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Drug and Alcohol Testing Results 1999 Annual Report

December 2000



Office of Safety and Security

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PREFACE

This annual report represents the cooperative efforts of many people. Full appreciation is extended to the U.S. Department of Transportation's Federal Transit Administration, the Volpe National Transportation Systems Center, and the following individuals who were instrumental in guiding this project and contributing to its success:

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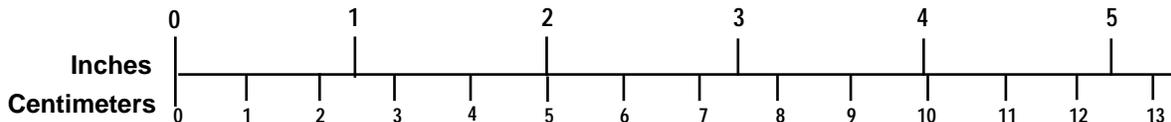
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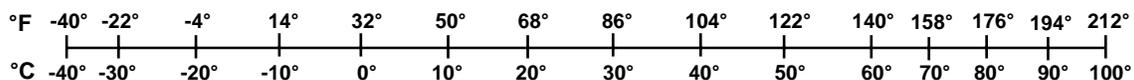
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EXECUTIVE SUMMARY

INTRODUCTION

This annual report presents the results of mandatory drug and alcohol testing conducted by transit systems and their contractors receiving funds from the Federal Transit Administration (FTA). Under the Omnibus Transportation Employee Testing Act passed by Congress in 1991, the FTA was required to establish regulations for drug and alcohol testing of transit employees performing safety-sensitive functions. These regulations require that each recipient of FTA funds (1) implement an anti-drug program to deter and detect the use of prohibited drugs, (2) establish a program to prevent the misuse of alcohol, and (3) report the results of its programs to FTA annually. The 1999 Annual Report is the fourth annual report summarizing the reported results of drug and alcohol tests from all such transit systems.

Compliance with FTA's drug and alcohol testing program is a condition of Federal assistance. Failure of a recipient to establish and implement a drug and alcohol testing program – either in its own operations or in those of an entity operating on its behalf – may result in the suspension of Federal transit funding to the recipient. Because a recipient may not always directly provide mass transit services, the FTA uses the term “operator” or “employer” to describe those who actually provide transit services. The direct recipient of FTA funds, however, is the entity legally responsible to the FTA for compliance.

DISTRIBUTION OF TRANSIT SYSTEMS AND CONTRACTORS

The FTA received drug and alcohol MIS reporting forms for calendar year 1999 from 2,588 individual employers representing 1,628 transit systems and 960 contractors. Of the 2,588 individual employers, 922 were large operators, 367 were small operators, and 1,299 were rural operators. A total of 1,653 of all employers reported being a member of a consortium. Approximately 73 percent of all employers reported no positive drug test results, and 97 percent of employers reported no alcohol test results ≥ 0.04 percent. Thirty-four percent of contractors had at least one positive drug test result, compared to 23 percent of transit systems. Two percent of contractors submitted forms with at least one alcohol test result ≥ 0.04 percent, compared to 3 percent of transit systems.

Employers reported a total of 238,641 employees performing safety-sensitive functions: 78.6 percent of these employees are employed at transit systems and 21.4 percent are employed by contractors. The average transit system employs more than twice as many safety-sensitive employees than the average contractor, 115 to 53. Large operators employ an average of 209 safety-sensitive employees compared to 49 for small operators and 21 for rural. The largest number of employees performing safety-sensitive functions are engaged in revenue vehicle operation (69.4 percent) followed by revenue vehicle and equipment maintenance (19.7). Revenue vehicle control/dispatch, armed security personnel, and CDL/non-revenue vehicle employees combined make-up less than 11 percent of the overall labor force (7.6 percent, 1.7 percent, and 1.5 percent respectively).

The largest number of contract employees were involved in revenue vehicle operation at 76.8 percent, followed by revenue vehicle and equipment maintenance at 12.6 percent. For rural operators, contractors comprise a relatively small percent of the total number of FTA-covered employees at 18.6 percent; for large operators, contractors comprise a slightly higher total at 21.2 percent. Contractors comprise 27.8 percent of the total number of FTA-covered employees for small contractors.

ELECTRONIC REPORTING

Electronically reporting Drug and Alcohol MIS results became an option for FTA-covered employers in 1998. Electronic software was developed with help and validation capabilities in an effort to lessen the reporting burden. In 1999, 568 employers (22 percent) reported electronically in 1999 versus 317 (13 percent) in 1998.

DRUG TEST RESULTS

The 1999 drug-testing program performed by large, small and rural FTA-covered employers revealed the following major findings:

- A total of 119,753 specimens were collected for random drug testing: 1,198 of these specimens tested positive for one or more of the five prohibited drugs. Random drug testing accounted for 53.5 percent of the total specimens collected and 33.7 percent of the total positive specimens.
- The positive random test rate was 1.00 percent industry-wide. Positive random test results were 0.83 percent for transit systems and 1.72 percent for contractors.
- A total of 223,668 specimens were collected for all six types of drug testing. Of that figure, 3,552 specimens tested positive for one or more of the five prohibited drugs. Transit systems accounted for 73.5 percent of all drug tests conducted, with contractors accounting for the remaining 26.5 percent of the total drug tests. The overall rate (transit systems and contractors combined) of positive drug tests was 1.59 percent.
- Of the six drug test types (pre-employment, random, post-accident, reasonable suspicion, return-to-duty, and follow-up), the highest percent of positive specimens was for reasonable suspicion testing (9.37 percent). Contractors reported positive results at a higher rate than did transit systems in all test types. The lowest percentage of positive specimens was for random testing (1.00 percent). Random testing was by far the most common test to be conducted, with 58.7 percent of all specimens collected by transit systems, followed by pre-employment testing (25.9 percent). Pre-employment testing was the most common test conducted by contractors at more than twice the rate as that of transit systems at 53 percent; this most likely suggests a higher rate of turnover for contractors.
- Marijuana and cocaine were detected most frequently in the specimens that tested positive for drugs. Of 3,552 positive specimens, 60.1 percent tested positive for

marijuana and 35.6 percent tested positive for cocaine. Marijuana was also detected most frequently in all 10 regions. Eighty specimens tested positive for multiple drugs; the most common multiple-drug combination was marijuana and cocaine, with 48 positive results. There were six cases of individuals testing positive for both drugs and alcohol.

- There were 232 qualifying accidents that resulted in a positive post-accident drug test (123 from transit systems and 109 from contractors). There were zero fatalities resulting from these accidents. Cocaine was detected in 48.7 percent of all positive post-accident drug tests; marijuana was second at 45.7 percent.

ALCOHOL TEST RESULTS

Employers are required to establish and conduct an alcohol misuse prevention program in which employees performing safety-sensitive functions are tested for the misuse of alcohol and supervisors are trained to recognize the signs and symptoms of alcohol misuse. Employees are subject to five types of alcohol tests: random, reasonable suspicion, post-accident, return-to-duty, and follow-up. In addition, employers may not allow safety-sensitive employees to consume alcohol under four specific circumstances: (1) 4 hours before performing a safety-sensitive function; (2) while performing a safety-sensitive function; (3) after a fatal accident, unless the employee has received a post-accident test or 8 hours have elapsed, whichever occurs first; or (4) after a non-fatal accident unless the employee's involvement was completely discounted as a contributing factor to the accident, the employee has been tested, or 8 hours have elapsed.

An employee with an alcohol concentration of 0.02 or greater but less than 0.04 must be removed from duty for 8 hours or until a retest shows an alcohol concentration of less than 0.02. An employee with an alcohol concentration ≥ 0.04 must be prohibited from performing any safety-sensitive duties, removed from his/her safety-sensitive position, and be evaluated by a substance abuse professional. To return to a safety-sensitive position, the employee must properly complete a course of treatment prescribed by the substance abuse professional and pass a return-to-duty alcohol test.

The 1999 alcohol-testing program performed by large, small, and rural transit employers revealed the following:

- Of the total 41,358 random alcohol-screening tests conducted, 39 confirmation test results ≥ 0.04 were documented (0.09 percent). The rate for transit systems was 0.10 percent, while for contractors the rate was 0.05 percent.
- The FTA alcohol-testing rule includes a definition for the violation rate for purposes of setting next year's random alcohol testing rate. The violation rate for 1999 for all employers (transit systems and contractors) was 0.18 percent.

- The percent of total alcohol screening results ≥ 0.04 for all test types was 0.21 percent industry-wide. The rate for transit systems was 0.18 percent, versus 0.33 percent for contractors.
- Transit systems conducted 83.0 percent of the 65,887 total screening tests; contractors conducted 17.0 percent of the total.
- Of the 5 required alcohol test types, the highest percent of test results ≥ 0.04 was for reasonable suspicion testing at 8.20 percent. Contractors had nearly double the number of alcohol concentrations at ≥ 0.04 for reasonable suspicion testing than transit systems at 15.57 percent.
- Of the 5 employee categories, the highest percent of test results ≥ 0.04 was in the Revenue Vehicle and Equipment Maintenance category at 0.33 percent. Armed Security Personnel had zero test results ≥ 0.04 .
- Random tests had the lowest percent of test results ≥ 0.04 at 0.09 percent.
- There were 16 accidents reported that resulted in a post-accident alcohol test result of 0.04 or greater. There were no fatalities resulting from these accidents. Transit systems accounted for 11 of the post-accident test results ≥ 0.04 and contractors accounted for 5.
- The Revenue Vehicle Operations employee category accounted for 15 of the 16 alcohol test results ≥ 0.04 for post-accident testing.
- There were 60 alcohol test refusals: 29 for transit systems and 31 for contractors. Thirty-six refusals were for random tests and 24 were for non-random tests.
- There were 60 reported “Other” Alcohol Violations — 4 additional specific circumstances in which employers may not allow their safety-sensitive employees to consume alcohol, as mentioned above.

TRENDS: 1996 THROUGH 1999

The number of FTA drug and alcohol reporting forms received from 1996 through 1999 has increased by 13.3 percent. The greatest gain has been in the number of contractor reports received: reports received from contractors have jumped by 24.7 percent while transit systems have only increased by 3.0 percent.

The number of reported safety-sensitive employees has increased by 7.7 percent for transit systems and 29.4 percent for contractors. The percent of contracted FTA-covered employees, increased from 18.4 percent in 1996 to 21.4 percent in 1999.

Overall, the percent of positive random drug test results and the percent of random alcohol test results greater than or equal to 0.04 decreased each year for the 4-year period (see “Totals” column in Tables ES-1 and ES-2).

Table ES-1. 1996 to 1999 Positive Random Drug Test Results

Employer	1996	1997	1998	1999
Transit Systems	1.42%	1.06%	0.93%	0.83%
Contractors	1.84%	1.92%	1.69%	1.72%
Totals	1.50%	1.21%	1.07%	1.00%

Table ES-2. 1996 to 1999 Random Alcohol Test Results \geq 0.04

Employer	1996	1997	1998	1999
Transit Systems	0.17%	0.15%	0.13%	0.10%
Contractors	0.11%	0.09%	0.14%	0.05%
Totals	0.16%	0.14%	0.13%	0.09%

As with random testing, the percent of total positive drug test results decreased overall each year for the 4-year period from 1996 to 1999. Transit systems showed a significant decrease in total positive drug tests whereas the percent of total positive drug tests for contractors showed no trend. See Table ES-3 below for the percentages. See Table ES-4 for the percent of total alcohol test results \geq 0.04 for both transit systems and contractors.

Table ES-3. 1996 to 1999 Positive Drug Test Results

Employer	1996	1997	1998	1999
Transit Systems	1.75%	1.41%	1.28%	1.20%
Contractors	2.75%	3.01%	2.87%	2.66%
Totals	2.00%	1.77%	1.67%	1.59%

Table ES-4. 1996 to 1999 Alcohol Test Results \geq 0.04

Employer	1996	1997	1998	1999
Transit Systems	0.26%	0.23%	0.24%	0.18%
Contractors	0.27%	0.28%	0.56%	0.33%
Totals	0.26%	0.24%	0.29%	0.21%

Other significant findings include:

- The number of random drug tests has increased at a rate of 9.5 percent for transit systems and 15.0 percent for contractors from 1996 to 1999.

- The number of non-random drug tests has increased significantly over the 4-year period: 36.7 percent for transit systems and 35.6 percent for contractors.
- Similar to drug tests, the number of non-random alcohol tests has increased notably by 14.4 percent and 42.7 percent, respectively, for transit systems and contractors.

See Table ES-5 and ES-6 for positive drug and alcohol tests ≥ 0.04 for all 5 employee category types over the last 4 years.

**Table ES-5. 1996 to 1999 Positive Drug Test Results/
Employee Category**

Employer	1996	1997	1998	1999
Revenue Vehicle Operation	2.06%	1.87%	1.79%	1.70%
Revenue Veh. And Equip. Maint.	1.95%	1.69%	1.45%	1.46%
Revenue Veh. Control/Disp.	1.20%	0.91%	0.85%	0.97%
CDL/Non-Revenue Vehicle	2.55%	2.05%	2.06%	1.02%
Armed Security Personnel	0.73%	0.28%	0.60%	0.53%
Totals	2.00%	1.77%	1.67%	1.59%

**Table ES-6. 1996 to 1999 Alcohol Test Results ≥ 0.04 /
Employee Category**

Employer	1996	1997	1998	1999
Revenue Vehicle Operation	0.23%	0.20%	0.26%	0.17%
Revenue Veh. And Equip. Maint.	0.33%	0.34%	0.39%	0.33%
Revenue Veh. Control/Disp.	0.20%	0.30%	0.47%	0.30%
CDL/Non-Revenue Vehicle	0.61%	0.48%	0.42%	0.26%
Armed Security Personnel	0.06%	0.06%	0.00%	0.00%
Totals	0.26%	0.24%	0.29%	0.21%

1. INTRODUCTION

This annual report presents the results of mandatory drug and alcohol testing conducted by transit systems that receive funds from the Federal Transit Administration (FTA). Under the Omnibus Transportation Employee Testing Act passed by Congress in 1991, the FTA was required to establish regulations for drug and alcohol testing of transit employees performing safety-sensitive functions. The purpose of requiring transit agencies to implement drug and alcohol programs is to achieve a drug- and alcohol-free work force in the interest of the health and safety of transit employees and the traveling public. This report covers the testing results from the calendar year 1999, as well as trend analysis gleaned from the Program's inception.

The FTA regulations require that recipients of specific FTA funds implement an anti-drug program to deter and detect the use of prohibited drugs by transit employees and to establish a program to prevent prohibited alcohol use. Covered under these regulations are employees of transit systems that receive grant funds and employees of contractors to those transit systems. Large operators (i.e., those providing transit services in urbanized areas of 200,000 or more in population) were required to begin their drug and alcohol testing programs for calendar year 1995. Small operators (i.e., those providing transit services in areas of less than 200,000) were required to begin their drug and alcohol testing programs for calendar year 1996.

1.1 Who Must Report

Transit systems that receive funding from the FTA sources listed in Figure 1-1 are required to have drug and alcohol testing programs. Under FTA regulations, all recipients must implement the required drug and alcohol testing programs and must report the results of their programs to the FTA annually. The results must be submitted to the FTA on specific Management Information System (MIS) forms or data diskettes. Recipients of 5310 funds only are not required to comply with FTA drug and alcohol testing requirements, unless they provide contract services to recipients receiving Section 5307, 5309, and 5311 funds. In those instances, they must report as contractors.

Section 5307 (Section 9). Formula Program
Section 5309 (Section 3). Capital Program
Section 5310 (Section 16). Elderly and Disabled Program
Section 5311 (Section 18). Non-urbanized Area Program

Figure 1-1. FTA Federal Funding Sources (1999)

Section 5307 refers to block grants for capital projects and to finance the planning, improvement, and operating costs of equipment, facilities, and associated capital maintenance items for use in mass transportation. Section 5309 refers to discretionary grants and loans for capital projects, new and existing fixed guideway systems, an efficient mass transportation system coordinated with other transportation systems, the introduction of new technologies, the enhancement of urban economic development or the incorporation of private investment, and mass transportation projects to meet the needs of the elderly and individuals with disabilities. Section 5310 refers to

grants and loans for the special needs of the elderly and individuals with disabilities. Section 5311 refers to financial assistance for non-urbanized areas.

Some recipients provide mass transit services directly. Others rely on additional public or private entities to provide services in whole or in part. In these cases, the direct recipient of FTA funds is legally responsible for assuring that any entity operating on its behalf is in compliance with FTA testing rules.

Transit systems that receive funding directly from the FTA must certify annually that they are in compliance with the drug and alcohol testing regulations. States must certify regulatory compliance on behalf of the transit systems that receive FTA funding through a state agency.

Failure of a recipient to establish and implement a drug and alcohol testing program—either in its own operations or in those of an entity operating on its behalf—may result in the suspension of Federal transit funding to the recipient. Because a recipient may not always provide transit services directly, the FTA uses the term “operator” or “employer” to describe those who actually provide transit services and who, therefore, must implement the FTA requirements.

1.2 Employees Who Must be Tested

Under the FTA’s drug and alcohol testing regulations, employees and supervisors who perform any of the following functions are considered safety-sensitive employees:

1. Operate a revenue service vehicle, including when not in revenue service (includes employees who operate a passenger vehicle, whether or not a fare is collected);
2. Maintain revenue service vehicles or equipment used in revenue service (except 5311 recipients’ contractors);
3. Dispatch or control revenue service vehicles;
4. Operate a non-revenue service vehicle (e.g., snowplow or wrecker), which requires a Commercial Drivers License (CDL), and is not already covered by another employee category; and/or
5. Provide security and carry a firearm.

Maintenance contractors (except for 5311 recipients’ contractors) that perform routine, ongoing repair or maintenance work for FTA recipients and subrecipients must comply if their employees perform any of the identified safety-sensitive functions. In addition, supervisors who perform, or could be called upon to perform, any of the safety-sensitive functions are also included.

1.3 Types of Tests

Employees who perform safety-sensitive functions are subject to six different types of tests:

1) Pre-employment testing for drugs is performed on each prospective employee, including individuals who are being transferred into safety-sensitive positions. Employees may not be hired unless they have a verified negative drug test result. (This is no longer applicable for alcohol — the FTA suspended required pre-employment testing for alcohol on May 10, 1995, as a result of a U.S. Court of Appeals decision.)

2) Random testing must be unannounced and unpredictable. The tests must be based on a scientifically valid random-number selection method. All safety-sensitive employees must have an equal chance of being selected for testing each time a selection is made, must be included in the selection pool, and must remain in the pool after being tested. For 1999, the number of random tests conducted must equal at least 50 percent (for drugs) and 10 percent (for alcohol) of the total number of employees performing safety-sensitive functions. Transit systems have the option of joining a consortium, an entity that arranges testing services and that acts on behalf of the employers. If a transit system joins a consortium for random testing, the testing rate applies to the total number of safety-sensitive employees within the consortium. As a result, some individual transit operators may not meet the random testing requirement.

3) Post-accident testing is required for accidents where there is loss of human life. For non-fatal accidents that meet FTA-defined conditions, testing is required unless the covered employee's performance can be completely discounted as a causative or contributing factor. When an accident occurs, safety-sensitive employees operating the vehicle must be tested, as well as any other safety-sensitive personnel not on the vehicle whose performance could have contributed to the accident. Tests must be administered as soon as possible but no later than 8 hours after the accident for alcohol and 32 hours for drugs.

4) Reasonable suspicion testing is conducted when an employer suspects that an employee has used a prohibited drug or has misused alcohol as defined in the regulations. Reasonable suspicion determinations are made by trained supervisors and must be based on specific, contemporaneous, articulated observations concerning the appearance, behavior, speech, or body odor of the safety-sensitive employee.

5) Return-to-duty testing occurs when an employer's policy statement permits an employee who violated the regulations (i.e., tested positive for drugs, had an alcohol result of ≥ 0.04 , refused to submit to a test) to return to duty to perform a safety-sensitive function after completion of rehabilitation. The employee must, however, be evaluated by a Substance Abuse Professional (SAP) and pass a return-to-duty test prior to performing a safety-sensitive function.

6) Follow-up testing occurs after an employee has been returned to duty after a positive drug or alcohol test. The employee is subject to unannounced follow-up testing for at least 12 but no more than 60 months as recommended by the SAP. Follow-up testing is separate from, and in addition to, random testing.

1.4 Drug Testing Program Overview

Transit systems must establish an anti-drug program that focuses on testing safety-sensitive employees and training for supervisors. FTA regulations specify that safety-sensitive employees may not use any of 5 prohibited substances (or their metabolites): marijuana; cocaine; opiates (e.g., heroin, morphine, codeine); amphetamines (e.g., racemic, amphetamine, extroamphetamine, and methamphetamine); or phencyclidine (PCP). Testing for any other drugs must be performed separately from the FTA test.

If an FTA-covered employee has a verified positive drug test result, the employee must be removed from the safety-sensitive position, be informed of the available educational and treatment programs, and be referred to a SAP. To return to a safety-sensitive position, the employee must complete a course of treatment prescribed by the SAP and take a return-to-duty drug test with a verified negative result.

1.5 Alcohol Testing Program Overview

Transit systems are required to establish and conduct an alcohol misuse prevention program in which employees performing safety-sensitive functions are tested for alcohol misuse. In addition, supervisors must receive specific training to recognize the signs and symptoms of possible alcohol misuse. There are four specific circumstances under which an employee is prohibited from consuming alcohol:

1. Four hours before performing a safety-sensitive function;
2. While performing a safety-sensitive function;
3. After a fatal accident unless a post-accident test has been administered, or 8 hours have elapsed (whichever occurs first); and/or
4. After a non-fatal accident unless the employee's involvement can be completely discounted as a contributing factor to the accident, the employee has been tested, or 8 hours have elapsed.

An employee with an alcohol concentration of 0.02 or greater but less than 0.04 for a confirmation test must be removed from duty for at least 8 hours or until a re-test conducted by the employer shows an alcohol concentration of less than 0.02. If an employer elects to remove the employee from duty for 8 hours, the employer is not required to administer an alcohol test before the employee resumes performing a safety-sensitive function unless the employee exhibits signs of alcohol misuse upon returning to work.

A safety-sensitive employee with an alcohol concentration of ≥ 0.04 must be prohibited from performing any safety-sensitive functions, removed from his or her safety-sensitive position, and be referred to a SAP.

1.6 Drug and Alcohol MIS Data Quality and Validation

The Drug and Alcohol MIS data submitted to the FTA by transit operators and their contractors are subjected to extensive analysis and validation, both manual and automated. The process entails detailed examination of each MIS report, identification of errors or questionable entries, and the resolution of these problems in conjunction with the reporting agencies.

In general, the quality of the database has improved each year as the FTA clarifies definitions of data items, simplifies reporting procedures, and designs more sophisticated validation checks. Despite extensive efforts, it should be noted that data validation primarily encompasses a review of the consistency and reasonableness of the reported data. Errors of significant magnitude have been detected and corrected, but some statistically minor errors may remain.

1.7 Availability of Drug and Alcohol MIS Documentation

Copies of reporting guidance and MIS reporting forms and diskettes are available from the Drug and Alcohol MIS Project Office at (617) 494-6336. The FTA Safety and Security Clearinghouse can be reached at (617) 494-2108 for additional copies of this report, as well as previously published annual reports. Other technical assistance materials including *The Implementation Guidelines for Drug and Alcohol Regulations in Mass Transit* may be acquired from the FTA's Office of Safety & Security at (202) 366-2896. Further information can also be found at the FTA Web site at the following Internet address: <http://transit-safety.volpe.dot.gov/damis>.

1.8 Organization of this Report

This report contains five chapters and three appendices. Chapter 2 provides general information on the reporting process, including how many employers reported testing results to the FTA. Chapters 3 and 4 present drug and alcohol testing results, respectively. Chapter 5 presents a trend analysis of testing results from 1996 through 1999. A glossary of terms used throughout this report comprises Appendix A; Appendix B provides a list of FTA regions; and Appendix C presents a list of rail systems and rail contractors that submitted reports. Last year an additional size category (rural) was introduced and another size category (small) was, therefore, redefined. "Large" systems are located in urbanized areas of 200,000 or more in population. "Small" systems are located in urbanized areas of less than 200,000 but greater than or equal to 50,000. "Rural" systems are located in urbanized areas of less than 50,000 in population.

2. GENERAL INFORMATION ON DRUG AND ALCOHOL FORMS

This chapter presents, graphically, the data submitted on the 1999 FTA Drug and Alcohol MIS forms. Among the data presented are the number of MIS Data Collection forms versus data diskettes* received, forms received by employer size, region and rail versus non-rail. Also covered are the number of FTA-covered employees by employee category, and broken out for transit systems and contractors, and the percent of FTA-covered employees by employer size.

2.1 Distribution of Transit Systems and Contractors

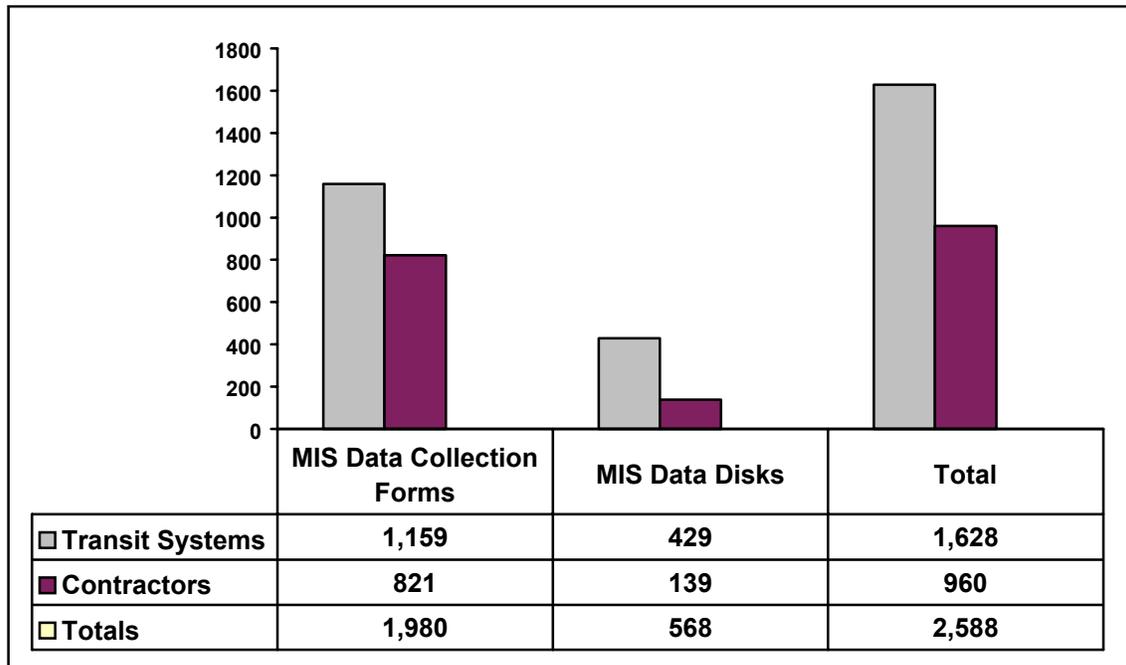


Figure 2-1. Number of Drug and Alcohol Forms Received

*Beginning in 1998, reporters had the option to report on either paper forms or by using the electronic reporting system and submitting results on a data disk.

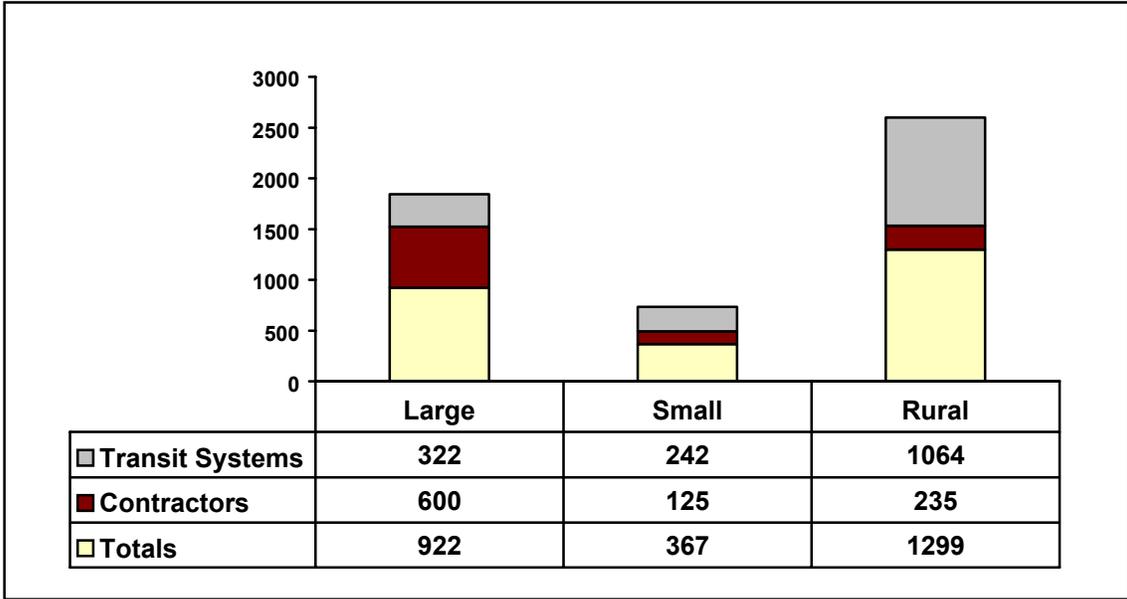


Figure 2-2. Drug and Alcohol Forms Received by Employer Size

2.2 Drug and Alcohol Forms Received by Region

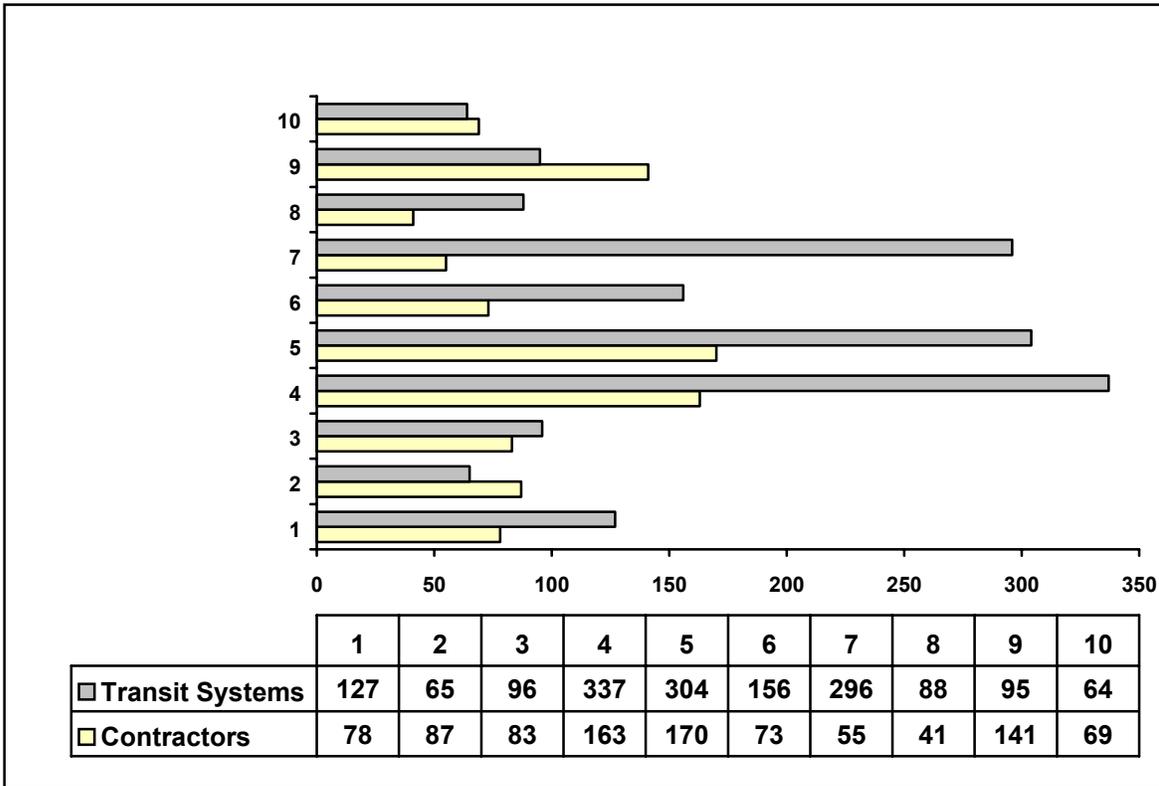


Figure 2-3. Number of FTA Drug and Alcohol Forms Received by Region

2.3 Rail and Non-Rail Employers

For this report, rail employers are considered to be those entities, along with their contractors, which operate rapid rail transit operations within an urban area and are not connected to the general railroad system of transportation. These transit vehicles include rail cars and trolley cars. The FTA and the Federal Railroad Administration (FRA) have agreed that commuter railroad operations that receive FTA funds must comply with FRA's drug and alcohol testing regulation, and are therefore not included in FTA's numbers.

