

Los Angeles County Metropolitan Transportation Authority:

*It Can Increase Its Efforts to Ensure the Safe
Operation of Its Buses*



August 2001
2001-101

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August 14, 2001

2001-101

The Governor of California
President pro Tempore of the Senate
Speaker of the Assembly
State Capitol
Sacramento, California 95814

Dear Governor and Legislative Leaders:

As requested by the Joint Legislative Audit Committee, the Bureau of State Audits presents its audit report concerning the Los Angeles County Metropolitan Transportation Authority's (MTA) compliance with applicable state and federal laws designed to protect driver and public safety and its procedures for monitoring the secondary employment of its part-time bus drivers.

This report concludes that the MTA lacks an adequate system to prevent all violations of federal and state driving and on-duty time restrictions. For example, the MTA does not have the ability to effectively prevent all drivers from exceeding 10 hours behind the wheel since it cannot track actual driving time. In addition, although the MTA is taking positive steps to collect complete data on its drivers' secondary employment, it needs a more consistent approach to identify bus drivers working for multiple employers who exceed driving and on-duty restrictions. Furthermore, the MTA does not take full advantage of citation information provided by the Department of Motor Vehicles to ensure it applies its discipline process equitably to all bus drivers. Finally, unreliable or missing data in MTA's accident monitoring system hinder its ability to determine whether driver fatigue contributes to an accident.

Respectfully submitted,

ELAINE M. HOWLE
State Auditor

BUREAU OF STATE AUDITS

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SUMMARY

Audit Highlights . . .

Our review of the Los Angeles County Metropolitan Transportation Authority's (MTA) management and monitoring of its bus operators revealed that:

- MTA lacks an effective system to prevent all violations of driving time restrictions.*
 - It does not adequately track the time its bus drivers work for other employers.*
 - Numerous errors in its accident database make analysis difficult if not impossible.*
 - MTA does not take full advantage of information on traffic citations to consistently discipline its bus drivers.*
-

RESULTS IN BRIEF

Created by state law in 1993, the Los Angeles County Metropolitan Transportation Authority (MTA) serves as the main transportation designer, builder, and operator for one of the country's largest, most populous counties. With a fleet of 2,500 buses, the MTA transports more than 1 million passengers each day. The safety of these passengers and the public at large rests in part on the MTA's success in restricting the driving hours of its almost 4,000 bus drivers. However, the MTA does not have an effective system to identify all bus drivers who exceed driving or on-duty¹ hour restrictions aimed at reducing driver fatigue.

The National Highway Traffic Safety Administration estimates that drowsy drivers cause 100,000 traffic accidents each year, in which 1,500 people are killed and 71,000 are injured. During the 1980s, the National Transportation Safety Board (board) investigated several accidents that involved operator fatigue. Following the completion of these accident investigations, the board recommended in 1989 that the federal Department of Transportation review and upgrade hours of service regulations to assure that they are consistent and that they incorporate the results of the latest research on fatigue and sleep issues. Fatigue has remained a significant factor in transportation accidents since the board made its recommendations.

Because driver fatigue is a clear safety risk, both federal and state regulations restrict bus drivers' time behind the wheel. These regulations state that drivers must not drive more than 10 hours or drive after being on duty for 15 hours, and both of these restrictions require a prior off-duty period of at least 8 hours. State regulations also prohibit drivers from driving after being on duty for 80 hours during a consecutive 8-day period. The Federal Motor Carrier Safety Administration's regulatory guidance indicates that motor carriers are liable for on-duty violations when they lack management systems that effectively prevent such violations. However, because it cannot track its drivers' actual driving time, and division staff do not calculate

¹ On-duty time is all time from when a driver begins to work until he or she finishes work, including driving time.

an estimate of this time for drivers daily, the MTA is unable to prevent violations before they occur. Moreover, the MTA does not accurately track or consistently monitor its bus drivers' on-duty hours, and cannot ensure that its drivers are obeying the on-duty time restrictions.

Recognizing the limitations of its time-keeping and scheduling system, the MTA has budgeted \$8.2 million to improve the system's capabilities. An important new feature will be individual bus driver badges and electronic badge scanning that will allow computers to accurately record drivers' actual on-duty hours. However, the planned upgrades are not designed to generate reports to make managers aware of and able to prevent all types of bus driver on-duty violations, such as being behind the wheel more than 10 hours.

The MTA is further hampered in preventing driving and on-duty violations by its lack of information on the number of hours its bus drivers work for other employers (secondary employment). Although state regulations require bus drivers who work for more than one employer within a 24-hour period to disclose the number of hours for each employer on a driver log, only one of the four divisions we visited had a procedure in place to collect these logs. The MTA requires all bus drivers to seek prior approval before assuming secondary employment, and its division managers recently began using disclosure letters to elicit this secondary employment information. However, not all bus drivers who have other employers submit the disclosure letters. Moreover, the MTA does not have a database for its division managers to effectively track secondary employment once it is disclosed. Although the MTA is taking positive steps to collect complete data on its drivers' secondary employment, it needs a more consistent approach to identify bus drivers working for multiple employers who exceed driving and on-duty restrictions.

When a bus driver does cause or contribute to an accident, the MTA should be able to evaluate driver fatigue as a factor by noting how long the driver was working at the time of the accident. However, the MTA's accident database, the Vehicle Accident Monitoring System (VAMS), contains numerous errors, making analysis of accident statistics difficult, if not impossible. Bus drivers sometimes incorrectly document the time between when they start work and when the accident happens, and the MTA's data entry staff often make errors when they enter

accident report data into the VAMS. As a result, the database is not useful to MTA for identifying accident causes relating to driver fatigue.

Finally, the MTA bus division managers often remain unaware of bus drivers who receive frequent traffic citations. Managers rely on the bus drivers to disclose their citations, despite the fact that the MTA headquarters receives every driver's public driving record, including citations, from the Department of Motor Vehicles (Motor Vehicles). Under a labor agreement with the United Transportation Union, the MTA may issue demerits to its bus drivers for their failure to report citations. However, managers have not reliably used this discipline process because bus drivers do not always disclose their citations and because managers do not receive sufficient summary detail of citation information.

RECOMMENDATIONS

To ensure that its drivers do not exceed on-duty restrictions, the MTA should finish upgrading its time-keeping and scheduling system. Also, it should continue exploring options to further improve the system to warn division managers when their bus drivers are in danger of exceeding 10 hours driving time or of driving after being on duty for more than 15 hours.

To ensure that it makes a reasonable effort to obtain secondary employment information, the MTA should enforce its newly established procedures by requiring all divisions to provide, and all bus drivers to complete, secondary employment disclosure letters. Moreover, it should require that these letters be updated periodically throughout the year. In addition, the MTA should develop a database for its division managers to track secondary employment.

To improve the accuracy of its accident information, the MTA should better train bus drivers to complete accident reports and data entry staff to enter report information into the VAMS.

To improve its process for monitoring citations and equitably disciplining its bus drivers, the MTA should make sure that its division managers receive summary level reports of Motor Vehicle's citation data.

AGENCY COMMENTS

The MTA agrees with our recommendations. However, it disagrees with much of our analysis that establishes the basis for the recommendations. The MTA's response contains numerous incorrect and misleading statements. Our comments addressing MTA's response begin on page 37. ■

INTRODUCTION

BACKGROUND

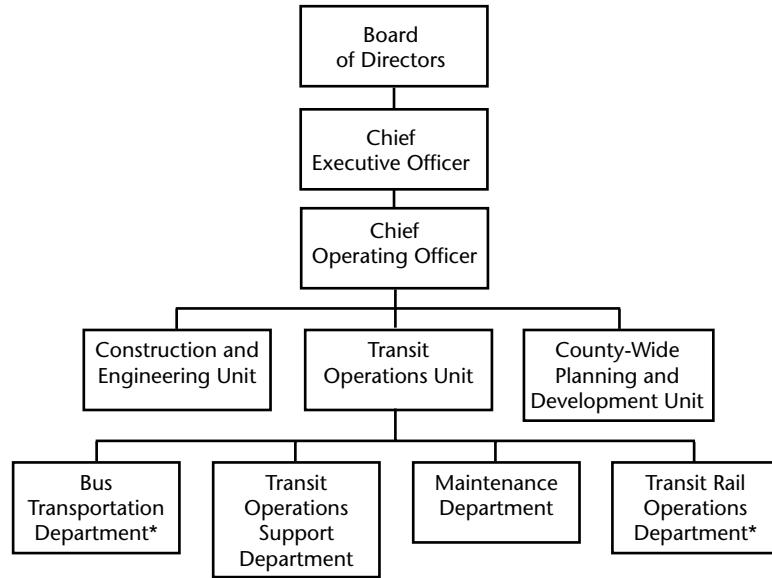
State law created the Los Angeles County Metropolitan Transportation Authority (MTA) in 1993, merging the Los Angeles County Transportation Commission and the Southern California Rapid Transit District. The principal transportation agency in Los Angeles County, the MTA operates a bus and rail system within a 1,433-square-mile service area that includes portions of Orange and Ventura counties. Its active fleet of more than 2,500 buses travels about 300,000 miles to provide transportation to more than 1 million passengers daily, while its almost 60-mile metro rail service provides daily service to more than 200,000 passengers through its 50 stations.

