Be employed by a transit system
- 2) Job function as an instructor, supervisor, or manager

About This Course

This training course was developed in cooperation with the Florida Department of Transportation and the USDOT's Transportation Safety Institute (TSI) and produced by the University of South Florida's (USF) Center for Urban Transportation Research (CUTR).

This guide should be used in conjunction with the "Curbing Transit Operator Distracted Driving" training video. The first column of the guide identifies the Microsoft PowerPoint slides that correspond to the topics that will be discussed. The italicized text provides detailed instructor facilitation information including questions for participants; facts and figures; and group activities and exercises.

This training program may be customized to include agency specific policies and procedures, as well as state laws and regulations. There have been place holders inserted into the PowerPoint presentation to allow an instructor to insert their agency's policies and procedures. It is critical for instructors to thoroughly review each element of their agency's policy on wireless devices and for participants to clearly understand the policy.

Course Goal (Terminal Learning Objective)

The goal of the Curbing Transit Operator Distracted Driving Training course is to teach public transportation employees about the dangers and consequences of driving distracted. In addition, participants will learn about their agencies' policies and procedures for non-agency authorized wireless technologies, as well as relevant state laws and regulations.

Course Objectives (Enabling Learning Objective)

At the conclusion of this training course, participants will be able to:

- Define the term "distracted"
- Describe the risk of driving while distracted
- Identify tips for preventing distracted driving
- Interpret the regulations, laws, and company policies related to wireless devices

Materials and Equipment

White board, computer (with Microsoft PowerPoint and Windows Media Player), DVD/CD Player, LCD projector, computer speakers

Printing Certificates

After each training class, the instructor should print "certificates of completion" for each training participant and file them in their employee file. Additionally, a list of training participants must be sent to sapper@cutr.usf.edu within 30 days of the training class.



SLIDE 1-2: WELCOME

Housekeeping items: Restrooms, emergency exit, vending machines, etc.

Introductions

Overall course time: 60 minutes



SLIDE 3: COURSE OVERVIEW

Welcome participants and identify the goals established for the training class.

- Teach public transportation employees about the dangers and consequences of driving distracted;
- Learn agency policies and procedures with regard to non-agency authorized wireless technologies;
- Learn relevant state laws and regulations related to wireless distractions.

The use of wireless technologies while operating motor vehicles is a real problem. Public transportation employees are affected by many aspects of distracted driving including being a potential victim of a distracted driver. This course introduces public transit professionals to key concepts and highlights the dangers of distracted driving.

This course will examine what distracted driving is, and how it has affected the public transportation industry. We will also learn about our state's laws on distracted driving and our agency's policies.

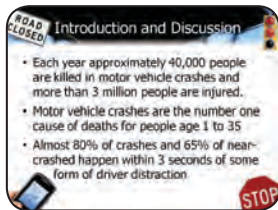


SLIDE 4: COURSE OBJECTIVE

By the end of this training course, participants will be able to:

- Define the term "distracted"
- Describe the risk of driving while distracted
- Identify tips for preventing distracted driving
- Interpret the regulations, laws and company policies with regard to wireless devices

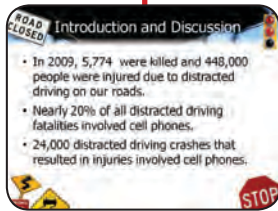
It is important for this class to be interactive. Encourage participants to ask questions.



SLIDE 5-6: INTRODUCTION AND DISCUSSION

Many studies have been conducted on the effects of driving while distracted. The statistics are shocking.

- Each year approximately 40,000 people are killed in motor vehicle crashes and more than 3 million people are injured.
- Motor vehicle crashes are the number one cause of death for people ages 1 to 35.
- Almost 80% of crashes and 65% of near-crashes happen within 3 seconds of some form of driver distraction.
- In 2009, there were 5,774 fatalities and 448,000 people injured in collisions resulting from distracted driving (Fatality Analysis Reporting System [FARS]/National Automotive Sampling System General Estimates System [NASS GES]).
- Nearly 20% of all distracted driving fatalities involved the use of cell phones.
- 24,000 crashes that were attributable to distracted driving involving the use of a cell phone resulted in injuries.



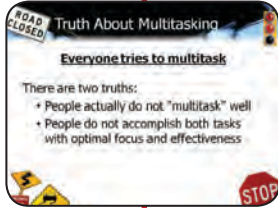


SLIDE 7-11: MULTITASKING

In our fast-paced and technologically advanced society, the ability of an individual to multitask is viewed as a positive attribute. What are some examples of multi-tasking?

- Talk on the phone while driving/eating
- Watching TV and reading

Instructor should ask students for other examples and write answers on the white board.

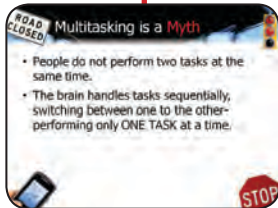


Many people believe that they can text, drive and do a number of other tasks all at the same time, without endangering themselves or others. They are convinced that their brief in-attention to the road holds no significant consequence, but the truth of the matter is that many, many studies have shown multitasking is a myth.

The truth about multitasking is that IT IS A MYTH!

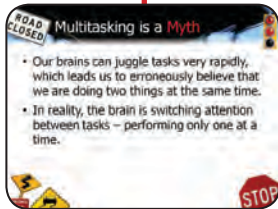
- People actually do not “multitask” well
- People do not accomplish both tasks with optimal focus and effectiveness
- People do not perform two tasks at the same time. Instead, the brain handles tasks sequentially, switching between one to the other.

The problem is that we don't know how poorly we are performing when we try to do multiple tasks at the same time.

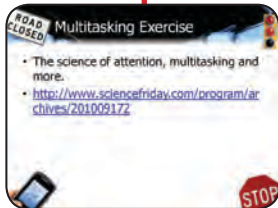


Our brains can juggle tasks very rapidly, which leads us to erroneously believe we are

performing two tasks at the same time effectively. In reality, the brain is switching attention between tasks—performing only one at a time.



A person who is talking on a cell phone while driving is performing both tasks with divided attention. The brain is overloaded by the incoming information, and to handle this overload, it does not process and store all of the information. The brain prioritizes some information for attention and possible action and filters out some of the information. Performance is impaired when this filtered information is not processed into a driver's working short-term memory.



In order to demonstrate our ability to multitask, we are going to watch a video. This video was developed by researchers who were investigating the science of attention, multitasking and more.

What are the limits of human attention? Is the ability to pay attention to detail something that can be improved? Let's try this exercise:

<http://www.sciencefriday.com/program/archives/201009172>



SLIDE 12-15: DISTRACTIONS

Ask participants these two questions and write their responses on a white board, or any other multimedia board. What is a distraction? What distracts drivers?