It is important to note that rail systems have a different employee demographic than non-rail, with rail employers often having fewer revenue vehicle operators and a greater concentration of mechanics.

Figure 2-4 compares the distribution of forms received for both rail and non-rail for transit systems and contractors. See Appendix C for a list of rail systems and rail contractors that report to the FTA.

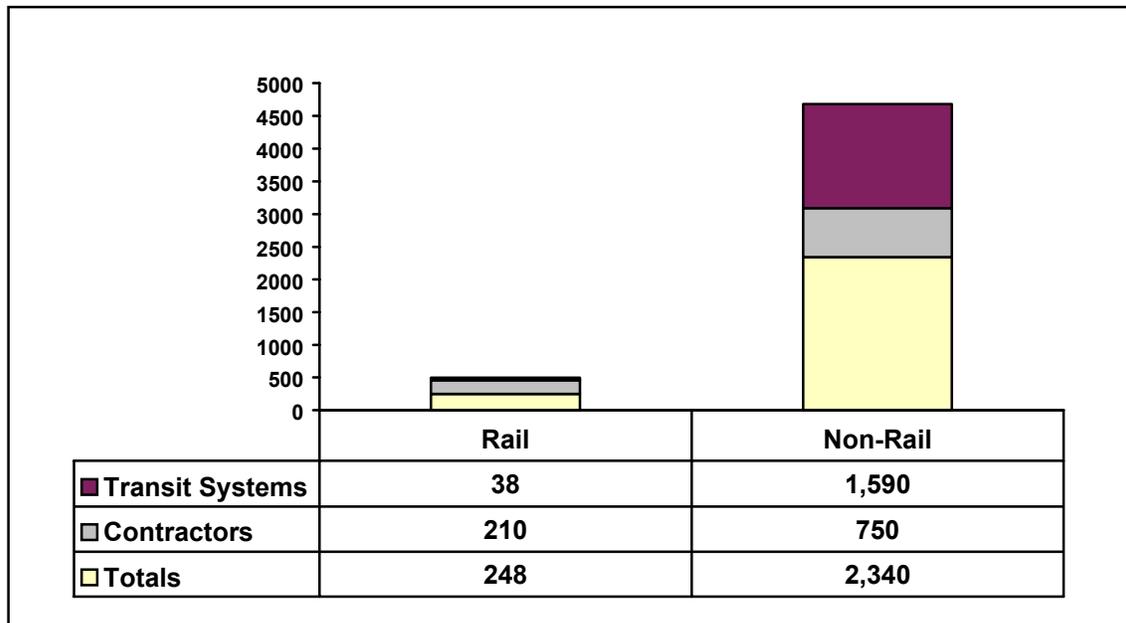


Figure 2-4. Forms Received - Rail Versus Non-Rail

2.4 FTA-Covered Employees

Following are a variety of breakouts for FTA-covered employees: by employee category, by transit system versus contractor, percent of employees for large, small and rural employers, various data on employees in rail and non-rail systems, and, finally, by region.

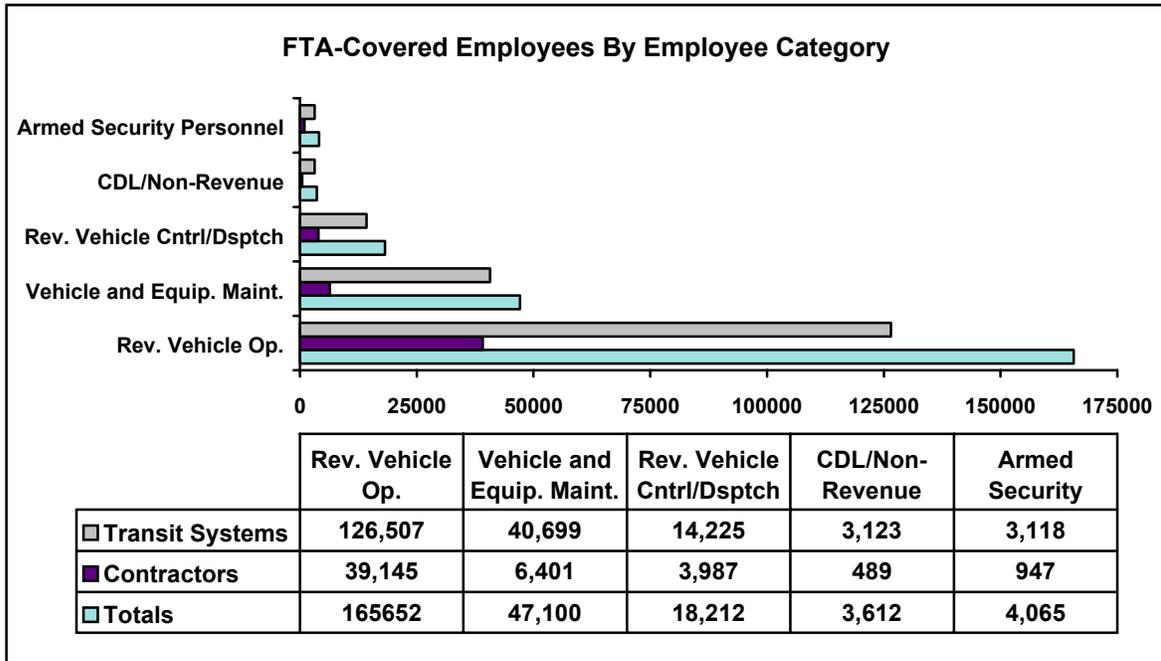


Figure 2-5. Number of FTA-Covered Employees by Employee Category/Percent of Labor Force that was Contracted

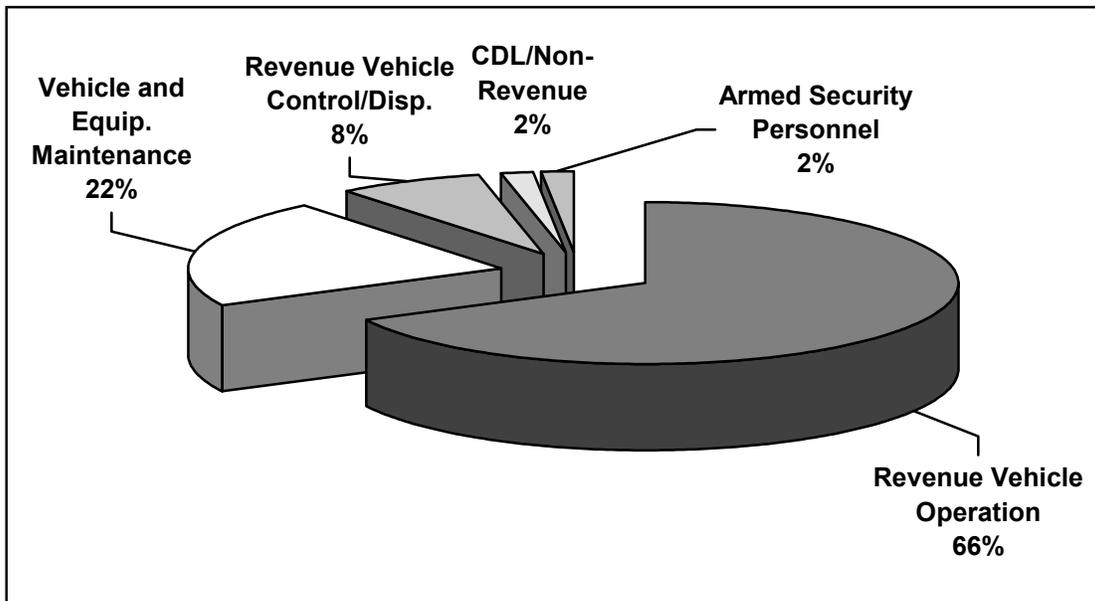


Figure 2-6. Percent of FTA-Covered Employees in Each Employee Category – Transit Systems

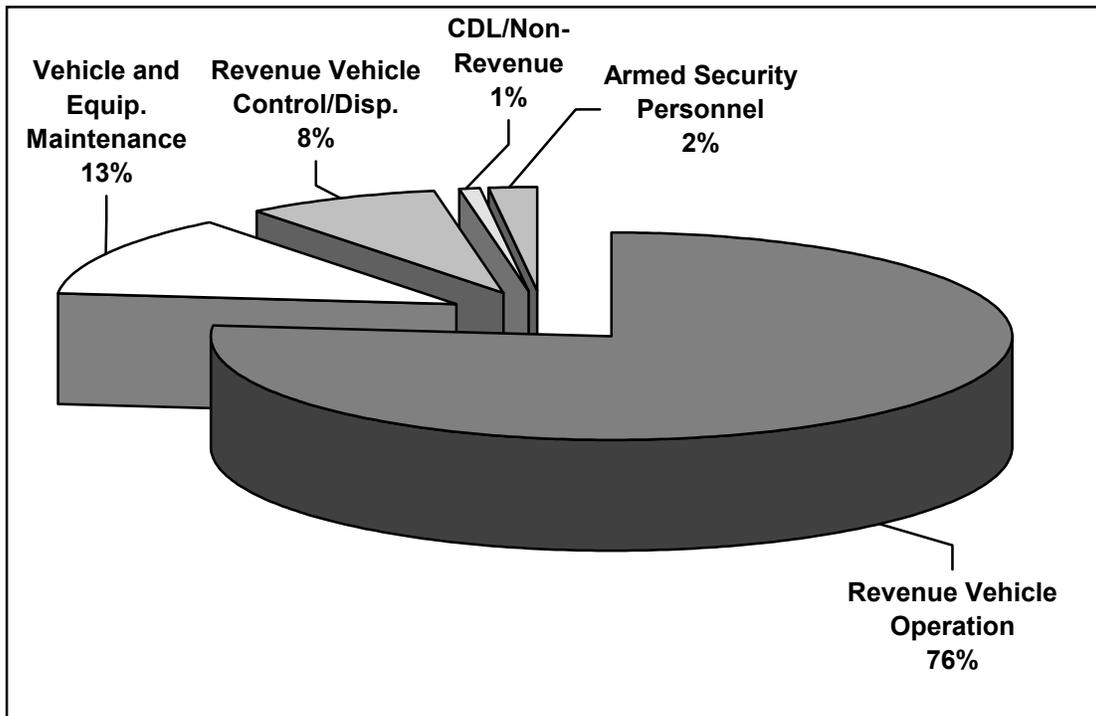


Figure 2-7. Percent of FTA-Covered Employees in Each Employee Category – Contractors

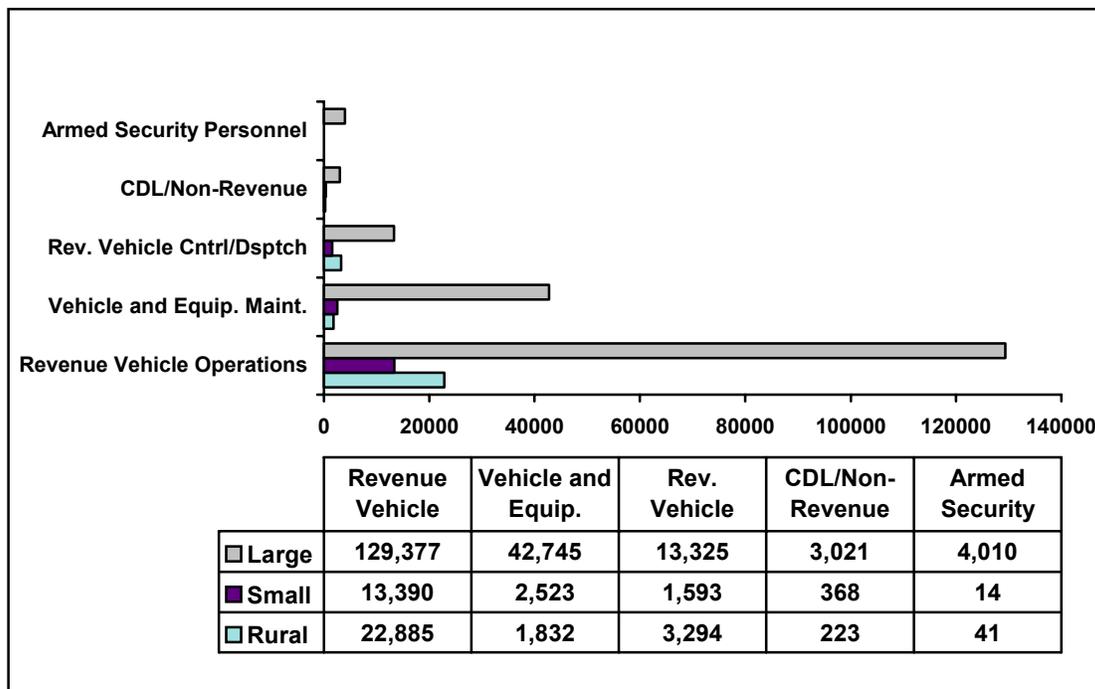


Figure 2-8. Number of FTA-Covered Employees by Employee Category – Large, Small, and Rural Systems

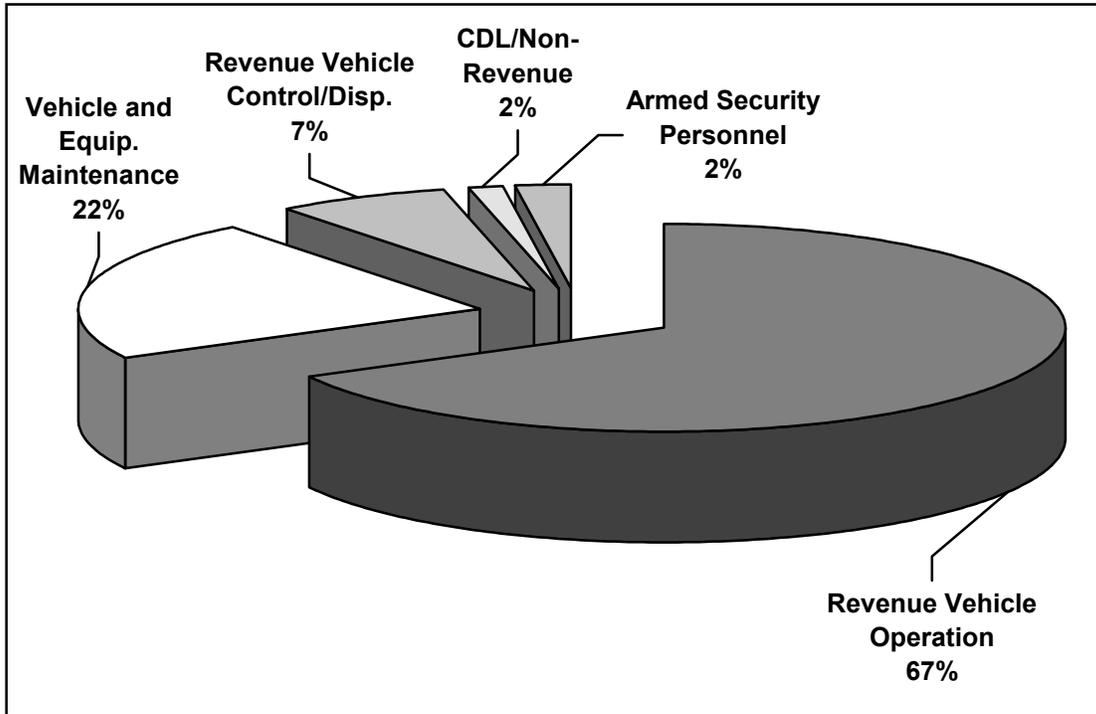


Figure 2-9. Percent of All FTA-Covered Employees for Large Operators

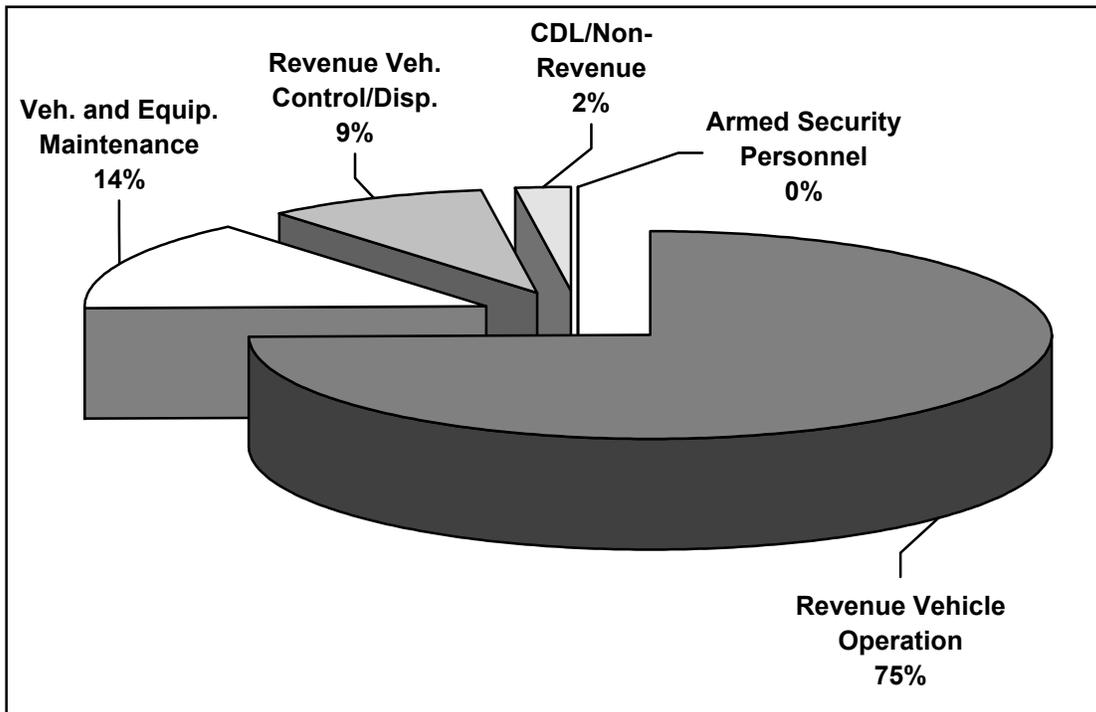


Figure 2-10. Percent of All FTA-Covered Employees for Small Operators

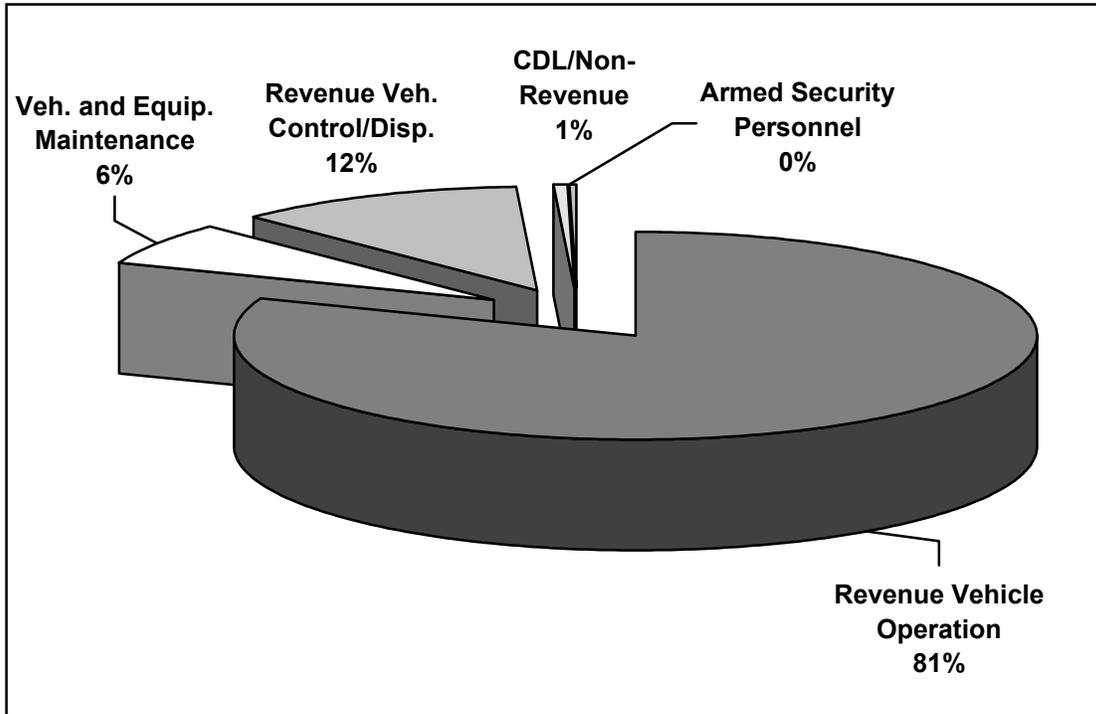


Figure 2-11. Percent of All FTA-Covered Employees Reporting for Rural Operators

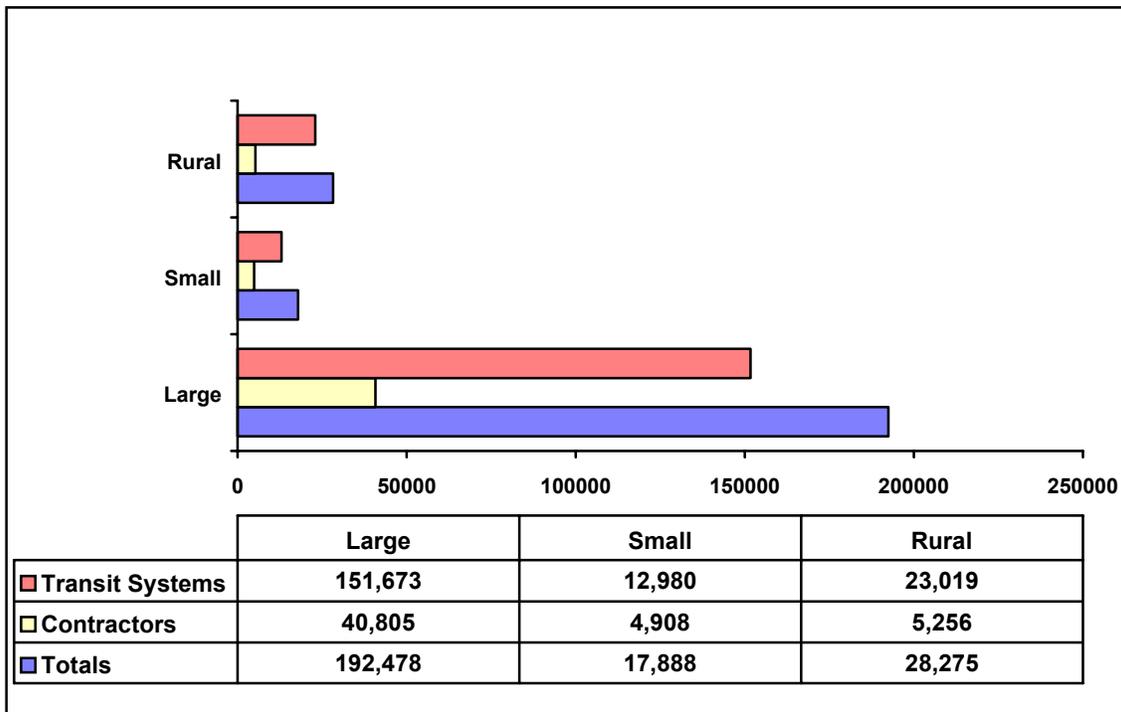


Figure 2-12. Number of FTA-Covered Employees by Employer Size

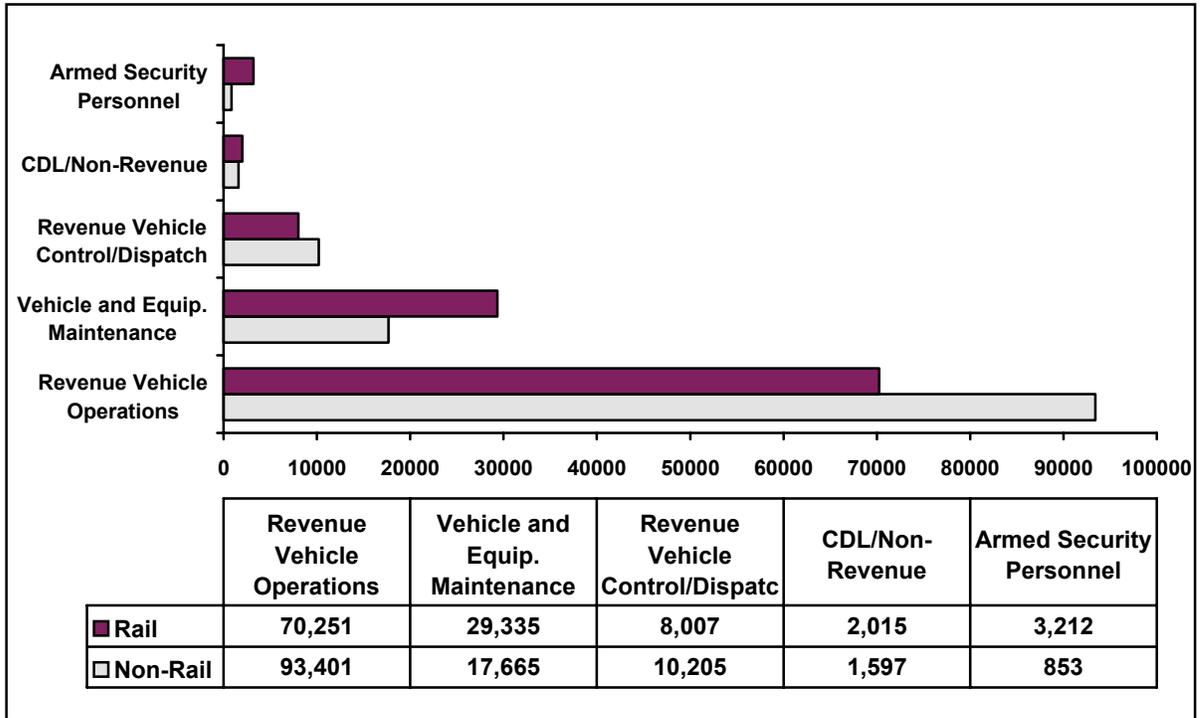


Figure 2-13. Number of FTA-Covered Employees by Employee Category for Rail and Non-Rail

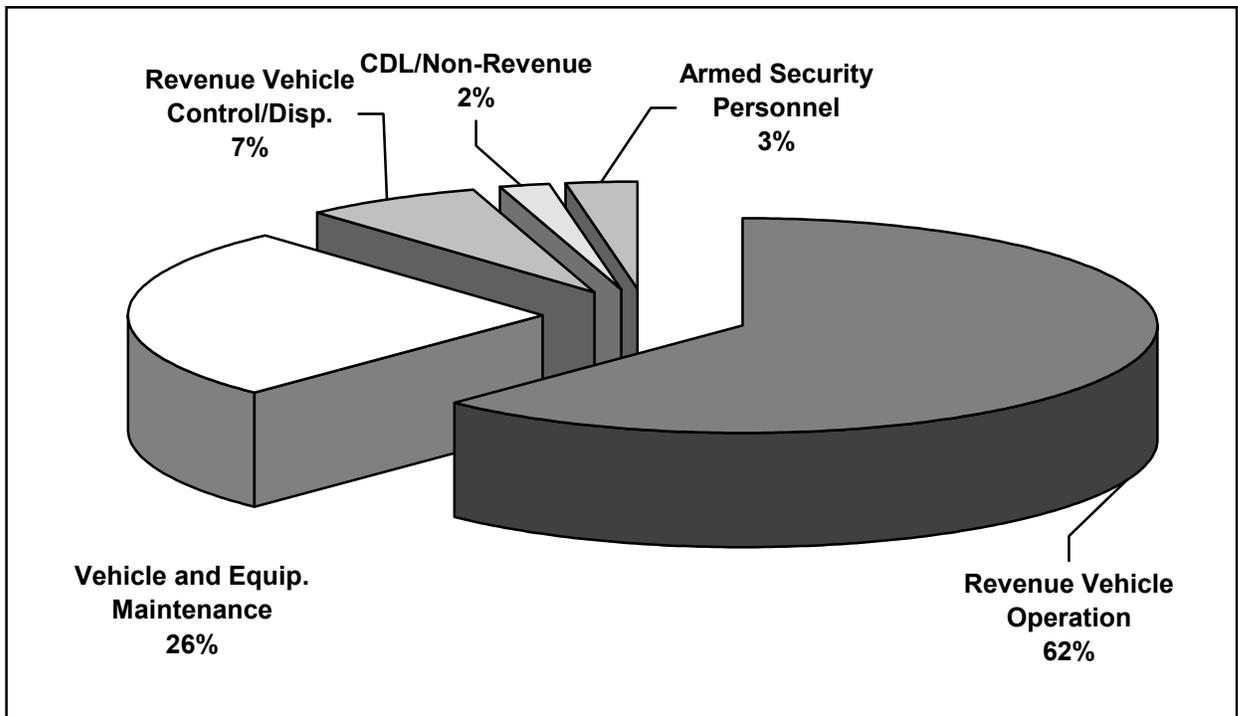


Figure 2-14. Percent of FTA-Covered Employees in Each Employee Category – Rail Operators

