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The Drug and Alcohol Testing Results 1998 Annual Report is a compilation and analysis of drug and alcohol testing results reported by transit systems in the United States during 1998. The report covers results for the following drug types: marijuana (THC), cocaine, phencyclidine (PCP), opiates, and amphetamines. The drug test types covered are: pre-employment, random, post-accident, reasonable suspicion, return-to-duty, and follow-up. The report also covers testing results for alcohol for the following test types: random, post-accident, reasonable suspicion, return-to-duty, and follow-up.

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PREFACE

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METRIC/ENGLISH CONVERSION FACTORS

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1 inch (in) = 2.5 centimeters (cm)	1 millimeter (mm) = 0.04 inch (in)
1 foot (ft) = 30 centimeters (cm)	1 centimeter (cm) = 0.4 inch (in)
1 yard (yd) = 0.9 meter (m)	1 meter (m) = 3.3 feet (ft)
1 mile (mi) = 1.6 kilometers (km)	1 meter (m) = 1.1 yards (yd)
	1 kilometer (km) = 0.6 mile (mi)
AREA (APPROXIMATE)	**AREA (APPROXIMATE)**
1 square inch (sq in, in^2) = 6.5 square centimeters (cm^2)	1 square centimeter (cm^2) = 0.16 square inch (sq in, in^2)
1 square foot (sq ft, ft^2) = 0.09 square meter (m^2)	1 square meter (m^2) = 1.2 square yards (sq yd, yd^2)
1 square yard (sq yd, yd^2) = 0.8 square meter (m^2)	1 square kilometer (km^2) = 0.4 square mile (sq mi, mi^2)
1 square mile (sq mi, mi^2) = 2.6 square kilometers (km^2)	10,000 square meters (m^2) = 1 hectare (ha) = 2.5 acres
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	= 1.1 short tons
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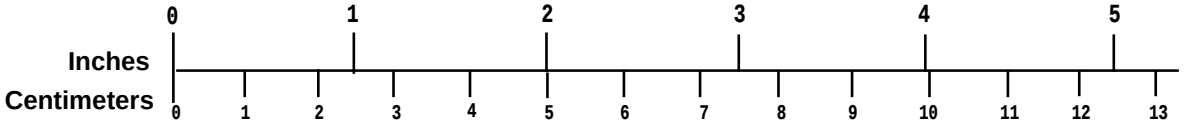

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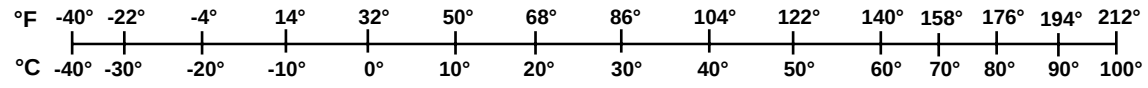

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EXECUTIVE SUMMARY

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 1998 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 reporting forms for calendar year 1998 from 2,477 individual employers representing 1,631 transit systems and 846 contractors. Of the 2,477 individual employers, 855 were large operators, 382 were small operators, and 1,240 were rural operators. A total of 1,606 of the total employers reported being a member of a consortium. Approximately 72 percent of all employers reported no positive drug test results, and 96 percent of employers reported no alcohol test results ≥ 0.04 percent. Thirty-five percent of contractors submitted a greater percentage of forms with at least one positive drug test result, compared to 23 percent of transit systems. Five percent of contractors submitted forms with at least one alcohol test result ≥ 0.04 percent (5 percent), compared to 3 percent of transit systems.

Employers reported a total of 224,696 employees performing safety-sensitive functions; 81.2 percent of these employees are employed at transit systems with 18.8 percent employed by contractors. The average transit system employs more than twice as many safety-sensitive employees than the average contractor, 111 to 51. Large operators employ an average of 211 safety-sensitive employees compared to 47 for small operators and 21 for rural. The largest number of employees performing safety-sensitive functions are engaged in revenue vehicle operation (69.1 percent) followed by revenue vehicle and equipment maintenance (19.4 percent). Revenue vehicle control/dispatch, CDL/non-revenue vehicle, and armed security personnel together make-up less than 12 percent of the overall labor force (7.6 percent, 1.9 percent, and 1.8 percent, respectively). Ninety-two transit systems reported contracting out all of their safety-sensitive functions (5.3 percent of all transit systems). The largest number of contract employees were involved in revenue vehicle operation at 21.5 percent, followed by revenue vehicle

control/dispatch at 19.9 percent. For rural operators, contractors comprise a relatively small percent of the total number of FTA-covered employees at 16.2 percent; for large operators, contractors comprise a slightly higher total at 19.0 percent; for small operators, contractors comprise 26.2 percent of the total number of FTA-covered employees.

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 December 1998, when the FTA Drug and Alcohol Project Office, located at the Volpe Center in Cambridge, Massachusetts, conducted its annual mailing of FTA Drug and Alcohol reporting materials, included was a set of five FTA Drug and Alcohol MIS reporting diskettes. Approximately 1,200 sets of diskettes were mailed to FTA recipients, subrecipients, and State Department of Transportation (DOT) offices. For the first time, reporters had the option of reporting on paper forms, or by using the electronic reporting system and submitting results on a data diskette; 317 reporters opted for the data diskette, more than 25 percent of those receiving the diskettes. In addition, approximately 300 reporters used electronic reporting to complete the information and then reported on paper forms generated through the electronic reporting software.

Of the 317 reporters who reported electronically, 58 or 18.3 percent indicated at least one positive drug test, and 27 or 8.5 percent indicated at least one positive alcohol test.

DRUG TEST RESULTS

All employers must establish an anti-drug program that encompasses training for and testing of employees and supervisors performing safety-sensitive functions. Supervisors receive specific training to recognize the signs and symptoms of prohibited drug use. The FTA's drug rule specifies that safety-sensitive employees may not use any of five prohibited substances (or their metabolites): marijuana, cocaine, phencyclidine (PCP), opiates (e.g., heroin, morphine, codeine), or amphetamines (e.g., racemic, amphetamine, dextroamphetamine, and methamphetamine).

If an FTA-covered employee has a verified positive result from a drug test, the employee must be removed from the safety-sensitive position, be informed of available educational and treatment programs, and be referred to a substance abuse professional to determine whether the employee has a drug problem. If an employer's policy allows for a "second chance," the regulation states that the employee must complete a course of treatment prescribed by the substance abuse professional and take a return-to-duty drug test with a verified negative result prior to returning to a safety-sensitive position.