What is distracted driving?

Distracted driving is any non-driving activity a person engages in that has the potential to distract him or her from the primary task of driving and increase the risk of crashing.

What distracts drivers?

- Eating
- Texting
- Talking on a cell phone
- Talking to a passenger
- Reading
- Grooming

There are three main types of distractions:

1. Visual - Taking your eyes off the road
2. Manual - Taking your hands off the wheel
3. Cognitive - Taking your mind off what you are doing



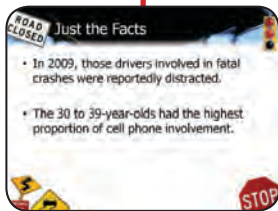


SLIDE 16-20: JUST THE FACTS

The fact is that distracted driving is seriously affecting the safety of our roadways.

- Distracted driving is the number one killer of American teens
- More than 80% of drivers admit to blatant hazardous behavior (Nationwide Mutual Insurance Survey)
- Drivers on cell phones are more impaired than drivers at .08 BAC (University of Utah Study)
- An estimated 1 million people chat on their mobile or send text messages while driving
- Drivers who use cell phones are four times as likely to get into crashes serious enough to injure themselves (NHTSA, Insurance Institute for Highway Safety)
- Sixteen percent of fatal crashes in 2009 involved reports of distracted driving.
- Twenty percent of injury crashes in 2009 involved distracted driving.
- The age group with the greatest proportion of distracted drivers was the under-20 age group—16 percent of all drivers younger than 20 involved in fatal crashes were reported to have been distracted while driving.
- Of those drivers involved in fatal crashes who were reportedly distracted, the 30- to 39-year-olds had the highest proportion of cell phone involvement (NHSTA 2009)

These statistics are staggering. It is our job as professional transit operators to ensure the safety—don't be a statistic.



SLIDE 21-23: THE RISKS ASSOCIATED WITH DISTRACTED DRIVING



For light vehicles or cars

- Dialing a cell phone made the risk of a crash or near-crash event 2.8 times higher than non-distracted driving;
- Talking or listening to a cell phone made the risk of a crash or near-crash event 1.3 times higher than non-distracted driving; and
- Reaching for an object, such as an electronic device made the risk of a crash or near-crash event 1.4 times higher than non-distracted driving.

(Virginia Tech cell phone use and driver distraction study, BLACKSBURG, Va., July 29, 2009)



For heavy vehicles or trucks

- Dialing a cell phone made the risk of crash or near-crash event 5.9 times higher than as non-distracted driving;
- Talking or listening to a cell phone made the risk of crash or near-crash event 1.0 times as high as non-distracted driving;
- Use of, or reaching for, an electronic device made the risk of crash or near-crash event 6.7 times as high as non-distracted driving; and
- Text messaging made the risk of crash or near-crash event 23.2 times as high as non-distracted driving.





SLIDE 24: PUBLIC TRANSPORTATION AND DISTRACTED OPERATORS

Examples of distractions that bus operators may experience include:

- Radio
- Mobile Data Terminals (MDT)
- Passenger assistance
- Route maps
- Fareboxes
- GPS

It is important for us to learn how to manage our level of distraction while operating a transit vehicle. Safety first!



SLIDE 25: PUBLIC TRANSPORTATION OPERATORS WHO HAVE DRIVEN DISTRACTED

Public transportation operators who have driven distracted have been observed:

- Missed stops
- Ran red lights
- Weaved
- Missed fares
- Hit street fixtures and other fixed objects
- Nearly missed hitting pedestrians and cars

DON'T DRIVE DISTRACTED!



SLIDE 26-27: THE TRANSPORTATION INDUSTRY

Discuss some of the major, more high profile incidents that have happened in the public transportation industry as a result of distracted driving.

On November 14, 2004, a bus driver departed the Baltimore/Washington International Airport operating a 58-passenger motorcoach for a trip to Mount Vernon, Virginia. Vehicle occupants were the bus driver, an adult chaperone, and 27 high school students. This bus was the second one of a two-bus team traveling to Mount Vernon. The motor carrier Eyre operates this route frequently, and the bus driver had driven this route on one previous occasion 9 days earlier. The bus was traveling southbound in the right lane of the George Washington Memorial Parkway in Alexandria, Virginia, at a recorded speed of approximately 46 mph. As the bus approached the Alexandria Avenue bridge, the bus driver passed warning signs indicating that the bridge had a 10-foot, 2-inch clearance in the right lane. The driver remained in the right lane and drove the 12-foot-high bus under the bridge, colliding with the underside and side of the overpass. At the time of the accident, the 13-foot, 4-inch-high left lane was available to the bus, and the lead Eyre bus was in the left lane ahead of the accident bus. Witnesses and the bus driver himself reported that he was talking on a hands-free cellular telephone at the time of the accident.

Of the 27 passengers, 10 received minor injuries and 1 sustained serious injuries. The roof of the bus was destroyed. The National Transportation Safety Board determined that the probable cause of this accident was the bus driver's failure to notice and respond to posted low-clearance warning signs and to the bridge itself due to the cognitive distraction of the driver resulting from conversing on a hands-free cellular telephone while driving.





SLIDE 28

On September 12, 2008, a westbound Southern California Regional Rail Authority Metrolink train, consisting of one locomotive and three passenger cars, collided head-on with eastbound Union Pacific Railroad freight train LOF65-12 near Chatsworth, California. The Metrolink train derailed its locomotive and lead passenger car; the UP train derailed its 2 locomotives and 10 of its 17 cars. The force of the collision caused the locomotive of train 111 to telescope into the lead passenger coach by about 52 feet. The accident resulted in 25 fatalities, including the engineer of train 111. Emergency response agencies reported transporting 102 injured passengers to local hospitals. Damages were estimated to be in excess of \$12 million.

The National Transportation Safety Board determined that the probable cause of the September 12, 2008, collision of a Metrolink commuter train and a Union Pacific freight train was the failure of the Metrolink engineer to observe and appropriately respond to the red signal aspect at Control Point Topanga. It was determined that the engineer was engaged in prohibited use of a wireless device, specifically text messaging, which distracted him from his duties.



SLIDE 29

On May 8, 2009, a two-car Massachusetts Bay Transportation Authority (MBTA) Green Line trolley slammed into the rear of another two-car Green Line trolley that was stopped at a red signal near the Government Center Station in Boston. One trolley had stopped at a red light in a tunnel, headed toward Park Street, and was struck from behind by the second one. The operator, who had been on the job 22 months, was text-messaging his girlfriend. The driver was looking down at his phone and could not apply the brakes quickly enough when he looked up and saw the trolley in front of him. 49 people were taken to the hospital.