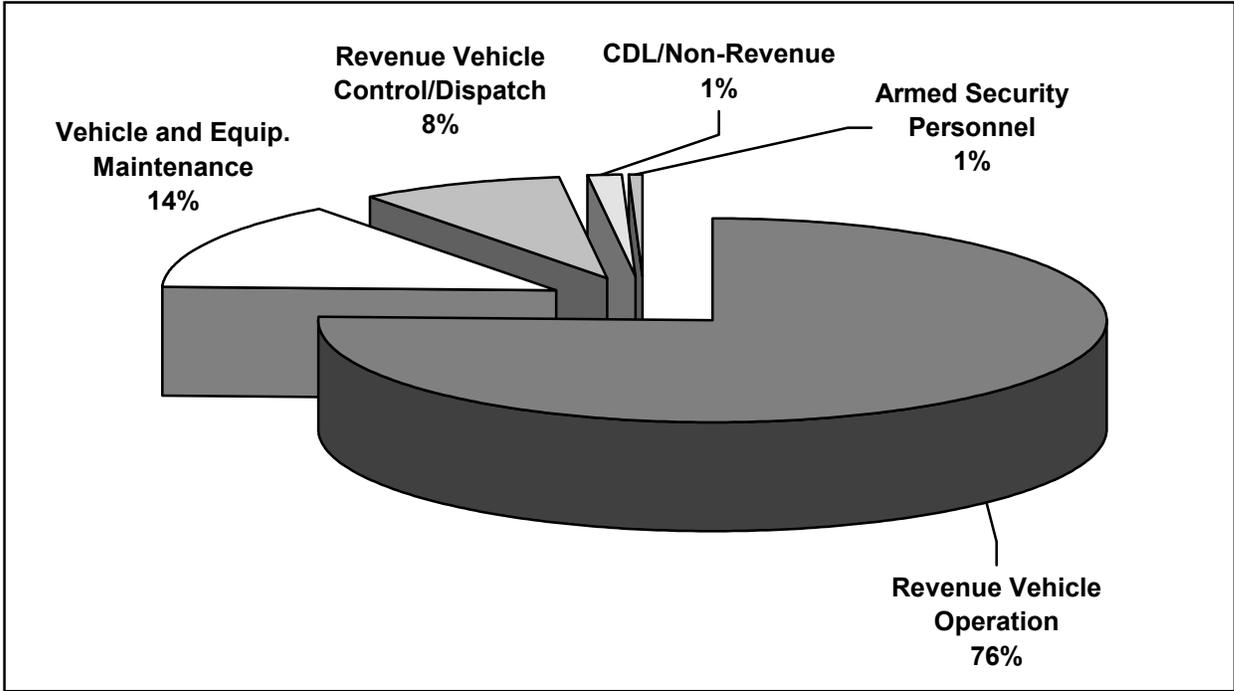


Figure 2-15. Percent of FTA-Covered Employees in Each Employee Category – Non-Rail Operators

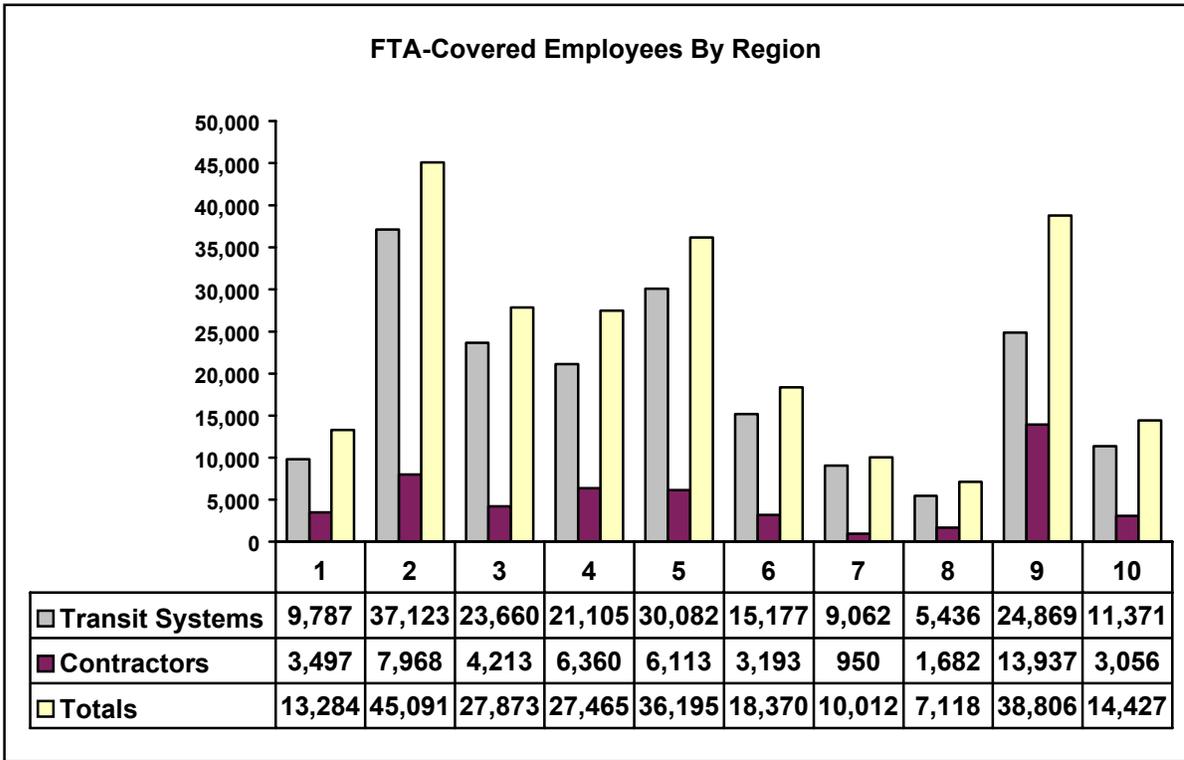


Figure 2-16. Number of FTA-Covered Employees by Region

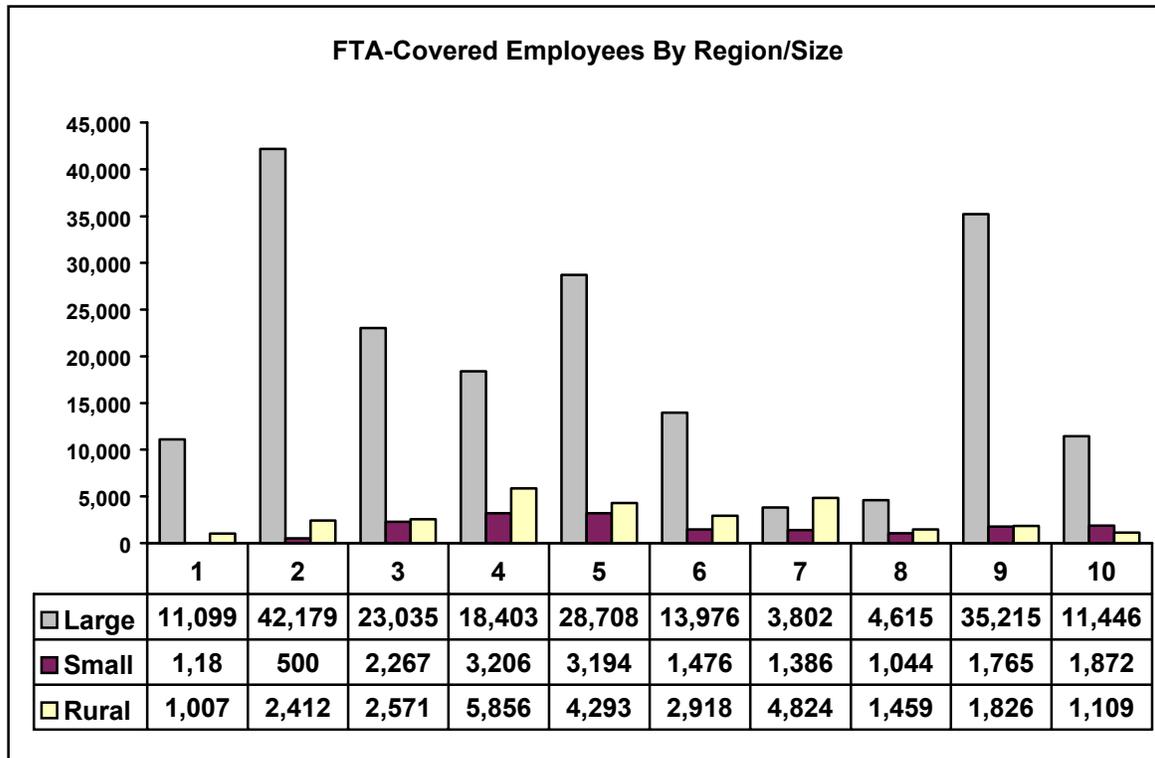


Figure 2-17. FTA-Covered Employees by Region/Size

2.5 Federal Funds

As mentioned in Chapter 1, transit systems are required to report the types of FTA funds they receive (that is, Sections 5309, 5307, 5310, and 5311). Some of the transit systems receive funding under multiple sections.

The following charts depict: the number/percent of transit systems receiving FTA funds by funding source; the percent of transit systems receiving FTA funds by source of funding; transit systems that received FTA funds by region; and the number of systems receiving FTA funds by system size and source of funding.

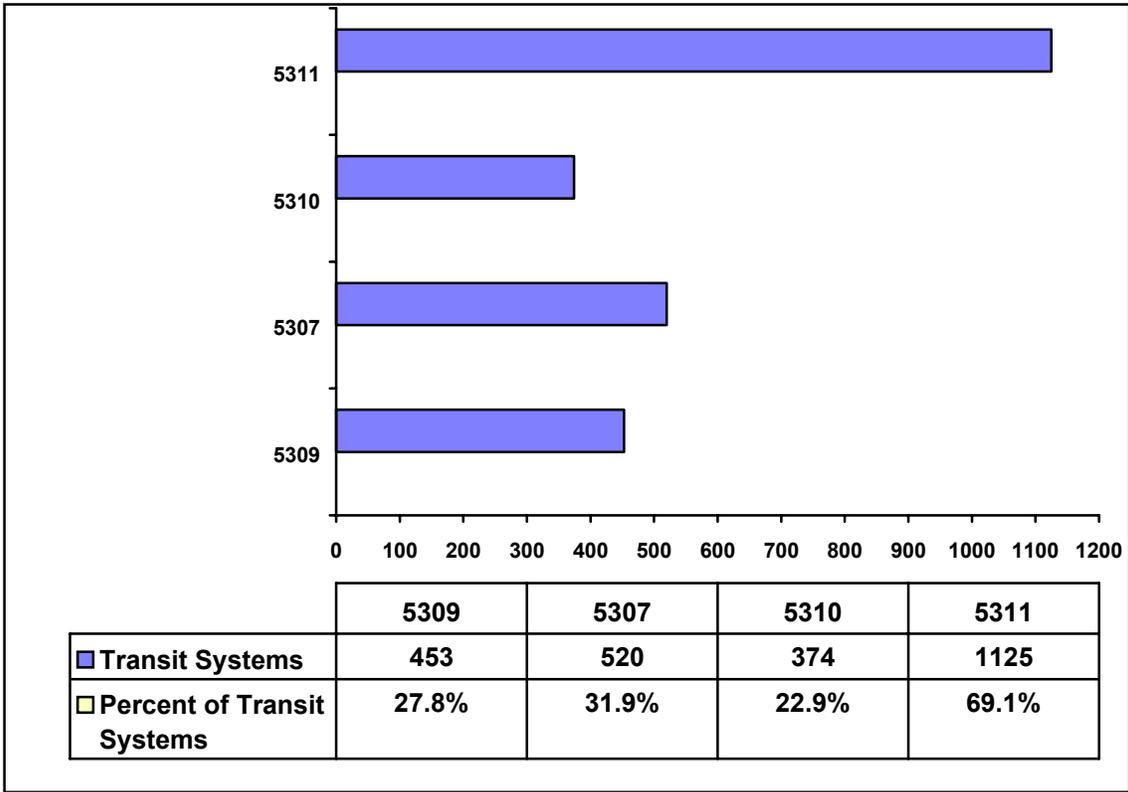


Figure 2-18. Number and Percent of Transit Systems that Received Federal Funds by Source of Funding

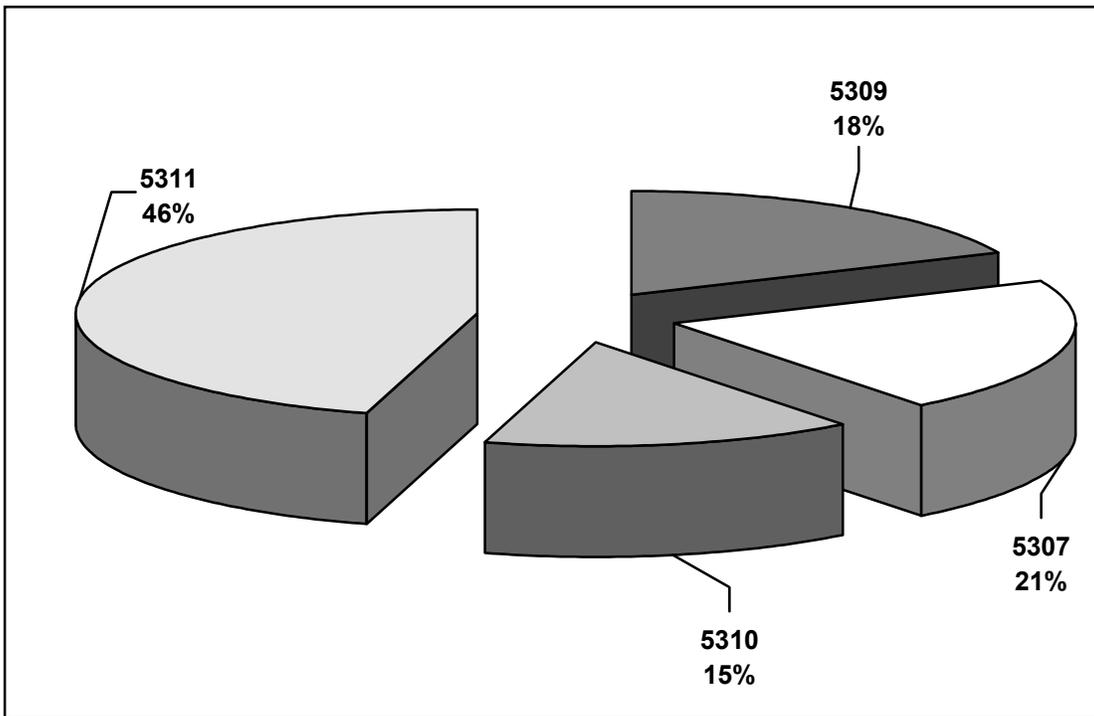


Figure 2-19. Percent of Total Funds by Funding Source

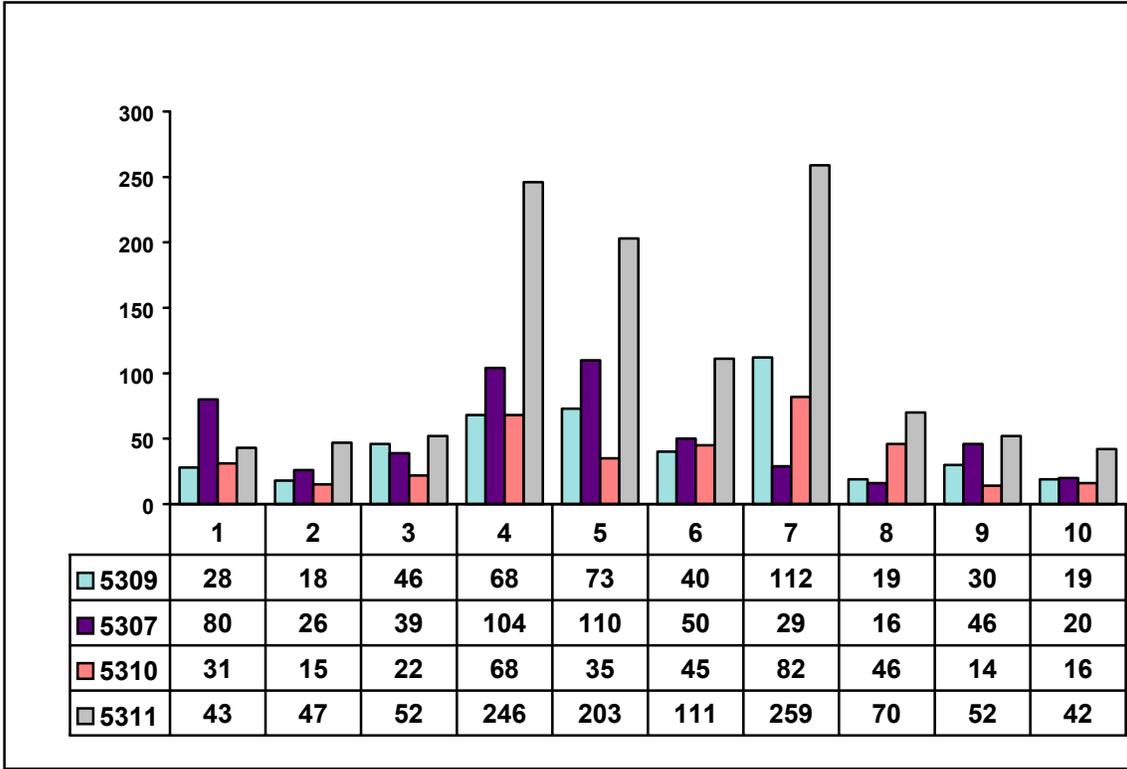


Figure 2-20. Number of Transit Systems that Received Federal Funds by Source of Funding and by FTA Region

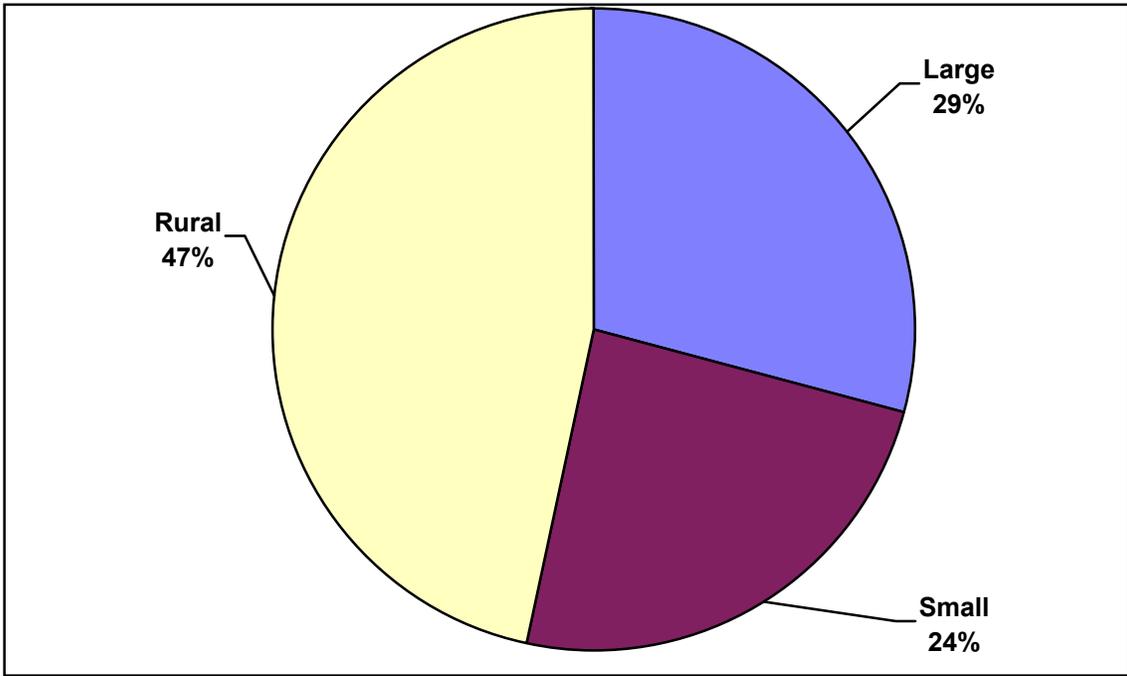


Figure 2-21. Number of Transit Systems that Received Federal Funds by Size

3. DRUG TEST RESULTS

This chapter provides background information and a summary of the 1999 drug testing results. For drug testing, a urine specimen is collected for analysis. Prohibited drugs for which each urine specimen must be tested are marijuana, cocaine, PCP, opiates, and amphetamines.

A total of 223,668 samples were collected for all types of drug testing in 1999. Six types of tests were administered: pre-employment; random; post-accident; reasonable suspicion; return-to-duty; and follow-up. The results of random drug testing provide the best indication of the overall level of industry-wide drug use among FTA-covered transit system and contractor employees.

3.1 Random Drug Test Results for 1999

Table 3-1 illustrates the random drug test results for transit systems and contractors. Table 3-2 presents random drug test results by operator size, while Table 3-3 breaks out random drug test results by rail and non-rail.

Table 3-1. 1999 Random Drug Test Results

Employer	Number of Specimens	Number Positive	Percent Positive
Transit Systems	96,491	798	0.83%
Contractors	23,262	400	1.72%
Totals	119,753	1,198	1.00%

Table 3-2. Random Drug Test Results by Operator Size

Operator Size	Number of Specimens	Number Positive	Percent Positive
Large	97,459	976	1.00%
Small	8,779	104	1.18%
Rural	13,515	118	0.87%
Totals	119,753	1,198	1.00%

Table 3-3. Random Drug Test Results for Rail and Non-Rail

Employer	Number of Specimens	Number Positive	Percent Positive
Rail Systems	58,025	510	0.88%
Non-Rail Systems	61,728	688	1.11%
Totals	119,753	1,198	1.00%

The FTA drug rule provides that, if the results from industry-wide drug testing are less than 1 percent for 2 consecutive years, the FTA may lower the required random drug testing rate from the current 50 percent requirement to 25 percent. However, in 1995, 1996, 1997, and 1998, the industry-wide random positive rate exceeded 1 percent. In 1999, that rate was at 1 percent.

3.2 Drug Test Results by FTA Region

This section reports random drug test results by FTA region. As shown in Figure 3-1, of the 10 FTA regions, Regions 5, 6, and 8 had the highest percent of random specimens testing positive for one or more drugs. Figure 3-2 shows the percentage of drug positives (all types) by FTA region; Regions 6 and 9 had the highest percent of drug positives overall.

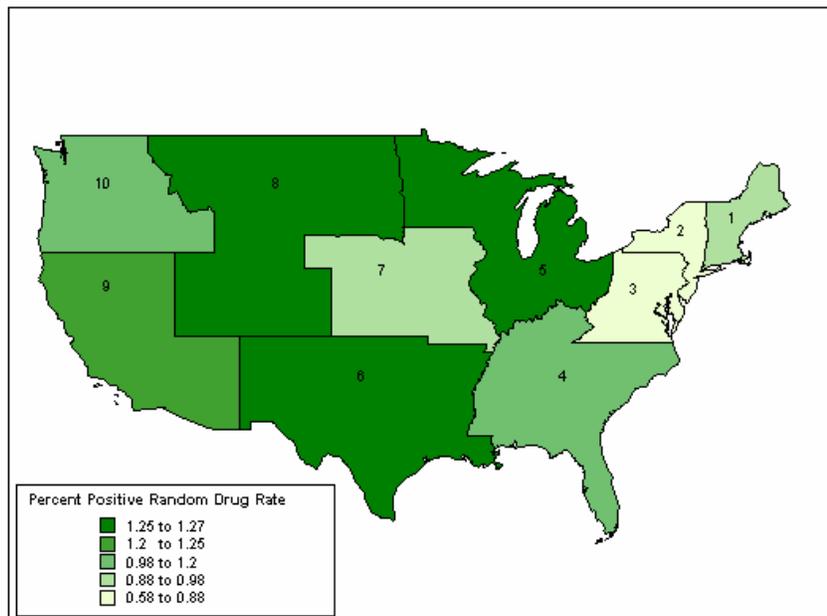


Figure 3-1. Random Drug Test Results by FTA Region

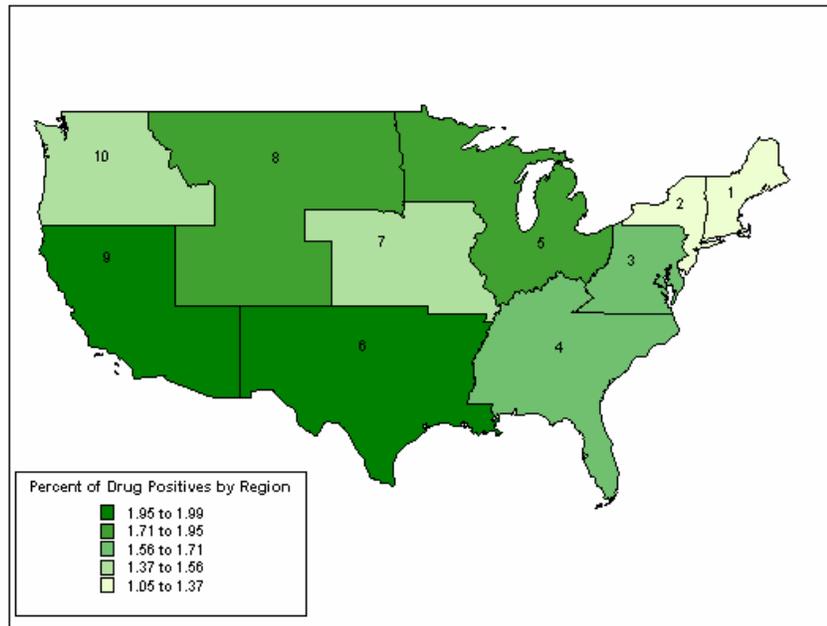


Figure 3-2. Percent of Positives by FTA Region

3.3 Results of Drug Tests Presented by Test Types

Table 3-4 presents drug test results by the 6 drug test types for transit systems, contractors, and their combined totals. It shows the number of specimens collected, the number of positive results, and the percent of positive results.

Table 3-5 presents drug test results by the 6 drug test types by employee category for large, small, and rural systems and their combined totals.

Table 3-6 presents drug test results by the 6 drug test types by employee category for rail and non-rail systems and their combined totals.

Table 3-4. Drug Test Results by Test Type and Employee Category

Test Type	Transit Systems			Contractors			Totals		
	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive
TOTALS BY TEST TYPE, ALL EMPLOYEE CATEGORIES									
Pre-Employment	42,537	805	1.89%	31,414	995	3.17%	73,951	1,800	2.43%
Random	96,491	798	0.83%	23,262	400	1.72%	119,753	1,198	1.00%
Post-Accident	12,276	122	0.99%	3,434	108	3.15%	15,710	230	1.46%
Reasonable Suspicion	652	40	6.13%	234	43	18.38%	886	83	9.37%
Return-to-Duty	1,183	42	3.55%	165	8	4.85%	1,348	50	3.71%
Follow-Up	11,256	170	1.51%	764	21	2.75%	12,020	191	1.59%
TOTALS	164,395	1,977	1.20%	59,273	1,575	2.66%	223,668	3,552	1.59%
Transit Systems									
Contractors									
Totals									
Employee Category	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive
PRE-EMPLOYMENT									
Revenue Vehicle Operation	33,840	646	1.91%	27,616	895	3.24%	61,456	1,541	2.51%
Revenue Veh. and Equip. Maint.	6,049	118	1.95%	1,972	77	3.90%	8,021	195	2.43%
Revenue Veh. Control/Disp.	1,511	28	1.85%	899	17	1.89%	2,410	45	1.87%
CDL/Non-Revenue Vehicle	643	13	2.02%	74	1	1.35%	717	14	1.95%
Armed Security Personnel	494	0	0.00%	853	5	0.59%	1,347	5	0.37%
RANDOM									
Revenue Vehicle Operation	64,007	510	0.80%	17,912	318	1.78%	81,919	828	1.01%
Revenue Veh. and Equip. Maint.	21,614	226	1.05%	2,917	51	1.75%	24,531	277	1.13%
Revenue Veh. Control/Disp.	6,978	37	0.53%	1,736	18	1.04%	8,714	55	0.63%
CDL/Non-Revenue Vehicle	2,231	17	0.76%	256	7	2.73%	2,487	24	0.97%
Armed Security Personnel	1,661	8	0.48%	441	6	1.36%	2,102	14	0.67%

Table 3-4. Drug Test Results by Test Type and Employee Category (continued)

Test Type	Transit Systems			Contractors			Totals		
	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive
POST-ACCIDENT									
Revenue Vehicle Operation	11,218	115	1.03%	3,205	104	3.24%	14,423	219	1.52%
Revenue Veh. and Equip. Maint.	756	6	0.79%	167	3	1.80%	923	9	0.98%
Revenue Veh. Control/Disp.	129	1	0.78%	33	1	3.03%	162	2	1.23%
CDL/Non-Revenue Vehicle	90	0	0.00%	18	0	0.00%	108	0	0.00%
Armed Security Personnel	83	0	0.00%	11	0	0.00%	94	0	0.00%
REASONABLE SUSPICION									
Revenue Vehicle Operation	534	34	6.37%	212	39	18.40%	746	73	9.79%
Revenue Veh. and Equip. Maint.	77	6	7.79%	13	1	7.69%	90	7	7.78%
Revenue Veh. Control/Disp.	28	0	0.00%	7	3	42.86%	35	3	8.57%
CDL/Non-Revenue Vehicle	12	0	0.00%	1	0	0.00%	13	0	0.00%
Armed Security Personnel	1	0	0.00%	1	0	0.00%	2	0	0.00%
RETURN-TO-DUTY									
Revenue Vehicle Operation	827	34	4.11%	139	4	2.88%	966	38	3.93%
Revenue Veh. and Equip. Maint.	274	6	2.19%	17	3	17.65%	291	9	3.09%
Revenue Veh. Control/Disp.	59	2	3.39%	9	1	11.11%	68	3	4.41%
CDL/Non-Revenue Vehicle	14	0	0.00%	0	0	0.00%	14	0	0.00%
Armed Security Personnel	9	0	0.00%	0	0	0.00%	9	0	0.00%
FOLLOW-UP									
Revenue Vehicle Operation	6,779	117	1.73%	591	16	2.71%	7,370	133	1.80%
Revenue Veh. and Equip. Maint.	3,527	46	1.30%	102	3	2.94%	3,629	49	1.35%
Revenue Veh. Control/Disp.	349	5	1.43%	71	2	2.82%	420	7	1.67%
CDL/Non-Revenue Vehicle	581	2	0.34%	0	0	0.00%	581	2	0.34%
Armed Security Personnel	20	0	0.00%	0	0	0.00%	20	0	0.00%