The MTA is governed by a 14-member board of directors consisting of 5 county supervisors, the mayor of Los Angeles, 3 members appointed by the mayor, 4 elected officials representing the other cities in Los Angeles County, and 1 non-voting member appointed by the governor.

The MTA's chief executive officer manages its four distinct operating units: Transit Operations, Construction and Engineering, County-Wide Planning and Development, and Support Services. The Transit Operations unit, which oversees all aspects of the bus and rail operations, has 11 bus and 3 rail divisions, whose staff are responsible for monitoring driver activities. For example, bus division staff are to track on-duty violations and secondary employment. Transit Operations support staff assist divisions in meeting and adhering to regulatory requirements. Figure 1 on page 6 shows an abbreviated version of the MTA's organizational structure.

FIGURE 1

**The MTA's Organizational Structure
(Abbreviated)**



Source: MTA's Adopted Budget for Fiscal Year 2001-02.

* There are 11 divisions within the Bus Transportation department and 3 within the Transit Rail Operations department.

The MTA employs about 8,000 people in a broad range of technical specialties and services. As of April 2001, the MTA employed roughly 3,200 full-time and 760 part-time bus drivers. The MTA uses its part-time bus drivers to meet morning and afternoon peak demand and to be more flexible and responsive to its customers. The number of part-time bus drivers has more than doubled from fiscal year 1998-99. However, as part of its most recent collective bargaining agreement with the United Transportation Union (UTU), the MTA has agreed to limit its part-time bus drivers to 980 by fiscal year 2002-03. The MTA also employs 150 full-time and 10 part-time rail drivers who are subject to the same collective bargaining agreement as its bus drivers.

The collective bargaining agreement also increases the hourly base pay rates for both full-time and part-time bus drivers hired on or after July 1, 1997 from \$16.76 to up to \$18.57 by July 1, 2002. Drivers hired before July 1, 1997 will be able to earn up to \$22.04. Full-time drivers receive fringe benefits such as paid vacations and holidays, health and insurance coverage, and a pension plan. Part-time bus drivers can work no more

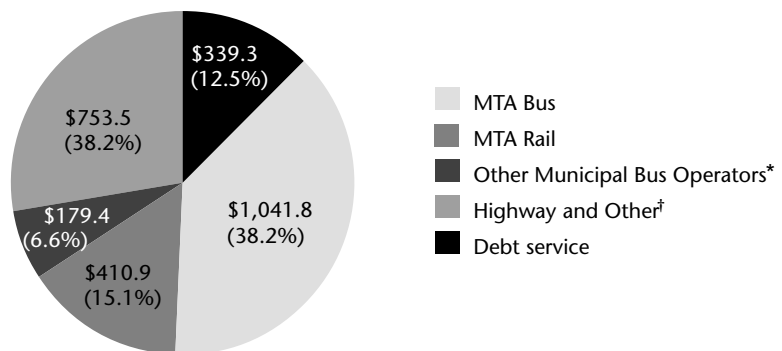
than 36 hours per week and are eligible to receive 40 hours of personal time off only after completing continuous service of one year or more. Part-time drivers receive no pensions, but the MTA will contribute up to \$2,500 annually to a health plan designated by the UTU for each part-time driver who works three or more months.

THE MTA EXPECTS TO USE THE MAJORITY OF ITS BUDGET TO SUPPORT BUS AND RAIL OPERATIONS

The MTA receives local, state, and federal funds to pay for its operations and capital projects. A major source of local funding comes from voter-approved Proposition A and Proposition C, which impose a sales tax on goods and services purchased in the county, generating about 37 percent of the MTA's budgeted annual revenues for fiscal year 2001-02. Bus riders and all other transit riders contribute about 9 percent of budgeted annual revenues, primarily through fare box collections. The MTA also receives state and federal funds for transportation planning purposes.

FIGURE 2

**MTA's Adopted Budget for Fiscal Year 2001-02
(In Millions)**



Source: MTA Adopted Budget for Fiscal Year 2001-02.

* "Other Municipal Bus Operators" includes expenditures incurred while working with 16 municipal bus operators in Los Angeles County to coordinate service and maximize use of transit resources.

† "Highway and Other" includes such things as return of sales tax to local jurisdictions as well as various commuter and motor assistance programs such as the Freeway Service Patrol, call boxes, bike lanes, and park-and-ride centers. It also includes expenditures for Metrolink.

The MTA's total budgeted expenditures for fiscal year 2001-02 are about \$2.7 billion. Of this amount, the MTA is allocating roughly \$1 billion (38 percent) to its bus and \$411 million (15 percent) to its rail operations. See Figure 2 on the previous page.

LAWS AND REGULATIONS GOVERNING MOTOR CARRIER RESPONSIBILITY FOR THE SAFE OPERATION OF VEHICLES

To ensure public safety, federal and state regulations prohibit motor carriers such as the MTA from permitting their bus drivers to drive more than 10 hours, or for any period after having been on duty 15 hours. Both of these hourly restrictions must be

preceded by 8 consecutive hours off duty. On-duty time includes all driving and non-driving work for any employer. Federal and state regulations also direct motor carriers to require their bus drivers to record their duty status for each 24-hour period using driving logs. However, if operating within a 100 air-mile radius of their normal work-reporting location, bus drivers only have to complete a driving log under certain circumstances, such as working more than 12 consecutive hours. Under state law, any motor carrier who violates the maximum driving and on-duty limitations is subject to punishment of fines ranging from \$1,000 to \$5,000.

The California Highway Patrol (CHP) has a limited role in evaluating the MTA's compliance with state laws and regulations. Once every 13 months, the CHP evaluates each of the MTA's 11 bus divisions. As part of its evaluation, the CHP reviews one-month's worth of driver and vehicle data. The CHP reviews the driving logs for a sample of about 15 percent of the bus drivers at the division, but would be unaware of any 10-hour driving violations unless that driver had also submitted a log for being on duty more than 12 hours. The CHP does not verify whether the MTA's bus drivers have other employment.

Maximum Bus-Driving and On-Duty Time

10-Hour Rule—A bus driver must not drive more than 10 hours (following 8 consecutive hours off duty).

15-Hour Rule—A bus driver must not be behind the wheel for any period after having been on duty 15 hours (following 8 consecutive hours off duty).

80-Hour Rule—A bus driver may not drive for any period after having been on duty for 80 hours in any consecutive 8-day period.

Adverse Driving Condition Exceptions

- A bus driver may drive an additional 2 hours if he or she encounters adverse weather conditions that were not apparent at the start of the trip. Regardless of adverse conditions, he or she cannot drive more than 12 hours, or any time after having been on duty more than 15 hours (following 8 consecutive hours off).
- In the event of a traffic accident, medical emergency, or disaster, a driver may complete his or her run if such run reasonably could have been completed absent the emergency.
- In order to reach a regularly scheduled relief point, a bus driver may exceed his or her regulated hours by up to one additional hour.

SCOPE AND METHODOLOGY

The Joint Legislative Audit Committee (audit committee) requested that the Bureau of State Audits examine the MTA's management and monitoring of its bus and rail drivers. Specifically, we were asked to determine if the MTA complies with applicable state or federal laws designed to protect driver and public safety. We were also asked to review the MTA's procedures for monitoring the secondary employment of its part-time drivers. Finally, the audit committee asked us to compare the MTA's number of part-time and full-time drivers to other transportation authorities, and to compare the number of vehicle accidents and citations for the MTA's full-time to its part-time bus drivers. Our review does not include the MTA's rail service operations because there are only 160 rail drivers in comparison to almost 4,000 bus drivers and because the MTA's monitoring process for rail service drivers is the same as the process it uses for bus drivers. Moreover, the risk of rail service drivers violating driving and on-duty restrictions is less than the bus drivers since they are confined to one alignment and perform yard assignments to fill in any remaining time. We also could not meaningfully correlate secondary employment data to accident data for part-time bus drivers because the MTA does not take the necessary steps to ensure it identifies all drivers with secondary employment.