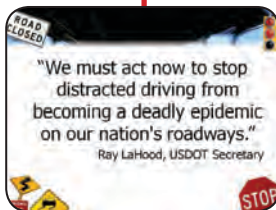


SLIDE 30-33: INDUSTRY RESPONSE TO DISTRACTED DRIVING

It was time for industry-wide change. Many transit agencies throughout the US have changed their policies on the use of wireless technologies and other distractions.

September 2009

U.S. Transportation Secretary Ray LaHood Distracted Driving Summit



This two-day summit brought together safety experts, researchers, industry representatives, elected officials and members of the public to share their expertise, experiences and ideas for reducing distracted driving behavior and addressing the safety risk posed by the growing problem across all modes of transportation.

"We must act now to stop distracted driving from becoming a deadly epidemic on our nation's roadways." U.S DOT Secretary Ray LaHood.



January 2010

Congress passes legislation banning truck drivers and bus drivers from texting while driving— However, public transit is not part of the ban.

As a result of these accidents and distracted driving summit agencies throughout the US changed their policies with regard to distracted driving. Some employees lost their jobs as a result.





SLIDE 34-37: MANAGING DISTRACTIONS

Our ability as professional transit operators to manage the level of distraction while driving is critically important. We must ensure safety first!

Personal Electronic Devices:

Depending on your agency's wireless policies:

- Personal electronic devices are prohibited from being brought onto the bus, or
- Personal electronic devices are allowed, but must be turned off and stowed off the operator's person and out of sight. These devices should be used only when the vehicle is parked and the operator is no longer sitting in the driver's seat.



Agency-Authorized or Required Equipment or Material Distractions

- Use of maps, requesting directions or instructions from dispatch to perform your job duties, should be performed while the vehicle is stopped in a safe location.
- Communication via the two-way radio: Operators must ensure that it is done in a safe manner. Stop the vehicle in a safe location while communicating with dispatch or other agency representatives.



Passenger Distractions

- Avoid unnecessary communications. If conversation cannot be avoided and you need to communicate with a passenger, do so while maintaining focus on the safe operation of the vehicle. Anytime the conversation impacts safe driving, pull the vehicle off the road to finish the conversation.



SLIDE 38-39: EDUCATION AND ENFORCEMENT

In 2010, the Florida Department of Transportation and the USDOT's Transportation Safety Institute (TSI) commissioned the developed of a statewide mandatory training program to curb transit operator distracted driving. This training resource includes:

- Classroom training
- Training video
- Computer Based Training (CBT) module

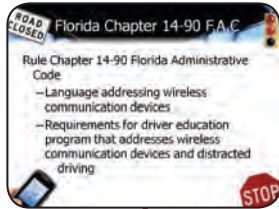


State of the Union

Many States have laws that ban drivers from text messaging while driving.

To underscore the seriousness of driver distractions, many states have established laws and are prosecuting individuals who drive distracted. These same states are also instituting fines and or prison time for those found guilty of driving distracted.

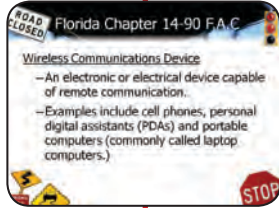
Show Curbing Distracted Driving Training Video – 9 minutes



SLIDE 40-47: LAWS AND REGULATIONS

There are many states in the US that have banned the use of hand held devices and texting. At this time Florida has not banned the use of wireless devices. However, Chapter 14-90, Florida Administrative Code, provides specific language about the use of ALL wireless technologies while operating a public transportation vehicle.

It is critical for you to interpret and comply with your agency's policies and procedures.



Rule Chapter 14-90, Florida Administrative Code

- Provides language about wireless distractions
- Identifies the requirements for distracted driver training
- Provides the following definitions:

Wireless Communications Device

"an electronic or electrical device capable of remote communication. Examples include cell phones, personal digital assistants (PDAs) and portable computers (commonly called laptop computers)."

Personal Wireless Communications Device

"an electronic or electrical device that was not provided by the bus transit system for business purposes."

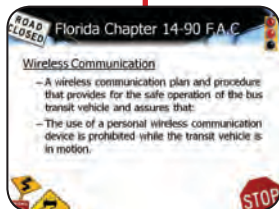
System Safety Program Plan Requirements

Section 14-90.004(1) "Each bus transit system shall develop and adopt SSPP that complies with or exceeds the established safety standards set forth in this rule chapter.

(a) The SSPP shall address the following safety elements and requirements:

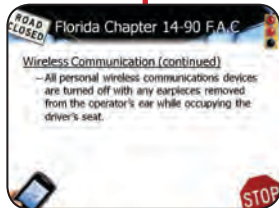


Wireless Communication



12. A wireless communication plan and procedure that provides for the safe operation of the bus transit vehicle and assures that:

- The use of a personal wireless communication device is prohibited while the transit vehicle is in motion.
- All personal wireless communications devices are turned off with any earpieces removed from the operator's ear while occupying the driver's seat.



13. A policy on the use of a wireless communications device issued to the operator by the bus transit system for business related purposes. Policies developed shall assure that:

- guidelines are developed that allow for the use of a wireless communications device in emergency situations.
- the use of a wireless communications device does not interfere with the operator's safety related duties.

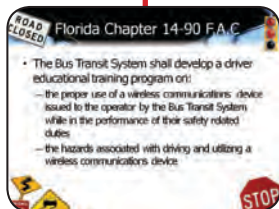


14. The Bus Transit System shall develop a driver educational training program on:

- the proper use of a wireless communications device issued to the operator by the Bus Transit System while in the performance of their safety related duties.
- hazards associated with driving and utilizing a wireless communications device



Our agency's policies: review agency policy here.





SLIDE 48: OUR AGENCIES POLICY

Insert your transit agency policy on wireless technologies here. Be sure to clearly explain your agencies policies and rules on both agency authorized and non-agency authorized wireless communication devices.



SLIDE 49-50: QUESTIONS AND REVIEW

Ask participants if they have any questions. Solicit and encourage discussion.

Review—Course Objectives

Ask participants to discuss what they have learned for each of the four learning objectives.

- Define the term “distracted”
- Describe the risk of driving while distracted
- Identify tips for preventing distracted driving
- Interpret the regulations, laws and company policies with regard to wireless devices



Ask participants if they have any questions. Be sure to allow ample time and adequate opportunity for participants to ask questions and/or clarify your agencies policies/rules.