Table 3-5. Drug Test Results by Test Type and Employee Category by Size

Test Type	Large			Small			Rural		
	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive
TOTALS BY TEST TYPE, ALL EMPLOYEE CATEGORIES									
Pre-Employment	57,774	1,534	2.66%	5,579	102	1.83%	10,598	164	1.55%
Random	97,459	976	1.00%	8,779	104	1.18%	13,515	118	0.87%
Post-Accident	14,063	212	1.51%	860	10	1.16%	787	8	1.02%
Reasonable Suspicion	807	63	7.81%	29	9	31.03%	50	11	22.00%
Return-to-Duty	1,234	43	3.48%	66	1	1.52%	48	6	12.50%
Follow-Up	11,748	172	1.46%	173	8	4.62%	99	11	11.11%
TOTALS	183,085	3,000	1.64%	15,486	234	1.51%	25,097	318	1.27%
Employee Category									
PRE-EMPLOYMENT									
Revenue Vehicle Operation	47,212	1,316	2.79%	4,799	83	1.73%	9,445	142	1.50%
Revenue Veh. and Equip. Maint.	7,098	166	2.34%	501	16	3.19%	422	13	3.08%
Revenue Veh. Control/Disp.	1,518	33	2.17%	229	3	1.31%	663	9	1.36%
CDL/Non-Revenue Vehicle	599	14	2.34%	50	0	0.00%	68	0	0.00%
Armed Security Personnel	1,347	5	0.37%	0	0	0.00%	0	0	0.00%
RANDOM									
Revenue Vehicle Operation	64,580	680	1.05%	6,489	67	1.03%	10,850	81	0.75%
Revenue Veh. and Equip. Maint.	22,176	225	1.01%	1,372	28	2.04%	983	24	2.44%
Revenue Veh. Control/Disp.	6,448	38	0.59%	729	5	0.69%	1,537	12	0.78%
CDL/Non-Revenue Vehicle	2,162	19	0.88%	183	4	2.19%	142	1	0.70%
Armed Security Personnel	2,093	14	0.67%	6	0	0.00%	3	0	0.00%

Table 3-5. Drug Test Results by Test Type and Employee Category by Size (continued)

Test Type	Large			Small			Rural		
	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive
POST-ACCIDENT									
Revenue Vehicle Operation	12,879	203	1.58%	785	9	1.15%	759	7	0.92%
Revenue Veh. and Equip. Maint.	845	7	0.83%	60	1	1.67%	18	1	5.56%
Revenue Veh. Control/Disp.	151	2	1.32%	4	0	0.00%	7	0	0.00%
CDL/Non-Revenue Vehicle	94	0	0.00%	11	0	0.00%	3	0	0.00%
Armed Security Personnel	94	0	0.00%	0	0	0.00%	0	0	0.00%
REASONABLE SUSPICION									
Revenue Vehicle Operation	681	55	8.08%	24	8	33.33%	41	10	24.39%
Revenue Veh. and Equip. Maint.	78	5	6.41%	5	1	20.00%	7	1	14.29%
Revenue Veh. Control/Disp.	33	3	9.09%	0	0	0.00%	2	0	0.00%
CDL/Non-Revenue Vehicle	13	0	0.00%	0	0	0.00%	0	0	0.00%
Armed Security Personnel	2	0	0.00%	0	0	0.00%	0	0	0.00%
RETURN-TO-DUTY									
Revenue Vehicle Operation	884	34	3.85%	48	0	0.00%	34	4	11.76%
Revenue Veh. and Equip. Maint.	269	7	2.60%	15	1	6.67%	7	1	14.29%
Revenue Veh. Control/Disp.	59	2	3.39%	3	0	0.00%	6	1	16.67%
CDL/Non-Revenue Vehicle	13	0	0.00%	0	0	0.00%	1	0	0.00%
Armed Security Personnel	9	0	0.00%	0	0	0.00%	0	0	0.00%
FOLLOW-UP									
Revenue Vehicle Operation	7,159	119	1.66%	136	5	3.68%	75	9	12.00%
Revenue Veh. and Equip. Maint.	3,590	45	1.25%	27	3	11.11%	12	1	8.33%
Revenue Veh. Control/Disp.	398	6	1.51%	10	0	0.00%	12	1	8.33%
CDL/Non-Revenue Vehicle	581	2	0.34%	0	0	0.00%	0	0	0.00%
Armed Security Personnel	20	0	0.00%	0	0	0.00%	0	0	0.00%

Table 3-6. Drug Test Results by Test Type and Employee Category by Rail and Non-Rail

Test Type	Rail Systems			Non-Rail Systems			Totals		
	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive
TOTALS BY TEST TYPE, ALL EMPLOYEE CATEGORIES									
Pre-Employment	31,896	805	2.52%	42,055	995	2.37%	73,951	1,800	2.43%
Random	58,025	510	0.88%	61,728	688	1.11%	119,753	1,198	1.00%
Post-Accident	8,074	114	1.41%	7,636	116	1.52%	15,710	230	1.46%
Reasonable Suspicion	597	35	5.86%	289	48	16.61%	886	83	9.37%
Return-to-Duty	519	23	4.43%	829	27	3.26%	1,348	50	3.71%
Follow-Up	9,491	108	1.14%	2,529	83	3.28%	12,020	191	1.59%
TOTALS	108,602	1,595	1.47%	115,066	1,957	1.70%	223,668	3,552	1.59%
Employee Category									
Rail Systems									
Non-Rail Systems									
TOTALS									
PRE-EMPLOYMENT									
Revenue Vehicle Operation	24,651	692	2.81%	36,805	849	2.31%	61,456	1,541	2.51%
Revenue Veh. and Equip. Maint.	4,860	78	1.60%	3,161	117	3.70%	8,021	195	2.43%
Revenue Veh. Control/Disp.	923	21	2.28%	1,487	24	1.61%	2,410	45	1.87%
CDL/Non-Revenue Vehicle	428	10	2.34%	289	4	1.38%	717	14	1.95%
Armed Security Personnel	1,034	4	0.39%	313	1	0.32%	1,347	5	0.37%
RANDOM									
Revenue Vehicle Operation	35,672	331	0.93%	46,247	497	1.07%	81,919	828	1.01%
Revenue Veh. and Equip. Maint.	15,167	129	0.85%	9,364	148	1.58%	24,531	277	1.13%
Revenue Veh. Control/Disp.	3,782	29	0.77%	4,932	26	0.53%	8,714	55	0.63%
CDL/Non-Revenue Vehicle	1,633	13	0.80%	854	11	1.29%	2,487	24	0.97%
Armed Security Personnel	1,771	8	0.45%	331	6	1.81%	2,102	14	0.67%

Table 3-6. Drug Test Results by Test Type and Employee Category by Rail and Non-Rail (continued)

Test Type	Rail Systems			Non-Rail Systems			Totals		
	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive
POST-ACCIDENT									
Revenue Vehicle Operation	7,273	108	1.48%	7,150	111	1.55%	14,423	219	1.52%
Revenue Veh. and Equip. Maint.	556	4	0.72%	367	5	1.36%	923	9	0.98%
Revenue Veh. Control/Disp.	96	2	2.08%	66	0	0.00%	162	2	1.23%
CDL/Non-Revenue Vehicle	64	0	0.00%	44	0	0.00%	108	0	0.00%
Armed Security Personnel	85	0	0.00%	9	0	0.00%	94	0	0.00%
REASONABLE SUSPICION									
Revenue Vehicle Operation	501	31	6.19%	245	42	17.14%	746	73	9.79%
Revenue Veh. and Equip. Maint.	52	2	3.85%	38	5	13.16%	90	7	7.78%
Revenue Veh. Control/Disp.	31	2	6.45%	4	1	25.00%	35	3	8.57%
CDL/Non-Revenue Vehicle	11	0	0.00%	2	0	0.00%	13	0	0.00%
Armed Security Personnel	2	0	0.00%	0	0	0.00%	2	0	0.00%
RETURN-TO-DUTY									
Revenue Vehicle Operation	332	18	5.42%	634	20	3.15%	966	38	3.93%
Revenue Veh. and Equip. Maint.	147	5	3.40%	144	4	2.78%	291	9	3.09%
Revenue Veh. Control/Disp.	25	0	0.00%	43	3	6.98%	68	3	4.41%
CDL/Non-Revenue Vehicle	10	0	0.00%	4	0	0.00%	14	0	0.00%
Armed Security Personnel	5	0	0.00%	4	0	0.00%	9	0	0.00%
FOLLOW-UP									
Revenue Vehicle Operation	5,560	70	1.26%	1,810	63	3.48%	7,370	133	1.80%
Revenue Veh. and Equip. Maint.	3,032	31	1.02%	597	18	3.02%	3,629	49	1.35%
Revenue Veh. Control/Disp.	330	5	1.52%	90	2	2.22%	420	7	1.67%
CDL/Non-Revenue Vehicle	550	2	0.36%	31	0	0.00%	581	2	0.34%
Armed Security Personnel	19	0	0.00%	1	0	0.00%	20	0	0.00%

3.4 Post-Accident Testing

FTA regulations require testing for prohibited drugs in the case of certain mass transit accidents. Post-accident testing is mandatory for accidents where there is a loss of life and other non-fatal accidents unless employee performance can be discounted completely as a causative or contributing factor.

An accident is defined as an occurrence associated with the operation of a vehicle in which

- An individual dies;
- An individual suffers a bodily injury and immediately receives medical attention away from the scene of an accident;
- The mass transit or other vehicles involved incur disabling damage as the result of the occurrence and are transported away from the scene by a tow truck or other vehicle; and
- The mass transit vehicle involved is a rail car, trolley car, trolley bus, or vessel, and is removed from revenue service.

Tables 3-7 through 3-10 depict accidents with drug positives; accidents with drug positives by operator size; accidents with drug positives by region; and post-accident drug test positives by employee category.

Table 3-7. Accidents with Drug Positives

Employer	Number of Non-Fatal Accidents	Number of Fatal Accidents	Number of Fatalities	Accidents per Covered Employee
Transit Systems	123	0	0	0.0007
Contractors	109	0	0	0.0021
Totals	232	0	0	0.0010

Table 3-8. Accidents with Drug Positives by Operator Size

Operator Size	Number of Non-Fatal Accidents	Number of Fatal Accidents	Number of Fatalities
Large	212	0	0
Small	11	0	0
Rural	9	0	0
Totals	232	0	0

**Table 3-9. Accidents with Drug Positives
by Region**

Region	Number of Non-Fatal Accidents	Number of Fatal Accidents	Number of Fatalities	Accidents per Covered Employee
1	15	0	0	0.0011
2	29	0	0	0.0006
3	27	0	0	0.0010
4	22	0	0	0.0008
5	44	0	0	0.0012
6	34	0	0	0.0018
7	8	0	0	0.0008
8	5	0	0	0.0007
9	34	0	0	0.0009
10	14	0	0	0.0010
Totals	232	0	0	0.0010

Table 3-10. Post-Accident Drug Test Positives by Employee Category

Employer	Revenue Vehicle Operations	Vehicle and Equip. Maint.	Rev. Vehicle Cntl/Dsptch	CDL/Non-Revenue	Armed Security Personnel
Transit Systems	115	6	1	0	0
Contractors	104	3	1	0	0
Totals	219	9	2	0	0

3.5 Distribution of Positive Drug Test Results by Type of Drug

This section presents the distribution of positive drug test results for employees who tested positive for 1 or more of the 5 prohibited drugs. To be recorded as a positive result, an employee may have tested positive for 1 drug or a combination of drugs (e.g., marijuana and cocaine).

Marijuana is a common name for the plant *cannabis sativa*. The primary active ingredient in marijuana is Delta-9-Tetrahydrocannabinol (THC). THC is absorbed quickly into fatty tissues and stored for a long time. People use marijuana for the mildly tranquilizing and mood and perception-altering effects it produces.

Cocaine is a chemical that has both local anesthetic properties, like Novocaine, and stimulant properties similar to adrenaline. Cocaine is used medically as a local anesthetic. Cocaine causes the brain to experience an exhilaration caused by a large release of neurohormones associated with mood elevation.

Opiates, also called *narcotics*, are drugs that alleviate pain, depress body functions and reactions, and, when taken in large doses, cause a strong euphoric feeling.

PCP was originally developed as an anesthetic, but adverse side effects prevented its use except as a tranquilizer for large animals. PCP acts as both a depressant and a hallucinogen, and sometimes as a stimulant.

Amphetamines are central nervous system stimulants that speed up the mind and body. Although widely prescribed at one time for weight reduction and mood elevation, the legal use of amphetamines is now limited to a very narrow range of medical conditions.

Figures 3-3 to 3-10 and Table 3-11 provide details on the distribution of test results by type of drug.

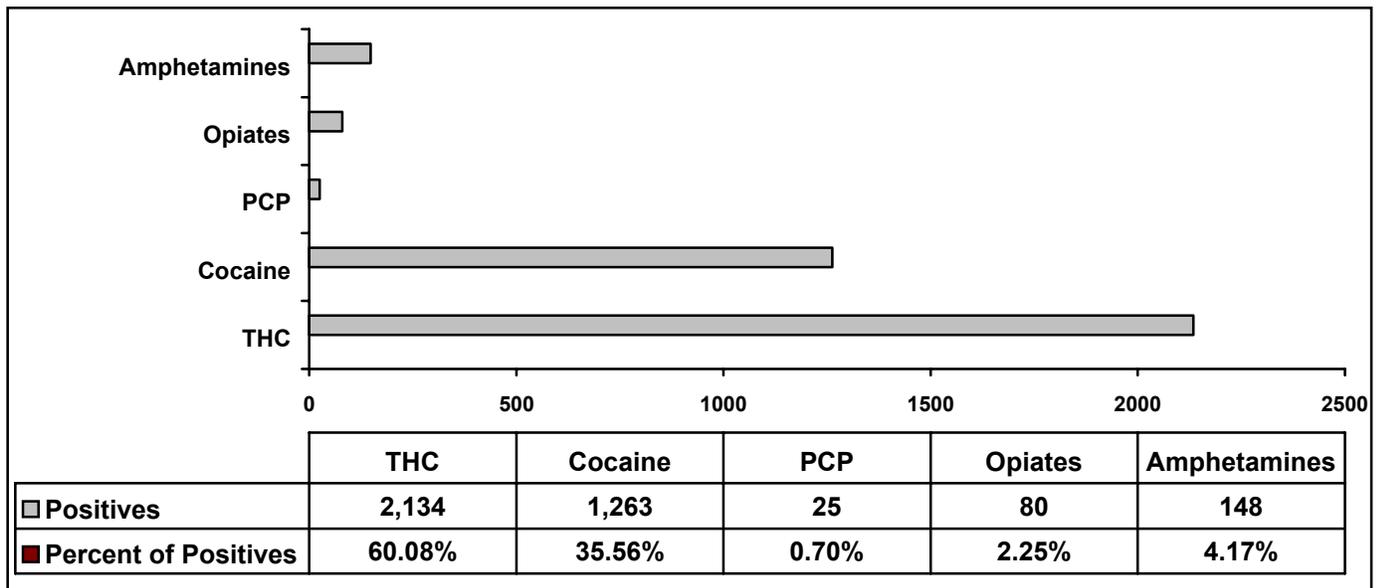


Figure 3-3. Number and Percent of Positive Specimens by Type of Drug

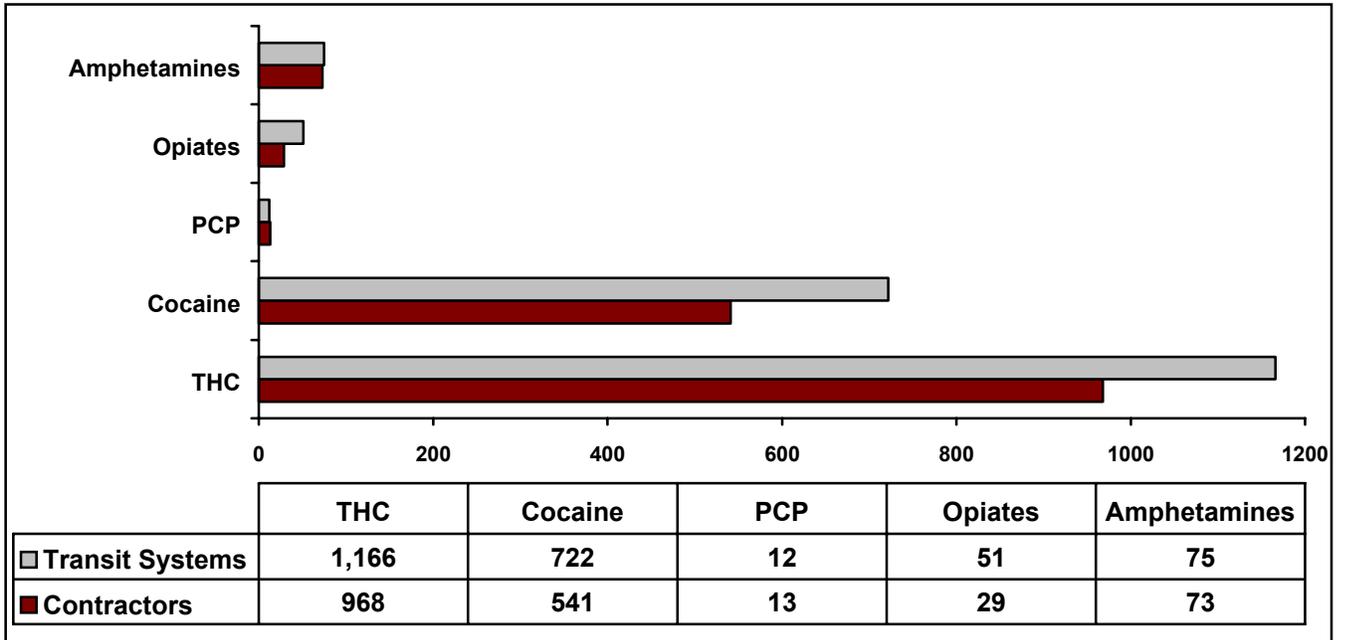


Figure 3-4. Number of Positive Specimens by Type of Drug for Each Employer Type

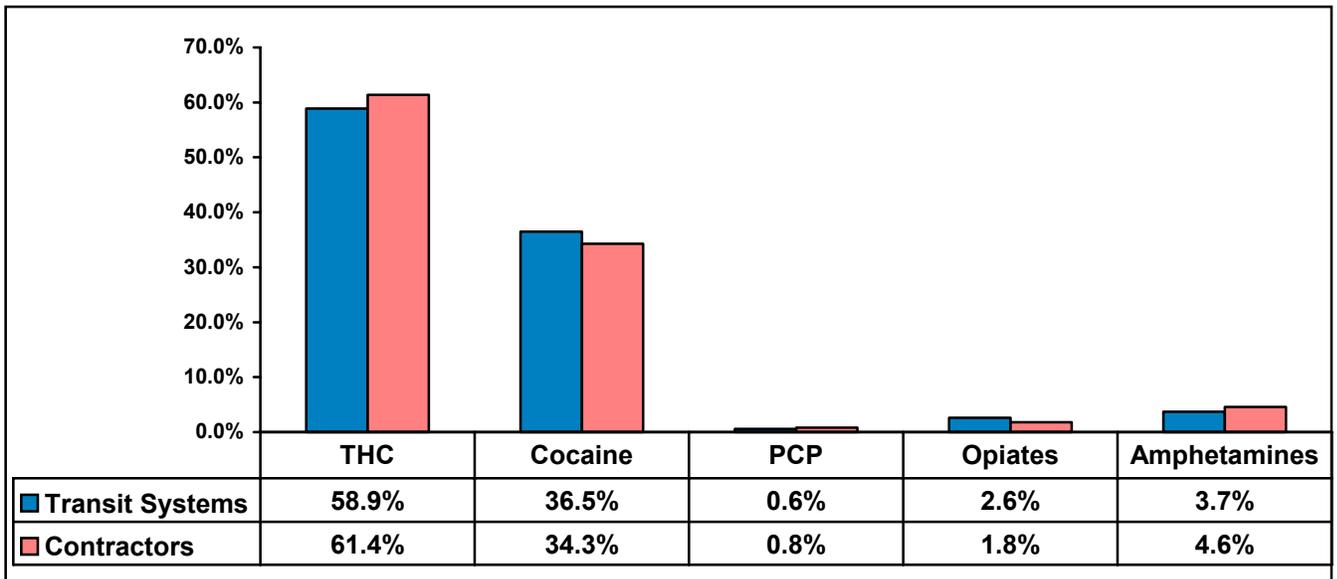


Figure 3-5. Percent of Positive Specimens by Type of Drug for Each Employer Type

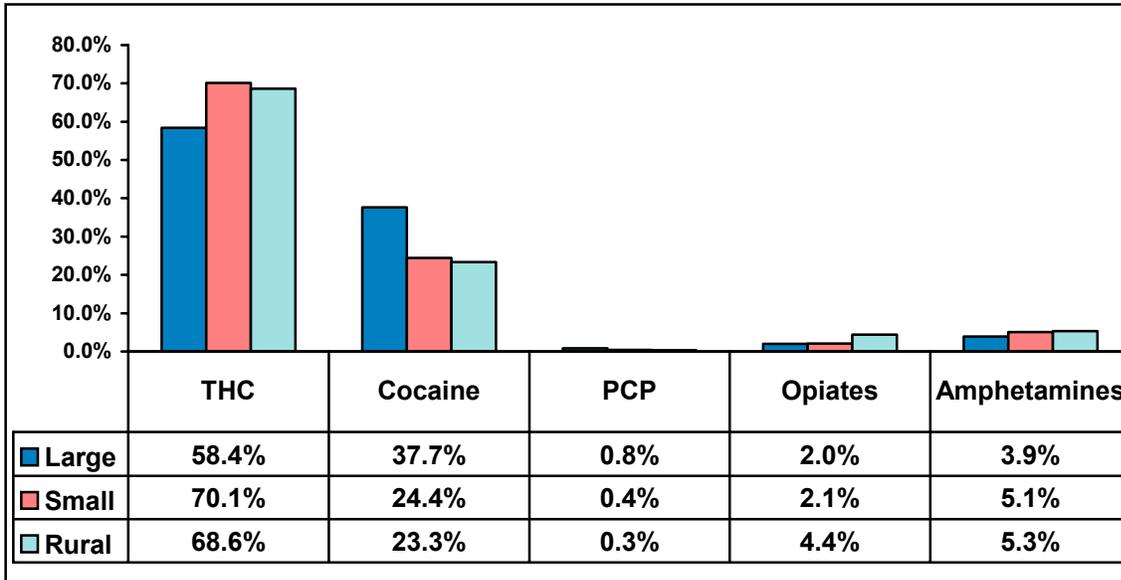


Figure 3-6. Percent of Positive Specimens by Type of Drug and Operator Size

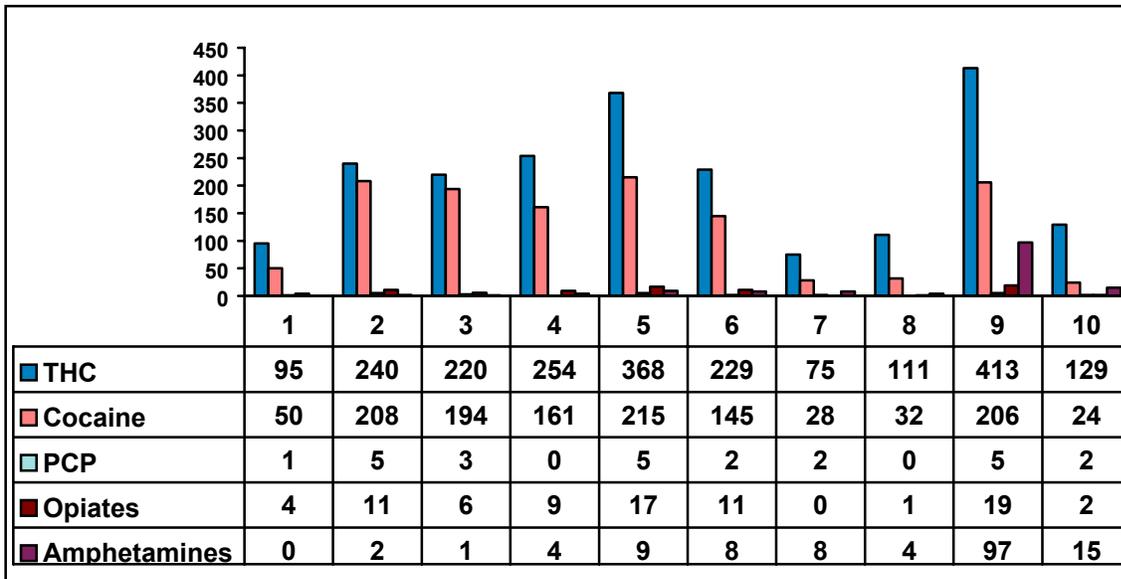


Figure 3-7. Number and Type of Drug by FTA Region

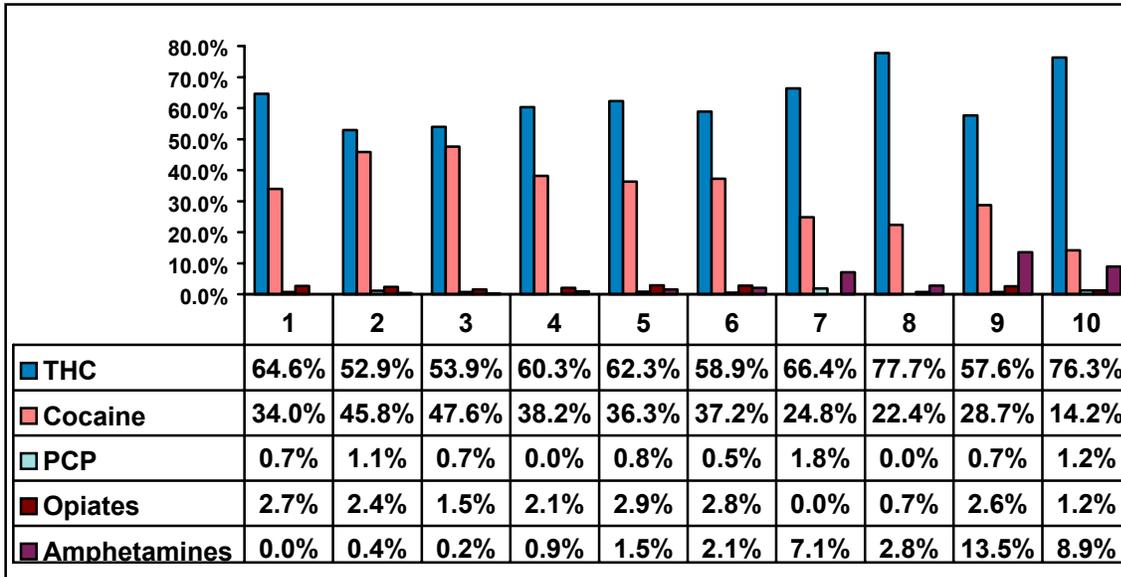


Figure 3-8. Percent of Positive Specimens by FTA Region and Type of Drug

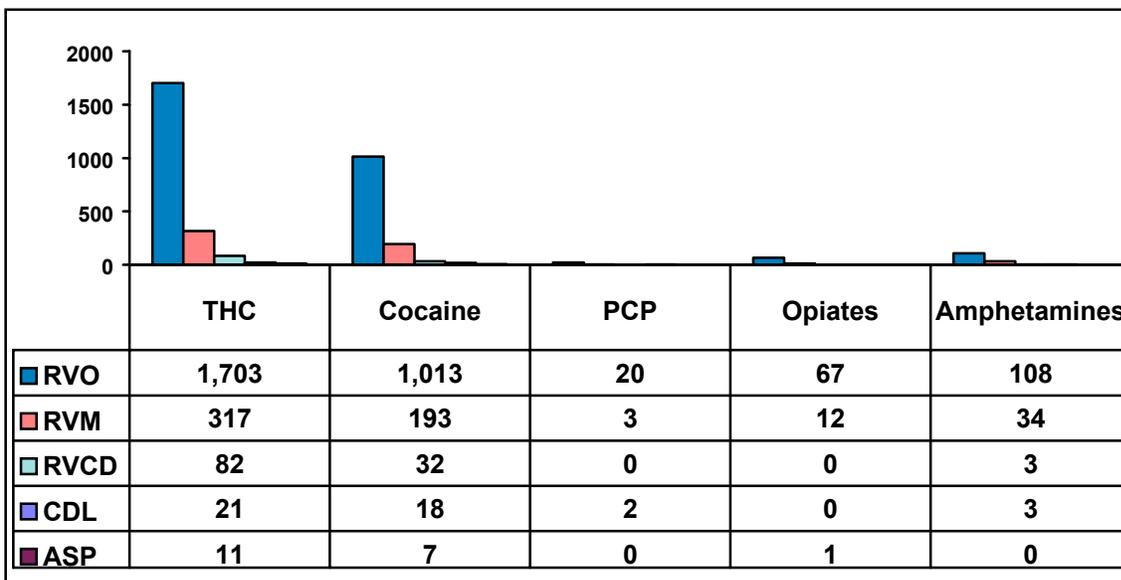


Figure 3-9. Number of Positive Specimens by Employee Category and Type of Drug

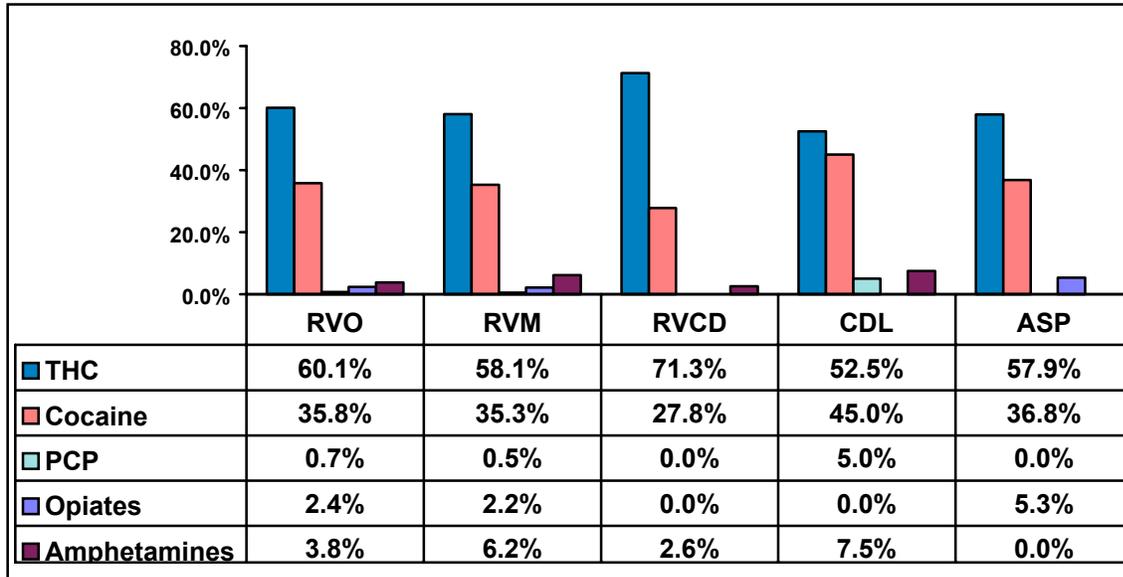


Figure 3-10. Percent of Positive Specimens by Type of Drug and Employee Category

Table 3-11. Multiple Drug Combinations

Drug Combination	Number of Specimens
THC/Cocaine	51
THC/PCP	2
THC/Opiates	1
THC/Amphetamines	9
Cocaine/Opiates	7
Cocaine/Amphetamines	1
Amphetamines/PCP	1
THC/Cocaine/Opiates	1
THC/Cocaine/Amphetamine	1
Totals	74

3.6 Drug Test Refusals

When directed to provide specimens for drug testing, some employees refused to be tested. In 1999, there were 170 reported cases of a covered employee refusing a random drug test and 93 cases of a covered employee refusing a non-random drug test. These refusals reflect 0.11 percent of the total number of drug tests attempted. See Figure 3-11.