The 1998 drug-testing program performed by large, small and rural transit employers revealed the following major findings:

A total of 111,490 specimens were collected for random drug testing. Of that number, 1,196 specimens tested positive for one or more of the five prohibited drugs. Random drug testing

accounted for 55.5 percent of the total specimens collected and 35.6 percent of the total positive specimens (of 3,355 total positive specimens).

The overall positive random test rate was 1.07 percent industry-wide, as shown in table ES-1. Positive random test results were 0.93 percent for transit systems and 1.69 percent for contractors. The 1997 random rate of positive test results was 1.21 percent.

Table ES-1. 1998 Random Drug Test Results

			Percent Positive
Transit Systems	90,855	847	0.93
Contractors	20,635	349	1.69
			1.07

There was little disparity in the percent of random drug positives between large, small, and rural operators (1.06 percent, 1.19 percent, and 1.12 percent, respectively).

A total of 200,748 specimens were collected for all six types of drug testing. Of that figure, 3,355 specimens tested positive for one or more of the five prohibited drugs. Transit systems accounted for 75.3 percent of all drug tests conducted. Contractors accounted for the remaining 24.7 percent of the total drug tests despite accounting for only 18.8 percent of total safety-sensitive employees. The overall rate of positive drug tests was 1.67 percent; the 1997 rate was 1.77 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 (8.04 percent). Cocaine was found to be present in 63 percent of all positive reasonable suspicion drug tests; marijuana was second at 42 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 (1.07 percent). Random testing was by far the most common test to be conducted, with 60.1 percent of all specimens collected by transit systems, followed by pre-employment testing (23.2 percent). Pre-employment testing was the most common test conducted by contractors at more than twice the rate as that of transit systems at 49.6 percent.

Across employee categories there was some variation in the percent of positive random tests. The lowest rate was 0.60 percent for revenue vehicle control/dispatch, and the highest was 1.22 percent for CDL/non-revenue vehicle operators. CDL/non-revenue vehicle operators also had the highest percent of positives of all specimens collected for both transit systems and contractors. Armed security personnel had the lowest percent of positives for both transit systems and contractors.

Marijuana and cocaine were detected most frequently in the specimens that tested positive for drugs. Of 3,355 positive specimens, 54.16 percent tested positive for marijuana and 38.69 percent tested positive for cocaine. Marijuana was also detected most frequently in all 10 regions. One hundred thirty-five specimens tested positive for multiple drugs; the most common multiple-drug combination was marijuana and cocaine, with 77 positive results. There were 22

cases of individuals testing positive for both drugs and alcohol and there was one isolated case of an individual testing positive for the five illegal substances.

There were 199 qualifying accidents that resulted in a positive post-accident drug test (128 from transit systems and 71 from contractors). There were no fatalities reported as resulting from these accidents. Cocaine was detected in 55.7 percent of all positive post-accident drug tests; marijuana was second at 42.9 percent.

ALCOHOL TEST RESULTS

Transit systems 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 nonfatal 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 1998 alcohol-testing program performed by large, small, and rural transit employers revealed the following: of the total of 41,206 random alcohol-screening tests conducted, 54 confirmation test results ≥ 0.04 were documented (0.13 percent), as shown in Table ES-2. The rate for transit systems was 0.13 percent. For contractors, the rate was 0.14 percent. In 1997, the random rate was 0.14 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 definition describes the violation rate as the number of random test results ≥ 0.04 in addition to the number of employees who refused a random test, divided by the total number of random tests administered plus the number of employees who refused a random test. The violation rate for 1998 for all employers (transit systems and contractors) is 0.22 percent.

Table ES-2. 1998 Random Alcohol Test Results

			Percent ≥ 0.04
Transit Systems	34,039	44	0.13
Contractors	7,167	10	0.14
			0.13

- For 1998, the FTA reduced the random alcohol testing rate to 10 percent. (Effective as of January 1, 1998, as announced in the *Federal Register* of January 6, 1998.)

- The percent of total test results ≥ 0.04 for all test types was 0.29 percent industry-wide. The rate for transit systems was 0.24 percent. For contractors, the rate was 0.56 percent. For 1997, the percent of total test results ≥ 0.04 was 0.25 percent.

- Transit systems conducted 83.8 percent of the 64,546 total screening tests. Contractors conducted 16.2 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 9.52 percent. Contractors returned alcohol concentrations at ≥ 0.04 for reasonable suspicion testing more often than transit systems (17.73 percent versus 7.34 percent).

- Of the 5 employee categories, the highest percent of test results ≥ 0.04 was in the Revenue Vehicle Control/Dispatch category at 0.47 percent. Armed Security Personnel had zero test results ≥ 0.04.

- The post-accident test type had the lowest percent of test results ≥ 0.04 at 0.12 percent.

- There were 15 accidents reported that resulted in a post-accident alcohol test result of 0.04 or greater. There were no fatalities resulting from these accidents. Contractors accounted for 8 of the post-accident test results ≥ 0.04 and transit systems accounted for 7.

- The Revenue Vehicle Operations employee category accounted for all of the alcohol test results ≥ 0.04 for post-accident testing.

- There were 59 alcohol test refusals, 31 for transit systems and 28 for contractors. Thirty-five refusals were for random tests and 24 were for non-random tests.

- There were 82 reported "Other" Alcohol Violations -- 4 additional specific circumstances in which employers may not allow their safety-sensitive employees to consume alcohol as mentioned above.

TREND RESULTS 1996 THROUGH 1998

The number of FTA drug and alcohol reporting forms received from 1996 through 1998 has increased by 8.3 percent. The number of these reports received from transit systems has increased by 3.2 percent while reports received from contractors have increased by 19.7 percent. The number of reported safety-sensitive employees has increased by 4.1 percent for transit systems and 9.7 percent for contractors. The percent of contracted FTA-covered employees, increased from 18.4 percent in 1996 to 19.2 percent in 1998.

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 3-year period from 1996 to 1998. Transit systems have shown a significant decrease in both random drug and random alcohol testing whereas the percent of random alcohol test results ≥ 0.04 has increased over the same period for contractors. The percent of positive random drug test results has decreased for contractors, but at a much slower rate than that of transit systems. See Tables ES-3 and ES-4.

Table ES-3. 1996 - 1998 Positive Random Drug Test Results

			1998
Transit Systems	1.42%	1.06%	0.93%
Contractors	1.84%	1.92%	1.69%
			1.07%

Table ES-4. 1996 - 1998 Random Alcohol Test Results ≥ 0.04

			1998
Transit Systems	0.17%	0.15%	0.13%
Contractors	0.11%	0.09%	0.14%
			0.13%

As with random testing, the percent of total positive drug test results decreased each year for the 3-year period from 1996 to 1998. Transit systems showed a significant decrease in total positive drug tests whereas the percent of total positive drug tests slightly increased over the same period for contractors. The percent of total alcohol test results ≥ 0.04 increased over the period of 1996 to 1998. The percent of total alcohol test results ≥ 0.04 has shown little change for transit systems but increased significantly for contractors, approximately doubling. See Tables ES-5 and ES-6.