Additional references for trainers:

http://www.aptastandards.com/Portals/0/Bus_Published/APTA-BTS-BS-RP-005-09_employee_controlled_distractions.pdf

<http://www.sciencefriday.com/program/archives/201009172>

www.nsc.org

www.aaaxchange.com

www.focusdriven.org

http://www.ghsa.org/html/issues/dist_driving_psa.html

http://www.ghsa.org/html/stateinfo/laws/cellphone_laws.html

<http://www.oprah.com/oprahshow/End-Distracted-Driving>

APPENDIX E

APTA Recommended Practice: Reducing Driver-Controlled Distractions While Operating a Vehicle on Agency Time



APTA STANDARDS DEVELOPMENT PROGRAM
RECOMMENDED PRACTICE

American Public Transportation Association
 1666 K Street NW
 Washington, DC 20006

APTA BTS-BS-RP-005-09

Published December 31, 2009

APTA Bus Safety Working Group

Reducing Driver-Controlled Distractions While Operating a Vehicle on Agency Time

Abstract: There are many driver-controlled devices, conditions and activities that might distract from safely operating a vehicle. This *Recommended Practice* establishes best practices to assist agencies with guidance concerning mitigating or minimizing these driver-controlled distractions while operating a vehicle on company business.

Keywords: alertness, awareness, distraction, electronics, phones, texting

Summary: Since January 2008, more than 100 bills in approximately 30 states have proposed to limit distracted driving, from cell phones, in some capacity at the state or local level, according to the Denver-based National Conference of State Legislatures. The number of wireless subscribers in the June 2008 was 262.7 million, up from 230 million in December 2006, according to the Cellular Communications and Internet Association, based in Washington D.C. Recognizing distracted driving as a serious public safety issue and as a civil liability toward organizations, the APTA Standards Bus Safety Working Group was convened to study and recommend mitigations to reduce transit operator distractions. A separate *Recommended Practice* has been developed with recommendations for reducing operator distractions that are under management's control.

Scope and purpose: Reducing operator distractions and improving safety is a shared responsibility of both the operator and the transit agency. This *Recommended Practice* contains best practices for reducing driver-controlled distractions. A separate *Recommended Practice* has been developed with recommendations for reducing operator distractions that are under management's control.

Summary of Recommendations:

- Educate employees about the industry wide issues of operator distraction
- Develop training programs to include driver distractions training
- Ensure policies and procedures include enforcement and disciplinary actions
- Analyze data to determine effectiveness of agency policies and training

This Recommended Practice represents a common viewpoint of those parties concerned with its provisions, namely, transit operating/planning agencies, manufacturers, consultants, engineers and general interest groups. The application of any standards, practices or guidelines contained herein is voluntary. In some cases, federal and/or state regulations govern portions of a rail transit system's operations. In those cases, the government regulations take precedence over this standard. APTA recognizes that for certain applications, the standards or practices, as implemented by individual transit agencies, may be either more or less restrictive than those given in this document.

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The American Public Transportation Association greatly appreciates the contributions of the APTA Bus Safety Working Group and the following individuals, who provided the primary effort in the drafting of this *Recommended Practice*:

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Reducing Driver-Controlled Distractions While Operating a Vehicle on Agency Time

1. Driver-controlled distractions

There are many types of driver-controlled devices, conditions and activities that might distract an operator from safely operating a vehicle. This *Recommended Practice* addresses common distractions and makes recommendations for dealing with the distractions.

1.1 Personal electronic devices

Personal electronic devices such as cell phone, pagers, MP3 players and video games should be turned off, stowed off of the driver's person and out of sight. These devices should never be used while the vehicle is in motion. Use of these devices should be restricted to times when the vehicle is in parked condition.

1.2 Non-electronic driver-controlled distractions

There are many other distractions, besides electronic devices, that can divert attention from safe driving. The driver should have both hands free to control the vehicle at all times. The following are some common distractions that may impact a driver's attention and should be avoided anytime the vehicle is in motion:

- food or drink
- grooming
- personal reading material
- paperwork

2. Other distractions

The driver should avoid activities that will distract from operating the vehicle in a safe, defensive manner.

2.1 Inherent distractions

2.1.1 Passengers

Drivers should avoid unnecessary communications. When conversing with passengers, a driver's focus should remain on safe, defensive operation of the vehicle. Anytime conversation impacts safe driving, the driver should pull the vehicle off the road to finish the conversation.

2.1.2 Agency-authorized or required reference material

Drivers may need to refer to maps, directions, instructions, etc. to perform their job duties. These actions should be performed while the vehicle is stopped in a safe location.

3. Agency implementation

3.1 Communication

Agencies should educate all employees about the industry-wide issue of operator distraction. Joint labor and management recognition of the safety and liability implications is essential to establishing effective mitigation

APTA-BTS-BS-RP-005-09 | Reducing Driver-Controlled Distractions While Operating a Vehicle on Agency Time

measures. Agencies should develop policies and procedures that are well documented and thoroughly communicated providing for feedback from operators and other employees.

3.2 Training

Training programs should be developed or revamped to include driver distraction training, focusing on policies and mitigation initiatives. All levels of the organization should be included in the implementation of the training.

Accident investigation training should incorporate the recognition of operator distractions as a potential contributor to the incident.

3.3 Enforcement

Agency-developed policies and procedures should include enforcement and disciplinary steps or actions in accordance with applicable agency standards. Enforcement tools may include the use of onboard observation, video and audio, black box technology, field personnel, customer reports, service audits, etc.

3.4 Analysis of data

It is important to collect, measure and analyze data to determine the effectiveness of the agency's policy, training and enforcement program.

Annex A

Excerpt from *Traffic Safety Facts Research Note* on driver cell phone use

Driver hand-held cell phone use decreased to 5 percent in 2006 compared to 6 percent in 2005. This downturn in handheld cell phone use is the first since the National Highway Traffic Safety Administration began estimating driver cell phone use in 2000 through its National Occupant Protection Use Survey (NOPUS). The 2006 NOPUS also found that the incidence of drivers speaking with observable headsets on remained unchanged, while the incidence of observable hand-held device manipulation while driving increased to 0.4 percent in 2006 from 0.2 percent in the previous year.

However, the lack of up-to-date data to extrapolate NOPUS observed data to total cell phone use precludes an accurate estimation of overall driver cell phone use. In the past, we had projected the total hands-free use and total cell phone use among all drivers based on 2003 cell phone use data from other sources. This research note will not make such a projection for the year of 2006 with the outdated data but we will do it in the future as updated data become available.

The 2006 hand-held phone use rate translates into 745,000 vehicles on the road at any given daylight moment being driven by someone talking on a hand-held phone. The decline in use occurred in a number of driver categories, including female drivers, drivers in the Midwest, drivers age 25 to 69, drivers of passenger cars, drivers in both urban and suburban areas, drivers on weekdays, and drivers driving alone.

The NOPUS is conducted annually by NHTSA's National Center for Statistics and Analysis. It provides the only probability-based observed data on driver cell phone use in the United States.

References

American Public Transportation Association, *Recommended Practice*, "Reducing Agency-Controlled Distractions while Operating a Vehicle on Agency Time," APTA BTS-BS-RP-006-09, 2009.