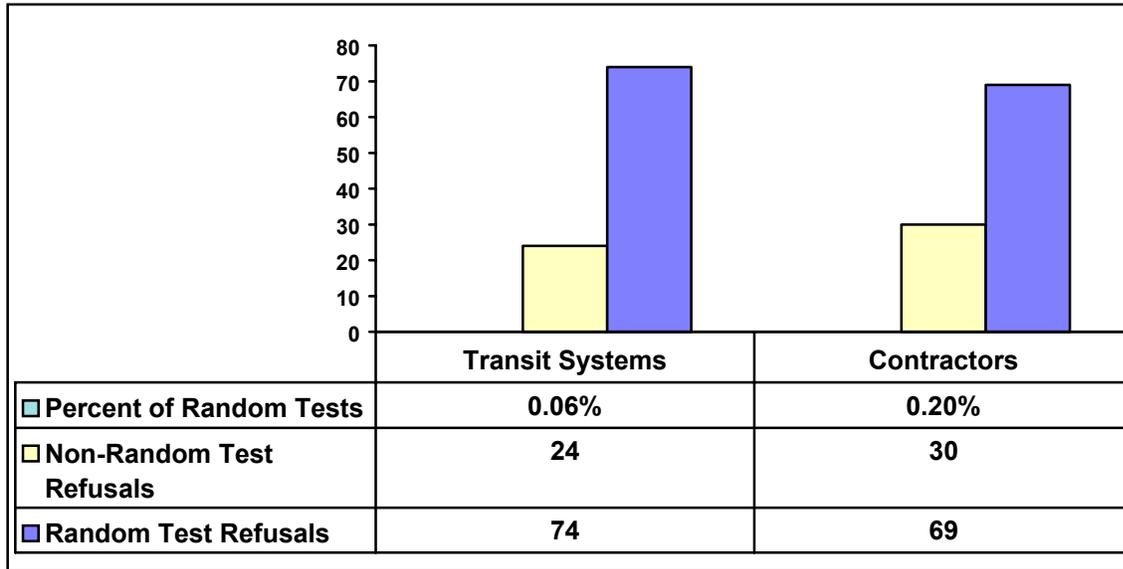


Figure 3-11. Drug Test Refusals

3.7 Return-to-Duty Positive Rate

The total number of employees who returned to duty after a positive drug test or after refusing to take a drug test was 707. Because the consequences for refusing a drug test and for testing positive are the same, the MIS form used to collect information from employers combines these figures. See Table 3-12.

Table 3-12. Returned-to-Duty Covered Employees

Employer	Returned-to-Duty	Percent of Total
Transit Systems	580	82.0
Contractors	127	18.0
Totals	707	100.0

3.8 Results of Drug Tests Presented by Employee Category

This section presents drug test results by employee category for transit systems and contractors and their combined totals. Table 3-13 identifies the number of specimens collected, the number of positive results, and the percent of positive results. Table 3-14 presents drug test results by employee category for large, small, and rural systems and their combined totals. Table 3-15 presents drug test results by employee category for transit systems and contractors and their combined totals.

Table 3-13. Drug Test Results by Employee Category and Test Type by Transit System and Contractor

Employee Category	Transit Systems			Contractors			Totals		
	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive
TOTALS BY EMPLOYEE CATEGORY, ALL TEST TYPES									
Revenue Vehicle Operation	117,205	1,456	1.24%	49,675	1,376	2.77%	166,880	2,832	1.70%
Revenue Veh. and Equip. Maint.	32,297	408	1.26%	5,188	138	2.66%	37,485	546	1.46%
Revenue Veh. Control/Disp.	9,054	73	0.81%	2,755	42	1.52%	11,809	115	0.97%
CDL/Non-Revenue Vehicle	3,571	32	0.90%	349	8	2.29%	3,920	40	1.02%
Armed Security Personnel	2,268	8	0.35%	1,306	11	0.84%	3,574	19	0.53%
TOTALS	164,395	1,977	1.20%	59,273	1,575	2.66%	223,668	3,552	1.59%
	Transit Systems			Contractors			Totals		
Test Type	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive
REVENUE VEHICLE OPERATOR									
Pre-Employment	33,840	646	1.91%	27,616	895	3.24%	61,456	1,541	2.51%
Random	64,007	510	0.80%	17,912	318	1.78%	81,919	828	1.01%
Post-Accident	11,218	115	1.03%	3,205	104	3.24%	14,423	219	1.52%
Reasonable Suspicion	534	34	6.37%	212	39	18.40%	746	73	9.79%
Return-to-Duty	827	34	4.11%	139	4	2.88%	966	38	3.93%
Follow-Up	6,779	117	1.73%	591	16	2.71%	7,370	133	1.80%
REVENUE VEHICLE AND EQUIPMENT MAINTENANCE									
Pre-Employment	6,049	118	1.95%	1,972	77	3.90%	8,021	195	2.43%
Random	21,614	226	1.05%	2,917	51	1.75%	24,531	277	1.13%
Post-Accident	756	6	0.79%	167	3	1.80%	923	9	0.98%
Reasonable Suspicion	77	6	7.79%	13	1	7.69%	90	7	7.78%
Return-to-Duty	274	6	2.19%	17	3	17.65%	291	9	3.09%
Follow-Up	3,527	46	1.30%	102	3	2.94%	3,629	49	1.35%

Table 3-13. Drug Test Results by Employee Category and Test Type by Transit System and Contractor (continued)

Test Type	Transit Systems			Contractors			Totals		
	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive
REVENUE VEHICLE CONTROL/ DISPATCH									
Pre-Employment	1,511	28	1.85%	899	17	1.89%	2,410	45	1.87%
Random	6,978	37	0.53%	1,736	18	1.04%	8,714	55	0.63%
Post-Accident	129	1	0.78%	33	1	3.03%	162	2	1.23%
Reasonable Suspicion	28	0	0.00%	7	3	42.86%	35	3	8.57%
Return-to-Duty	59	2	3.39%	9	1	11.11%	68	3	4.41%
Follow-Up	349	5	1.43%	71	2	2.82%	420	7	1.67%
CDL/NON-REVENUE VEHICLE									
Pre-Employment	643	13	2.02%	74	1	1.35%	717	14	1.95%
Random	2,231	17	0.76%	256	7	2.73%	2,487	24	0.97%
Post-Accident	90	0	0.00%	18	0	0.00%	108	0	0.00%
Reasonable Suspicion	12	0	0.00%	1	0	0.00%	13	0	0.00%
Return-to-Duty	14	0	0.00%	0	0	0.00%	14	0	0.00%
Follow-Up	581	2	0.34%	0	0	0.00%	581	2	0.34%
ARMED SECURITY PERSONNEL									
Pre-Employment	853	5	0.59%	494	0	0.00%	1,347	5	0.37%
Random	441	6	1.36%	1,661	8	0.48%	2,102	14	0.67%
Post-Accident	11	0	0.00%	83	0	0.00%	94	0	0.00%
Reasonable Suspicion	1	0	0.00%	1	0	0.00%	2	0	0.00%
Return-to-Duty	0	0	0.00%	9	0	0.00%	9	0	0.00%
Follow-Up	0	0	0.00%	20	0	0.00%	20	0	0.00%

Table 3-14. Drug Test Results by Employee Category and Test Type by Size

Employee Category	Large			Small			Rural		
	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive
TOTALS BY EMPLOYEE CATEGORY, ALL TEST TYPES									
Revenue Vehicle Operation	133,395	2,407	1.80%	12,281	172	1.40%	21,204	253	1.19%
Revenue Veh. and Equip. Maint.	34,056	455	1.34%	1,980	50	2.53%	1,449	41	2.83%
Revenue Veh. Control/Disp.	8,607	84	0.98%	975	8	0.82%	2,227	23	1.03%
CDL/Non-Revenue Vehicle	3,462	35	1.01%	244	4	1.64%	214	1	0.47%
Armed Security Personnel	3,565	19	0.53%	6	0	0.00%	3	0	0.00%
TOTALS	183,085	3,000	1.64%	15,486	234	1.51%	25,097	318	1.27%
Test Type									
	Large			Small			Rural		
	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive
REVENUE VEHICLE OPERATOR									
Pre-Employment	47,212	1,316	2.79%	4,799	83	1.73%	9,445	142	1.50%
Random	64,580	680	1.05%	6,489	67	1.03%	10,850	81	0.75%
Post-Accident	12,879	203	1.58%	785	9	1.15%	759	7	0.92%
Reasonable Suspicion	681	55	8.08%	24	8	33.33%	41	10	24.39%
Return-to-Duty	884	34	3.85%	48	0	0.00%	34	4	11.76%
Follow-Up	7,159	119	1.66%	136	5	3.68%	75	9	12.00%
REVENUE VEHICLE AND EQUIPMENT MAINTENANCE									
Pre-Employment	7,098	166	2.34%	501	16	3.19%	422	13	3.08%
Random	22,176	225	1.01%	1,372	28	2.04%	983	24	2.44%
Post-Accident	845	7	0.83%	60	1	1.67%	18	1	5.56%
Reasonable Suspicion	78	5	6.41%	5	1	20.00%	7	1	14.29%
Return-to-Duty	269	7	2.60%	15	1	6.67%	7	1	14.29%
Follow-Up	3,590	45	1.25%	27	3	11.11%	12	1	8.33%

Table 3-14. Drug Test Results by Employee Category and Test Type by Size (continued)

Test Type	Large			Small			Rural		
	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive
REVENUE VEHICLE CONTROL/ DISPATCH									
Pre-Employment	1,518	33	2.17%	229	3	1.31%	663	9	1.36%
Random	6,448	38	0.59%	729	5	0.69%	1,537	12	0.78%
Post-Accident	151	2	1.32%	4	0	0.00%	7	0	0.00%
Reasonable Suspicion	33	3	9.09%	0	0	0.00%	2	0	0.00%
Return-to-Duty	59	2	3.39%	3	0	0.00%	1	0	0.00%
Follow-Up	398	6	1.51%	10	0	0.00%	12	1	8.33%
CDL/NON-REVENUE VEHICLE									
Pre-Employment	599	14	2.34%	50	0	0.00%	68	0	0.00%
Random	2,162	19	0.88%	183	4	2.19%	142	1	0.70%
Post-Accident	94	0	0.00%	11	0	0.00%	3	0	0.00%
Reasonable Suspicion	13	0	0.00%	0	0	0.00%	0	0	0.00%
Return-to-Duty	13	0	0.00%	0	0	0.00%	1	0	0.00%
Follow-Up	581	2	0.34%	0	0	0.00%	0	0	0.00%
ARMED SECURITY PERSONNEL									
Pre-Employment	1,347	5	0.37%	0	0	0.00%	0	0	0.00%
Random	2,093	14	0.67%	6	0	0.00%	3	0	0.00%
Post-Accident	94	0	0.00%	0	0	0.00%	0	0	0.00%
Reasonable Suspicion	2	0	0.00%	0	0	0.00%	0	0	0.00%
Return-to-Duty	9	0	0.00%	0	0	0.00%	0	0	0.00%
Follow-Up	20	0	0.00%	0	0	0.00%	0	0	0.00%

Table 3-15. Drug Test Results by Employee Category and Test Type by Rail and Non-Rail

Employee Category	Rail			Non-Rail			Totals		
	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive
TOTALS BY EMPLOYEE CATEGORY, ALL TEST TYPES									
Revenue Vehicle Operation	73,989	1,250	1.69%	92,891	1,582	1.70%	166,880	2,832	1.70%
Revenue Veh. and Equip. Maint.	23,814	249	1.05%	13,671	297	2.17%	37,485	546	1.46%
Revenue Veh. Control/Disp.	5,187	59	1.14%	6,622	56	0.85%	11,809	115	0.97%
CDL/Non-Revenue Vehicle	2,696	25	0.93%	1,224	15	1.23%	3,920	40	1.02%
Armed Security Personnel	2,916	12	0.41%	658	7	1.06%	3,574	19	0.53%
TOTALS	108,602	1,595	1.47%	115,066	1,957	1.70%	223,668	3,552	1.59%
Test Type									
RAIL									
	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive
REVENUE VEHICLE OPERATOR									
Pre-Employment	24,651	692	2.81%	36,805	849	2.31%	61,456	1,541	2.51%
Random	35,672	331	0.93%	46,257	497	1.07%	81,919	828	1.01%
Post-Accident	7,273	108	1.48%	7,150	111	1.55%	14,423	219	1.52%
Reasonable Suspicion	501	31	6.19%	245	42	17.14%	746	73	9.79%
Return-to-Duty	332	18	5.42%	634	20	3.15%	966	38	3.93%
Follow-Up	5,560	70	1.26%	1,810	63	3.48%	7,370	133	1.80%
NON-RAIL									
	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive
REVENUE VEHICLE AND EQUIPMENT MAINTENANCE									
Pre-Employment	4,860	78	1.60%	3,161	117	3.70%	8,021	195	2.43%
Random	15,167	129	0.85%	9,364	148	1.58%	24,531	277	1.13%
Post-Accident	556	4	0.72%	367	5	1.36%	923	9	0.98%
Reasonable Suspicion	52	2	3.85%	38	5	13.16%	90	7	7.78%
Return-to-Duty	147	5	3.40%	144	4	2.78%	291	9	3.09%
Follow-Up	3,032	31	1.02%	597	18	3.02%	3,629	49	1.35%

Table 3-15. Drug Test Results by Employee Category and Test Type by Rail and Non-Rail (continued)

Test Type	Rail			Non-Rail			Totals		
	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive	Number of Specimens Collected	Number of Positive Results	Percent Positive
REVENUE VEHICLE CONTROL/ DISPATCH									
Pre-Employment	923	21	2.28%	1,487	24	1.61%	2,410	45	1.87%
Random	3,782	29	0.77%	4,932	26	0.53%	8,714	55	0.63%
Post-Accident	96	2	2.08%	66	0	0.00%	162	2	1.23%
Reasonable Suspicion	31	2	6.45%	4	1	25.00%	35	3	8.57%
Return-to-Duty	25	0	0.00%	43	3	6.98%	68	3	4.41%
Follow-Up	330	5	1.52%	90	2	2.22%	420	7	1.67%
CDL/NON-REVENUE VEHICLE									
Pre-Employment	428	10	2.34%	289	4	1.38%	717	14	1.95%
Random	1,633	13	0.80%	854	11	1.29%	2,487	24	0.97%
Post-Accident	64	0	0.00%	44	0	0.00%	108	0	0.00%
Reasonable Suspicion	11	0	0.00%	2	0	0.00%	13	0	0.00%
Return-to-Duty	10	0	0.00%	4	0	0.00%	14	0	0.00%
Follow-Up	550	2	0.36%	31	0	0.00%	581	2	0.34%
ARMED SECURITY PERSONNEL									
Pre-Employment	1,034	4	0.39%	313	1	0.32%	1,347	5	0.37%
Random	1,771	8	0.45%	331	6	1.81%	2,102	14	0.67%
Post-Accident	85	0	0.00%	9	0	0.00%	94	0	0.00%
Reasonable Suspicion	2	0	0.00%	0	0	0.00%	2	0	0.00%
Return-to-Duty	5	0	0.00%	4	0	0.00%	9	0	0.00%
Follow-Up	19	0	0.00%	1	0	0.00%	20	0	0.00%

4. ALCOHOL TEST RESULTS

This chapter provides background information on the alcohol testing procedures and a summary of the 1999 alcohol test results. This section also discusses results of random alcohol testing for transit systems and contracts, by size, by rail, and by region.

Because employees are prohibited from using alcohol while performing safety-sensitive functions, an employer who knows that an employee is using alcohol must prohibit that employee from performing these functions. An on-call employee must be given the opportunity to acknowledge use of alcohol at the time he or she is called to duty and must be given an alcohol test if the employee claims to be able to perform his or her safety-sensitive function. In addition, employees are prohibited from using alcohol within 4 hours prior to performing safety-sensitive functions and from consuming alcohol while on call. The FTA provides different sets of consequences (see Figure 4-1) should an alcohol confirmation test show that an employee's alcohol concentration is (1) ≥ 0.02 but < 0.04 , or (2) ≥ 0.04 .

An employee with an alcohol concentration of ≥ 0.02 but < 0.04 must be removed from his or her safety-sensitive position for 8 hours or until a re-test shows an alcohol concentration of < 0.02 .

An employee with an alcohol concentration of ≥ 0.04 must be removed from his or her safety-sensitive position, be told about educational and treatment programs available, and be referred to a substance abuse professional.

Figure 4-1. Consequences of an Alcohol Test for FTA-Covered Employees

The alcohol concentration level is the alcohol in a volume of breath expressed in terms of grams of alcohol per 210 liters of breath. Alcohol tests are conducted in two parts: a screening test, followed by a confirmation test for those employees for whom the screening test result indicates an alcohol concentration ≥ 0.02 .

The data collected by the FTA from transit systems and contractors include information on the number of screening tests conducted, the number of confirmation tests conducted, and the results from these confirmation tests. In this report, the alcohol test results are derived from the number of screening tests conducted and found to be ≥ 0.04 . The number of screening tests is used to better reflect accurate testing percentages. Because confirmation tests are only performed once a screening test has resulted in ≥ 0.02 , to report results ≥ 0.04 of confirmation tests would result in high and misleading percentages.

Table 4-1 shows the percent of alcohol forms received for 1999 from transit systems and contractors with at least 1 positive test result.

Table 4-1. Percent of Alcohol Forms Received for 1999 With at Least 1 Positive Test Result

Employer	Number of Reporters	Number 0.02 - 0.04	Percent with a Test 0.02 - 0.04	Number \geq 0.04	Percent with a Positive
Transit Systems	1,628	26	1.60%	47	2.89%
Contractors	960	16	1.67%	23	2.40%
Totals	2,588	42	1.62%	70	2.70%

Table 4-2 shows the results of random alcohol testing for transit systems and contractors. Random alcohol testing was the type of test conducted most frequently: 41,358 tests out of 65,887 total tests. Although Table 4-2 shows the number of random “positives” for alcohol tests \geq 0.02 but $<$ 0.04, for reporting purposes verified positives are considered \geq 0.04.

Table 4-2. Random Alcohol Test Results at Both Levels for Transit Systems and Contractors

Employer	Total Screens	Number 0.02 - 0.04	Number \geq 0.04	Percent 0.02 - 0.04	Percent \geq 0.04
Transit Systems	33,868	29	35	0.09%	0.10%
Contractors	7,490	8	4	0.11%	0.05%
Totals	41,358	37	39	0.09%	0.09%

Table 4-3 provides random alcohol test results at both levels by size and Table 4-4 presents random alcohol test results by rail and non-rail systems.

Table 4-3. Random Alcohol Test Results at Both Levels by Size

Size	Total Screens	Number 0.02 - 0.04	Number \geq 0.04	Percent 0.02 - 0.04	Percent \geq 0.04
Large	34,010	32	37	0.09%	0.11%
Small	2,741	3	1	0.11%	0.04%
Rural	4,607	2	1	0.04%	0.02%
Totals	41,358	37	39	0.09%	0.09%

Table 4-4. Random Alcohol Test Results by Rail and Non-Rail

Size	Total Screens	Number 0.02 - 0.04	Number \geq 0.04	Percent 0.02 - 0.04	Percent \geq 0.04
Rail	19,999	15	25	0.08%	0.13%
Non-Rail	21,359	22	14	0.10%	0.07%
Totals	41,358	37	39	0.09%	0.09%

4.1 Alcohol Tests by FTA Region

This section reports alcohol test results by FTA region. A list of states found in each FTA region can be found in Appendix A. As shown in Table 4-2, of the 10 FTA regions, Regions 3 and 8 had the highest percent of specimens testing positive for alcohol. Regions 2 and 6 had the highest percent positive random alcohol rates, as shown in Figure 4-3. Table 4-5 provides the actual numbers for random alcohol test results at both levels by region.

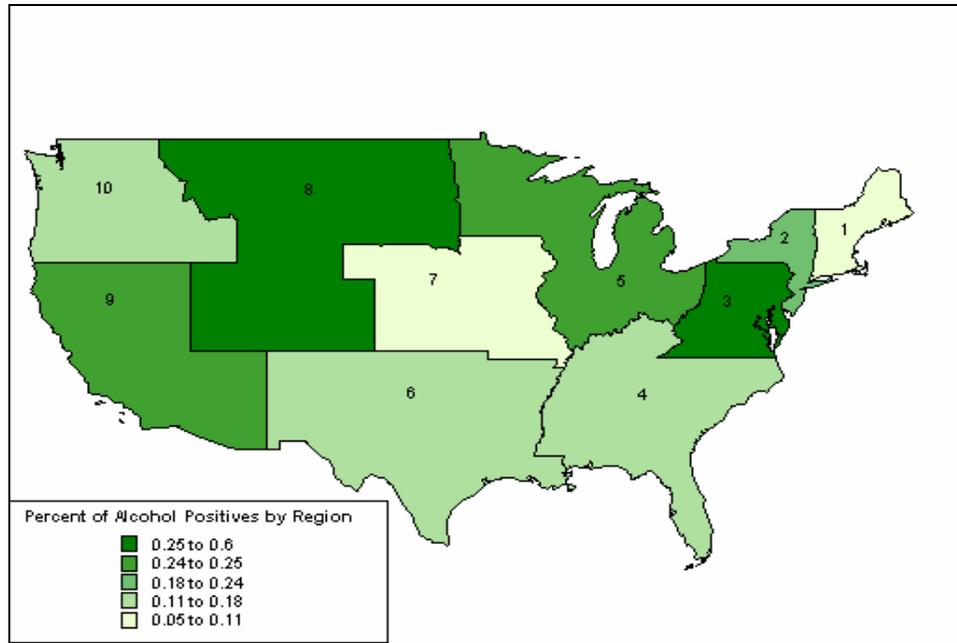


Figure 4-2. Percent of Alcohol Positives by Region

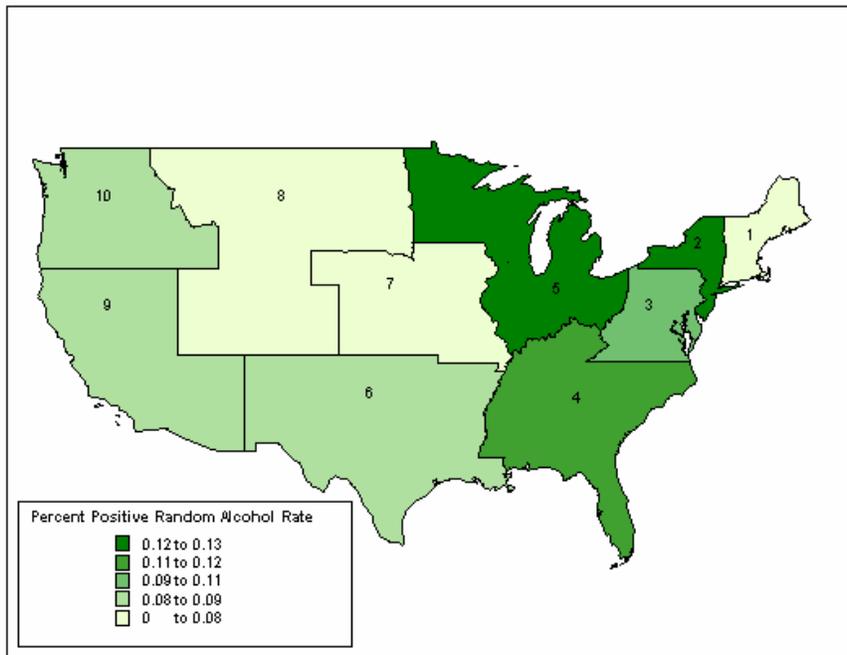


Figure 4-3. Percent Positive Random Alcohol Rates by Region

Table 4-5. Random Alcohol Test Results at Both Levels by Region

Region	Total Screens	Number 0.02 - 0.04	Number ≥ 0.04	Percent 0.02 - 0.04	Percent ≥ 0.04
1	1,525	1	0	0.07%	0.00%
2	7,974	2	10	0.03%	0.13%
3	6,356	8	6	0.13%	0.09%
4	6,304	1	7	0.02%	0.11%
5	5,184	10	6	0.19%	0.12%
6	4,790	7	4	0.15%	0.08%
7	1,085	0	0	0.00%	0.00%
8	854	0	0	0.00%	0.00%
9	4,851	5	4	0.10%	0.08%
10	2,435	3	2	0.12%	0.08%
Totals	41,358	37	39	0.09%	0.09%

4.2 Results of Alcohol Testing by Test Type and Employee Category

Alcohol test information was required from transit systems and their contractors for 5 test types: random; post-accident; reasonable suspicion; return-to-duty; and follow-up. The requirement to conduct pre-employment testing was suspended by the FTA as of May 10, 1995.

Table 4-6 presents the alcohol test results by test type and by employee category for transit systems and contractors and identifies the combined totals, while Table 4-7 presents the alcohol test results by test type and employee category for large, small, and rural systems. Table 4-8 presents the alcohol test results by test type and employee category for rail and non-rail systems. Table 4-9 presents alcohol testing information by employee category and test type for transit systems, contractors, and totals, and Table 4-10 presents the alcohol test results by employee category and test type for large, small, and rural systems and their combined totals. Table 4-11 presents the alcohol test results by employee category and test type for rail and non-rail systems and their combined totals.

Table 4-6. Alcohol Test Results by Test Type and Employee Category by Transit System and Contractor

Test Type	Transit Systems			Contractors			Totals		
	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04
TOTALS BY TEST TYPE, ALL EMPLOYEE CATEGORIES									
Random	33,868	35	0.10%	7,490	4	0.05%	41,358	39	0.09%
Post-Accident	11,777	11	0.09%	2,874	5	0.17%	14,651	16	0.11%
Reasonable Suspicion	638	40	6.27%	167	26	15.57%	805	66	8.20%
Return-to-Duty	673	1	0.15%	65	0	0.00%	738	1	0.14%
Follow-Up	7,746	12	0.15%	589	2	0.34%	8,335	14	0.17%
TOTALS	54,702	99	0.18%	11,185	37	0.33%	65,887	136	0.21%
Employee Category									
TOTALS BY TEST TYPE, ALL EMPLOYEE CATEGORIES									
RANDOM									
Revenue Vehicle Operations	22,210	13	0.06%	5,568	1	0.02%	27,778	14	0.05%
Vehicle and Equipment Maintenance	7,227	19	0.26%	1,148	1	0.09%	8,375	20	0.24%
Revenue Vehicle Control/Dispatch	2,236	1	0.04%	598	1	0.17%	2,834	2	0.07%
CDL/Non-Revenue Vehicle	1,283	2	0.16%	74	1	1.35%	1,357	3	0.22%
Armed Security Personnel	912	0	0.00%	102	0	0.00%	1,014	0	0.00%

Table 4-6. Alcohol Test Results by Test Type and Employee Category by Transit System and Contractor (continued)

Employee Category	Transit Systems			Contractors			Totals		
	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04
POST-ACCIDENT									
Revenue Vehicle Operations	10,753	10	0.09%	2,674	5	0.19%	13,427	15	0.11%
Vehicle and Equipment Maintenance	733	0	0.00%	155	0	0.00%	888	0	0.00%
Revenue Vehicle Control/Dispatch	128	1	0.78%	26	0	0.00%	154	1	0.65%
CDL/Non-Revenue Vehicle	83	0	0.00%	19	0	0.00%	102	0	0.00%
Armed Security Personnel	80	0	0.00%	0	0	0.00%	80	0	0.00%
REASONABLE SUSPICION									
Revenue Vehicle Operations	503	23	4.57%	146	22	15.07%	649	45	6.93%
Vehicle and Equipment Maintenance	71	12	16.90%	11	2	18.18%	82	14	17.07%
Revenue Vehicle Control/Dispatch	53	4	7.55%	8	2	25.00%	61	6	9.84%
CDL/Non-Revenue Vehicle	10	1	10.00%	2	0	0.00%	12	1	8.33%
Armed Security Personnel	1	0	0.00%	0	0	0.00%	1	0	0.00%
RETURN-TO-DUTY									
Revenue Vehicle Operations	466	0	0.00%	49	0	0.00%	515	0	0.00%
Vehicle and Equipment Maintenance	169	1	0.59%	11	0	0.00%	180	1	0.56%
Revenue Vehicle Control/Dispatch	23	0	0.00%	5	0	0.00%	28	0	0.00%
CDL/Non-Revenue Vehicle	9	0	0.00%	0	0	0.00%	9	0	0.00%
Armed Security Personnel	6	0	0.00%	0	0	0.00%	6	0	0.00%
FOLLOW-UP									
Revenue Vehicle Operations	4,448	4	0.09%	390	2	0.51%	4,838	6	0.12%
Vehicle and Equipment Maintenance	2,587	6	0.23%	164	0	0.00%	2,751	6	0.22%
Revenue Vehicle Control/Dispatch	271	1	0.37%	35	0	0.00%	306	1	0.33%
CDL/Non-Revenue Vehicle	421	1	0.24%	0	0	0.00%	421	1	0.24%
Armed Security Personnel	19	0	0.00%	0	0	0.00%	19	0	0.00%

Table 4-7. Alcohol Test Results by Test Type and Employee Category by Size

Test Type	Large			Small			Rural		
	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04
TOTALS BY TEST TYPE, ALL EMPLOYEE CATEGORIES									
Random	34,010	37	0.11%	2,741	1	0.04%	4,607	1	0.02%
Post-Accident	13,265	16	0.12%	753	0	0.00%	633	0	0.00%
Reasonable Suspicion	751	59	7.86%	27	4	14.81%	27	3	11.11%
Return-to-Duty	711	1	0.14%	16	0	0.00%	11	0	0.00%
Follow-Up	8,232	14	0.17%	62	0	0.00%	41	0	0.00%
TOTALS	56,969	127	0.22%	3,599	5	0.14%	5,319	4	0.08%
Employee Category	Large			Small			Rural		
	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04
RANDOM									
Revenue Vehicle Operations	22,205	13	0.06%	1,909	0	0.00%	3,664	1	0.03%
Vehicle and Equipment Maintenance	7,515	19	0.25%	525	1	0.19%	335	0	0.00%
Revenue Vehicle Control/Dispatch	2,038	2	0.10%	252	0	0.00%	544	0	0.00%
CDL/Non-Revenue Vehicle	1,242	3	0.24%	51	0	0.00%	64	0	0.00%
Armed Security Personnel	1,010	0	0.00%	4	0	0.00%	0	0	0.00%

Table 4-7. Alcohol Test Results by Test Type and Employee Category by Size (continued)