To understand the MTA's driver requirements for ensuring safe vehicle operation, we reviewed applicable federal regulations and state laws and regulations governing bus drivers. We also reviewed relevant MTA policies and interviewed staff responsible for monitoring these requirements. Further, to identify policies relating to driver discipline and the MTA's use of part-time bus drivers, we reviewed the current collective bargaining agreement between the MTA and the UTU.

To ensure the accuracy of the databases that the MTA uses to monitor driving hours, accidents, and citations, we selected a sample of bus driver accidents and citations occurring between July 1998 and April 2001. Our citation sample includes only citations issued to bus drivers while driving an MTA or other government vehicle. Our accident sample includes only avoidable accidents, those where the MTA found that the bus driver could have acted to prevent the accident from occurring.

Using these two samples, we also traced the driving hours reported by the MTA in its databases to its payroll records and reviewed the drivers' personnel files to verify that they had current medical and Verification of Transit Training Certificates issued by the Department of Motor Vehicles.

Further, to ensure that bus drivers with secondary employment were properly submitting secondary employment letters, we used the drivers' prior employment history data to contact their previous employers. If we found that a driver was still working for a previous employer, we verified whether he or she disclosed this secondary employment to the division manager.

To compare the number of vehicle accidents and citations for MTA's full-time and part-time bus drivers, we analyzed data provided by the MTA to identify trends. However, as previously stated, we included only avoidable accidents and only citations occurring in MTA or other government vehicles. We also analyzed MTA workers' compensation claim data for the period between July 1998 and April 2001 to identify the number and types of claims filed by its bus drivers, and present this information in Appendix A.

In order to compare the MTA's part-time and full-time drivers to those of other transportation authorities, we requested data on staffing levels from six other authorities. We present this information in Appendix B.

Finally, to understand the CHP's role in ensuring compliance with state laws and regulations, we reviewed its monitoring process. ■

AUDIT RESULTS

THE MTA NEEDS TO DO MORE TO ENSURE THAT BUS DRIVERS COMPLY WITH DRIVING AND ON-DUTY TIME RESTRICTIONS

According to the National Highway Traffic Safety Administration, drowsy drivers cause 100,000 traffic accidents each year, in which 1,500 people die and 71,000 are injured. Therefore, it is important that the Los Angeles County Metropolitan Transportation Authority (MTA) identify bus drivers who exceed on-duty and driving restrictions aimed at reducing driver fatigue. Lacking an effective management system to monitor and ensure compliance with these restrictions, the MTA cannot guarantee that bus drivers have had enough time to rest.

During the 1980s, the National Transportation Safety Board (board) investigated several accidents that involved operator fatigue. Following the completion of these accident investigations, the board recommended in 1989 that the federal Department of Transportation review and upgrade regulations governing hours of service for all transportation modes to ensure that they were consistent and that they incorporated the results of the latest research on fatigue and sleep issues. Current federal regulations and state laws restrict the number of hours bus drivers can work and drive, and direct motor carriers such as the MTA to ensure their bus drivers work within these restrictions. However, the MTA's time-keeping and scheduling system does not yield sufficient or accurate data to allow bus division managers to ensure drivers' compliance with the legal time restrictions. Lack of information on its drivers' secondary employment, such as hours worked and driving time, also keeps the MTA from preventing bus driver violations of work hour and driving limitations, as state law requires.

The MTA Lacks an Adequate System to Prevent Violations of Driving and On-Duty Time Restrictions

Although state law requires it to ensure that its bus drivers do not exceed established maximum driving and on-duty time limits, the MTA does not generate sufficient information either to be aware of or to prevent all such violations. The MTA's

scheduling database generates reports on drivers who work more than 12 hours, but it does not report on the actual driving time, which is manually calculated for almost 4,000 drivers by the MTA division staff on an as need basis. Because manual calculations are subject to human error, the MTA may not have accurate data on violations of the 10-hour federal and state driving limits. Moreover, because no reports are generated on drivers who work less than 12 hours but drive more than 10, the MTA has no information on those possible violations. Also, the MTA's report on drivers who work more than 15 hours contains numerous errors and so may not identify time violations. Finally, the MTA cannot use any of the reports, which are generated after the fact, to

prevent violations. Until the MTA changes its scheduling and time-keeping system, it cannot ensure that its drivers are adhering to on-duty restrictions. By not having an effective process to identify all on-duty violations, the MTA is not heeding the Federal Motor Carrier Safety Administration's regulatory guidance, which indicates that carriers permit violations by their employees when they fail to have in place management systems that effectively prevent such violations.

State regulations require all bus drivers operating within a 100 air-mile radius from their normal reporting locations to complete driver logs when they work more than 12 hours or do not take 8 consecutive hours off after each 12 hours on duty. The logs include the time a driver reports for duty, total number of hours on duty, and the driver's release time for each day. The log should also include the name of each employer the driver worked for during the entire 24-hour period. Since 1984, the MTA has used its scheduling database, the Transit Operating Trends System (TOTS), to assign bus drivers to their bus routes and to generate exception reports to identify those drivers who

Driving Time Restrictions

Federal—Following 8 consecutive hours off duty, a bus driver must not drive more than 10 hours, or for any period after having been on duty 15 hours.

State—Same as the federal. Also, a bus driver may not drive for any period after having been on duty for 80 hours in any consecutive 8-day period.

MTA—A bus driver must not drive more than 10 hours within a 16-hour "awake" period (eight hours reserved for rest).

work more than 12 hours. Using these reports, the bus division supervisors obtain logs from the appropriate bus drivers, usually the following day.

Because its management reports do not include actual driving time and are prepared too late, MTA cannot use them to prevent violations.

Unfortunately, TOTS does not record real-time vehicle operation. According to MTA management, tracking actual driving time was never seen as a function of TOTS, so the data necessary for TOTS to monitor bus driver schedules against their actual driving time would be overwhelming. Instead, division staff must calculate the time spent driving to and from relief points and the time spent during layovers to adjust the vehicle operating time recorded by TOTS. These manual calculations estimate the actual driving time, which the MTA uses to determine if bus drivers are exceeding the 10-hour limit. Because the MTA has roughly 760 part-time and 3,200 full-time bus drivers, manually calculating their time could result in errors. Moreover, since division staff do not calculate the estimated actual driving time for drivers daily, the MTA is unable to prevent violations before they occur. Furthermore, neither TOTS nor the manual calculations identify drivers who exceed the 10-hour state and federal driving limit, but do not work more than 12 hours and therefore do not need to submit driver logs. The MTA has no system to monitor such violations. The MTA asserts that TOTS minimizes the possibility that its drivers will exceed 10 hours driving time. However, our review of on-duty hours for 260 drivers from excerpts of 18 daily employee activity detail reports—generated by TOTS—found that 26 drivers did exceed 10 hours of vehicle time. The MTA did not respond to our requests to provide manual calculations that would show that these drivers drove less than 10 hours. Further, we found that 4 of the 26 drivers had accidents on the days that their vehicle time was more than 10 hours. However, because MTA does not accurately track or maintain sufficient information, we could not correlate bus driver fatigue with these accidents.

The MTA does use TOTS to produce a report of drivers who work 15 hours or more. Although reviewed at each division, this 15-hour report lacks accuracy. We examined records for 30 bus drivers who were listed on this report and found that the sign-off times for 18 bus drivers (60 percent) were inaccurate. Although the 15-hour report uses data from TOTS, the on-duty times in all 30 cases were different from the on-duty times in other TOTS reports such as the daily cycle and the employee

activity detail. These reports show times in the morning, while the 15-hour report stated times in the afternoon or evening. For example, on the daily cycle report, one bus driver had an assignment beginning at 5:17 a.m. and ending at 8:31 a.m. However, the 15-hour report showed the assignment ending at 8:31 p.m., which results in an overstatement of 12 hours.

Another error we found on the 15-hour report was the inclusion of “miss-outs” that occurred when bus drivers arrived to work late and missed their assignments. Bus drivers are not paid for missed time but can be given a subsequent reporting time. However, we found two instances where the 15-hour report added hours for miss-outs to the on-duty time (one adding 6 and the other adding 9 hours). These examples show that the MTA cannot rely on these reports to properly identify whether its drivers are exceeding the maximum driving and on-duty times.

MTA management explained that the 15-hour report would be inaccurate when its bus divisions fail to properly correct employee time information and then re-run the report. The MTA told us that it would establish a process for the division managers to correct any errors and re-run the 15-hour report to reflect accurate on-duty information. This is a necessary step since, by failing to correct the 15-hour report, the MTA is unable to verify that its division managers review and adequately address all potential time errors or on-duty violations.