Definitions

agency authorized device: Any device or activity, whether personal or agency-issued, used for agency business at the request or authorization of the agency.

driver: A person operating a vehicle.

driver-controlled distractions (DCD): Anything within the driver's power that diverts attention away from safely operating a vehicle.

electronic device: Any device that has an on/off switch.

personal electronic device: Any non-agency authorized or distributed electronic device.

vehicle: Any powered bus, car, railcar or truck used by the agency for agency business.

Abbreviations and acronyms

APTA American Public Transportation Association

DCD driver-controlled distractions

APPENDIX F

APTA Recommended Practice: Reducing Agency-Controlled Distractions While Operating a Vehicle on Agency Time



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RECOMMENDED PRACTICE

American Public Transportation Association
 1666 K Street NW
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APTA BTS-BS-RP-006-09

Published December 31, 2009

APTA Standards Bus Safety Working Group

Reducing Agency-Controlled Distractions While Operating a Vehicle on Agency Time

Abstract: There are many agency-controlled devices, conditions and activities that might distract from safely operating a vehicle. This *Recommended Practice* guides agencies in mitigating or minimizing these agency-controlled distractions for drivers while they operate vehicles on company business.

Keywords: alertness, awareness, distraction, electronics, phones, texting

Summary: Driver inattention is the leading factor in most crashes and near-crashes, according to a landmark research report released by the National Highway Traffic Safety Administration (NHTSA) and the Virginia Tech Transportation Institute (VTI). Nearly 80 percent of crashes and 65 percent of near-crashes involved some form of driver inattention within three seconds before the event. Primary causes of driver inattention are distracting activities, such as cell phone use and drowsiness. Reducing operator distractions and improving safety is a shared responsibility of both the transit agency and the operator.

Scope and purpose: Recognizing distracted driving as a serious public safety issue and as a civil liability, the APTA Standards Bus Safety Working Group was convened to study and recommend mitigations agencies should consider to reduce transit operator distractions. This *Recommended Practice* provides transit agencies with a guideline to develop standard operating procedures, policies, training programs and improvement in technologies regarding agency-controlled operator distractions. In addition, it examines the nature and scope of the problem associated with distracted driving; examines current data, practices, standards, attitudes, technologies and related issues in public transit regarding distracted driving; and identifies specific strategies that might be helpful for consideration by transit agencies. Federal or state laws that are more restrictive than this *Recommended Practice* supersede this document and must be followed. Transit systems are free to develop more restrictive rules than are provided for in this *Recommended Practice*. A separate *Recommended Practice* has been developed with recommendations for reducing operator distractions that are under management's control.

Agency Controlled Distractions

- Develop policies, procedures and training programs to mitigate distractions
- Keep dispatch communications to a minimum
- Create and enforce disciplinary steps or actions in accordance with agency's policies and procedures
- Create an operator's work station to minimize distractions

This Recommended Practice represents a common viewpoint of those parties concerned with its provisions, namely, transit operating/planning agencies, manufacturers, consultants, engineers and general interest groups. The application of any standards, practices or guidelines contained herein is voluntary. In some cases, federal and/or state regulations govern portions of a rail transit system's operations. In those cases, the government regulations take precedence over this standard. APTA recognizes that for certain applications, the standards or practices, as implemented by individual transit agencies, may be either more or less restrictive than those given in this document.

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1. Agency-controlled distractions

There are many types of agency-controlled devices, conditions and activities that might distract the driver or operator from safely operating a vehicle. This *Recommended Practice* addresses common distractions and makes recommendations for dealing with the distractions.

The following sections contain some common agency-controlled distractions that may impact a driver's or operator's attention.

1.1 Devices

- communications equipment (agency authorized)
- route map or route descriptions
- vehicle equipment
- workstations
- farebox
- Onboard vehicle displays of schedule adherence

1.2 Conditions

- schedule adherence/recovery time
- fatigue (shift work, etc.)
- fitness for duty
- driver confidence
- workstation ergonomics
- mechanical failures

1.3 Activities

- communication protocols between agency and operator
- enforcement of rules
- suspicious people/packages
- counseling employees
- customer emergencies
- customer inquires
- restroom breaks
- check rides
- interactions with passengers
- personal emergencies

2. Implementation

Addressing the agency-controlled distractions listed above requires a multi-faceted approach. The development of policies, procedures, training programs and use of technologies may be used to mitigate agency-controlled distractions. For example, it will be necessary to establish a procedure by which an operator can be contacted in the event of a personal emergency.

3. Policies

Agencies should develop policies and procedures that are designed to reduce agency-controlled distractions. As part of the policy development process, a safety assessment should be performed to determine individual agency-controlled distractions. Once agency-controlled distractions are identified, the agency should develop plans to eliminate or mitigate those distractions using the following hierarchy of controls:

- Eliminate the distraction.
- Reduce or mitigate the distraction through engineering controls.
- Train and instruct employees on agency policies and procedures to minimize distractions while operating a vehicle.

In addition to identifying distractions, the agency's policy should also address training requirements and how the policy is to be enforced.

3.1 Example

All dispatcher communications should be kept to a minimum and should be business-related, with each agency defining those terms. Any call to a vehicle should begin with an inquiry, such as, "Is it safe for you to talk?" The recipient of such a call should respond "yes" or "no." If the answer is "no," then the recipient should defer the call until he or she has arrived at a safe location.

4. Training

Agencies should provide initial and periodic training (new hire, recertification, refresher and retraining) to all drivers and operators on distractions and develop policies and procedures that reduce or eliminate distractions. Agencies committed to providing this training will benefit from improved safety performance and reduced operational costs.

Training on distractions must follow the established agency policy guidelines and include instructions on all items identified during the safety assessment. (Refer to the distractions listed in Section 1, Agency-controlled distractions.)

Accident investigation training for supervisors should incorporate the recognition of operator's distractions as a contributing factor to the incident. See Annex C for examples.

5. Technology

The design and function of the operator's work station should minimize distractions due to visibility (including fare box, blind spots, glare and mirror placement), controls, instrumentation and seat design and location.

6. Enforcement

Agency policies and procedures should include enforcement and disciplinary steps or actions in accordance with applicable agency standards. Enforcement tools may include the use of on-board observation, video and audio, event recorder, field personnel, customer reports, service audits, etc.

7. Analysis of data

It is important to collect, measure, and analyze data to determine the effectiveness of the agency's policy, training and enforcement program.