Table ES-5. 1996 - 1998 Positive Drug Test Results

			1998
Transit Systems	1.75%	1.41%	1.28%
Contractors	2.75%	3.01%	2.87%
			1.67%

Table ES-6. 1996 - 1998 Alcohol Test Results ≥ 0.04

			1998
Transit Systems	0.26%	0.23%	0.24%
Contractors	0.27%	0.28%	0.56%
			0.29%

The number of random drug tests has increased at a rate of 3.1 percent for transit systems and 2.0 percent for contractors from 1996 to 1998.

The number of non-random drug tests has increased at the much higher rate of 21.5 percent for transit systems and 8.7 percent for contractors from 1996 to 1998.

The random alcohol testing requirement was reduced in 1998 from 25 percent to 10 percent and is indicated in the number of tests, which have decreased by 33.7 percent for transit systems and 36.5 percent for contractors.

Like drug tests, the number of non-random alcohol tests has increased significantly by 10.2 percent and 26.4 percent respectively for transit systems and contractors.

Of the 6 required drug and 5 alcohol test types, the only test type with an increase in its positive drug test rate and alcohol test results ≥ 0.04 from 1996-98 was reasonable suspicion testing. Post-accident testing also had an increase in alcohol test results ≥ 0.04.

Of the 5 employee categories that comprise FTA-covered employees, all categories have shown a decrease in the percent of total positive drug test results. Almost the opposite is true with alcohol test rates ≥ 0.04, where 3 of the 5 employee categories have increased. For contractors all 5 categories have increased or remained the same for alcohol test rates ≥ 0.04. See Tables ES-7 and ES-8.

Table ES-7. 1996 - 1998 Positive Drug Test Results/ Employee Category

			1998
Revenue Vehicle Operation	2.06%	1.87%	1.79%
Revenue Veh. And Equip. Maint.	1.95%	1.69%	1.45%
Revenue Veh. Control/Disp.	1.20%	0.91%	0.85%
CDL/Non-Revenue Vehicle	2.55%	2.05%	2.06%
Armed Security Personnel	0.73%	0.28%	0.60%
			1.67%

Table ES-8. 1996 - 1998 Alcohol Test Results ≥ 0.04/ Employee Category

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

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 annual report covers the testing results from calendar year 1998.

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 approved by the Office of Management and Budget (OMB). 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 (1998)

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 1998, 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 an 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.

* On September 30, 1997, the Department of Health and Human Services (DHHS) published the final amendments to its Mandatory Guidelines for Federal Workplace Testing Programs (DHHS Guidelines) and indicated that December 1, 1998 would be the effective date for implementing these amendments. The amendments raised the initial and confirmatory test opiate thresholds from 300 nanograms per milliliter (ng/ml) to 2000 ng/ml. The DHHS amendments also established a new requirement to test for 6-acetylmorphine (6-AM), a metabolite that comes only from heroin, using a 10 ng/ml confirmatory level, for specimens that have tested positive for morphine on the confirmatory test at the 2000 ng/ml level.

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 improves 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 Organization of this Report

This report contains six chapters and two appendices. Chapter 2 provides information on electronic reporting. Chapter 3 provides general information on the reporting process, including how many employers reported testing results to the FTA. Chapters 4 and 5 present drug and alcohol testing results, respectively. Chapter 6 presents a trend analysis. A glossary of terms used throughout this report is in Appendix A; Appendix B provides a list of FTA regions; Appendix C presents a list of rail systems and rail contractors that submitted reports. This year an additional size category (rural) has been introduced and another size category (small) has therefore been 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.

1.8 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.

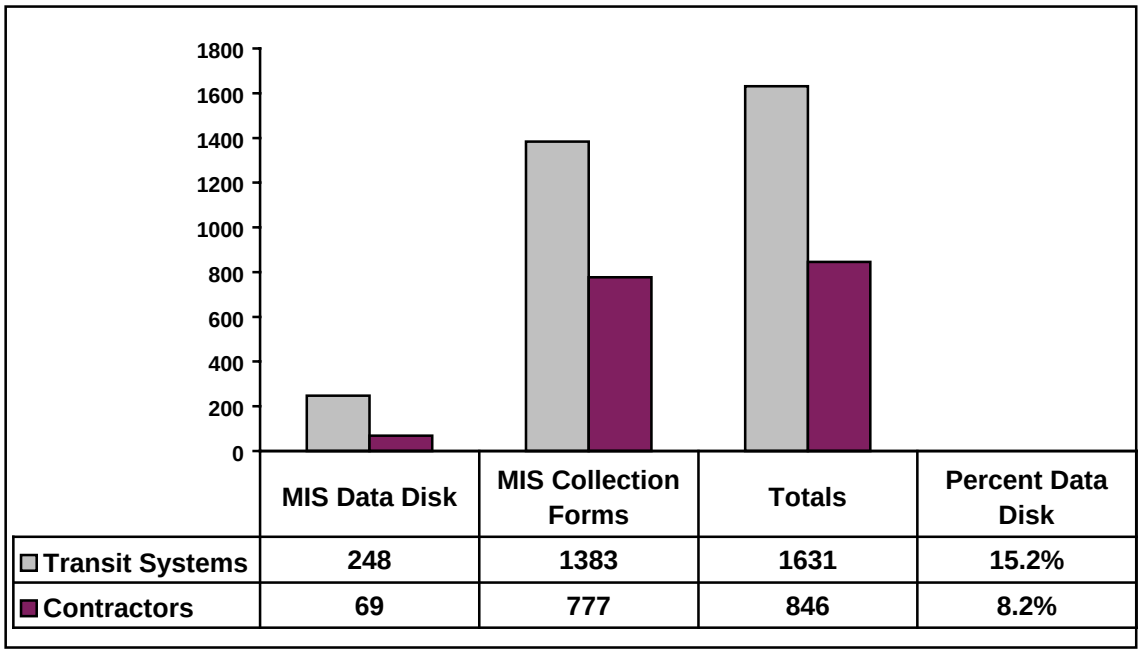
2. ELECTRONIC REPORTING

This chapter presents details on electronic reporting of mandatory drug and alcohol testing conducted by transit systems receiving funds from the Federal Transit Administration (FTA). The discussion presents data on the percentage of reporters who reported electronically by grantee, subrecipient, and by contractor. Also presented are data percentages by operator size: large, small, and rural.