Recognizing the limitations of its time-keeping and scheduling system, the MTA is upgrading TOTS, at a cost of about \$8.2 million. An important feature of this upgrade is that drivers will be issued personal badges, which they will swipe through an electronic badge reader at the beginning and end of each work assignment, allowing the MTA to capture accurate time-keeping data. This electronic process will replace MTA’s existing time reporting system, which is prone to errors. With this new process, the MTA will be able to meet state regulations that require employers of 100 air-mile radius drivers to maintain true-time records to justify the drivers’ exemption from completing daily driver logs unless certain conditions exist.

In addition to tracking on-duty time, the new electronic scanning software will allow the badge readers to interface with TOTS through a notification system that issues various advisories to both the drivers and division management. For example, if at least

MTA is upgrading its time-keeping and scheduling system at a cost of about \$8.2 million.

8 hours and 1 minute has not gone by since the end of a driver's last work assignment, the system will issue an "operator not rested" notification. However, the MTA's upgrade plans do not include a function that will notify divisions when its bus drivers are in danger of exceeding the 10-hour driving limitation or are driving after being on duty more than 15 hours.

Because MTA believes it may be three to five years before the technology is available to track actual driving time, it should explore other options in the meantime.

The MTA management told us that it is considering further enhancements to TOTS that would include the daily production of a consolidated 10-, 12-, and 15-hour report to assist in ensuring compliance with state and federal driving and on-duty restrictions. Specifically, the project under consideration would be able to measure travel time across a route and identify when a bus is not in motion or service. The MTA believes that it may take three to five years before this project is complete since the technology is currently not available. However, in the meantime, the MTA could still explore other options to track actual driving time, such as adding an advisory to its proposed notification system that would alert division staff when a bus driver reaches 9 hours on-duty time. The staff could then investigate whether the driver's remaining driving time might exceed 10 hours. Until the MTA completes its improvements to TOTS' reporting capabilities, it will not be able to capture its employees' actual driving time, prevent violations, and ensure that its drivers have had sufficient time to rest so that they can provide safe transportation to the public.

The MTA Does Not Effectively Track Secondary Employment

An important step in preventing bus drivers from exceeding the maximum legal on-duty hours is identifying whether they have employment outside of the MTA (secondary employment), and if so, the types of duties and the number of hours spent with those employers. However, the MTA does not take the necessary steps to ensure it identifies all drivers with secondary employment. Of the 81 bus drivers we reviewed, we found 3 who held secondary employment without their division managers' knowledge. All 3 of these bus drivers had avoidable accidents during the period of our review. Because it lacks a database for tracking outside employment, the MTA is unaware of drivers who exceed the maximum legal on-duty hours and may cause accidents.

State regulations require any bus driver who works for more than one employer within a 24-hour period to disclose on a driver log the beginning and finishing time, thus verifying the driver's total on-duty time. On-duty time includes any work for which the driver receives compensation, even if the employer is not a motor carrier; all secondary employment must be added to a driver's on-duty hours, which then must not exceed the maximum on-duty hours previously discussed. The MTA also recognizes the importance of driver disclosure and requires all bus drivers, full-time and part-time, to seek prior approval before assuming secondary employment. However, the MTA does not consistently enforce this requirement.

Bus division managers recently began using disclosure letters that require secondary employment information from their part-time drivers. However, they rely on their full-time drivers to voluntarily disclose when they have secondary employment. We found that a few drivers with secondary employment, including one full-time driver, did not properly disclose this information to their division managers.

Because it does not track drivers who disclose secondary employment, MTA has no way of knowing if these drivers submit daily driving logs or adhere to on-duty hour restrictions.

Apparently, one division began using disclosure letters to obtain information on secondary employment on its own, then shared its format with the remaining 10 divisions in late November 2000. The divisions use disclosure letters to ask their part-time bus drivers to indicate whether or not they have secondary employment, and if so, to provide the employer's name, address, and telephone number. However, only one division obtained additional facts such as a job description and the number of work hours per week, information necessary for division managers to make prudent, informed scheduling decisions.

Although the divisions' disclosure letter requests bus drivers with secondary employment to submit a daily driver log, the MTA does not use a database to track the secondary employment disclosure letters its bus drivers submit. As a result, it has no way of knowing if these bus drivers are submitting daily driver logs or adhering to on-duty hour restrictions. For example, one division had 16 drivers disclose secondary employment. Of those, 4 claimed that they worked 40 hours per week for their secondary employer, one stating that she held a driving position. However, the division did not have more than 3 daily logs for any of these 16 drivers for the period between April and June 2001, even though its disclosure letter instructs the drivers to submit driver logs for a 7-day period following each day that they work for either MTA or the secondary employer.

Of the four divisions we visited, only one had a procedure to collect driver logs from bus drivers with other employment.

Of the four divisions we visited, only one division had a procedure in place to collect driver logs from bus drivers who have secondary employment. This division's instruction department posts a list of part-time drivers who have reported that they have secondary employment, which includes the bus driver's badge number, name, days off, assignment, and beginning and ending on-duty times. Division staff review the list on a daily basis and collect driver logs from the bus drivers when they complete their assignments. While this is a good start, the MTA would be better able to monitor this activity if it had a database to track secondary employment since bus drivers frequently transfer between its divisions.

Moreover, five divisions told us they ask full-time drivers to submit disclosure letters only if they have secondary employment. Thus, the division managers are not receiving testimony from full-time drivers that they have no secondary employment. The MTA believes that the appropriate pay and overtime opportunities available to full-time drivers should prevent them from seeking secondary employment. Nevertheless, the MTA told us that as part of its new procedures, it will require both part-time and full-time drivers to submit disclosure letters indicating whether or not they have secondary employment.

Using the 10-year employment history information for 81 bus drivers, we were able to identify 3 drivers who, as of July 2001, held secondary employment without the knowledge of the MTA division management. One full-time bus driver who currently has secondary employment did not disclose this employment to the MTA. Two part-time drivers indicated on their disclosure letters that they did not have secondary employment, but their previous employers told us the drivers were still working for them. All three of these drivers had avoidable accidents during the period of our review.

THE MTA'S SYSTEM FOR TRACKING BUS DRIVER ACCIDENTS HAS FLAWED DATA

In addition to not always knowing when drivers violate on-duty restrictions, the MTA cannot be sure how long drivers have been working at the time they have accidents. Although the MTA tracks the number of bus driver accidents using a database, the Vehicle Accident Monitoring System (VAMS), we found numerous errors in the VAMS. Some bus drivers improperly documented the amount of time that elapsed between when

they started work and when accidents occurred. In addition, some data entry staff in MTA's bus division did not properly input details from the accident report into the VAMS. As a result, the VAMS is not useful to the MTA for analysis that might determine potential causes of bus accidents. In particular, the unreliable data make it impossible to determine whether driver fatigue has contributed to accidents.

When an accident occurs, the bus driver prepares an accident report prior to the end of the day that includes the date, time, and location of the accident, and whether there were any fatalities, personal injuries, or property damage. The driver also

records his or her "time on duty," or how much time has elapsed between when the driver began working and when the accident occurred. Then the driver submits the accident report to either the transit operations supervisor or the transit division dispatch for a review. If the transit operations supervisor is unable to conclude that the accident was unavoidable, he or she refers it to the Accident Review Board, which has a lengthy process to determine whether the driver could have prevented the accident. Once the review is complete, the division's data entry staff receive the original accident report and enter the accident data into the VAMS. Ideally, this process should yield useful data for analyzing accident causes; unfortunately, there are numerous errors in both the accident reports and the VAMS.

MTA's Accident Review Board (ARB) Process for Determining Avoidable Accidents

First Tier—After an accident is referred to the ARB by the senior transit operations supervisor, a 3-member panel consisting of a service operations director, senior instructor, and line instructor review the case and determine if the accident was avoidable.

Second Tier—The bus driver may appeal the ruling of the first tier ARB to the second tier. Five individuals (two transit operations supervisors, two line instructors, and one labor representative as the chairperson) determine if the accident was avoidable.

Third Tier—If the bus driver and the union representative are not satisfied with the second-tier ruling, they may submit their case to an arbitrator.

We sampled avoidable accidents—50 for full-time and 50 for part-time bus drivers—and found that 13 out of 100 accident reports incorrectly stated

that the length of time that the driver had been on duty was the same as the time that the accident occurred. For example, one accident report in our sample indicated both that the accident occurred at 20:15 (8:15 p.m.) and that the time on duty was 20 hours and 15 minutes. If the bus driver had actually been working 20 hours when the accident happened, the MTA could clearly correlate the accident with driver fatigue and violation of on-duty time restrictions. However, payroll records for the driver involved in the accident show that he had worked about 3 hours on that particular day.