Annex A

Excerpt from *Traffic Safety Facts Research Note* on driver cell phone use

Driver hand-held cell phone use decreased to 5 percent in 2006 compared to 6 percent in 2005. This downturn in handheld cell phone use is the first since the National Highway Traffic Safety Administration began estimating driver cell phone use in 2000 through its National Occupant Protection Use Survey (NOPUS). The 2006 NOPUS also found that the incidence of drivers speaking with observable headsets on remained unchanged, while the incidence of observable hand-held device manipulation while driving increased to 0.4 percent in 2006 from 0.2 percent in the previous year.

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The NOPUS is conducted annually by NHTSA's National Center for Statistics and Analysis. It provides the only probability-based observed data on driver cell phone use in the United States.

Annex B

NHTSA press release on driver inattention, April 20, 2006

Driver inattention is the leading factor in most crashes and near-crashes, according to a landmark research report released today by the National Highway Traffic Safety Administration (NHTSA) and the Virginia Tech Transportation Institute (VTTI).

Nearly 80 percent of crashes and 65 percent of near-crashes involved some form of driver inattention within three seconds before the event. Primary causes of driver inattention are distracting activities, such as cell phone use, and drowsiness.

“This important research illustrates the potentially dire consequences that can occur while driving distracted or drowsy. It’s crucial that drivers always be alert when on the road,” said Jacqueline Glassman, acting administrator of NHTSA. Her remarks were made during a news conference today at VTTI in Blacksburg, VA.

The 100-Car Naturalistic Driving Study tracked the behavior of the drivers of 100 vehicles equipped with video and sensor devices for more than one year. During that time, the vehicles were driven nearly 2,000,000 miles, yielding 42,300 hours of data. The 241 drivers of the vehicles were involved in 82 crashes, 761 near crashes, and 8,295 critical incidents.

“The huge database developed through this breakthrough study is enormously valuable in helping us to understand—and prevent—motor vehicle crashes,” said Dr. Tom Dingus, director of VTTI.

In addition, a follow-on analysis to the 100-Car Study has also been released. Focused on the types of driver inattention and their associated risk, key findings include:

- Drowsiness is a significant problem that increases a driver’s risk of a crash or near-crash by at least a factor of four. But drowsy driving may be significantly under-reported in police crash investigations.
- The most common distraction for drivers is the use of cell phones. However, the number of crashes and near-crashes attributable to dialing is nearly identical to the number associated with talking or listening. Dialing is more dangerous but occurs less often than talking or listening.
- Reaching for a moving object increased the risk of a crash or near-crash by 9 times; looking at an external object by 3.7 times; reading by 3 times; applying makeup by 3 times; dialing a hand-held device (typically a cell phone) by almost 3 times; and talking or listening on a hand-held device by 1.3 times.
- Drivers who engage frequently in distracting activities are more likely to be involved in an inattention-related crash or near-crash. However, drivers are often unable to predict when it is safe to look away from the road to multi-task because the situation can change abruptly leaving the driver no time to react even when looking away from the forward roadway for only a brief time.

The 100-Car Study and its follow-on analysis were co-sponsored by NHTSA, the Virginia Transportation Research Council (the research division of the Virginia Department of Transportation) and Virginia Tech.

The background and results of both studies are available on NHTSA’s website under Research and Development at <http://www-nrd.nhtsa.dot.gov/departments/nrd-13/newDriverDistraction.html>.

Annex C

Accident investigation for supervisors

The purpose of assembling the investigation is to provide guidance and recommendations on assembling the collision investigation report. Also consider the following benefits:

- **Reduced liability:** Who or what caused the collision? (It's usually a combination of circumstances rather than a single cause. Human error is almost always due to a chain of events or errors.) Having a complete and thorough accident investigation greatly assists the agency's claims department in assessing and defending liability.
- **Improved safety:** How can this type of accident be reduced or eliminated?

The chain of events is the time of first perception to final rest, in the following order:

- Point of possible perception (the first possible point)
- Point of perception (when it took place, 3/4 second)
- Operator response (3/4 second)
- Equipment response (condition of)
- Initial engagement (first contact)
- Maximum engagement (most damage)
- Disengagement (vehicles separate)
- Final rest (may be different if vehicle was moved after impact)

There are two kinds of evidence to be collected (see **Figure 1**):

- **Transient:** marks, debris and fluids. This is evidence that is temporary and prone to disappear, be moved or be disturbed. It should be recorded by photo or sketch as soon as possible.
- **Fixed:** damage to structures and vehicles. This is evidence that is likely to be around for a while, such as vehicle, tree or building damage. The investigator should take photos of vehicle damage before vehicles are moved, as they can become further damaged during the recovery process.

FIGURE 1
Types of Evidence



Transient evidence



Fixed evidence

Debris as evidence:

- underbody
- vehicle parts
- vehicle fluids

There are five different forms of fluid debris:

- **Splashdown:** A fluid container is ruptured and fluid splashes onto the road surface (such as radiator fluid). A vehicle splashdown is not always a good indicator of the exact point of impact.
- **Dribble:** Fluid is left in a “trail” from the point of impact to the vehicle’s final rest.
- **Puddling:** Fluid forms in a puddle after leaking from the vehicle, generally under and around the vehicle.
- **Runoff:** Fluid leaks from vehicle and runs down a grade.
- **Soak-in:** Fluid leaks from vehicle and soaks into a porous surface such as soil or gravel.

What is good documentation?

- Use behavioral language describing the situation (what you saw, heard and could measure).
- Record factual details (date, time, location, bus number, etc.).
- Timeliness (preferably make notes at the time of the observation)
- Notes of contacts are vital for both inappropriate behavior and for the purpose of recognizing operators.

Interview techniques

The following people should be interviewed, when applicable:

- operators
- passengers and eyewitnesses
- local police
- emergency crews
- any person involved/witnessed at the scene
- residents or businesses near the scene
- technical specialists
- walk-ins

Interview arrangements

- At the scene, identify yourself and state your purpose.
- Make contact as soon as possible at the scene.
- Use a positive approach.
- Select a good location.
- Avoid group interviews.
- Seek a neutral location for hostile witnesses.
- Always display courtesy and patience.
- Take notes when possible.

Aids to effective interviews

- Always display courtesy and patience; anger causes brain shutdown.
- No profanity.
- Take notes when possible.

Factors that affect witness reporting

- Perception vs. what really happened:
 - emotion
 - exaggeration

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- intelligence
- quantitative or blanket statements
- Transposition:
 - sequence of events out of order
- Post accident loss of memory:
 - frightening or traumatic
 - subconscious response
- Credibility assessment:
 - general demeanor
 - prejudicial statements
 - tendency toward drama
 - easily swayed
 - subconscious response
- Environment:
 - vision obstructions or impairments
 - noise
 - weather conditions
- Physiological factors:
 - hearing or vision
 - drugs or alcohol
 - subconscious response
- Health:
 - fatigue
 - stress
 - illness
 - subconscious response
- Psychological factors:
 - judgment
 - revenge or retaliation
 - rationalization
 - incrimination
 - subconscious response
- Personalities:
 - witness
 - yourself

It takes practice, patience and empathy to be an effective interviewer.