Electronic reporting of the Drug and Alcohol MIS results was instituted in 1998. Electronic software with "help" screen and validation capabilities was developed in an effort to lessen the burden placed upon the reporter. When the FTA Drug and Alcohol MIS Project Office, located at the Volpe Center in Cambridge, Massachusetts, conducted its annual mailing of FTA Drug and Alcohol reporting materials in December 1998, the reporting materials included a set of five FTA Drug and Alcohol MIS reporting disks. Approximately 1,200 sets of disks were included in this mailing to FTA recipients, subrecipients, and State Department of Transportation (DOT) Offices.

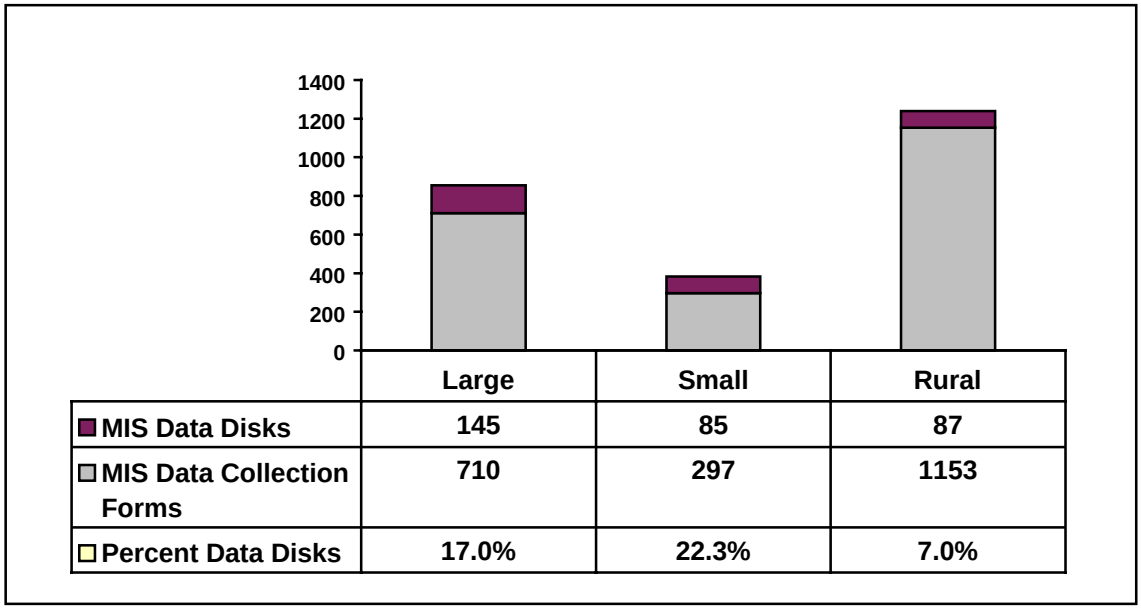
For the first time in 1998 reporters had the option of reporting on paper forms that are available or by using the electronic reporting system and submitting results on a data disk. More than 25 percent of reporters receiving the disks (317) opted for the data disk. In addition, approximately 300 reporters used the electronic reporting method to complete the information and then reported on paper forms generated through the electronic reporting software.

Of the 317 reporters who submitted data disks, 58 (18.3 percent) indicated a positive drug test and 27 (8.5 percent) indicated at least one positive alcohol test. This chapter presents details on electronic reporting of mandatory drug and alcohol testing conducted by transit systems receiving funds from the FTA. Figures 2-1, 2-2, and 2-3 that follow illustrate graphically the findings from the first year of electronic reporting.



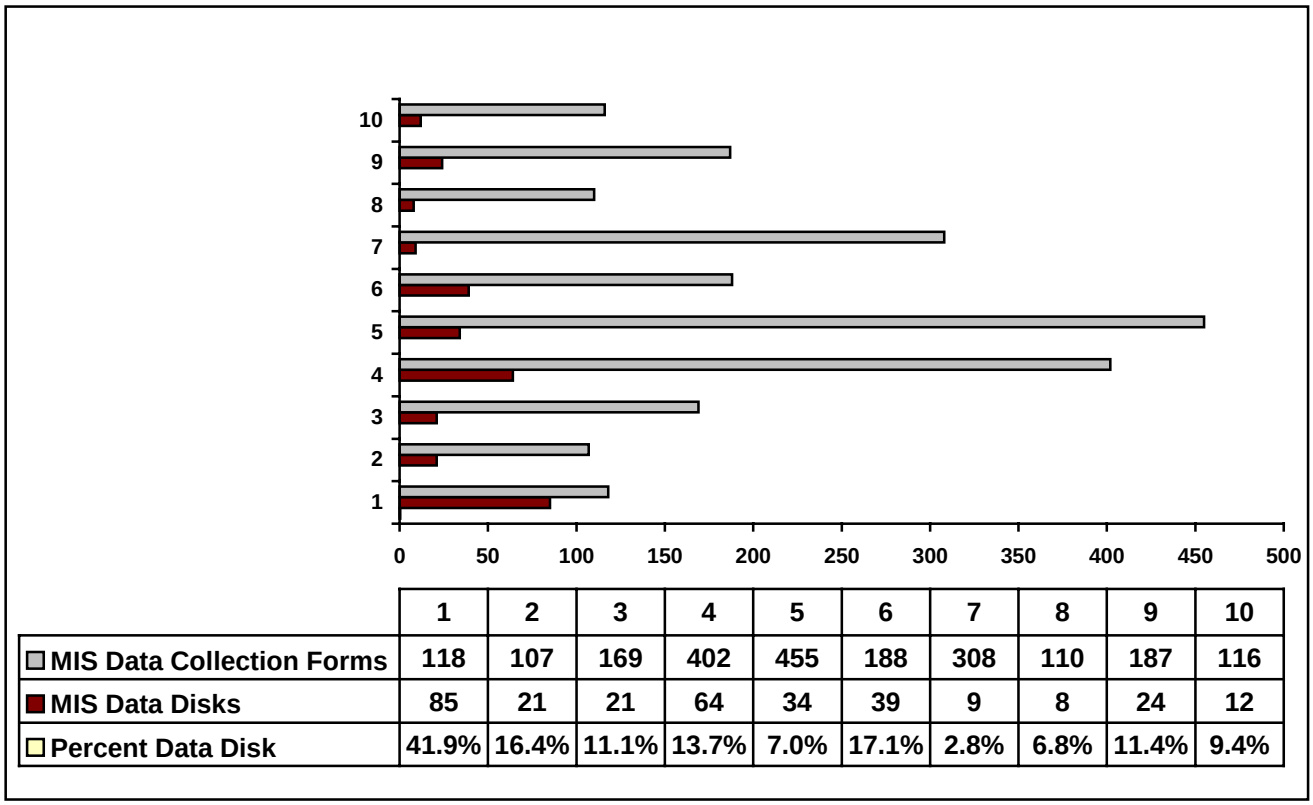
	MIS Data Disk	MIS Collection Forms	Totals	Percent Data Disk
Transit Systems	248	1383	1631	15.2%
Contractors	69	777	846	8.2%