We also found that division data entry staff sometimes improperly converted the length of time the driver had been on duty prior to the accident to military time (0100 – 2400). For example, if an accident occurred when a driver had been on duty for 3 hours and 14 minutes, the data entry staff recorded the time in the VAMS as 15 hours and 14 minutes. Data entry staff made this type of error on 15 of the 100 accident reports we reviewed. In addition, we noted 29 instances where the elapsed time on duty in the VAMS was greater than the time found on payroll records for the bus drivers.

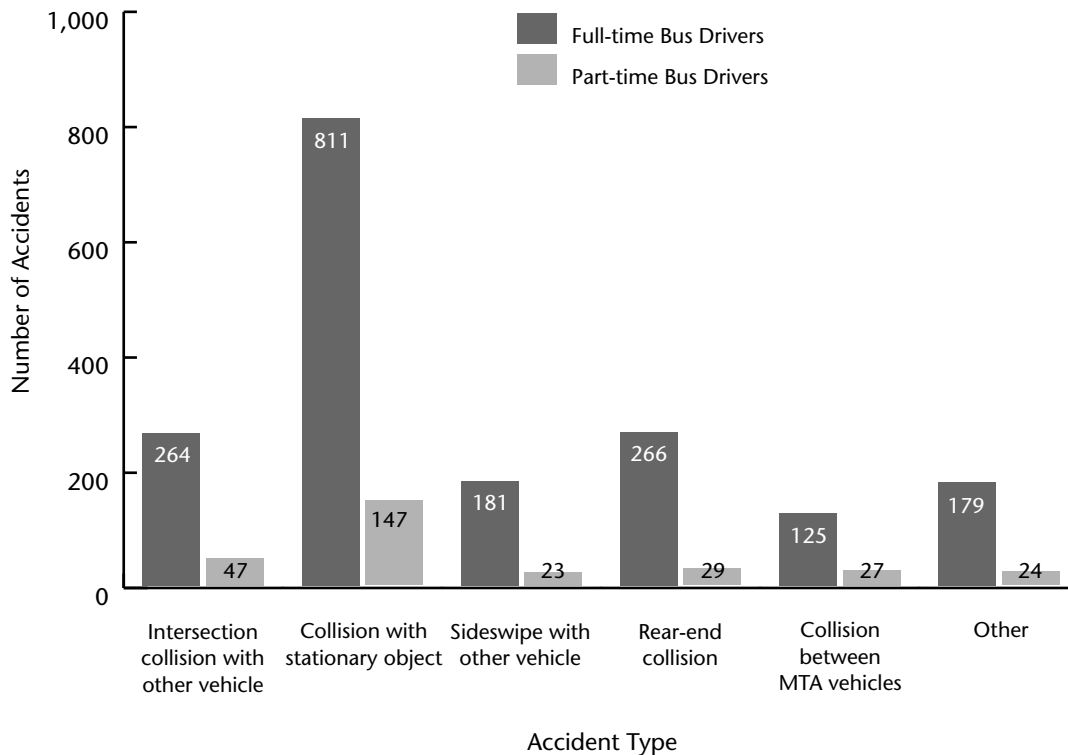
The MTA told us that the VAMS database field for the time on duty at the time of the accident is subject to error because it depends on the bus driver to record the correct time and the division data entry staff to properly input it. Although MTA bus drivers receive some training during their orientation on how to fill out accident reports, this training may not be adequate. The MTA has stated that as part of its TOTS upgrade, it will enable bus drivers to enter accident data directly into the VAMS, and it plans to include controls to ensure that drivers input accident information that is coded correctly. Although the MTA does not currently utilize the time-on-duty database field in any production reports or analysis, this field could prove a useful tool in determining a correlation between driver fatigue and bus accidents if the information within it were accurate.

Because of the unreliable or missing data in the VAMS, we could not meaningfully correlate accident data for part-time and full-time drivers with driver fatigue. Although the MTA could provide data on weather conditions, it could not give us summary information about other factors such as traffic congestion and road conditions that may have contributed to the frequency of accidents. However, between July 1998 and May 2001, MTA bus drivers were involved in 2,123 avoidable accidents, in which the MTA concluded that the driver could have taken some action to prevent the accident from occurring. Full-time bus drivers were involved in 1,826 and part-time drivers in 297 of these accidents. Figure 3 on the following page shows the types of avoidable accidents most common for MTA bus drivers.

Because of unreliable or missing data in the accident database, we could not directly correlate accident data with driver fatigue.

FIGURE 3

Avoidable Accidents Involving MTA Drivers Between July 1998 and April 2001



Source: MTA's Vehicle Accident Monitoring System (VAMS).

* Other accidents include accidents such as those involving pedestrians.

THE MTA DOES NOT TAKE FULL ADVANTAGE OF INFORMATION ON DRIVERS' TRAFFIC CITATIONS TO CONSISTENTLY APPLY ITS DISCIPLINE PROCESS

State law requires the MTA to participate in a Department of Motor Vehicles (Motor Vehicles) process that gives motor carriers full disclosure, including citations, of any action against a bus drivers' driving record. However, the MTA does not take full advantage of this Motor Vehicles information. Moreover, our sample of driver citations reveals that bus drivers frequently fail to disclose their citations to division managers, despite the MTA's policy requiring them to do so. For example, we were unable to find any evidence that bus division managers were aware of citations for 39 of the 55 bus drivers in our sample. Being unaware of all citations, managers cannot equitably use the discipline process to identify and, if necessary, discharge bus drivers.

Bus drivers work under a collective bargaining agreement between the United Transportation Union (UTU) and the MTA. Article 27, Section 8, of this agreement outlines a process through which a driver receives an increasingly higher number of demerits for each instance of a minor rule violation. If a bus driver accumulates 90 demerits or more, he or she may be subject to discharge. For the purpose of this demerit process, minor rule violations include improper conduct, the use of inappropriate language, and the failure to report a traffic citation. Major infractions include accidents, the use of intoxicants or drugs, and felony or misdemeanor convictions.

The MTA cannot ensure that managers consistently apply the demerit process to drivers who fail to report traffic citations.

Actions by Motor Vehicles Against a Commercial Driver’s Endorsement or Certificate

Revocation or Suspension—Motor Vehicles may revoke or suspend a driver’s certificate or endorsement to transport passengers if he or she causes or contributes to three accidents in 12 months; demonstrates an addiction to drugs or alcohol; or is a negligent operator.

Negligent Operator—A driver is deemed a negligent operator if he or she receives a certain number of points within a given time frame:

- Four points within 12 months.
- Six points within 24 months.
- Eight points within 36 months.

Points are generally given to drivers in one- and two-point increments depending on the type of traffic violation:

- **One-point offense**—includes speeding, improper lane use, illegal passing, and right-of-way violations.
- **Two-point offense**—includes hit-and-run with injury and/or property damage, driving under the influence of alcohol, evading peace officers, and speeding at a rate of more than 100 miles per hour.

Because they do not always have access to summary citation data, managers cannot give their drivers comparable reviews and dispense discipline equitably. This may adversely affect bus driver morale, since drivers who fail to report their citations may receive rewards for good performance while those who report themselves are subject to the discipline process. Each of the 11 divisions told us either that the MTA does not have a program in place to notify them of citations or that they only receive citation information from the MTA’s quality assurance department when a driver’s license is at risk of suspension or revocation.

State law requires motor carriers such as the MTA to participate in the Motor Vehicles’ “pull-notice” system, which provides the employer with a report showing any action against a driver’s record, such as convictions, failures to appear, accidents, license suspensions, and revocations. Motor Vehicles expects motor carriers to use this information to stop employing drivers when they have had their certificates or endorsements to transport passengers suspended or revoked. As a result of the Motor Vehicle’s pull-notice system, the MTA’s quality assurance department maintains a complete record of all bus driver traffic citations in its driving license monitoring system. However, although bus division staff can access the driving

license monitoring system for individual driver information, they do not receive summary citation information for all of their bus drivers.

This lack of access to summary information would make periodic review of all drivers quite time consuming because divisions would have to type in the badge number of each driver. At some divisions this would mean typing in the badge number and individually reviewing records for more than 400 bus drivers on a periodic basis—a cumbersome and unnecessary task considering that the quality assurance department has the ability to provide this information on a summary level. For example, at our request, the MTA was able to give us a listing of all bus drivers who received citations between July 1, 1998, and April 30, 2001.