References

- American Public Transportation Association, *Recommended Practice*, “Reducing Driver-Controlled Distractions while Operating a Vehicle on Agency Time,” APTA BTS-BS-RP-005-09, 2009.
- Glassbrenner, Donna, and Tony Jianqiang Ye, *Traffic Safety Facts Research Note*, “Driver Cell Phone Use in 2006—Overall Results,” National Highway Traffic Safety Administration, DOT HS 810 790, July 2007.
- National Highway Traffic Safety Administration press release, “NHTSA, Virginia Tech Transportation Institute Release Findings of Breakthrough Research on Real-World Driver Behavior, Distraction and Crash Factors,” April 2006.

Definitions

agency-controlled distractions: Any device, condition or activity within the agency’s control which diverts attention away from safely operating a vehicle.

dispatcher: An employee, usually supervisory level, who communicates with employees in vehicles carrying out business related functions for the agency through the use of a two way radio or digital messaging system.

driver: A person operating a non-revenue vehicle in the performance of their scope of work for the agency. This includes contractors.

electronic device: Any device that has an on/off switch.

mobile data terminal (MDT): A device installed in a vehicle to provide data pertinent to the operation of the system.

nonrevenue vehicle: Any vehicle used in carrying out agency business that is not used in revenue service.

operator: Any individual operating a revenue vehicle.

personal data assistant (PDA): A handheld electronic communication device.

revenue vehicle: Any bus, railcar, van or other vehicle used by the agency or agency contractors to provide transportation to agency customers.

personal electronic device: Any non-agency authorized or distributed electronic device.

safety assessments: A structured and systematic methodology, aimed at enhancing workplace safety, including protection of life, health, the environment and property.

Abbreviations and acronyms

APTA	American Public Transportation Association
DOT	Department of Transportation
VTTI	Virginia Tech Traffic Institute
NHTSA	National Highway Traffic Safety Administration
PDA	personal data assistant

APPENDIX G

Maryland Transit Administration Policy: Zero Tolerance for Mobile Communication Devices



POLICY

Zero Tolerance for Mobile Communications Devices & Other Electronic Devices

Policy No. 1001-2010-1		MTA Document Serial No. 1001-2010-1.1.20100913		Page 2 of 6
Rev No. <u>N/A</u>	Issue Date: <u>9/13/2010</u>	Supersedes: <u>Bulletin #111-09 and others</u>		Guidance Office: Labor and Employee Relations
Effective Date: <u>10/1/2010</u>	Applies to: <u>ALL MTA Employees & Contractors (except Police Department employees)</u>			

1. STATEMENT OF POLICY

The Maryland Transit Administration (MTA) is committed to providing safe and reliable transportation service and is dedicated to ensuring the safety of its employees, its riders, and the general public. As such, the MTA adopts a policy of *Zero-Tolerance* for the use of cellular phones and other mobile electronic devices while its employees are directly engaged in public service, performing safety sensitive duties, or in locations where complete attention is required to ensure safety. **The following policy clarifies and extends what was stated in Transportation Bulletin #111-09, and, upon the effective date provided above, will supersede Bulletin #111-09 and all previous policy statements regarding cell-phone use.**

2. APPLICABILITY

This policy applies to all MTA employees and contractors (union and non-union) but does not apply to employees of the MTA Police Department¹. However, the *corrective actions* described in Section 4 apply to MTA employees only (except for Police Department employees) and not to contractors. The corrective action for contractors (i.e., persons performing work on contract with the MTA) who violate this policy is removal from their contracted work or an appropriate action to be taken by the project manager.

3. DEFINITIONS

3.1. *Policy*: a reference to the current document.

3.2. *Mobile Communications Device*: refers to a device by which mobile communication is made possible. This includes cellular (or mobile) phones or other mobile communications devices (for example, pagers, texting devices, etc.). This also includes any attachments (e.g., hands-free headsets, bluetooth earpieces or headsets, or other attachments) that allow for hands-free or concealed use of the device.

3.3. *Mobile Electronic Device*: refers to an electronic device that can be used for entertainment, leisure, or other non-work activities (for example, portable gaming systems, electronic book readers, portable music and/or

¹ MTA Police Department employees should refer to Section 6 and consult departmental rules and Standard Operating Procedures.



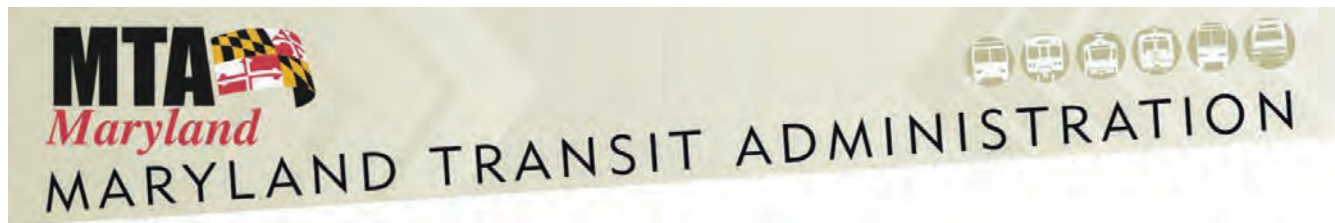
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video players, etc.). This also includes any attachments (e.g., headphones, microphones, earpieces, or other attachments).

- 3.4. *Personal Device*: Refers to any of the above devices mentioned in sections 3.2 and 3.3 that was not issued or paid for by the MTA.
- 3.5. *MTA Equipment*: refers to any piece of MTA property including vehicles, buildings, tracks, parking lots, and other MTA property.
- 3.6. *Revenue Vehicle*: refers to any MTA vehicle designed for the transport of the riding public including MTA's buses, trains, and paratransit vehicles, regardless of whether the revenue vehicle is directly owned by MTA or by a contracted service provider.
- 3.7. *Non-Revenue Vehicle*: refers to any MTA vehicle that is not intended for revenue service. This includes, but is not limited to, non-revenue passenger vehicles, maintenance vehicles (e.g., tow trucks, rail trucks, etc.), construction equipment, and "golf-carts."
4. APPLICATION OF ZERO-TOLERANCE: The following rules govern how and where the MTA's zero-tolerance policy applies and what corrective action will result from a violation of this Policy.
 - 4.1. *Operating an MTA Revenue Vehicle*: This includes driving the vehicle, being in the driver's seat or operator's cab (regardless of vehicle movement), performing a pre-trip inspection or otherwise preparing to operate the vehicle, and/or parking and securing the vehicle. While operating an MTA Revenue Vehicle, all mobile communications devices and mobile electronic devices must not be used or visible, including any attachments to such devices (e.g., hands-free headsets, ear phones, or any other apparatus allowing hands-free or covert use of the device).
Corrective Action: Using ANY mobile electronic or communications device and/or related attachments (or having those devices visible) while operating an MTA Revenue Vehicle (described above), whether the vehicle is in service or out of service, **will result in immediate termination.**



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4.2. *Maintaining MTA Equipment:* This includes any task conducted to maintain or repair MTA equipment (defined in Section 3.5). For example, performing corrective maintenance, preventative maintenance, inspections, campaigns, replacements, cleaning, and other maintenance tasks. While maintaining MTA equipment, all personal mobile communications devices and personal mobile electronic devices must not be used or visible, including any attachments to such devices (e.g., hands-free headsets, ear phones, or any other apparatus allowing hands-free or covert use of the device).