Figure 2-1. Electronic Report Forms Received



	Large	Small	Rural
MIS Data Disks	145	85	87
MIS Data Collection Forms	710	297	1153
Percent Data Disks	17.0%	22.3%	7.0%

Figure 2-2. Electronic Reporting by Employer Size



	1	2	3	4	5	6	7	8	9	10
MIS Data Collection Forms	118	107	169	402	455	188	308	110	187	116
MIS Data Disks	85	21	21	64	34	39	9	8	24	12
Percent Data Disk	41.9%	16.4%	11.1%	13.7%	7.0%	17.1%	2.8%	6.8%	11.4%	9.4%

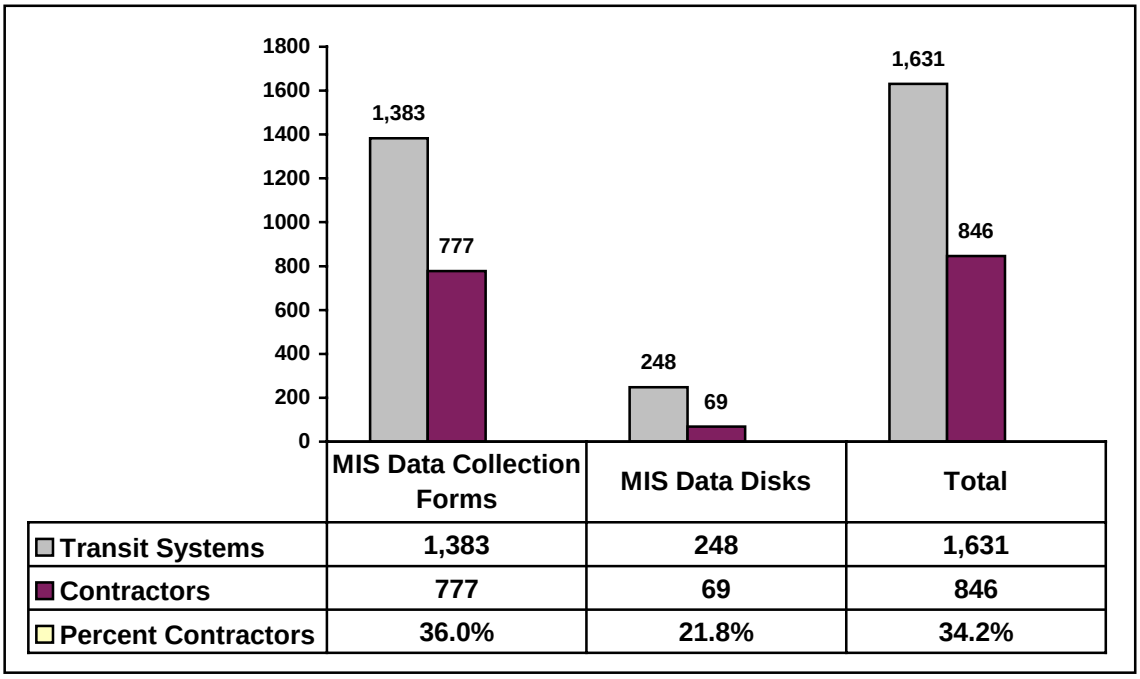
Figure 2-3. Electronic Reporting by FTA Region

3. GENERAL INFORMATION–DRUG AND ALCOHOL TEST RESULTS

This chapter presents in graphical format the information provided by transit systems and contractors submitting FTA Drug and Alcohol MIS forms to the FTA for 1998. The discussion presents data on the number of forms received and the distribution of workers by employee category, distribution of employees by size of organization (large, small, rural). Also included are sources of FTA funds and information comparing rail and non-rail reports received.

3.1 Distribution of Transit Systems and Contractors

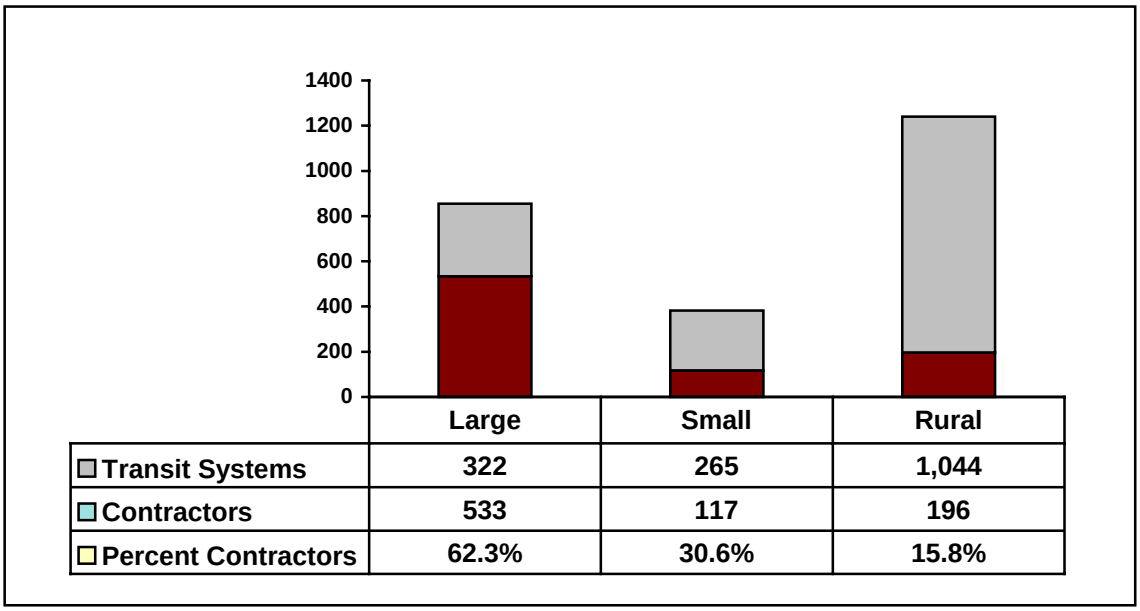
For calendar year 1998, the FTA received drug and alcohol forms from 1,631 transit systems and 846 contractors. Figure 3-1 identifies the number of drug and alcohol forms received and the percent of contractors reporting.