Although the MTA requires its drivers to report their citations to management, 39 (71 percent) of the 55 drivers in our sample did not appear to do so.

Based on our review of a sample of these citations, it is common practice for bus drivers not to disclose their citations to management, contrary to MTA policy. According to the MTA, 2,237 of its bus drivers received citations while either on or off duty between July 1, 1998, and April 30, 2001. Of those, 111 drivers (7 part-time and 104 full-time) were cited while operating an MTA or other government vehicle. We selected a sample of 55 of these 111 bus drivers to determine if their division managers were aware of these traffic violations and had issued demerits. For 71 percent of the sample (39 instances), we were unable to find any evidence that the bus division managers were aware of the citations, or that the drivers were subjected to the MTA's discipline process. This high percentage indicates that bus drivers generally do not report their citations, even ones received while driving on duty.

The most effective way for bus division managers to reliably enforce the MTA's demerit process is to receive summary level citation data from the quality assurance department. Without this data, the MTA cannot ensure that it treats all drivers equitably.

RECOMMENDATIONS

To ensure that its drivers do not exceed federal and state on-duty restrictions, the MTA should do the following:

- Continue upgrading its TOTS database system. In addition, it should further enhance TOTS so it can produce reports that identify all bus drivers who have driven more than 10 hours or for any period after having been on duty for 15 hours.

- Ensure that its division managers review, correct, and re-run the 15-hour report daily so that the report contains accurate information.
- Enforce its newly established procedures by requiring all divisions to provide, and all bus drivers to complete, secondary employment disclosure letters. These letters should be updated periodically throughout the year.
- Consistently ask for hours worked per week, phone numbers, addresses, and job duty information on the secondary employment disclosure letters. Also, division staff should periodically select a sample of bus drivers and call their other employers to verify the bus drivers' time commitment.
- Develop a database to track those bus drivers who have secondary employment and must submit a daily driver log.

To ensure that it captures more accurate accident data, the MTA should provide refresher training to its bus drivers and data entry staff on how to fill out accident reports and how to enter information into the VAMS. Also, it should complete its plans to include controls that ensure drivers' data is coded correctly in the VAMS.

To improve its process for monitoring citations and consistently disciplining its bus drivers, the MTA should periodically distribute Motor Vehicles' summary citation data to its division managers so they can readily access all citations relating to all their bus drivers.

Finally, to continue to maintain consistency in monitoring its bus and rail operators, the MTA should ensure that any improvements made in monitoring its bus drivers should also apply to its rail drivers.

We conducted this review under the authority vested in the California State Auditor by Section 8543 et seq. of the California Government Code and according to generally accepted government auditing standards. We limited our review to those areas specified in the audit scope section of this report.

Respectfully submitted,

A handwritten signature in black ink that reads "Elaine M. Howle". The signature is written in a cursive, flowing style.

ELAINE M. HOWLE
State Auditor

Date: August 14, 2001

Staff: Joanne Quarles, CPA, Audit Principal
Ken L. Willis, CPA
Dee Cheney
Grant Parks
John Romero

APPENDIX A

Summary of MTA Bus Driver Workers' Compensation Claims

The Joint Legislative Audit Committee asked us to determine the number and types of workers' compensation claims filed by Los Angeles County Metropolitan Transportation Authority (MTA) bus drivers. Between July 1, 1998, and April 30, 2001, MTA bus drivers filed 4,966 workers' compensation claims. Table 1 shows the number and type of claims filed by its full-time and part-time bus drivers.

TABLE 1

Claims by Type and Work Status

Claim Type	Part-Time Driver*	Full-Time Driver	Overall Total by Claim Type	Percent of Total
Traffic collision	50	730	780	15.71
Driver seat	23	673	696	14.02
Repetitive motion	25	561	586	11.80
Unprovoked assault	15	422	437	8.80
Exposure to dust, fumes, or chemicals	5	320	325	6.54
Turning steering wheel	13	295	308	6.20
Continuous trauma	12	247	259	5.21
Slip/trip	13	232	245	4.93
Adjusting equipment	12	211	223	4.49
Entering or exiting a vehicle	10	205	215	4.33
Struck against an object	12	133	145	2.92
Struck by falling object	4	122	126	2.54
Breaking/accelerating	3	93	96	1.93
Pushing or pulling objects	4	76	80	1.61
Opening/closing doors or windows	2	65	67	1.35
Provoked assault	3	62	65	1.31
Sitting down or standing up	2	56	58	1.17
Lifting	2	49	51	1.03
Verbal abuse and altercation	2	49	51	1.03
Nonindustrial illness or stress	1	47	48	0.97
Animal or insect bite	2	41	43	0.87
Cut/puncture	1	20	21	0.42
Caught in or between an object	1	17	18	0.36
Fall	0	10	10	0.20
Contact with an object	0	4	4	0.08
Fire	0	4	4	0.08
Splashed/sprayed	0	4	4	0.08
Electric shock	0	1	1	0.02
Total Claims	217	4,749	4,966	100.00

Source: MTA's database on workers' compensation claims.

*Includes part-time bus drivers and those drivers who were classified as Business Development Operating Facility bus drivers and participating in MTA's training program at the time of the claim.

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APPENDIX B

Summary of Transportation Authority Comparisons

As requested by the Joint Legislative Audit Committee, Table 2 provides a comparison of the Los Angeles County Metropolitan Transportation Authority (MTA) to other transportation authorities using the most recent data reported by the National Transit Database (NTD). The NTD is the Federal Transit Administration's national database of statistics for the transit industry. NTD data are used for management and planning by transit systems, and for policy analysis and investment decision making at all levels of government. Transportation authorities throughout the nation submit their data to the NTD on standardized forms.

TABLE 2

Transportation Authority	NTD Reporting Period	Number of Full-Time Drivers	Number of Part-Time Drivers
New York City Transit Authority	Calendar Year 2000	Bus: 9,120 Rail: 6,368	None
Los Angeles MTA	Fiscal Year 1999-2000	Bus: 3,960 Rail: 159	Bus: 697 Rail: 12
Chicago Transit Authority	Calendar Year 1999	Bus: 3,845 Rail: 1,798	Bus: 709 Rail: 39
Southeastern Pennsylvania Transportation Authority	Fiscal Year 1999-2000	Bus: 2,601 Rail: 1,035	Bus: 82 Rail: 53
San Francisco Municipal Transportation Agency	Fiscal Year 1999-2000	Bus: 1,566 Rail: 462	Bus: 152 Rail: 20
San Diego Transit Corp. San Diego Trolley, Inc.	Fiscal Year 1999-2000 Fiscal Year 1998-99	Bus: 699 Rail: 129	Bus: 121 Rail: None
Santa Clara Valley Transportation Authority	Fiscal Year 1999-2000	Bus: 1,168 Rail: 105	None

Source: NTD reports from each transit authority.

Note: The MTA totals for drivers shown above differ from the totals presented in the body of the report because its NTD data is for fiscal year 1999-2000, while the data presented in the body of the report is as of April 2001.

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Agency's comments provided as text only.

Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012-2952

August 6, 2001

Elaine M. Howle*
California State Auditor
555 Capitol Mall, Suite 300
Sacramento, California 95814

Re: Response by the Los Angeles County Metropolitan Transportation Authority to State Auditor Report "Los Angeles County Metropolitan Transportation Authority: Can Increase Its Efforts to Ensure the Safe Operation of Its Buses"

Dear Ms. Howle:

Enclosed please find our agency response to the State Auditor's report on the enclosed diskette in the text ".txt" format.

Very truly yours,

(Signed by: Allan G. Lipsky)

Allan G. Lipsky
Chief Operating Officer

*California State Auditor's comments begin on page 37.

Re: Response by the Los Angeles County Metropolitan Transportation Authority to State Auditor report “Los Angeles County Metropolitan Transportation Authority: Can Increase Its Efforts to Ensure the Safe Operation of Its Buses”

Introduction

As discussed in the “Scope and Methodology: section of this report, the Bureau of State Audits was requested by the California Legislature’s Joint Legislative Audit Committee to: 1) determine if the MTA complies with applicable state or federal laws [related to driver fatigue] (2) review the MTA’s procedures for monitoring secondary employment of its part-time drivers (3) compare the MTA’s number of part-time and full-time drivers to other transportation agencies and the relative number of vehicle accidents and citations for MTA’s full-time and part-time drivers.

The MTA believes that the information it provided, if accepted audit methodology were applied, should have enabled the State Auditor to conclude that: (1) the MTA is in full compliance with all state and federal regulations restricting bus drivers time behind the wheel (2) the MTA has adequate and reliable polices and procedures to monitor secondary employment - and driver time behind the wheel (3) there is no evident difference in the relative number of accidents for full-time and part-time drivers.