Corrective Action: Using a PERSONAL mobile electronic or communications device and/or related attachments while maintaining MTA equipment (described above) **will result in immediate termination.**

4.3. *Directly Serving the Riding Public:* This includes, but is not limited to, monitoring and/or controlling MTA service and monitoring and/or controlling service communications (for example, controlling and monitoring MTA operations in control centers).

Corrective Action: Using a PERSONAL mobile communications device when directly serving the riding public (described above), unless this use is absolutely necessary during a work-related emergency (described in Section 5.3, is a major offense and may result in **penalties up to and including termination.** (Operating an MTA Revenue Vehicle does not fall into Section 4.3; for rules governing device use while operating an MTA Revenue Vehicle, see Section 4.1.)

4.4. *Being present in a safety-sensitive area:* This includes any location in the MTA where, in the opinion of Safety or Service Quality, an employee's full attention is necessary to ensure safety. This includes bus yards, farebox vaulting lanes, maintenance shop lanes and floors, parking lots, train yards and track areas, and substations. However, mobile device use may be permissible if the employee is walking in an area that is designated for pedestrian use (e.g., sidewalks) or the employee is in a safe space (e.g., a safely parked vehicle) as long as device use is not interfering with MTA's operations and is not posing a safety hazard.



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Corrective Action: Using a PERSONAL mobile communications or electronic device while being present in a safety-sensitive area (described above) is a major offense and may result in **penalties up to and including termination.**

- 4.5. *Operating an MTA Non-Revenue Vehicle:* Employees using mobile communications devices while operating non-revenue vehicles must abide by the Hands-Free Cell Phone Use Policy for State Employees and applicable federal, state, and local laws. Mobile communications devices may be used by the operator of an MTA Non-Revenue Vehicle while the vehicle is in motion if and only if a hands-free attachment is being used and the operator of the vehicle is able to safely operate the vehicle. (However, the MTA strongly recommends safely stopping the vehicle before using a mobile device and will impose significant discipline for any employee whose accident is a direct or indirect result of mobile device use.)

Corrective Action:

- 4.5.1. Using ANY mobile communications device without using a hands-free attachment is a major offense and will result in **penalties up to and including termination.**
- 4.5.2. Texting (viewing or sending text messages and/or emails) while the vehicle is in motion is a major offense and will result in **penalties up to and including termination.**
5. PERMISSABLE USE OF MOBILE DEVICES: There are locations and times when use of a mobile device is not in violation of the Policy. If the device is used or seen in a situation not outlined in Section 5, that use is not necessarily a violation of this Policy (unless expressly prohibited in Section 4); however, MTA's management reserves the right to use reasonable judgment in situations that are not clearly outlined in this Policy (departmental rules may take precedence in these situations). Use of a mobile communications or electronic device in one or more the following situations is not in violation of this Policy:
- 5.1. *During operator breaks and layovers* but ONLY IF ALL of the following conditions are met:
- 5.1.1. The operator must be out of the driver's seat or operator's cab.
- 5.1.2. The vehicle must be stopped and secured as outlined in the appropriate operator's rules.



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- 5.1.3. The operator is not performing any of the actions outlined in Section 4.1.
- 5.1.4. The use does not interfere with or delay service.
- 5.2. *During non-operator breaks* but ONLY IF ALL of the following conditions are met:
 - 5.2.1. The employee is not in a safety-sensitive area (see Section 4.4). For example, the employee may be allowed to use the device in a break room, lunch room, or office. The appropriate location for mobile device use will be determined by departmental management. Employees are responsible for knowing the appropriate location for device use.
 - 5.2.2. The employee is not performing any actions outlined in Sections 4.1, 4.2, or 4.3.
- 5.3. *During work-related emergencies* but ONLY IF the employee has no other means of communication available. However, the employee should cease all safety-sensitive duties (outlined in Sections 4.1, 4.2, and 4.3) and remove him or her self from any safety-sensitive area if possible (outlined in Section 4.4).
- 6. DEPARTMENTAL MOBILE DEVICE POLICIES
 - 6.1. Individual MTA Departments/Divisions may issue and enforce their own mobile device policies ONLY IF those policies do not violate any of the prohibitions contained in this Policy. That is, policies at MTA's departments/divisions cannot allow for mobile communications or electronic device use in situations that are expressly prohibited by this Policy.
 - 6.2. Departmental/Divisional policies that address situations not discussed in this Policy will take precedence.

Abbreviations used without definitions in TRB publications:

A4A	Airlines for America
AAAE	American Association of Airport Executives
AASHO	American Association of State Highway Officials
AASHTO	American Association of State Highway and Transportation Officials
ACI-NA	Airports Council International-North America
ACRP	Airport Cooperative Research Program
ADA	Americans with Disabilities Act
APTA	American Public Transportation Association
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
ATA	American Trucking Associations
CTAA	Community Transportation Association of America
CTBSSP	Commercial Truck and Bus Safety Synthesis Program
DHS	Department of Homeland Security
DOE	Department of Energy
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
HMCRP	Hazardous Materials Cooperative Research Program
IEEE	Institute of Electrical and Electronics Engineers
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITE	Institute of Transportation Engineers
MAP-21	Moving Ahead for Progress in the 21st Century Act (2012)
NASA	National Aeronautics and Space Administration
NASAO	National Association of State Aviation Officials
NCFRP	National Cooperative Freight Research Program
NCHRP	National Cooperative Highway Research Program
NHTSA	National Highway Traffic Safety Administration
NTSB	National Transportation Safety Board
PHMSA	Pipeline and Hazardous Materials Safety Administration
RITA	Research and Innovative Technology Administration
SAE	Society of Automotive Engineers
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005)
TCRP	Transit Cooperative Research Program
TEA-21	Transportation Equity Act for the 21st Century (1998)
TRB	Transportation Research Board
TSA	Transportation Security Administration
U.S.DOT	United States Department of Transportation