	MIS Data Collection Forms	MIS Data Disks	Total
Transit Systems	1,383	248	1,631
Contractors	777	69	846
Percent Contractors	36.0%	21.8%	34.2%

Figure 3-1. Number of Drug and Alcohol Forms Received

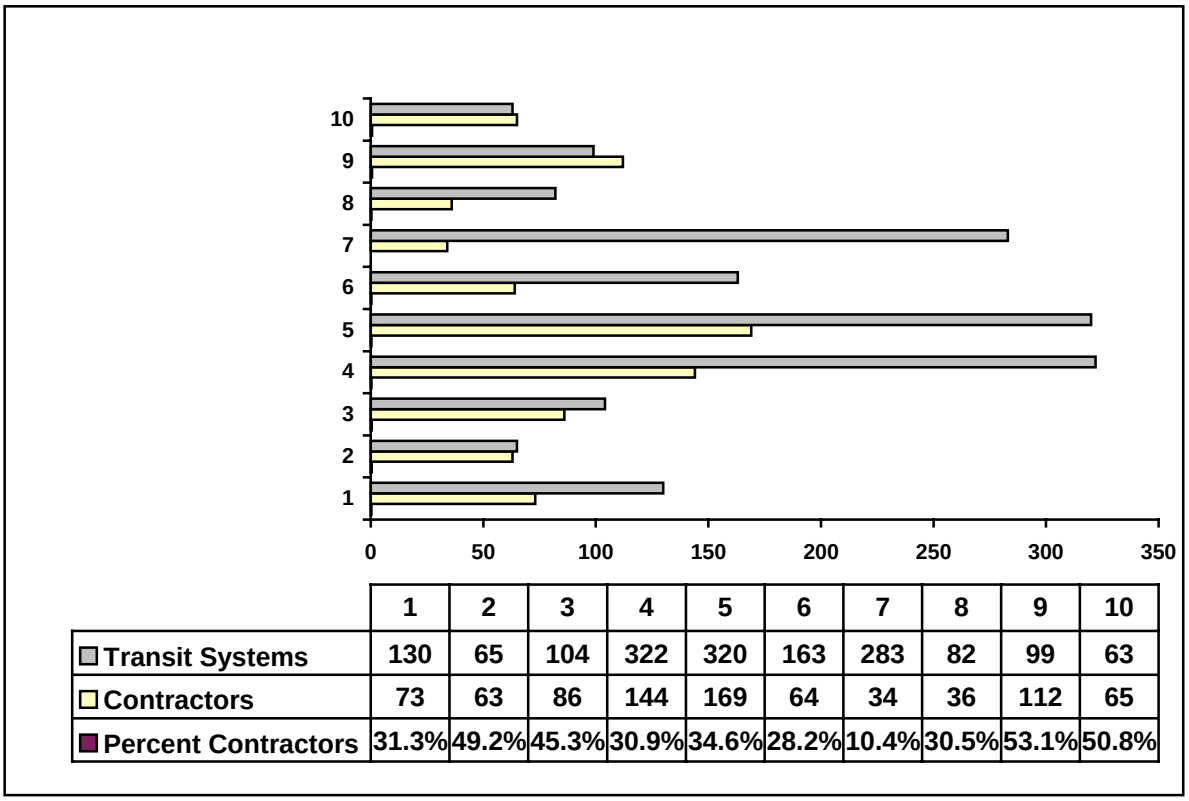
Figure 3-2 shows the number of transit system and contractor employers in large, small, and rural systems.



	Large	Small	Rural
Transit Systems	322	265	1,044
Contractors	533	117	196
Percent Contractors	62.3%	30.6%	15.8%

Figure 3-2. Drug and Alcohol Reports Received by Employer Size

Figure 3-3 presents the distribution of drug and alcohol reports received from transit system employers and contractors by region.



	1	2	3	4	5	6	7	8	9	10
Transit Systems	130	65	104	322	320	163	283	82	99	63
Contractors	73	63	86	144	169	64	34	36	112	65
Percent Contractors	31.3%	49.2%	45.3%	30.9%	34.6%	28.2%	10.4%	30.5%	53.1%	50.8%

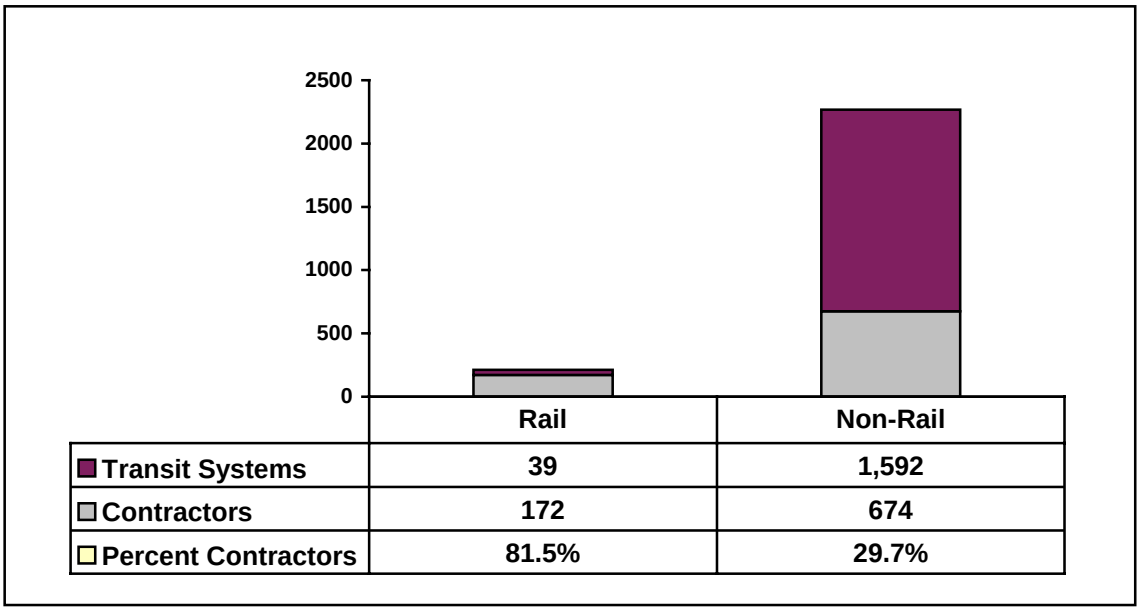
Figure 3-3. Number of FTA Drug and Alcohol Reports Received by Region

3.2 Rail and Non-Rail Employers

For this report, rail entities 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 these numbers.