①

②

Most important, although not specifically mentioned as part of the audit scope, the State Auditor should have reported that the MTA has an excellent safety record compared to other transit agencies and that its passengers are not at risk.

Unfortunately the audit report does not include a statement of findings specifically responsive to the questions posed by the Joint Committee. Instead, most of the report is devoted to a criticism of the MTA’s procedures and record keeping. Although there is absolutely no evidence that any deficiencies in the MTA’s management of its drivers’ compliance with time behind the wheel regulations have ever resulted in accidents (and although regular California Highway Patrol inspections have found the MTA in compliance with service hour reporting regulations) the report includes many statements critical of the MTA. Since bus and rail passengers on all public transit systems are much safer than in a passenger car, the State Auditor should issue a supplemental statement reassuring the MTA’s passengers that the MTA is ensuring the safe operation of its buses.

③

We have the following specific comments on the findings in the audit report:

AUDIT RESULT REPORTED: THE MTA LACKS AN ADEQUATE SYSTEM TO PREVENT VIOLATIONS OF DURING AND ON-DUTY TIME RESTRICTIONS

MTA Response:

The MTA tracks and monitors its operators' driving and on-duty hours in the following methods:

- ④ 1. The bus and rail schedules are constructed so that no individual or combination of assignments will result in driving time greater than 9 hours and 40 minutes or on-duty time greater than 11 hours and 40 minutes. The runs are constructed in this manner to ensure a 20-minute safety net to avoid driving time violations in the event of unforeseen conditions.
2. The MTA uses an Automated Bidding System (ABS) that prevents an operator from selecting trip combinations that will lead to potential violations. The ABS is used at for assignment selection by operators at bi-annual shake-ups and weekly bidding. The ABS has a maximum threshold for "on-duty" time set at 11 hours and 40 minutes when an operator bids a tripper to work with a work run. Since no work run contains driving time greater than 9 hours and 40 minutes, no work run can exceed the 10, 12 or 15 hour limits.
3. Each division uses the Transportation Operating & Trends System (TOTS) to ensure that extra-board operators do not exceed either the driving time or on-duty restrictions. As each operator receives his assignment for the day, his badge number and the assignment are entered into the automated system. As the operator receives subsequent assignments during the day, that is also entered into the system. If any assignment violates the time restrictions, the division management immediately receives an error message indicating the violation. This allows division management to adjust the schedule so that the operator does not risk time violations. This system has been in use since January 2000 and continues to be enhanced.
- ⑤
- ⑥ 4. TOTS identifies operators who did not work their scheduled assignment (exception reporting) and identifies operators who have on-duty time in excess of 12 hours or a spread in excess of 15 hours. The operators are quite diligent in reporting their exceptions to the shift dispatcher as this is the only method for them to receive overtime pay for additional hours worked.

- The law requires operators with on-duty time greater than 12 hours to complete a driver's log. The 12-hour report generated by TOTS allows division management to track all drivers with on-duty time greater than 12 hours so they can monitor that drivers are completing the driver's logs, as required. The California Highway Patrol monitors the driver's logs on an annual basis - the MTA has successfully passed nearly all of the motor carrier inspections relative to driver's logs.
- ③

- This section of the audit report cites numerous examples of inaccurate record keeping and violations of driving limits. However, this information is not presented in a form which would enable the reader to determine whether impartial sampling methodology was applied and whether the results cited have any statistical meaningfulness. One particularly unprofessional example is the statement that 26 drivers were found to exceed 10 hours of vehicle time of whom 4 had accidents - without any discussion of the significance of this finding.
- ⑦

AUDIT RESULT REPORTED: THE MTA DOES NOT EFFECTIVELY TRACK SECONDARY EMPLOYMENT

MTA Response:

The MTA policy guideline "Operator Rulebook and Standard Operating Procedures" Section #4.20 Employment Exclusive, requires that specific written approval from the division manager must be received before an employee may become identified with or engaged in any other business or employment. All new employees receive a form from Operations Central Instruction where they identify if they have secondary employment and the hours worked if applicable. This form is then transmitted to the employees' permanent division at the conclusion of the six-week training program. Additionally, operators are reminded of the secondary employment rule twice yearly during the bidding and shake-up process. Failure to advise management of secondary employment can result in disciplinary action.

If the employee has secondary employment, California law requires that the operator complete a driver's log. Failure to complete the driver's log is a violation of the law and will result in discipline and/or termination of the operator. Employees are advised of this and all laws as part of the new employee-training program and through reminders posted at their divisions. ⑧

As an additional method of monitoring operator performance, each day as employees check in for their work assignments, they are required to greet and interface with the division management. One of the underlying reasons for this requirement is so that management can observe the demeanor of the operator before they begin their work assignment. If the operator appears fatigued, ill, or otherwise disoriented, management has the ability to relieve the operator of the assignment.

The audit report states that out of 81 sampled, three employees were identified that had secondary employment and were unknown to the MTA. Actually, only one of the employees was out of compliance with MTA policy. Of the three, one operator's secondary employment letter was on file at the division. This information was provided to the state auditor on or around July 18, 2001. This employee completes a driver's log on a daily basis. Of the remaining two identified by the state audit, one has provided the MTA with a statement that she no longer has secondary employment. The one employee who was working without the secondary employment letter has been counseled by division management and now has a letter on file. This employee also completes a driver's log on a daily basis. ⑨

Once again, this section of the report is highly critical of MTA record keeping and reporting but there does not appear to be any statistical support for the conclusion that "the MTA does not effectively track secondary employment. The audit cites a sample of 81 bus drivers, one of whom has undisclosed secondary employment (see paragraph above). If the conclusion was based on this sample, the audit result is not statistically supported. ⑨

AUDIT RESULT REPORTED: THE MTA'S SYSTEM FOR TRACKING BUS DRIVER ACCIDENTS HAS FLAWS

MTA Response:

Every accident is reviewed by division management to determine the cause of the accident. Accidents requiring further investigation are discussed in detail in each division as part of the accident review process. During this review, the operator, union, and division management discuss the causes of the accident in detail. If fatigue were identified as the cause or one of the contributing causes for the accident, this would be noted in the accident review process. The accident report requires the operator to report "the time on duty at the time of the accident" and "number of days worked since last day off." These fields are designed to aid in the accident review process to determine the possible causes or contributing causes of accidents.

10

The audit report does not really explain what is meant by "MTA's system.....has flaws." The flaws referred to in the report apparently refer to inaccurate input or transmittal of data in the Vehicle Accident Monitoring System, rather than a flawed system. MTA absolutely agrees that information on accidents must be complete and accurate. Once again, however, the statistical basis for the audit finding has not been explained.

11

AUDIT RESULT REPORTED: MTA DOES NOT TAKE FULL ADVANTAGE OF INFORMATION ON DRIVERS TRAFFIC CITATIONS TO CONSISTANTLY APPLY ITS DISCIPLINE PROCESS

MTA Response:

The MTA policy guideline "Operator Rulebook and Standard Operating Procedures" Section #4.07 Traffic Violations, requires operators to report all traffic citations received whether in an MTA vehicle or private vehicle. Failure to report traffic citations will result in discipline and/or termination. Most importantly, DMV records are checked daily by Quality Assurance, and all MTA division management is notified immediately when an operator has lost their license. No operator is allowed to operate an MTA vehicle without proper licensing and certification at all times.

RECOMMENDATIONS

Although the MTA has one of the lowest accident rates (3.5 per 100,000 miles) of any urban transit operator, we are continuously working to improve our safety record. Safety is our highest priority.

In this spirit, the MTA is carefully considering the recommendations in the audit report.

Audit Recommendation:

1. Continue upgrading its TOTS database system.

Response: The TOTS upgrade is expected to be completed by December 31, 2001.

Audit Recommendation:

2. Continue exploring options to further improve the system to warn division managers when drivers are in danger of exceeding 10 hours driving time or of driving after being on duty for more than 15 hours.

Response: Although the technology is not available to transit operators today to track an operator's on-duty, classroom, rest, layover, behind the wheel, or administrative set-up time during the course of the day, the MTA will continue to explore new technology options with this recommendation as a goal.

Audit Recommendation:

3. Enforce newly established procedures by requiring all divisions to provide, and all bus drivers to complete secondary employment disclosure letters and update these letters periodically throughout the year.

Response: We are already doing this. Efforts are underway to standardize this process system wide.

Audit Recommendation:

4. Consistently ask for hours worked per week, employer phone numbers and addresses and job duty information on the secondary employment disclosure letters. Also, periodically select a sample of bus drivers and call their other employers to verify the bus driver's time commitment. Develop a database to track information on those bus drivers who have secondary employment and must complete a driver's log.