Employee Category	Large			Small			Rural		
	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04
POST-ACCIDENT									
Revenue Vehicle Operations	12,126	15	0.12%	691	0	0.00%	610	0	0.00%
Vehicle and Equipment Maintenance	824	0	0.00%	50	0	0.00%	14	0	0.00%
Revenue Vehicle Control/Dispatch	144	1	0.69%	4	0	0.00%	6	0	0.00%
CDL/Non-Revenue Vehicle	91	0	0.00%	8	0	0.00%	3	0	0.00%
Armed Security Personnel	80	0	0.00%	0	0	0.00%	0	0	0.00%
REASONABLE SUSPICION									
Revenue Vehicle Operations	606	42	6.93%	21	1	4.76%	22	2	9.09%
Vehicle and Equipment Maintenance	76	13	17.11%	4	1	25.00%	2	0	0.00%
Revenue Vehicle Control/Dispatch	56	3	5.36%	2	2	100.00%	3	1	33.33%
CDL/Non-Revenue Vehicle	12	1	8.33%	0	0	0.00%	0	0	0.00%
Armed Security Personnel	1	0	0.00%	0	0	0.00%	0	0	0.00%
RETURN-TO-DUTY									
Revenue Vehicle Operations	493	0	0.00%	12	0	0.00%	10	0	0.00%
Vehicle and Equipment Maintenance	178	1	0.56%	2	0	0.00%	0	0	0.00%
Revenue Vehicle Control/Dispatch	25	0	0.00%	2	0	0.00%	1	0	0.00%
CDL/Non-Revenue Vehicle	9	0	0.00%	0	0	0.00%	0	0	0.00%
Armed Security Personnel	6	0	0.00%	0	0	0.00%	0	0	0.00%
FOLLOW-UP									
Revenue Vehicle Operations	4,758	6	0.13%	45	0	0.00%	35	0	0.00%
Vehicle and Equipment Maintenance	2,735	6	0.22%	11	0	0.00%	5	0	0.00%
Revenue Vehicle Control/Dispatch	299	1	0.33%	6	0	0.00%	1	0	0.00%
CDL/Non-Revenue Vehicle	421	1	0.24%	0	0	0.00%	0	0	0.00%
Armed Security Personnel	19	0	0.00%	0	0	0.00%	0	0	0.00%

Table 4-8. Alcohol Test Results by Test Type and Employee Category by Rail and Non-Rail

Test Type	Rail			Non-Rail			Totals		
	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04
TOTALS BY TEST TYPE, ALL EMPLOYEE CATEGORIES									
Random	19,999	25	0.13%	21,359	14	0.07%	41,358	39	0.09%
Post-Accident	7,794	10	0.13%	6,857	6	0.09%	14,651	16	0.11%
Reasonable Suspicion	537	28	5.21%	268	38	14.18%	805	66	8.20%
Return-to-Duty	409	0	0.00%	329	1	0.03%	738	1	0.14%
Follow-Up	6,507	11	0.17%	1,828	3	0.02%	8,335	14	0.17%
TOTALS	35,246	74	0.21%	30,461	62	0.20%	65,887	136	0.21%
Employee Category									
RANDOM									
Revenue Vehicle Operations	12,402	7	0.06%	15,376	7	0.05%	27,778	14	0.05%
Vehicle and Equipment Maintenance	4,539	14	0.31%	3,836	6	0.16%	8,375	20	0.24%
Revenue Vehicle Control/Dispatch	1,207	2	0.17%	1,627	0	0.00%	2,834	2	0.07%
CDL/Non-Revenue Vehicle	1,012	2	0.20%	345	1	0.29%	1,357	3	0.22%
Armed Security Personnel	839	0	0.00%	275	0	0.00%	1,014	0	0.00%

Table 4-8. Alcohol Test Results by Test Type and Employee Category by Rail and Non-Rail (continued)

Employee Category	Rail			Non-Rail			Totals		
	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04
POST-ACCIDENT									
Revenue Vehicle Operations	7,027	9	0.13%	6,400	6	0.09%	13,427	15	0.11%
Vehicle and Equipment Maintenance	544	0	0.00%	344	0	0.00%	888	0	0.00%
Revenue Vehicle Control/Dispatch	92	1	1.09%	62	0	0.00%	154	1	0.65%
CDL/Non-Revenue Vehicle	60	0	0.00%	42	0	0.00%	102	0	0.00%
Armed Security Personnel	71	0	0.00%	9	0	0.00%	80	0	0.00%
REASONABLE SUSPICION									
Revenue Vehicle Operations	444	18	4.05%	205	27	13.17%	649	45	6.93%
Vehicle and Equipment Maintenance	49	7	14.29%	33	7	21.21%	82	14	17.07%
Revenue Vehicle Control/Dispatch	33	2	6.06%	28	4	14.29%	61	6	9.84%
CDL/Non-Revenue Vehicle	10	1	10.00%	2	0	0.00%	12	1	8.33%
Armed Security Personnel	1	0	0.00%	0	0	0.00%	1	0	0.00%
RETURN-TO-DUTY									
Revenue Vehicle Operations	257	0	0.00%	258	0	0.00%	515	0	0.00%
Vehicle and Equipment Maintenance	121	0	0.00%	59	1	1.69%	180	1	0.56%
Revenue Vehicle Control/Dispatch	19	0	0.00%	9	0	0.00%	28	0	0.00%
CDL/Non-Revenue Vehicle	7	0	0.00%	2	0	0.00%	9	0	0.00%
Armed Security Personnel	5	0	0.00%	1	0	0.00%	6	0	0.00%
FOLLOW-UP									
Revenue Vehicle Operations	3,641	4	0.11%	1,197	2	0.17%	4,838	6	0.12%
Vehicle and Equipment Maintenance	2,181	5	0.23%	570	1	0.18%	2,751	6	0.22%
Revenue Vehicle Control/Dispatch	266	1	0.38%	40	0	0.00%	306	1	0.33%
CDL/Non-Revenue Vehicle	400	1	0.25%	21	0	0.00%	421	1	0.24%
Armed Security Personnel	19	0	0.00%	0	0	0.00%	19	0	0.00%

Table 4-9. Alcohol Test Results by Employee Category and Test Type by Transit System and Contractor

Employee Category	Transit Systems			Contractors			Totals		
	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04
TOTALS BY EMPLOYEE CATEGORY, ALL TEST TYPES									
Revenue Vehicle Operations	38,380	50	0.13%	8,827	30	0.34%	47,207	80	0.17%
Revenue Veh. and Equip. Maint.	10,787	38	0.35%	1,489	3	0.20%	12,276	41	0.33%
Revenue Veh. Control/Dispatch	2,711	7	0.26%	672	3	0.45%	3,383	10	0.30%
CDL/Non-Revenue Vehicle	1,806	4	0.22%	95	1	1.05%	1,901	5	0.26%
Armed Security Personnel	1,018	0	0.00%	102	0	0.00%	1,120	0	0.00%
TOTALS	54,702	99	0.18%	11,185	37	0.33%	65,887	136	0.21%
Test Type									
REVENUE VEHICLE OPERATIONS									
Random	22,210	13	0.06%	5,568	1	0.02%	27,778	14	0.05%
Post-Accident	10,753	10	0.09%	2,674	5	0.19%	13,427	15	0.11%
Reasonable Suspicion	503	23	4.57%	146	22	15.07%	649	45	6.93%
Return-to-Duty	466	0	0.00%	49	0	0.00%	515	0	0.00%
Follow-Up	4,448	4	0.09%	390	2	0.51%	4,838	6	0.12%
REVENUE VEHICLE AND EQUIPMENT MAINTENANCE									
Random	7,227	19	0.26%	1,148	1	0.09%	8,375	20	0.24%
Post-Accident	733	0	0.00%	155	0	0.00%	888	0	0.00%
Reasonable Suspicion	71	12	16.90%	11	2	18.18%	82	14	17.07%
Return-to-Duty	169	1	0.59%	11	0	0.00%	180	1	0.56%
Follow-Up	2,587	6	0.23%	164	0	0.00%	2,751	6	0.22%

Table 4-9. Alcohol Test Results by Employee Category and Test Type by Transit System and Contractor (continued)

Test Type	Transit Systems			Contractors			Totals		
	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04
REVENUE VEHICLE CONTROL/DISPATCH									
Random	2,236	1	0.04%	598	1	0.17%	2,834	2	0.07%
Post-Accident	128	1	0.78%	26	0	0.00%	154	1	0.65%
Reasonable Suspicion	53	4	7.55%	8	2	25.00%	61	6	9.84%
Return-to-Duty	23	0	0.00%	5	0	0.00%	28	0	0.00%
Follow-Up	271	1	0.37%	35	0	0.00%	306	1	0.33%
CDL/NON-REVENUE VEHICLE									
Random	1,283	2	0.16%	74	1	1.355	1,357	3	0.22%
Post-Accident	83	0	0.00%	19	0	0.00%	102	0	0.00%
Reasonable Suspicion	10	1	10.00%	2	0	0.00%	12	1	8.33%
Return-to-Duty	9	0	0.00%	0	0	0.00%	9	0	0.00%
Follow-Up	421	1	0.24%	0	0	0.00%	421	1	0.24%
ARMED SECURITY PERSONNEL									
Random	912	0	0.00%	102	0	0.00%	1,014	0	0.00%
Post-Accident	80	0	0.00%	0	0	0.00%	80	0	0.00%
Reasonable Suspicion	1	0	0.00%	0	0	0.00%	1	0	0.00%
Return-to-Duty	6	0	0.00%	0	0	0.00%	6	0	0.00%
Follow-Up	19	0	0.00%	0	0	0.00%	19	0	0.00%

Table 4-10. Alcohol Test Results by Employee Category and Test Type by Size

Employee Category	Large			Small			Rural		
	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04
TOTALS BY EMPLOYEE CATEGORY, ALL TEST TYPES									
Revenue Vehicle Operations	40,188	76	0.19%	2,678	1	0.04%	4,341	3	0.07%
Revenue Veh. and Equip. Maint.	11,328	39	0.34%	592	2	0.34%	356	0	0.00%
Revenue Veh. Control/Dispatch	2,562	7	0.27%	266	2	0.75%	555	1	0.18%
CDL/Non-Revenue Vehicle	1,775	5	0.28%	59	0	0.00%	67	0	0.00%
Armed Security Personnel	1,116	0	0.00%	4	0	0.00%	0	0	0.00%
TOTALS	56,969	127	0.22%	3,599	5	0.14%	5,319	4	0.08%
Test Type	Large			Small			Rural		
	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04
REVENUE VEHICLE OPERATIONS									
Random	22,205	13	0.06%	1,909	0	0.00%	3,664	1	0.03%
Post-Accident	12,126	15	0.12%	691	0	0.00%	610	0	0.00%
Reasonable Suspicion	606	42	6.93%	21	1	4.76%	22	2	9.09%
Return-to-Duty	493	0	0.00%	12	0	0.00%	10	0	0.00%
Follow-Up	4,758	6	0.13%	45	0	0.00%	35	0	0.00%
REVENUE VEHICLE AND EQUIPMENT MAINTENANCE									
Random	7,515	19	0.25%	525	1	0.19%	335	0	0.00%
Post-Accident	824	0	0.00%	50	0	0.00%	14	0	0.00%
Reasonable Suspicion	76	13	17.11%	4	1	25.00%	2	0	0.00%
Return-to-Duty	178	1	0.56%	2	0	0.00%	0	0	0.00%
Follow-Up	2,735	6	0.22%	11	0	0.00%	5	0	0.00%

Table 4-10. Alcohol Test Results by Employee Category and Test Type by Size (continued)

Test Type	Large			Small			Rural		
	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04	Number of Screening Tests	Number of Results ≥ 0.04	Percent ≥ 0.04
REVENUE VEHICLE CONTROL/DISPATCH									
Random	2,038	2	0.10%	252	0	0.00%	544	0	0.00%
Post-Accident	144	1	0.69%	4	0	0.00%	6	0	0.00%
Reasonable Suspicion	56	3	5.36%	2	2	100.00%	3	1	33.33%
Return-to-Duty	25	0	0.00%	2	0	0.00%	1	0	0.00%
Follow-Up	299	1	0.33%	6	0	0.00%	1	0	0.00%
CDL/NON-REVENUE VEHICLE									
Random	1,242	3	0.24%	51	0	0.00%	64	0	0.00%
Post-Accident	91	0	0.00%	8	0	0.00%	3	0	0.00%
Reasonable Suspicion	12	1	8.33%	0	0	0.00%	0	0	0.00%
Return-to-Duty	9	0	0.00%	0	0	0.00%	0	0	0.00%
Follow-Up	421	1	0.24%	0	0	0.00%	0	0	0.00%
ARMED SECURITY PERSONNEL									
Random	1,010	0	0.00%	4	0	0.00%	0	0	0.00%
Post-Accident	80	0	0.00%	0	0	0.00%	0	0	0.00%
Reasonable Suspicion	1	0	0.00%	0	0	0.00%	0	0	0.00%
Return-to-Duty	6	0	0.00%	0	0	0.00%	0	0	0.00%
Follow-Up	19	0	0.00%	0	0	0.00%	0	0	0.00%

Table 4-11. Alcohol Test Results by Employee Category and Test Type by Rail and Non-Rail

Employee Category	Rail			Non-Rail			Totals		
	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04
TOTALS BY EMPLOYEE CATEGORY, ALL TEST TYPES									
Revenue Vehicle Operations	23,771	38	0.16%	23,436	42	0.18%	47,207	80	0.17%
Revenue Veh. and Equip. Maint.	7,434	26	0.35%	4,842	15	0.31%	12,276	41	0.33%
Revenue Veh. Control/Dispatch	1,617	6	0.37%	1,766	4	0.23%	3,383	10	0.30%
CDL/Non-Revenue Vehicle	1,489	4	0.27%	412	1	0.24%	1,901	5	0.26%
Armed Security Personnel	935	0	0.00%	185	0	0.00%	1,120	0	0.00%
TOTALS	35,246	74	0.21%	30,641	62	0.20%	65,887	136	0.21%
Test Type									
	Rail			Non-Rail			Totals		
	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04
REVENUE VEHICLE OPERATIONS									
Random	12,402	7	0.06%	15,376	7	0.05%	27,778	14	0.05%
Post-Accident	7,027	9	0.13%	6,400	6	0.09%	13,427	15	0.11%
Reasonable Suspicion	444	18	4.05%	205	27	13.17%	649	45	6.93%
Return-to-Duty	257	0	0.00%	258	0	0.00%	515	0	0.00%
Follow-Up	3,641	4	0.11%	1,197	2	0.17%	4,838	6	0.12%
REVENUE VEHICLE AND EQUIPMENT MAINTENANCE									
Random	4,539	14	0.31%	3,836	6	0.16%	8,375	20	0.24%
Post-Accident	544	0	0.00%	344	0	0.00%	888	0	0.00%
Reasonable Suspicion	49	7	14.29%	33	7	21.21%	82	14	17.07%
Return-to-Duty	121	0	0.00%	59	1	1.69%	180	1	0.56%
Follow-Up	2,181	5	0.23%	570	1	0.18%	2,751	6	0.22%

Table 4-11. Alcohol Test Results by Employee Category and Test Type by Rail and Non-Rail (continued)

Test Type	Rail			Non-Rail			Totals		
	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04	Number of Screening Tests	Number of Results \geq 0.04	Percent \geq 0.04
REVENUE VEHICLE CONTROL/DISPATCH									
Random	1,207	2	0.17%	1,627	0	0.00%	2,834	2	0.07%
Post-Accident	92	1	1.09%	62	0	0.00%	154	1	0.65%
Reasonable Suspicion	33	2	6.06%	28	4	14.29%	61	6	9.84%
Return-to-Duty	19	0	0.00%	9	0	0.00%	28	0	0.00%
Follow-Up	266	1	0.38%	40	0	0.00%	306	1	0.33%
CDL/NON-REVENUE VEHICLE									
Random	1,012	2	0.20%	345	1	0.29%	1,357	3	0.22%
Post-Accident	60	0	0.00%	42	0	0.00%	102	0	0.00%
Reasonable Suspicion	10	1	10.00%	2	0	0.00%	12	1	8.33%
Return-to-Duty	7	0	0.00%	2	0	0.00%	9	0	0.00%
Follow-Up	19	0	0.00%	0	0	0.00%	19	0	0.00%
ARMED SECURITY PERSONNEL									
Random	839	0	0.00%	275	0	0.00%	1,014	0	0.00%
Post-Accident	71	0	0.00%	9	0	0.00%	80	0	0.00%
Reasonable Suspicion	1	0	0.00%	0	0	0.00%	1	0	0.00%
Return-to-Duty	5	0	0.00%	1	0	0.00%	6	0	0.00%
Follow-Up	19	0	0.00%	0	0	0.00%	19	0	0.00%

4.3 Employees Who Refused Alcohol Testing

The FTA regulations stipulate that no employer shall permit an employee who refuses to submit to a required alcohol test to perform safety-sensitive functions; the number of employees who refused to be tested is small, as shown in Figure 4-4.

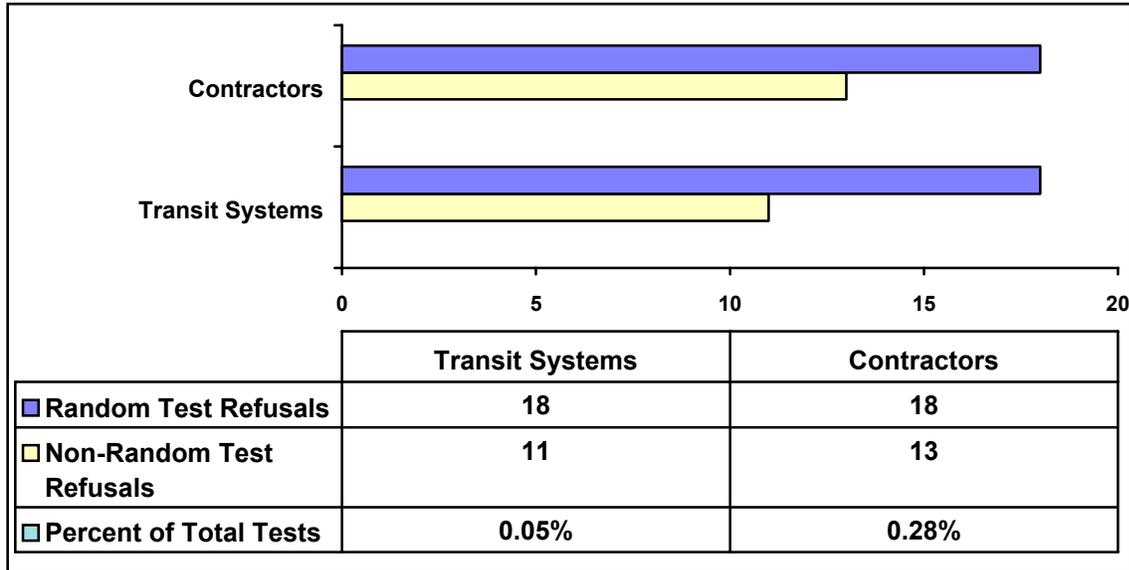


Figure 4-4. Alcohol Test Refusals

4.4 Employees Returned to Duty

For 1999, 219 employees who had previously engaged in alcohol misuse or who had refused to take an alcohol test were returned to duty. Each individual had to undergo a return-to-duty test and have a result indicating an alcohol concentration < 0.02. Table 4-12 shows the number of employees who returned-to-duty.

Table 4-12. Covered Employees Returned-to-Duty

Employer	Returned-to-Duty	Percent of Total
Transit Systems	191	87.2%
Contractors	28	12.8%
Totals	219	100.0%

4.5 Accidents

FTA regulations require testing for drugs and alcohol following an accident in which there is a loss of human life. For non-fatal accidents meeting FTA-defined conditions, testing is required unless the covered employee's performance can be discounted completely as a causative or contributing factor. The definition of an accident can be found in section 3.4.

Post-accident drug tests must be performed within 32 hours of an accident meeting the above-described conditions; **post-accident alcohol tests must be performed within 8 hours.**

According to the regulations, employers should be conducting an equal number of drug and alcohol post-accident tests (i.e., with each accident requiring testing, both a drug and alcohol post-accident test should be performed). If both tests are not conducted, reasons should be documented.

Tables 4-13 and 4-14 present the 1999 accident data for non-fatal and fatal accidents with alcohol positives, by both transit systems and contractors and by size, respectively.

Table 4-13. Accidents with Alcohol Positives

Employer	Number of Non-Fatal Accidents	Number of Fatal Accidents	Number of Fatalities
Transit Systems	11	0	0
Contractors	5	0	0
Totals	16	0	0

Table 4-14. Accidents with Alcohol Positives by Size

Employer	Number of Non-Fatal Accidents	Number of Fatal Accidents	Number of Fatalities
Large	16	0	0
Small	0	0	0
Rural	0	0	0
Totals	16	0	0

4.6 Post-Accident Positives

Employers are required to report the number of accidents that resulted in a post-accident alcohol test indicating an alcohol concentration ≥ 0.04 . The 1999 figures appear in Table 4-15 below.

Table 4-15. Post-Accident Alcohol Positives

Employer	Revenue Vehicle Operations	Vehicle and Equip. Maint.	Rev. Vehicle Cntl/Dsptch	CDL/Non-Revenue	Armed Security Personnel
Number 0.02 – 0.04	3	1	0	0	0
Number ≥ 0.04	15	0	1	0	0
Totals	18	1	1	0	0

4.7 Violation Rate

The FTA alcohol testing rule defines the violation rate as the number of random alcohol test results ≥ 0.04 plus the number of FTA-covered employees who refused a random test, divided by the total number of random tests plus the number of FTA-covered employees who refused a random test. See Tables 4-16 to 4-18 for data on violation rates for transit systems and contractors as well as by employer size. The following formula is a sample of how the violation rate is determined.

$$\frac{\text{Random alcohol test results } \geq 0.04\% + \text{number refused random testing}}{\text{Total random tests} + \text{number refused random testing}} = \frac{(39 + 36)}{(41,358 + 36)} = \frac{75}{41,394} = 0.18\%$$

Table 4-16. Violation Rate by Transit System/Contractor

Employer	Total Screens	Number ≥ 0.04	Random Test Refusals	Violation Rate
Transit Systems	33,868	35	18	0.16%
Contractors	7,490	4	18	0.29%
Totals	41,358	39	36	0.18%

Table 4-17. Violation Rate by Employer Size

Employer	Total Screens	Number ≥ 0.04	Random Test Refusals	Violation Rate
Large	34,010	37	24	0.18%
Small	2,741	1	2	0.11%
Rural	4,607	1	10	0.24%
Totals	41,358	39	36	0.18%

Table 4-18. Violation Rate by FTA Region

Region	Total Screens	Number ≥ 0.04	Random Test Refusals	Violation Rate
1	1,525	0	3	0.20%
2	7,974	10	0	0.13%
3	6,356	6	1	0.11%
4	6,304	7	10	0.27%
5	5,184	6	5	0.21%
6	4,790	4	4	0.17%
7	1,085	0	3	0.28%
8	854	0	4	0.47%
9	4,851	4	3	0.14%
10	2,435	2	3	0.21%
Totals	41,358	39	36	0.18%

4.8 Other Violations

Table 4-19 provides information for alcohol violations other than those detected through the alcohol testing process.

Table 4-19. Other Alcohol Violations

Number of Covered Employees	Transit Systems	Contractors	Other Violations
28	15	13	Covered employee used alcohol while performing safety-sensitive function.
26	16	10	Covered employee used alcohol within 4 hours of performing safety-sensitive function.
5	3	2	Covered employee used alcohol before taking a required post-accident alcohol test.
59	34	25	

5. TREND ANALYSIS

This chapter provides a trend analysis of the drug and alcohol testing conducted by all of the employers reporting in 1996, 1997, 1998, and 1999.

5.1 Drug and Alcohol Reports Received

In 1996, a total of 2,287 MIS forms were received and in 1997 there were 2,317 MIS forms submitted. In 1998, reporters could submit either hard copy MIS forms or data diskettes; the combined total of these in 1998 was 2,477, and in 1999 there were 2,588 submissions. The number of drug and alcohol reports received, therefore, has increased 13.2 percent over this 4-year period. The majority of this growth is due to the increased number of contractors reporting – this swell may be indicative of an industry-wide trend in contracting for services. Figure 5-1 illustrates this trend.

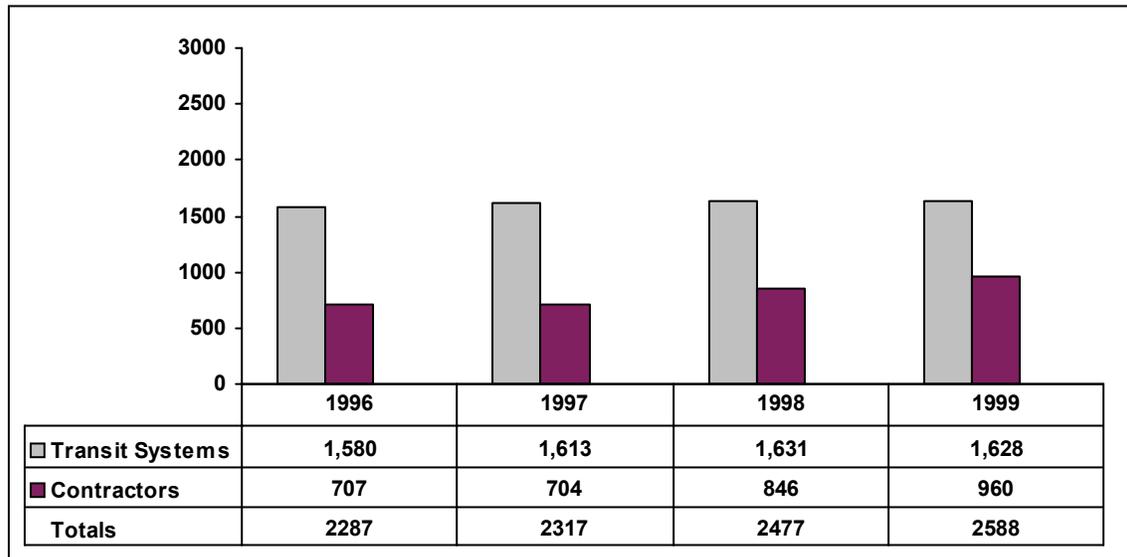


Figure 5-1. Drug and Alcohol Reports Received

The total number of drug MIS reports with at least one positive test result has decreased for each of the last 4 years. For transit systems, the number increased slightly in 1999, after a steady decline for the preceding years; for contractors their lowest rate of drug reports with positives was in 1999, although their rate was significantly higher than for transit systems for all 4 years. The total number of alcohol reports with test results ≥ 0.04 has also decreased overall, with a significant decline from 4.06 percent in 1996 to 2.70 percent in 1999. See Table 5-1.

Table 5-1. Percent of Drug Reports with a Positive and Alcohol Reports with a Test ≥ 0.04

Employer	Drug				Alcohol			
	1996	1997	1998	1999	1996	1997	1998	1999
Transit Systems	24.56	23.56	23.06	23.46	4.30	3.66	3.06	2.89
Contractors	37.34	40.91	35.10	33.96	3.82	4.26	5.08	2.40
Totals	30.95	28.83	27.57	27.36	4.06	3.84	3.75	2.70

5.2 Positive Drug and Alcohol Test Results

The transit industry-wide positive random drug test rate and random alcohol test results ≥ 0.04 have declined over the last 4 years. Consistent with that trend is the random positive testing rate of the transit systems. However, the results of contractor testing are not consistent with that trend; contractors' positive random drug rates are at a much higher rate than transit systems and have fluctuated during the 4-year period. The overall rates for both random positive drug test results and random alcohol test results ≥ 0.04 have declined each year over the past 4 years. See Figures 5-2 and 5-3.

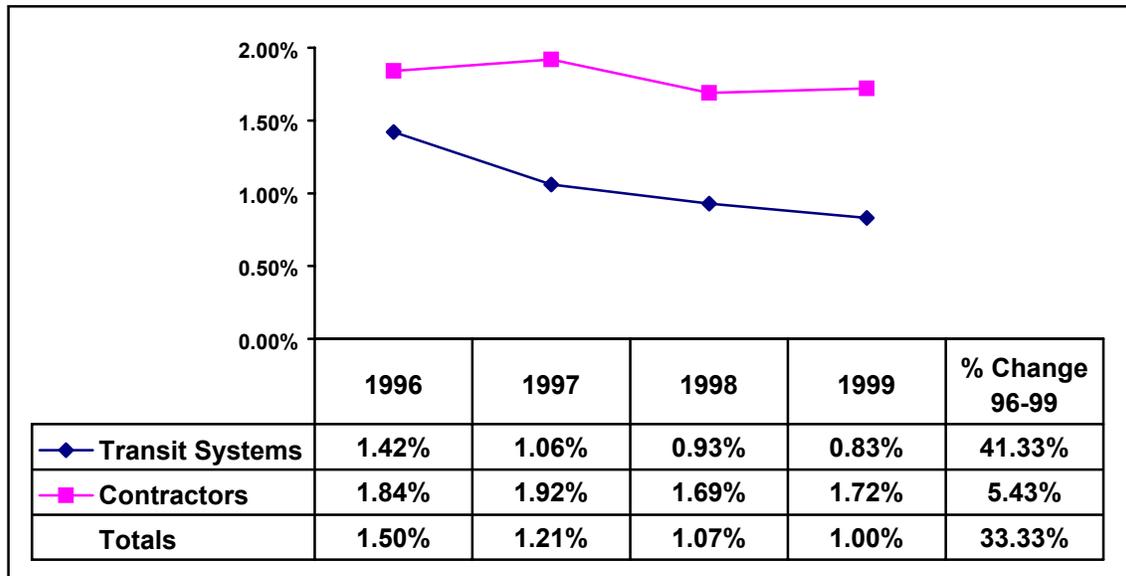


Figure 5-2. Comparison of Positive Random Drug Test Results

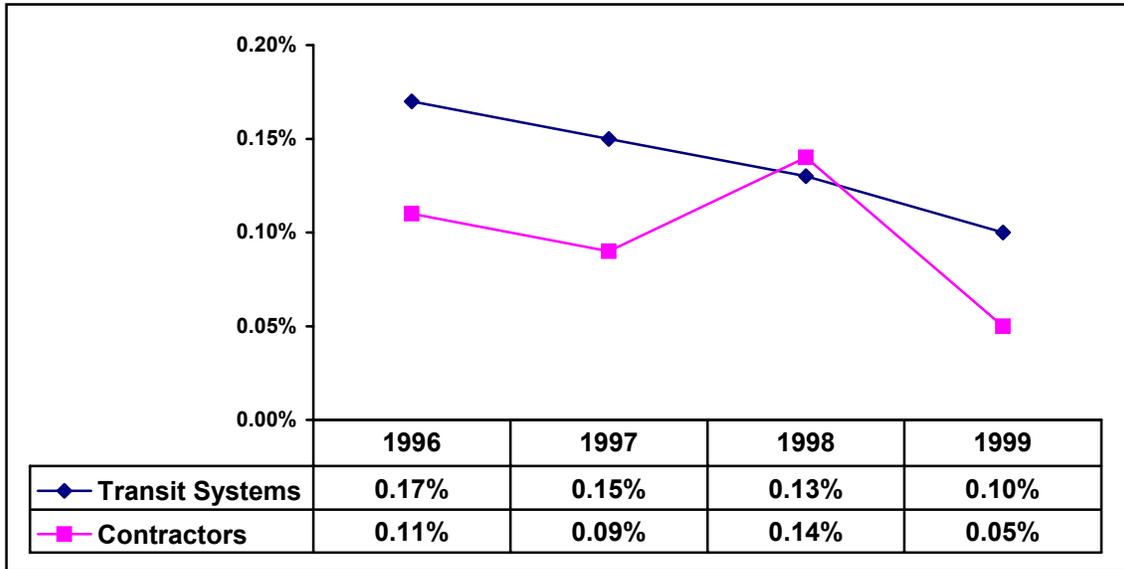


Figure 5-3. Comparison of Random Alcohol Test Results ≥ 0.04

The positive drug test rate for all types of tests declined for the 4 consecutive years. Test rates for contractors were substantially higher than those of transit systems. See Figure 5-4.