In 37 of 39 cases, rail systems are considered "large." It is important to note that rail systems have a different employee demographic than non-rail, with rail employers ten having fewer revenue vehicle operators and a greater concentration of mechanics.

Figure 3-4 compares the distribution of reports 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 submitted reports.



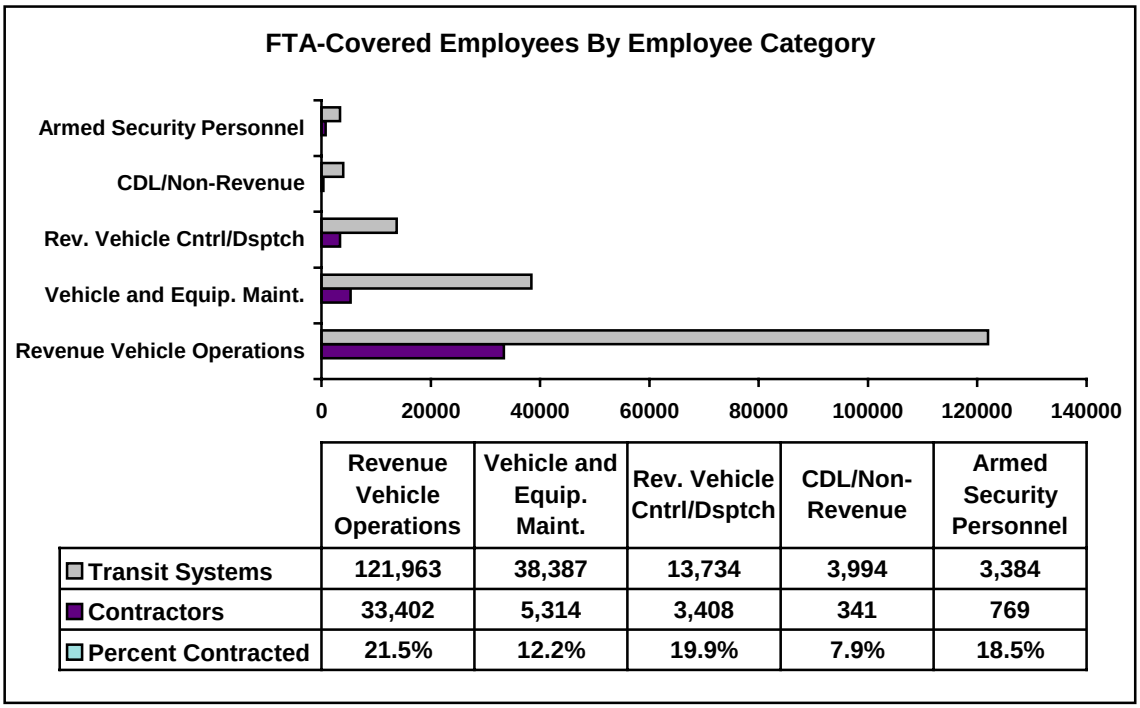
	Rail	Non-Rail
Transit Systems	39	1,592
Contractors	172	674
Percent Contractors	81.5%	29.7%

Figure 3-4. Reports Received - Rail Versus Non-Rail

3.3 FTA-Covered Employees

Under the FTA's drug and alcohol testing regulations, employees who perform safety-sensitive functions must be included in the substance abuse management program. The following figures present the distribution of these FTA-covered employees.

Figure 3-5 presents the distribution of FTA-covered employees by employee category for both transit systems and contractors, and the percent of the labor force that was contracted.



	Revenue Vehicle Operations	Vehicle and Equip. Maint.	Rev. Vehicle Cntrl/Dsptch	CDL/Non-Revenue	Armed Security Personnel
Transit Systems	121,963	38,387	13,734	3,994	3,384
Contractors	33,402	5,314	3,408	341	769
Percent Contracted	21.5%	12.2%	19.9%	7.9%	18.5%

Figure 3-5. Number of FTA-Covered Employees by Employee Category/Percent of Labor Force that was Contracted

Figure 3-6 shows the percent of FTA-Covered Employees of Transit Systems.

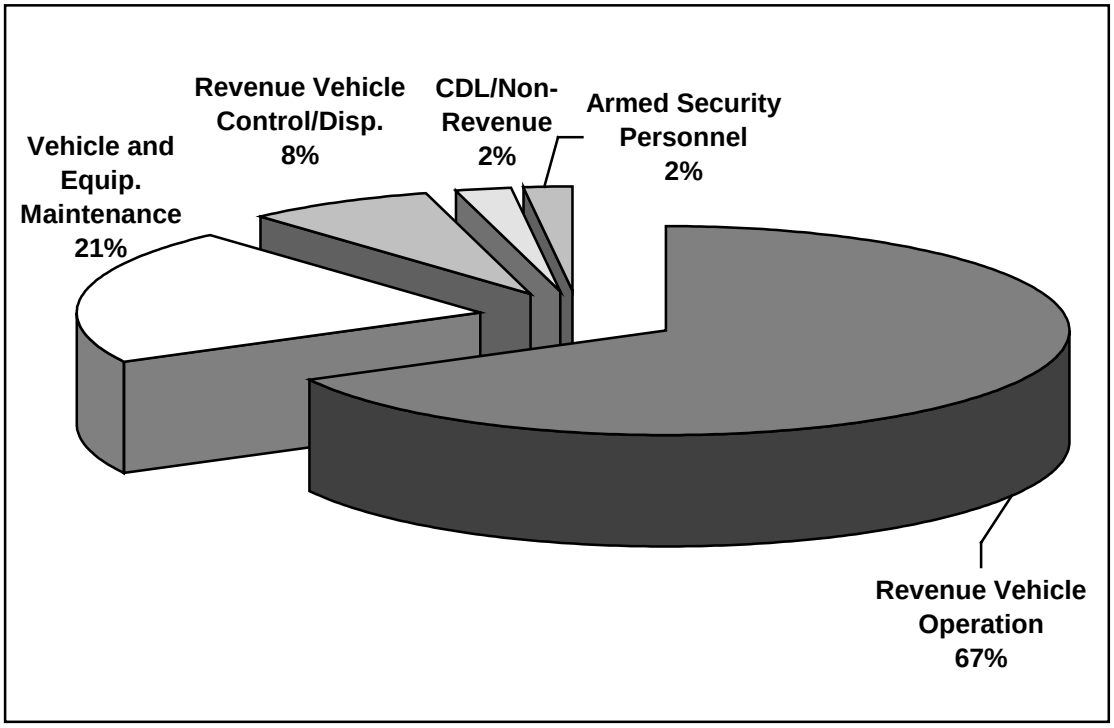


Figure 3-6. Percent of FTA-Covered Employees for Transit Systems

Figure 3-7 shows the percent of FTA-covered employees of contractors in each employee category.