Response: The secondary employment letter will be standardized for all divisions effective September 2001. MTA will review the recommendation to telephone other employers to determine whether there are legal issues related to confidentiality and contractual issues requiring union approval.

Audit Recommendation:

5. Provide refresher training to bus drivers to complete accident reports and data entry staff to enter information into the VAMS database.

Response: Training employees to do a better job on accident reporting is one of the requirements of an RFP issued by the MTA on July 27, 2001 for a safety management consultant. We expect the safety management consultant to be under contract by October 1, 2001. The consultant will develop an organization-wide safety-training program to be implemented in early 2002. Additionally, the VAMS system is undergoing enhancements that will minimize the need for operator input.

Audit Recommendation:

6. Provide division managers with summary-level detail of DMV citation information.

Response: The division managers have access to this information for all employees at their divisions. To make accessing this information easier for the division managers, Quality Assurance will provide summary level reports on a monthly basis beginning September 2001.

Audit Recommendation:

7. Ensure that any improvements made in monitoring its bus drivers should also apply to its rail drivers.

Response: We already do this.

Respectfully submitted:

Los Angeles County Metropolitan Transportation Authority

(Signed by: Allan G. Lipsky)

Allan G. Lipsky
Chief Operating Officer

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COMMENTS

California State Auditor's Comments on the Response From the Los Angeles County Metropolitan Transportation Authority

To provide clarity and perspective, we are commenting on the Los Angeles County Metropolitan Transportation Authority's (MTA) response to our audit report. The number corresponds to the number we have placed in the response.

- ① The MTA is incorrect. From the information provided to us by MTA, we conclude on page 12 that although state law requires it to ensure that its bus drivers do not exceed established maximum driving and on-duty time limits, the MTA does not generate sufficient information either to be aware of or to prevent all such violations. Thus, the MTA is unable to comply with state law requiring it to prevent driving and on-duty violations. In addition, it is not clear what MTA means when it says, "if accepted audit methodology were applied." Contrary to MTA's assertion, we applied generally accepted auditing procedures in arriving at our conclusions. Indeed, it was the results of those audit procedures that prevented us from concluding that MTA fully complies with state laws and regulations regarding on-duty and driving time restrictions or that its procedures for monitoring secondary employment are adequate.
- ② The MTA suggests that there is no evident difference in the relative number of accidents for full-time and part-time drivers. However, we do not believe that mere numbers provide insight into causal relationships for accidents. As we state on page 19, unreliable or missing data in MTA's database and the lack of summary information about traffic congestion and road conditions prevented us from making any meaningful comparisons concerning MTA's accident data.
- ③ The MTA is wrong on three counts. First, this report is fully responsive to the Joint Legislative Audit Committee's audit request. Second, although MTA maintained insufficient data for us to establish a correlation between fatigue and accidents, the MTA exaggerates when it states that there is absolutely no evidence that any deficiencies in its management have ever

resulted in accidents. In fact, as stated on page 13, some drivers had accidents on days that MTA's Transit Operating Trends System (TOTS) showed that they had violated on-duty time restrictions, and deficiencies in MTA's procedures precluded it from detecting or preventing these violations. Lastly, the MTA is overstating the California Highway Patrol's (CHP) role in monitoring its compliance with on-duty and driving time restrictions. As stated on page 8, the CHP has a limited role in evaluating MTA's compliance with state laws and regulations. Further, according to an internal memorandum, MTA acknowledges that the CHP's review will not detect 10-hour driving violations because the CHP cannot be sure if a driver actually exceeds 10 hours unless the driver prepares a log. Moreover, MTA bus drivers complete driver logs when their on-duty time exceeds 12 hours or they work for more than one employer within a 24-hour period as we state on pages 12 and 16, respectively. However, as stated on page 16, MTA does not consistently collect logs from all drivers with secondary employment, thus even fewer drivers would be subject to the CHP's review.

- ④ The MTA states that its bus schedules are constructed so that no individual or combination of assignments will result in driving time greater than 9 hours and 40 minutes. However, as stated on page 13, we found 26 drivers who exceeded 10 hours of vehicle time. The MTA did not respond to our requests to provide manual calculations that would show these drivers drove less than 10 hours. In addition, according to an internal memorandum, the MTA states, "no runs are actually scheduled for over 10 hours, however, some runs which are scheduled for exactly 10 hours consistently take longer due to failure of scheduling to account for heavy traffic."
- ⑤ Although MTA now asserts that TOTS produces an error message to immediately notify management that an assignment violates time restrictions, it did not stress its reliance on this notification to us during our fieldwork. In fact, we asked division staff at one bus division to test this warning system by scheduling a driver for an additional assignment that would bring the driver's scheduled driving time for the day to more than 15 hours. We noted that TOTS accepted the extra assignment and did not produce an error message.
- ⑥ The MTA is missing the point. We do not dispute that MTA employs a variety of management tools to track and monitor on-duty and driving time. However, as we state on pages 12

through 15, these tools are not based on actual driving time, contain errors, and are prepared after the fact. As a result, while these tools may be adequate for planning or detecting on-duty and driving time violations after they occur, they are not adequate to prevent violations as state laws and regulations require.

- ⑦ The MTA is mistaken. Our audit fully complies with professional standards. We find it puzzling that MTA should question our professionalism in reporting our results because we included them at MTA's insistence. As we discussed with MTA, we were reluctant to do so because its inability to provide us reliable information prevented us from drawing a correlation between driving hours and accidents. Nonetheless, we have clarified the text on page 13 to make it clear that MTA does not accurately track or maintain sufficient information for us to correlate fatigue with accidents.
- ⑧ The MTA's statements evade our concern that state law directs motor carriers such as MTA to employ systems to prevent on-duty violations. Although state regulations require drivers to disclose secondary employment, state law places a responsibility on MTA to prevent on-duty violations. As stated on page 15, MTA does not take the necessary steps to either identify drivers with secondary employment or to track the number of hours spent with the other employers. As a result, MTA cannot ensure that its drivers who have secondary employment are not violating on-duty restrictions.
- ⑨ The MTA is wrong. The MTA asserts that one driver's secondary employment letter was on file at the division and provided to us on or about July 18, 2001. However, this letter was not on file when we were at the division in May 2001 and was not provided to us until after we brought it to the division manager's attention. Further, it does not change the fact that this driver held secondary employment from February 22, 2001, through June 18, 2001, without division management's knowledge.

The MTA states that it received a statement from another driver indicating that she no longer has secondary employment. However, this does not change the fact that the driver's division manager was unaware that she continued to work for her previous employer between her hire date of August 15, 1999, and July 20, 2001. Furthermore, she did not disclose the employment until after we brought it to the division manager's attention.

Moreover, MTA is clearly missing our point concerning driver logs. As stated on page 17, of the four bus divisions we visited, only one had a procedure in place to collect driver logs from bus drivers who have secondary employment. As a result, we find it difficult to believe MTA when it states that its drivers who have secondary employment complete logs on a daily basis. For example, on page 16 we discuss how at one division none of the 16 drivers with secondary employment were completing driver logs on a daily basis as required.

Finally, our conclusion that MTA does not effectively track secondary employment is not based on three cases. Indeed, as described on pages 15 through 17, our conclusion is based on several factors. Specifically, MTA lacks a database to track secondary employment, and it does not consistently enforce its requirement that drivers seek prior approval before assuming such employment. In addition, MTA lacks a procedure to collect logs from drivers whom have secondary employment. Furthermore, the only reason MTA was aware of the three drivers mentioned in the report is because we brought it to their attention.

- ⑩ We disagree with MTA's characterization of its accident review process. MTA's Accident Investigation Procedures Manual charges investigators with determining whether accidents are avoidable or unavoidable and requires them to document the bases for their conclusions. However, it does not specifically require them to determine the underlying cause of the accident. Eleven of the accident investigation files we reviewed had accident reports indicating that the drivers had been on duty 15 hours or more at the time of their accidents. However, none of the files we reviewed included any discussion of fatigue as a factor contributing to the accident. If MTA is to be believed, its Accident Review Board should have raised the issue since it is a clear violation for any driver to drive after having been on duty for 15 hours.
- ⑪ To address MTA's concern we replaced the word "flaws" with "flawed data."

cc: Members of the Legislature
Office of the Lieutenant Governor
Milton Marks Commission on California State
Government Organization and Economy
Department of Finance
Attorney General
State Controller
State Treasurer
Legislative Analyst
Senate Office of Research
California Research Bureau
Capitol Press