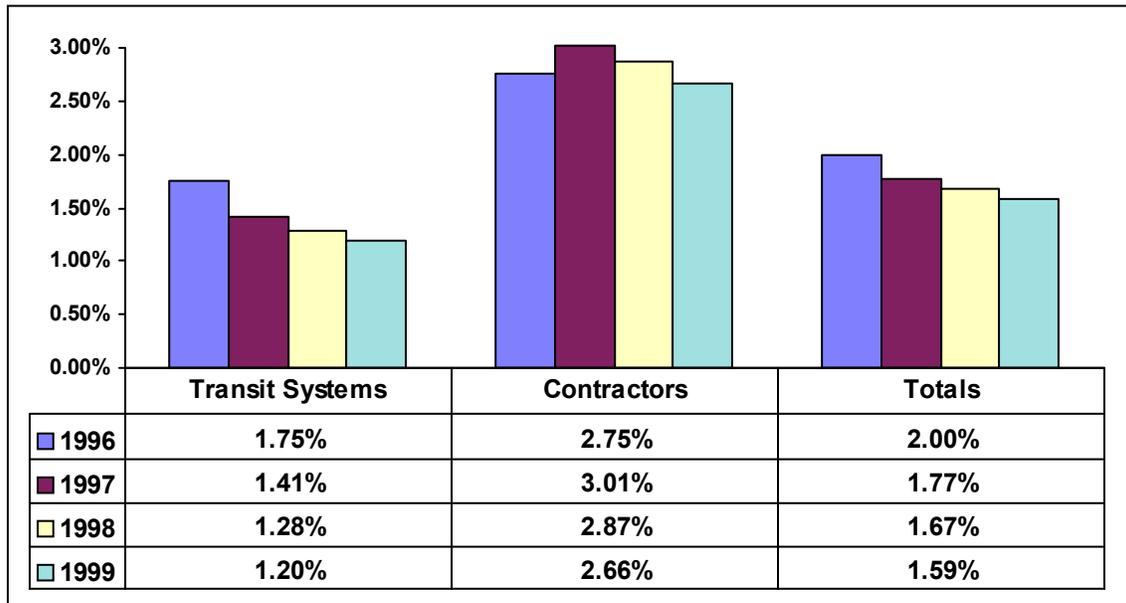


Figure 5-4. Total Positive Drug Test Rate

The alcohol test rate ≥ 0.04 for all types of tests has remained fairly constant for 1996-1998, dipping slightly in 1999. Test rates for contractors were higher than those of transit systems, particularly in 1998. Unlike the random alcohol tests rates ≥ 0.04 , the alcohol rate ≥ 0.04 for all types of tests is not declining in a consistent manner. See Figure 5-5.

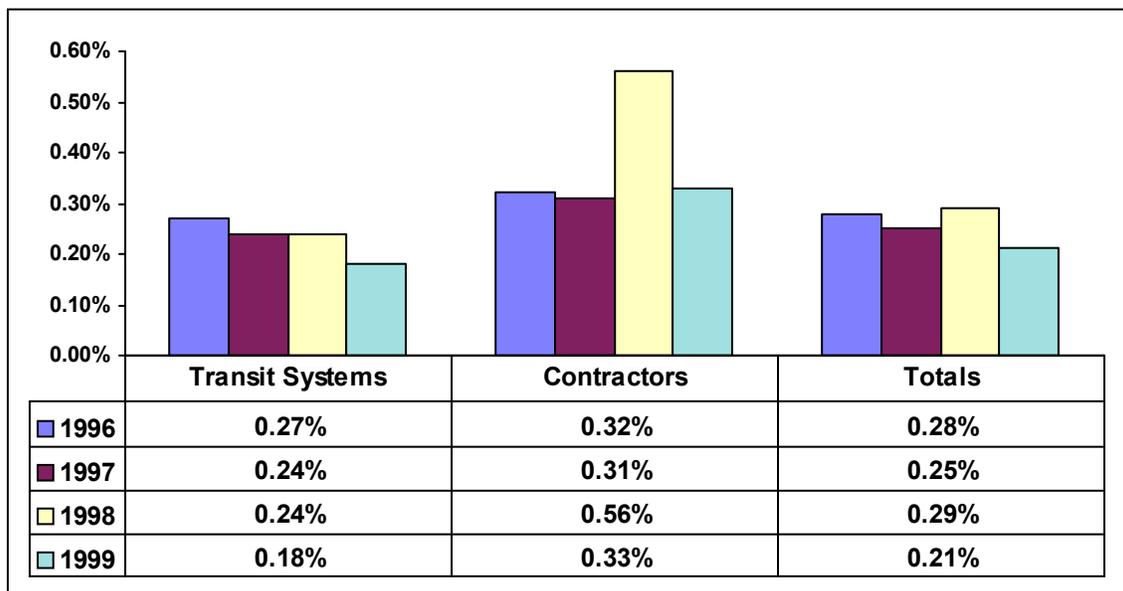


Figure 5-5. Total Results of Alcohol Tests ≥ 0.04

5.3 Violation Rates and Test Refusals

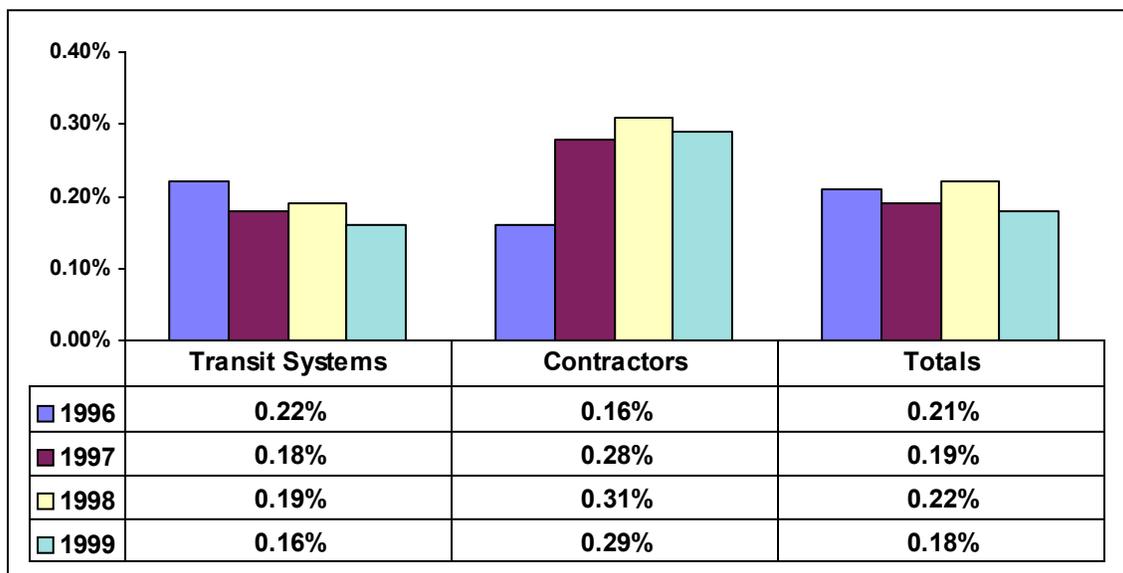


Figure 5-6. Violation Rate (Alcohol)

See Figure 5-6 for the alcohol violation rate; in every year but 1996, contractors had a much greater violation rate than transit systems. In 1999, contractors nearly doubled transit systems in their violation rate.

Unlike the FTA’s alcohol testing rule that defines a violation rate for the purposes of setting next year’s random alcohol testing rate, the FTA has no such definition for random drug testing. Using a similar equation to that used in determining the alcohol violation rate, a drug violation rate can be determined and is a useful tool in showing the affect of random drug test refusals. Figure 5-7 shows that the positive random test rate has decreased by 33.3 percent since 1996 and 17.3 percent since 1997, whereas the violation rate has decreased by 28.7 percent and 10.1 percent since for the same time periods.

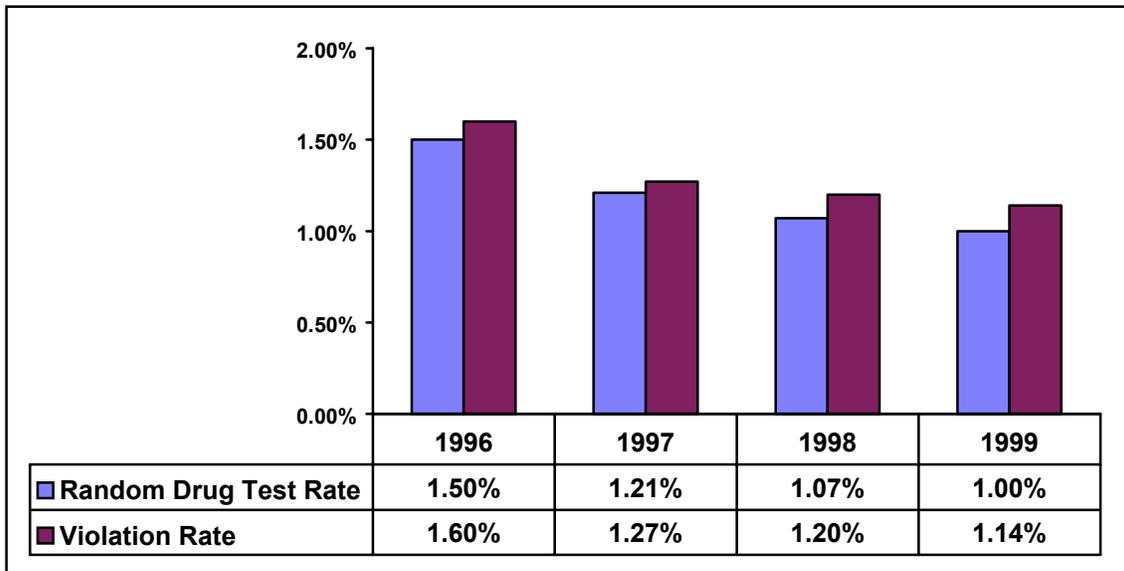


Figure 5-7. The Random Drug Test Violation Rate

The FTA regulations stipulate that no employer shall permit an employee who refuses to submit to a required alcohol test or drug test to perform safety-sensitive functions. The number of employees who refused alcohol tests is small, as shown in Figure 5-8. This was not the case for drug tests. The number of total drug tests conducted increased by 21.1 percent from 1996 to 1999; in contrast, the number of total drug test refusals increased by 66.4 percent for the same time period. Random drug test refusals have increased by 54.5 percent from 1996 to 1999. This is significantly higher than the increase in number of random drug tests conducted (10.5 percent). The data in Figure 5-9 indicate a definite trend toward the increase in drug test refusals.

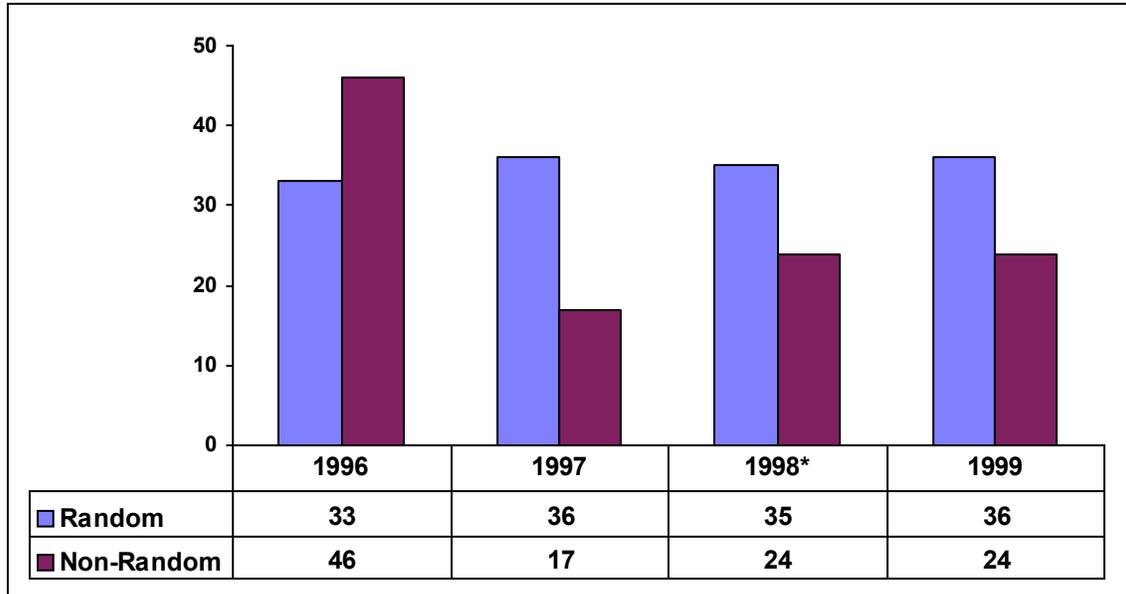


Figure 5-8. Alcohol Test Refusals

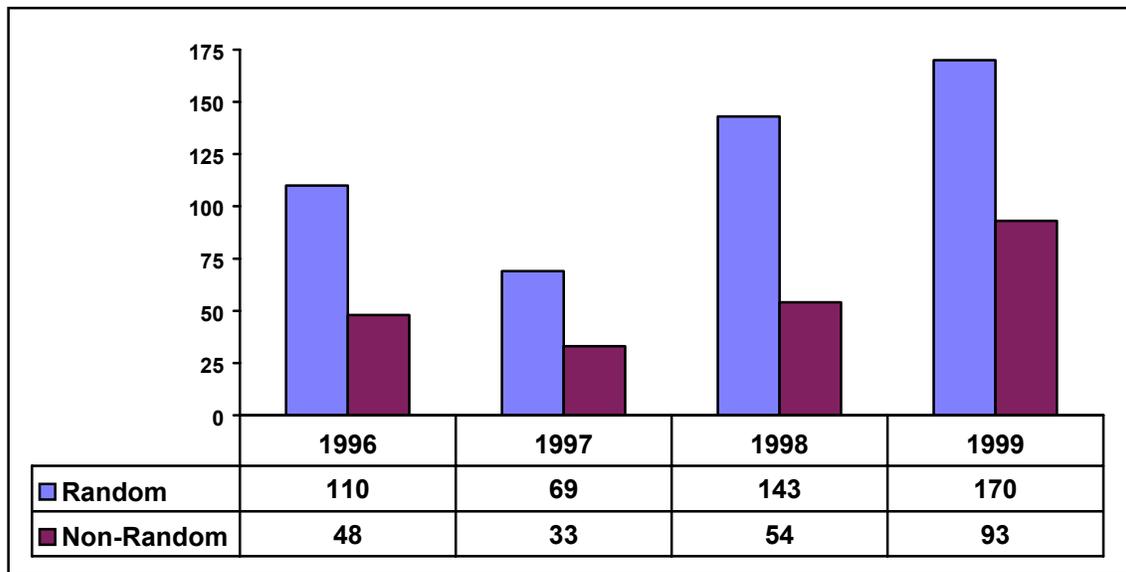


Figure 5-9. Drug Test Refusals

5.4 Drug and Alcohol Test Positives by Employment Category and Test Type

Figure 5-10 depicts the percent of drug test positives by test type for the last 4 years. Of all test types, reasonable suspicion tests are the one category that had increased positives for both transit systems and contractors for 1999 versus 1996 when the program began. Reasonable suspicion tests are conducted when a determination based on training is made by supervisors. The goal is to become more proficient in making this determination, which would result in higher positive drug test rates and a lower number of reasonable suspicion tests conducted, for this particular test type.

For return-to-duty testing, contractors had a greater percent of positives than in 1996, although a decrease from the previous year. Post-accident positives for contractors also increased in 1999.

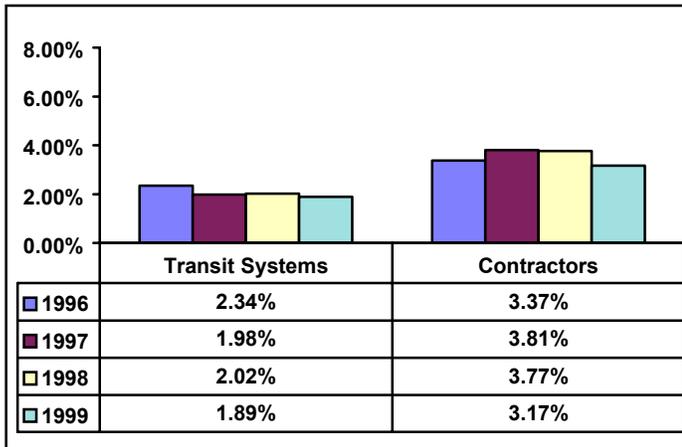
All the testing categories for both transit systems and contractors showed declines in the percent positive in 1999 as compared to 1996. There were, however, variations in 1997 and 1998 showing no particular trend.

The only two testing categories that showed a decline each year in positive test results were for transit systems' random and post-accident testing.

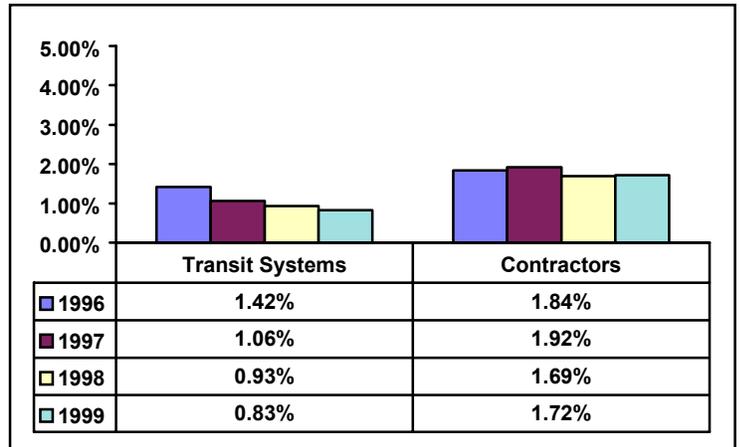
For alcohol testing (see Figure 5-11), random positives for transit systems were the only test type that showed a decline in the percent of positive test results \geq for each of the 4 years.

If comparing 1996 with 1999, there were less positives \geq for both transit systems and contractors for random, reasonable suspicion and follow-up testing. For post-accident testing there was a decrease in the percent positives for transit systems 1999 versus 1996. In 1997 and 1998, as with drug positives, there was much variation among the numbers.

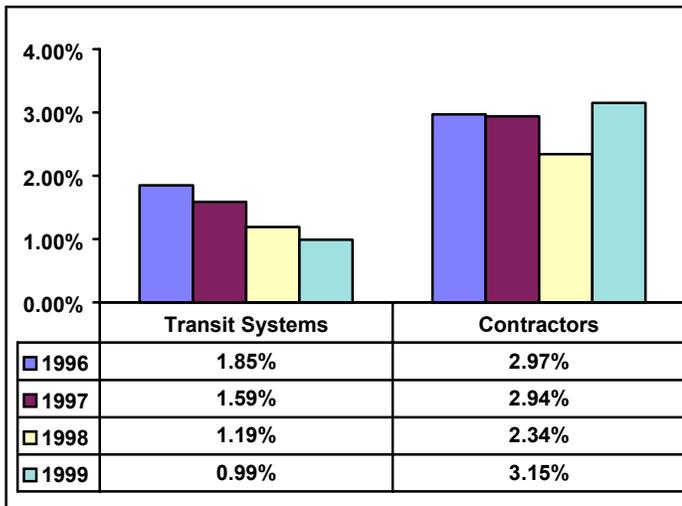
Pre-Employment



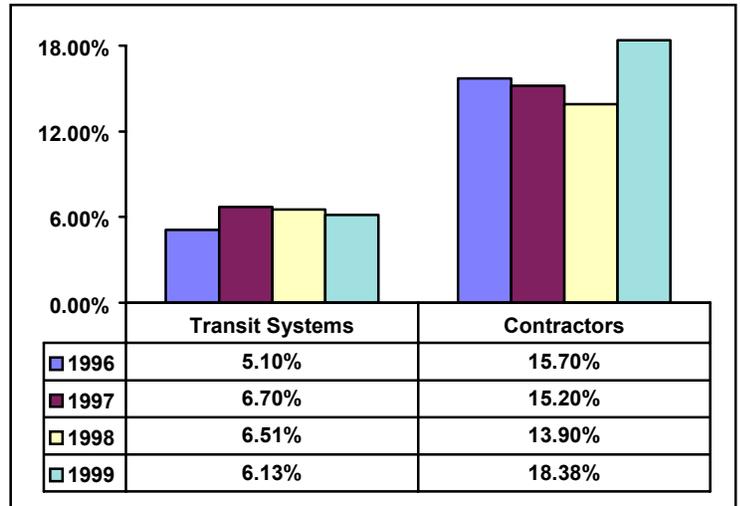
Random



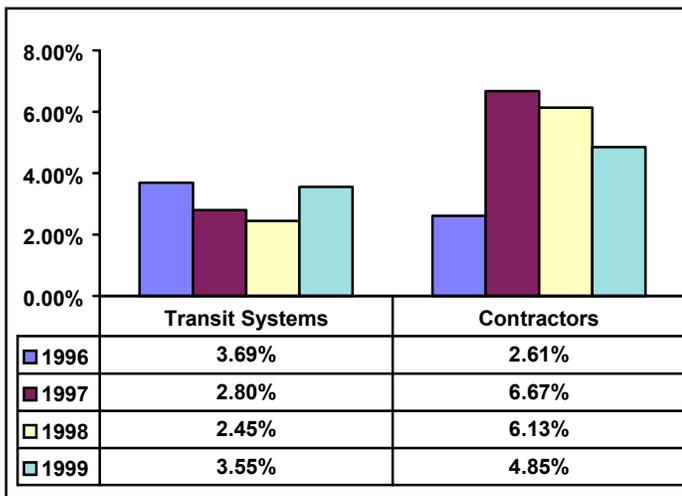
Post-Accident



Reasonable Suspicion



Return-to-Duty



Follow-up

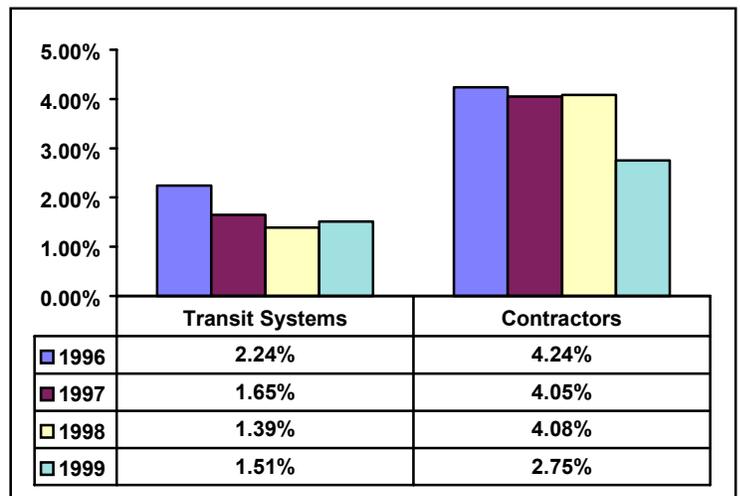
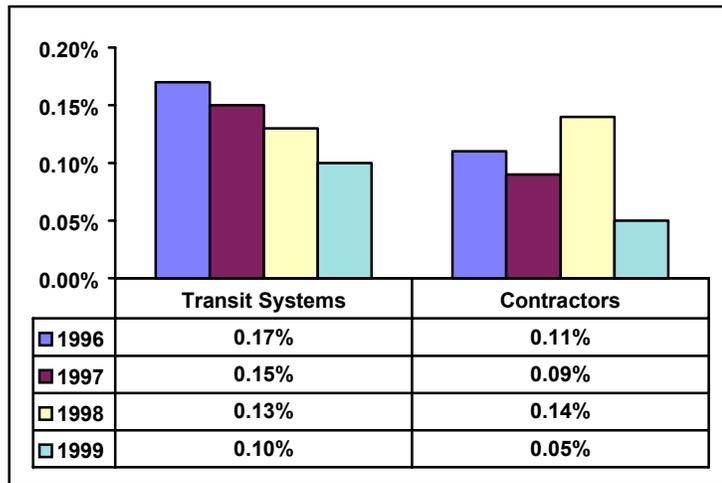
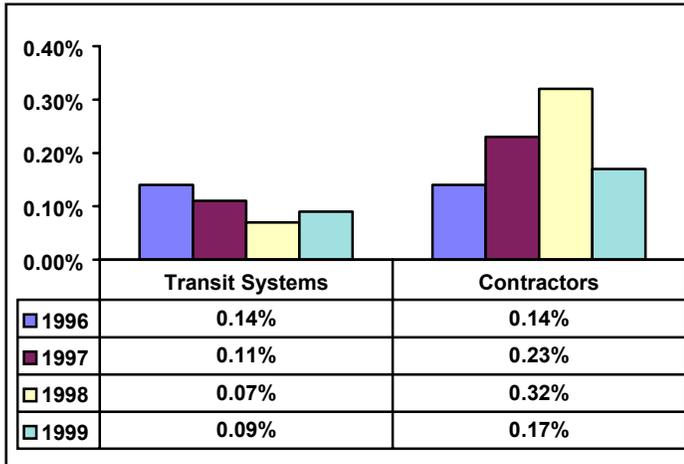


Figure 5-10. Drug Test Results by Test Type 1996 to 1999

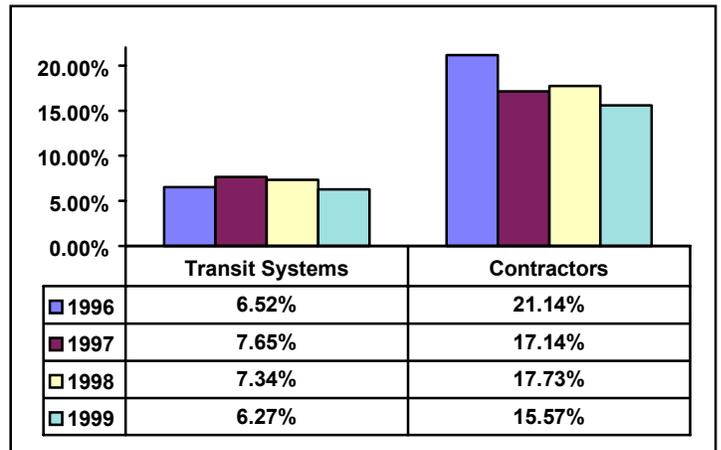
Random



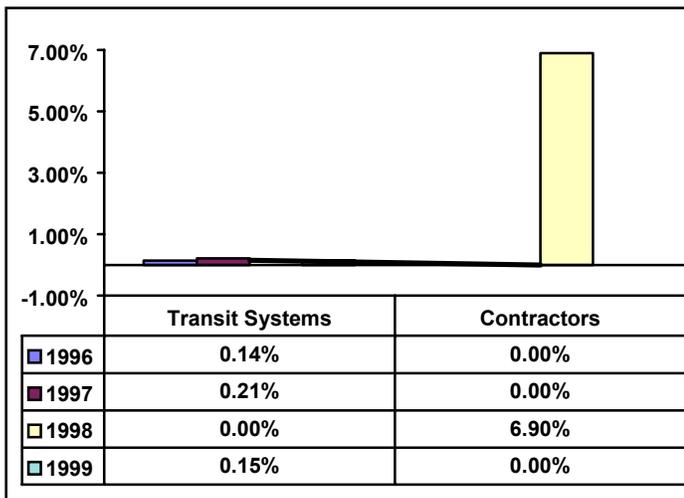
Post-Accident



Reasonable Suspicion



Return-to-Duty



Follow-up

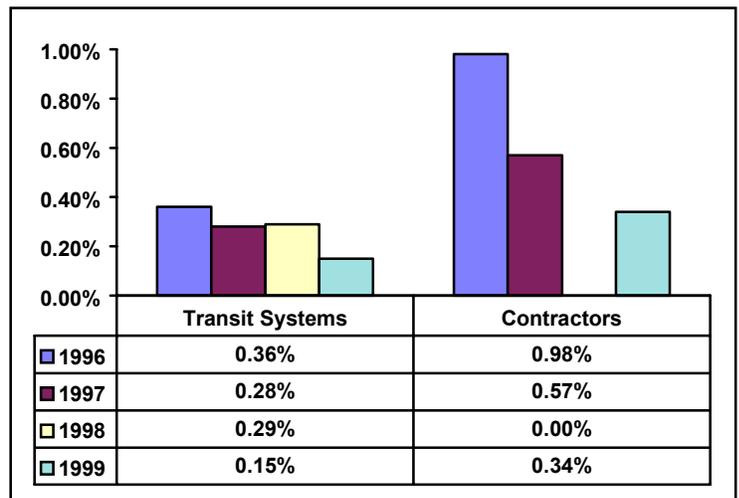


Figure 5-11. Alcohol Test Results ≥ 0.04 by Test Type 1996 to 1999

Figure 5-12 compares test results by drug type for the 4-year period of 1996 to 1999. As shown, marijuana (THC) was the predominant drug found in pre-employment, random and return-to-duty testing. Cocaine was the most frequently detected drug in the reasonable suspicion and follow-up testing categories. For post-accident testing, marijuana and cocaine were found in equal percentages: 49.1 percent for both drugs.

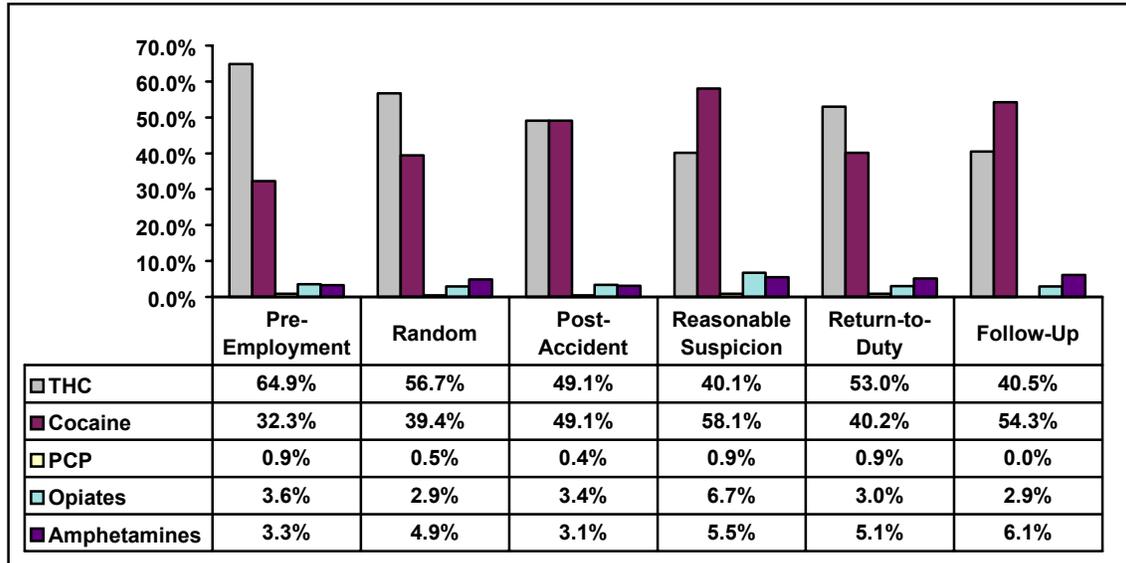


Figure 5-12. Comparison of Test Results by Drug Type 1996 to 1999

5.5 Drug and Alcohol Test Positives – Regional Comparisons

Figures 5-13 and 5-14 show random alcohol tests ≥ 0.04 and positive random drug test by region. Figure 5-15 depicts the percent of positive random drug tests by region. As shown, for each of the 4 years, marijuana was detected most frequently in positive samples, followed by cocaine. Amphetamines were the third most frequently detected, although in substantially smaller numbers; the highest percent of amphetamine positives was in 1997 with 5.18 percent. Specific percentages are cited in the following tables.

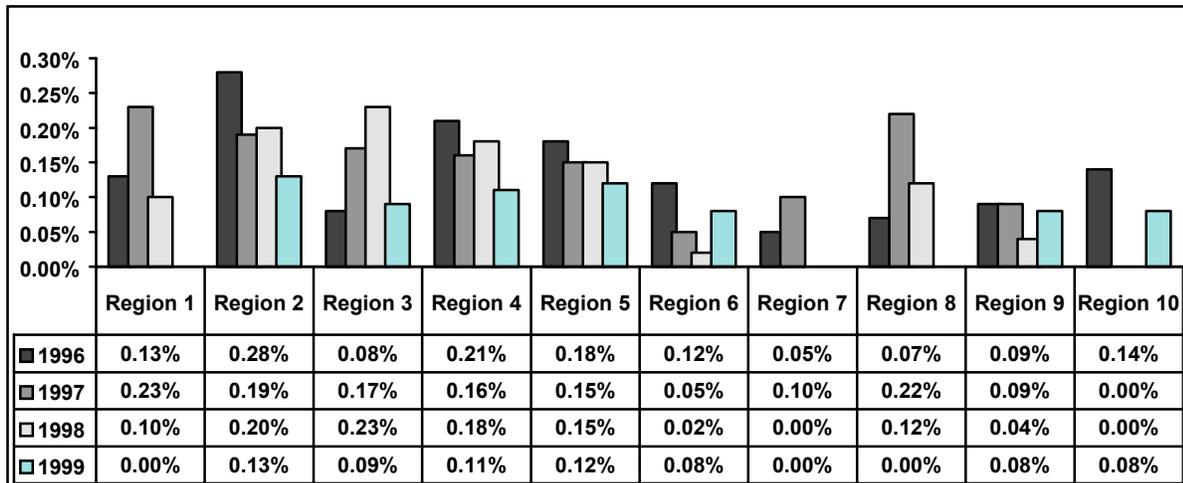


Figure 5-13. Random Alcohol Test Results \geq 0.04 by Region

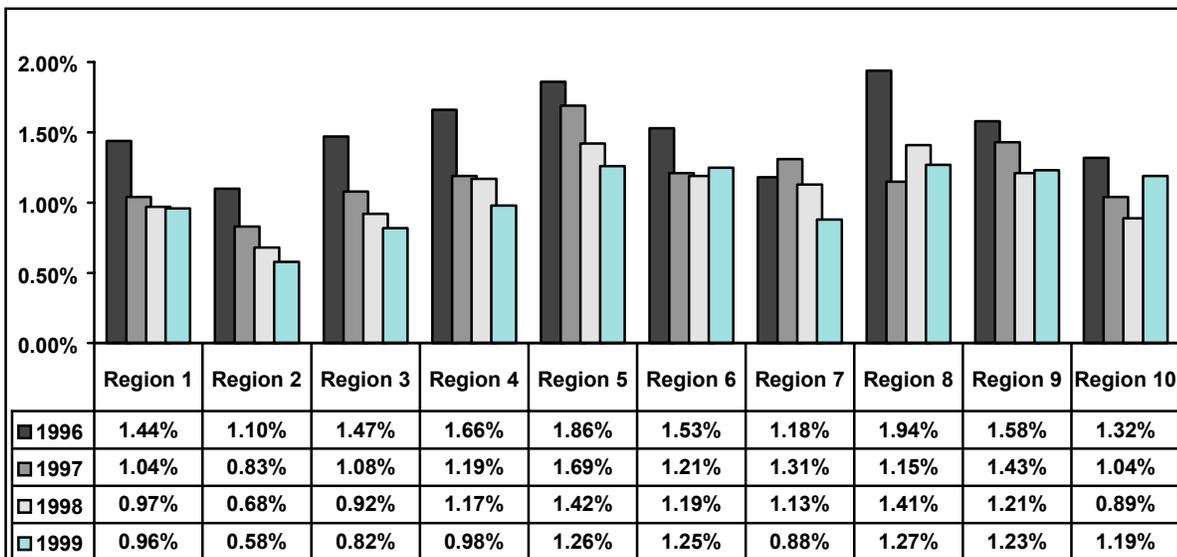


Figure 5-14. Positive Random Drug Tests by Region

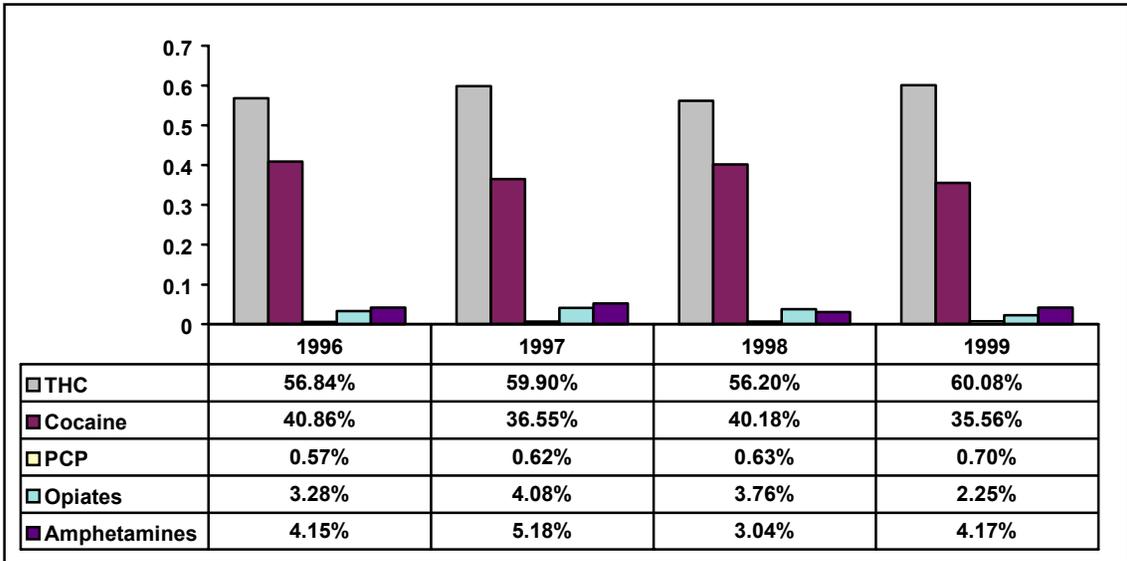


Figure 5-15. Percent of Positive Random Drug Tests by Region

APPENDIX A

GLOSSARY

GLOSSARY

Accident: An occurrence associated with the operation of a vehicle, if as a result

- (1) An individual dies;
- (2) An individual suffers a bodily injury and immediately receives medical treatment away from the scene of the accident;
- (3) With respect to an occurrence in which the mass transit vehicle involved is a bus, electric bus, van, or automobile, one or more vehicles incurs disabling damage as the result of the occurrence and is transported away from the scene by a tow truck or other vehicle; or
- (4) With respect to an occurrence in which the mass transit vehicle involved is a rail car, trolley car, trolley bus, or vessel, the mass transit vehicle is removed from revenue service.

Alcohol: The intoxicating agent in beverage alcohol, ethyl alcohol or other low molecular weight alcohols including methyl or isopropyl alcohol.

Alcohol Concentration: The alcohol in a volume of breath expressed in terms of grams of alcohol per 210 liters of breath as indicated by a breath test.

Alcohol Use: The consumption of any beverage, mixture or preparation, including any medication containing alcohol.

Anti-Drug Program: A program to detect and deter the use of prohibited drugs as required by FTA regulations.

Armed Security Personnel: Function including any person who provides security to protect persons or property and who carries a firearm.

Canceled or Invalid Test: In drug testing, a drug test that has been declared invalid by a Medical Review Officer (MRO). In alcohol testing, this would be a test that is deemed to be invalid. It is neither a positive nor a negative test.

CDL/Non-Revenue Vehicle: Job category including any transit employee who holds a Commercial Driver's License (CDL), performs a function requiring a CDL, and is not included in any other job category.

Confirmation (or Confirmatory) Test: In drug testing, a second analytical procedure to identify the presence of a specific drug or metabolite that is independent of the screening test and that uses a different technique and chemical principle from that of the screening test in order to ensure reliability and accuracy. In alcohol testing, a second test, following a screening test with a result of 0.02 or greater that provides quantitative data of alcohol concentration.

Consortium: An entity, including a group or association of employers, operators, recipients, subrecipients, or contractors, which provides drug testing services and acts on behalf of the employer.

Contractor: A person or organization that provides a service for a recipient, subrecipient, employer, or operator consistent with a specific understanding or arrangement. The understanding can be a written contract or an informal arrangement that reflects an ongoing relationship between the parties.

Covered Employee: A person, including an applicant, transferee, and certain volunteers, who performs a safety-sensitive function for a recipient, subrecipient, employer, or operator.

DOT: The United States Department of Transportation.

DOT Agency: An agency (or "operating administration") of the United States Department of Transportation administering regulations requiring drug testing.

Drug Metabolite: The specific substance produced when the human body metabolizes a given prohibited drug as it passes through the body and is excreted in urine.

Drug Test: The laboratory analysis of a urine specimen collected in accordance with 49 CFR part 40 and analyzed in a DHHS-approved laboratory.

Education: Efforts that include the display and distribution of informational materials, a community service hotline telephone number for employee assistance, and the transit entity policy regarding drug use and alcohol misuse in the workplace.

Employee: An individual designated in a DOT agency regulation as subject to drug testing and/or alcohol testing. "Employee" includes an applicant for employment.

Employer: A recipient or other entity that provides mass transportation services or which performs a safety-sensitive function for such recipient or other entity. This term includes subrecipients, operators, and contractors.

Follow-up Test: Required of employees who have returned to duty in a safety-sensitive position following a positive drug test result or an alcohol test result of ≥ 0.04 . A minimum of six tests must be performed during the first 12 months after the employee returned to duty.

FTA: The Federal Transit Administration, an agency of the U.S. Department of Transportation.

Large Operator: A recipient or subrecipient primarily operating in an area of 200,000 or more in population.

Medical Review Officer (MRO): A licensed physician (medical doctor or doctor of osteopathy) responsible for receiving laboratory results generated by an employer's drug testing program who has knowledge of substance abuse disorders and has appropriate medical training to interpret and evaluate an individual's confirmed positive test result together with appropriate medical history and any other relevant biomedical information.

Post-Accident Testing: Required testing for prohibited drugs and alcohol, following certain mass transit accidents. These accidents include those in which a death occurs, medical treatment away from the scene is required, or one or more of the vehicles involved incurs disabling damage.

Pre-Employment Testing: Testing that is designed to identify applicants who have consumed a prohibited drug in the recent past. Employers are prohibited from hiring an applicant for a safety-sensitive function unless they have a verified negative drug test.

Prohibited Drugs: Include marijuana (THC), cocaine, phencyclidine (PCP), opiates, or amphetamines.

Rail Operators: A recipient and its contractors and subrecipients that operate rapid transit operations within an urban area and are not connected to the general railroad system. Rail vehicles include railcars, trolley cars, and trolley buses.

Random Testing: Identifies employees who are using drugs or misusing alcohol by using an unpredictable and unannounced testing pattern.

Random Testing Rate: The number of drug tests equal to at least 50 percent of the total number of safety-sensitive employees and alcohol tests equal to at least 10 percent of the total number of safety-sensitive employees must be conducted each year by this method.

Reasonable Suspicion Testing: Required when an employer has reasonable suspicion that an employee has used a prohibited drug or has misused alcohol as defined in the regulations. Reasonable suspicion testing must be based on specific, contemporaneous, articulable observations made by a trained supervisor concerning the appearance, behavior, speech, or body odor of a safety-sensitive employee.

Recipient: An entity receiving Federal financial assistance under Section 5307, 5309, or 5311 of the Federal Transit Act or under sections 103(e)(4) of Title 23 of the U.S. Code.

Refuse to Submit (to an alcohol test): A covered employee fails to provide adequate breath for testing without a valid medical explanation.

Refuse to Submit (to a drug test): A covered employee fails to provide a urine sample as required by 49 CFR Part 40, without a valid medical explanation, after the employee has received notice of the requirement to be tested or engages in conduct that clearly obstructs the testing process.

Return-to-Duty Testing: Required before an employee is allowed to return to duty to perform a safety-sensitive function following a verified positive drug test, an alcohol result of 0.04 or greater, a refusal to submit to a test, or any other violation of the regulation.

Revenue Vehicle Control/Dispatch: Job function including any person who controls the dispatch or movement of revenue service vehicles.

Revenue Vehicle Operations: Function including any person who operates or works as a crewman on revenue service vehicles at any time.

Rural Operators: A subrecipient of 5311 funding primarily operating in an area of less than 50,000 in population.

Safety-Sensitive Function: Any of the following duties:

- Operating a revenue service vehicle, including when not in revenue service;
- Operating a non-revenue service vehicle, when required to be operated by a holder of Commercial Driver's License;
- Controlling dispatch or movement of a revenue service vehicle;
- Maintaining a revenue service vehicle or equipment used in revenue service, unless the recipient receives section 5311 funding and contracts out such services; and/or
- Providing security and carrying a firearm.

Screening Test (or Initial Test): In drug testing, an immunoassay screen to eliminate "negative" urine specimens from further analysis. In alcohol testing, an analytic procedure to determine whether an employee may have a prohibited concentration of alcohol in a breath specimen.

Small Operators: A recipient or subrecipient primarily operating in an area equal or greater than 50,000 and less than 200,000 in population.

Substance Abuse Professional (SAP): A licensed physician (Medical Doctor or Doctor of Osteopathy), or a licensed or certified psychologist, social worker, employee assistance professional, or addiction counselor (certified by the National Association of Alcoholism and Drug Abuse Counselors Certification Commission), with knowledge of and clinical experience in the diagnosis and treatment of drug and alcohol-related disorders.

Transit System: The public entity that receives the Federal grant (direct grant recipient), whether or not that recipient provides mass transit services directly.

Vehicle and Equipment Maintenance: Function including any person repairing or maintaining revenue service vehicles or other equipment used in revenue service.

Verified Negative (drug test result): A drug test result reviewed by a medical review officer and determined to have no evidence of prohibited drug use.

Verified Positive (drug test result): A drug test result reviewed by a medical review officer and determined to have evidence of prohibited drug use.

APPENDIX B

FTA REGIONS

The Federal Transit Administration is comprised of 10 regions, which are identified below. The data provided by these regions have facilitated the comparison of drug and alcohol test results and the identification of regional trends.

U.S. States and Territories Reporting to the 10 FTA Regions

Region 1	Region 2	Region 3	Region 4	Region 5
Connecticut	New Jersey	Delaware	Alabama	Illinois
Maine	New York	District of	Florida	Indiana
Massachusetts	Puerto Rico	Columbia	Georgia	Michigan
New Hampshire	Virgin Islands	Maryland	Kentucky	Minnesota
Rhode Island		Pennsylvania	Mississippi	Ohio
Vermont		Virginia	North Carolina	Wisconsin
		West Virginia	South Carolina	
			Tennessee	
 Region 6	 Region 7	 Region 8	 Region 9	 Region 10
Arkansas	Iowa	Colorado	American Samoa	Alaska
Louisiana	Kansas	Montana	Arizona	Idaho
New Mexico	Missouri	North Dakota	California	Oregon
Oklahoma	Nebraska	South Dakota	Guam	Washington
Texas		Utah	Hawaii	
		Wyoming	Nevada	
			Northern	
			Mariana Islands	

APPENDIX C

RAIL EMPLOYERS

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

VETERANS TRANSPORTATION SERVICES
 KIT CLARK SENIOR SERVICES
 GREATER LYNN SENIOR SERVICES, INC.
 THOMPSON TRANSIT, INC.
 TOWN OF BEDFORD
 CAVALIER COACH CORP.
 UNDA'S BUS SERVICE, INC.
 H & L BLOOM, INC.
 J B L BUS LINES, INC.
 YCN TRANSPORTATION
 JOSEPH'S LIMOUSINE SERVICES, INC.
 ABC BUS COMPANY, INC.
 PAUL REVERE TRANSPORTATION
 BRUSH HILL TRANSPORTATION COMPANY
 THE COACH COMPANY
 PETER PAN BUS LINES, INC.
 POWER LINE CONTRACTORS, INC.
 EXECUTIVE PERSONNEL SERVICES, INC.
 KIESSLING TRANSIT, INC.
 A+A CHARTER, INC.
 HARBOR CRUISE, LLC
 NATICK NEIGHBORHOOD BUS, TOWN OF NATICK
 KNORR BRAKE CORPORATION
 WATER TRANSPORTATION ALTERNATIVES
 A&B COACH LINES
 LAIDLAW TRANSIT

BOSTON MA
 WALTHAM MA
 DORCHESTER MA
 LYNN MA
 FRAMINGHAM MA
 BEDFORD MA
 BOSTON MA
 STOUGHTON MA
 TAUNTON MA
 BRAINTREE MA
 NORWOOD MA
 MEDFORD MA
 NO. ANDOVER MA
 CHELSEA MA
 RANDOLPH MA
 PLAISTOW NH
 SPRINGFIELD MA
 READING MA
 WASHINGTON DC
 BRAINTREE MA
 WOBURN MA
 BOSTON MA
 NATICK MA
 WESTMINSTER MD
 QUINCY MA
 BRAINTREE MA
 CAMBRIDGE MA

NIAGARA FRONTIER TRANSPORTATION METRO SYSTEM, INC.

BUFFALO NY

MTA-NEW YORK CITY TRANSIT

RJR PARATRANSIT CORPORATION
 HALLS SECURITY ANALYSTS, INC.
 UNICCO SERVICE COMPANY
 GOODYEAR MILEAGE SALES AUTHORITY
 AMERICAN AMBULETTE CORP.
 ATLANTIC PARATRANS

BROOKLYN NY
 STATEN ISLAND NY
 BELLE ROSE NY
 MACCLENNY FL
 AKRON OH
 YONKERS NY
 RIDGEWOOD NY

PORT AUTHORITY TRANSIT CORPORATION (PATCO)

LINDENWOLD NJ

NJ TRANSIT

ATLANTIC COUNTY GOVERNMENT
 SENIOR CITIZENS UNITED COMMUNITY SERVICES
 COUNTY OF GLOUCESTER
 LION CORP.
 GOODYEAR MILEAGE SALES AUTHORITY
 UNICCO SERVICE COMPANY AUTHORITY
 FIRESTONE MILEAGE SALES
 LAIDLAW TRANSIT SERVICE, INC.
 LAIDLAW TRANSIT SERVICES
 LAIDLAW TRANSIT SERVICES, INC.
 ATLANTIC PARATRANS

NEWARK NJ
 NORTHFIELD NJ
 MT. EPHRAIM NJ
 WOODBURY NJ
 RIO GRANDE NJ
 AKRON OH
 MACCLENNY FL
 SAN ANTONIO TX
 UNION NJ
 CINNAMINSON NJ
 SAYERVILLE NJ
 EGG HARBOR TWP. NJ

CAMBRIA COUNTY TRANSIT AUTHORITY

UNITED CEREBRAL PALSY

JOHNSTOWN PA
 JOHNSTOWN PA

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY

ATLANTIC PARATRANS, INC.
 METRO CARE INC.
 COMMUNITY TRANSIT OF DELAWARE COUNTY
 TRIAGE, INC.
 KRAPF'S PARA TRANSIT DIVISION
 GOODYEAR MILEAGE SALES
 UNICCO SERVICE COMPANY
 KING PARATRANSIT SERVICE, INC.

PHILADELPHIA PA
 PHILADELPHIA PA
 BONSALEM PA
 EDDYSTONE PA
 PHILADELPHIA PA
 GLENMOORE PA
 AKRON OH
 MACCLENNY FL
 KING OF PRUSSIA PA

PORT AUTHORITY OF ALLEGHENY

ACCESS TRANSPORTATION SYSTEMS, INC.
 DUQUESNE INCLINE
 GENESIS VII, INC. - PITTSBURGH
 EXECUTIVE PERSONNEL SERVICES, INC.
 FIRESTONE MILEAGE SALES

PITTSBURGH PA
 PITTSBURGH PA
 PITTSBURGH PA
 TITUSVILLE FL
 WASHINGTON DC
 SAN ANTONIO TX

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DIAMOND TRANSPORTATION SERVICES, INC.
 METRO ACCESS OF MARYLAND
 CLEAN VENTURE, INC.
 BIG APPLE TIRE, INC.
 A&A WASTE OIL CO.
 GOODYEAR MILEAGE SALES - WMATA
 EASTERN TRANS WASTE OF MD INC.
 TRANSPORTATION MGMT. SERVICES, INC.

WASHINGTON DC
 ALEXANDRIA VA
 TUXEDO MD
 BALTIMORE MD
 BROOKLYN NY
 LINTHICUM HEIGHTS MD
 AKRON OH
 CAPITOL HEIGHTS MD
 FORESTVILLE MD

MASS TRANSIT ADMINISTRATION

EYRE BUS SERVICE, INC.
 DILLON'S BUS SERVICE, INC.
 FIRESTONE MILEAGE SALES
 KELLER TRANSPORTATION INC

BALTIMORE MD
 GLENELY MD
 MILLERSVILLE MD
 SAN ANTONIO TX
 WALDORF MD

CHATTANOOGA AREA REGIONAL TRANS AUTHORITY (CARTA)

CHATTANOOGA TN

MIDSOUTH TRANSPORTATION MGMT., INC. (MATA)

MEMPHIS TN

METROPOLITAN ATLANTA RAPID TRANSIT

MICHELIN NORTH AMERICA
 MAXIMUM SAFETY/SECURITY ASSOC., INC.
 S & W SERVICES OF ATLANTA, INC.
 ADVANCED RAIL MANAGEMENT CORPORATION
 MARTA TRACK CONSTRUCTORS, INC.
 SPERRY RAIL SERVICE
 LAIDLAW TRANSIT SERVICES

ATLANTA GA
 GREENVILLE SC
 DECATUR GA
 TUCKER GA
 INDIALANTIC FL
 DECATUR GA
 DANBURY CT
 NEW ORLEANS LA

MIAMI-DADE TRANSIT AGENCY

ALANIS SECURITY, INC.
 AMERICAN BRAKE & CLUTCH
 CUMMINS SOUTHEASTERN POWER, INC.
 FEICK SECURITY
 FLORIDA DETROIT DIESEL-ALLISON, INC.
 HANDI-VAN, INC.
 KAUFFS OF MIAMI, INC.
 MILEX SECURITY SERVICES
 PRECISION AUTO & TRUCK SERVICE, INC.

MIAMI FL
 MIAMI FL
 TROY MI
 HIALEAH GARDENS FL
 MIAMI FL
 JACKSONVILLE FL
 MIAMI FL
 OPA-LOCKA FL
 MIAMI FL
 MIAMI FL

RED TOP TRANSPORTATION, INC.	MIAMI	FL
AMC MEDICAL TRANSPORTATION	MIAMI	FL
ZUNI TRANSPORTATION INC.	MIAMI	FL
AAA WHEELCHAIR/STS	MIAMI	FL
COMPREHENSIVE PARATRANSIT	MIAMI	FL
GOODYEAR MILEAGE SALES	AKRON	OH
GENESIS VII, INC. - MIAMI DADE COUNTY	TITUSVILLE	FL
UNICCO SERVICE COMPANY	MACCLENNY	FL
SUPER NICE LIMO	MIAMI	FL
MINORITY MOBILE SYSTEM, INC.	HIALEAH	FL
SUPER YELLOW CAB	MIAMI	FL
WRP TRANSPORTATION	MIAMI SHORES	FL
TRUCK TRAILER TRANSIT, INC.	DETROIT	MI
THE WACKENHUT CORPORATION	MIAMI	FL
JACKSONVILLE TRANSPORTATION AUTH.	JACKSONVILLE	FL
BUGGS TRANSPORTATION	JACKSONVILLE	FL
BROWNING TRANSPORTATION, INC.	JACKSONVILLE	FL
INTELITRAN	JACKSONVILLE	FL
GJTC/DAN BETH MEDIVAC	JACKSONVILLE	FL
GREATER CLEVELAND RTA	CLEVELAND	OH
HOPKINS AIRPORT LIMOUSINE SERVICE, INC.	CLEVELAND	OH
GOODYEAR MILEAGE SALES	AKRON	OH
INTRANS, INC.	CLEVELAND	OH
GENESIS VII, INC.	TITUSVILLE	FL
CHICAGO TRANSIT AUTHORITY	CHICAGO	IL
SIMTRAN TRANSPORTATION L.L.C.	EVANSTON	IL
COOK-DUPAGE TRANSPORTATION CO., INC.	CHICAGO	IL
SCR MEDICAL TRANSPORTATION, INC.	CHICAGO	IL
ART'S TRANSPORTATION L.L.C.	CHICAGO	IL
DETROIT TRANSPORTATION CORPORATION	DETROIT	MI
BRAZOS TRANSIT-ISLAND TRANSIT	BRYAN	TX
TRANSIT MANAGEMENT OF SOUTHEAST, LA, INC.,	NEW ORLEANS	LA
WASHINGTON TRANSPORTATION, INC.	NEW ORLEANS	LA
CITY OF NEW ORLEANS	NEW ORLEANS	LA
BAYOU STATE SECURITY SERVICES, INC.	NEW ORLEANS	LA
PENSKE TRUCK LEASING CO., L.P.	READING	PA
EXECUTIVE PERSONNEL SERVICES, INC.	WASHINGTON	DC
FUELMAN	WESTWEGO	LA
DALLAS AREA RAPID TRANSIT	DALLAS	TX
TCT TRANSIT SERVICES	DALLAS	TX
ACCU-GUARD, INC.	DALLAS	TX
GOODYEAR MILEAGE SALES	AKRON	OH
GENESIS VII, INC.	TITUSVILLE	FL
BARRIER SYSTEMS, INC.	CARSON CITY	NV
ATE MANAGEMENT & SERVICE CO., INC.	DALLAS	TX
RYDER/ATE	DALLAS	TX
BI-STATE DEVELOPMENT AGENCY	ST. LOUIS	MO
BIG APPLE TIRE, INC.	BROOKLYN	NY
CCC&C, INC.	ST. LOUIS	MO

WHELAN SECURITY COMPANY, INC.	ST. LOUIS	MO
FIRESTONE MILEAGE SALES	SAN ANTONIO	TX
DENVER - RTD	DENVER	CO
SENIORS RESOURCE CENTER, INC.	DENVER	CO
SPECIAL TRANSPORTATION FOR BOULDER COUNTY	BOULDER	CO
FREEDOM CABS, INC.	COMMERCE CITY	CO
GOODYEAR MILEAGE SALES	AKRON	OH
UNICCO SERVICE COMPANY	MACCLENNY	FL
A-1 SECURITY	DENVER	CO
LAIDLAW TRANSIT SERVICES	COMMERCE CITY	CO
LAIDLAW TRANSIT SERVICES	DENVER	CO
THE WACKENHUT CORPORATION	AURORA	CO
ATCVANCOM OF COLORADO, L.P.	DENVER	CO
BAY AREA RAPID TRANSIT	OAKLAND	CA
FRIENDLY TRANSPORTATION, INC.	OAKLAND	CA
M.V. TRANSPORTATION	SAN LEANDRO	CA
LAIDLAW TRANSIT SERVICES	OVERLAND PARK	KS
VALLEY TRANSPORTATION AUTHORITY	SAN JOSE	CA
M.V. TRANSPORTATION	SAN JOSE	CA
SAN FRANCISCO MUNICIPAL RAILWAY	SAN FRANCISCO	CA
GOODYEAR MILEAGE SALES	AKRON	OH
LAIDLAW TRANSIT SERVICES	SAN FRANCISCO	CA
M.V. TRANSPORTATION	SAN FRANCISCO	CA
SACRAMENTO REGIONAL TRANSIT DISTRICT	SACRAMENTO	CA
GOODYEAR MILEAGE SALES	AKRON	OH
UNICCO SERVICE COMPANY	MACCLENNY	FL
PARATRANSIT, INC.	SACRAMENTO	CA
SAN DIEGO TROLLEY, INC.	SAN DIEGO	CA
LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTH.	LOS ANGELES	CA
U.S. GUARDS CO., INC.	LOS ANGELES	CA
HARMON & SON TIRE CENTER, INC.	GARDENA	CA
PARKING CONCEPTS, INC.	IRVINE	CA
INTER-CON SECURITY SYSTEMS, INC.	PASADENA	CA
COMMUNITY JOINT VENTURE PARTNERS	GARDENA	CA
GOODYEAR MILEAGE SALES	AKRON	OH
BASZILE METALS SERVICE	LOS ANGELES	CA
ATCVANCOM	VALENCIA	CA
LAIDLAW TRANSIT SERVICES, INC.	LOS ANGELES	CA
RYDER/ATE	LOS ANGELES	CA
RYDER/ATE	LOS ANGELES	CA
KING COUNTY	SEATTLE	WA
MULTI SERVICE CENTERS OF N & E KING COUNTY	BELLEVUE	WA
3A/EDJ TRANSIT	SEATTLE	WA
SEATTLE PERSONAL TRANSIT	SEATTLE	WA
PACIFIC MOBILITY, INC.	SEATTLE	WA
EMMETT KOELSCH COACHES	REDMOND	WA
PARATRANSIT SERVICES	BREMERTON	WA
HARTS AUTOMOTIVE	SEATTLE	WA

ARGOSY L.P.
FIRESTONE MILEAGE SALES
LAIDLAW TRANSIT SERVICES, INC.
LAIDLAW TRANSIT SERVICES, INC.
RYDER TRUCK RENTAL, INC.
RYDER/ATE
ATC/VANCOM OF KING COUNTY

SEATTLE WA
SAN ANTONIO TX
WOODINVILLE WA
SEATTLE WA
TUKWILA WA
FEDERAL WAY WA
KENT WA

TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT

BROADWAY CAB, INC.
LAIDLAW TRANSIT SERVICES
LAIDLAW TRANSIT SERVICES
ATC/VANCOM MANAGEMENT SERVICES
LAIDLAW TRANSIT SERVICES
RYDER/ATE

PORTLAND OR
PORTLAND OR
PORTLAND OR
PORTLAND OR
PORTLAND OR
BEAVERTON OR
PORTLAND OR

SEATTLE CENTER/CITY OF SEATTLE

SEATTLE WA