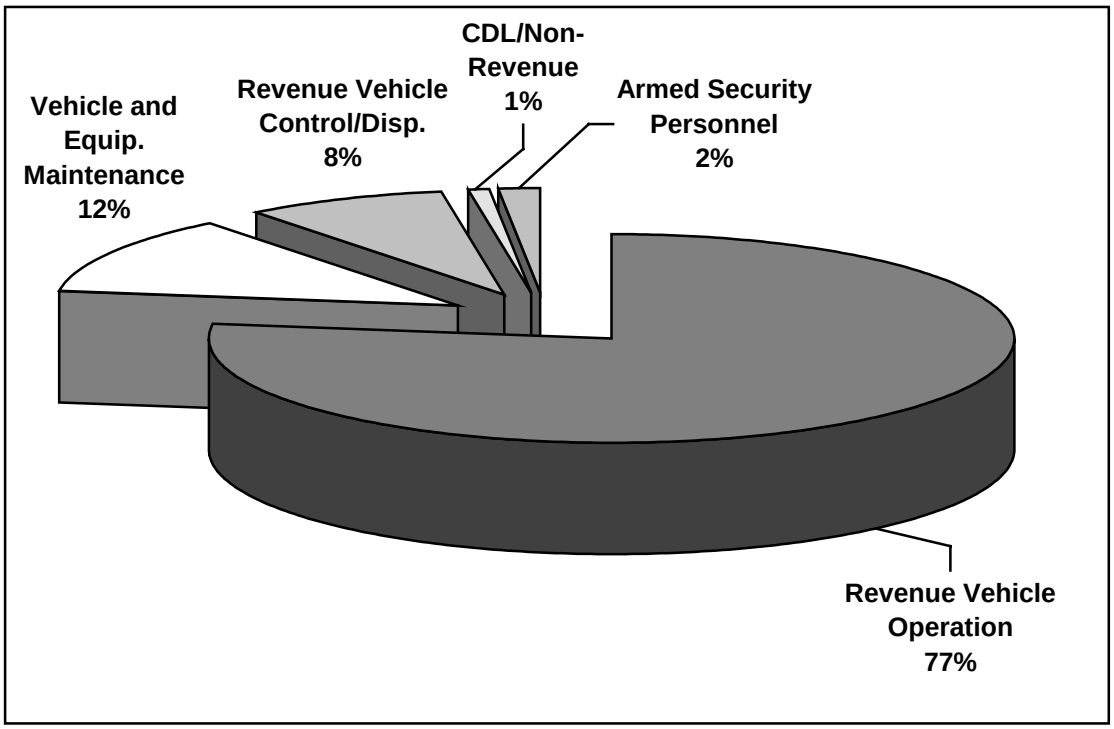
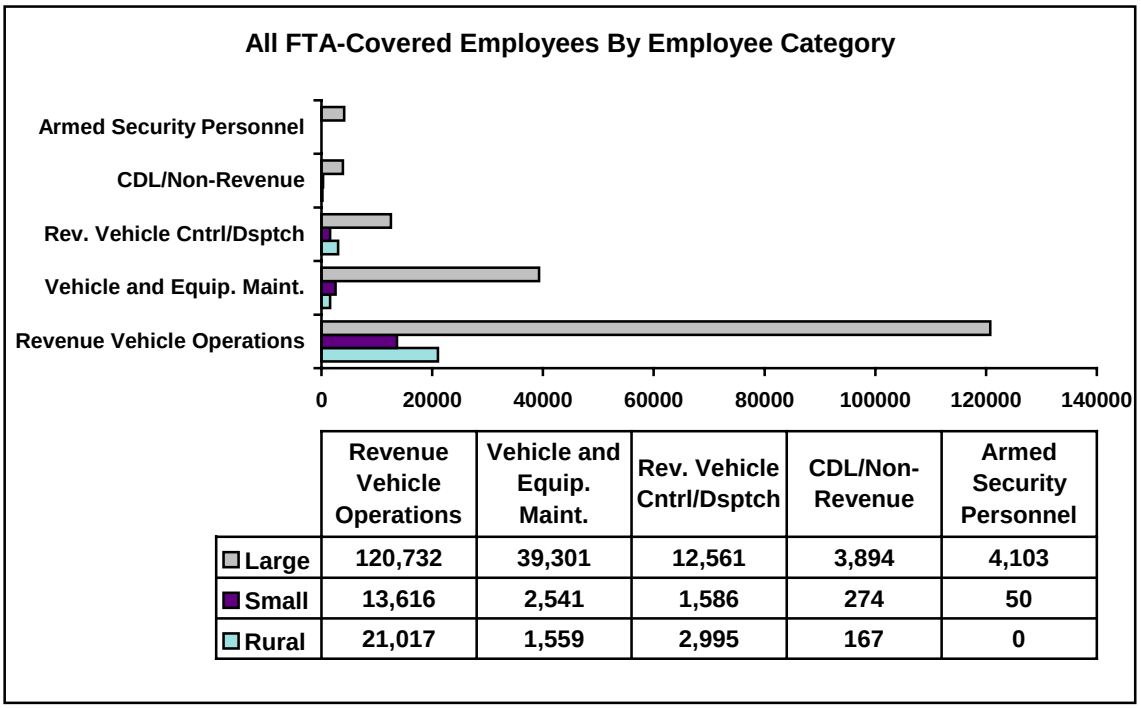


Figure 3-7. Percent of FTA-Covered Employees in Each Employee Category – Contractors

Figure 3-8 illustrates all FTA-covered employees by employee category. Figure 3-9 shows the percent of all FTA-covered employees for larger operators. Figure 3-10 shows the percent of all FTA employees covered for small operators. Figure 3-11 shows the percent of all FTA-covered employees for rural operators.



	Revenue Vehicle Operations	Vehicle and Equip. Maint.	Rev. Vehicle Cntrl/Dsptch	CDL/Non-Revenue	Armed Security Personnel
Large	120,732	39,301	12,561	3,894	4,103
Small	13,616	2,541	1,586	274	50
Rural	21,017	1,559	2,995	167	0

Figure 3-8. All FTA-Covered Employees by Employee Category

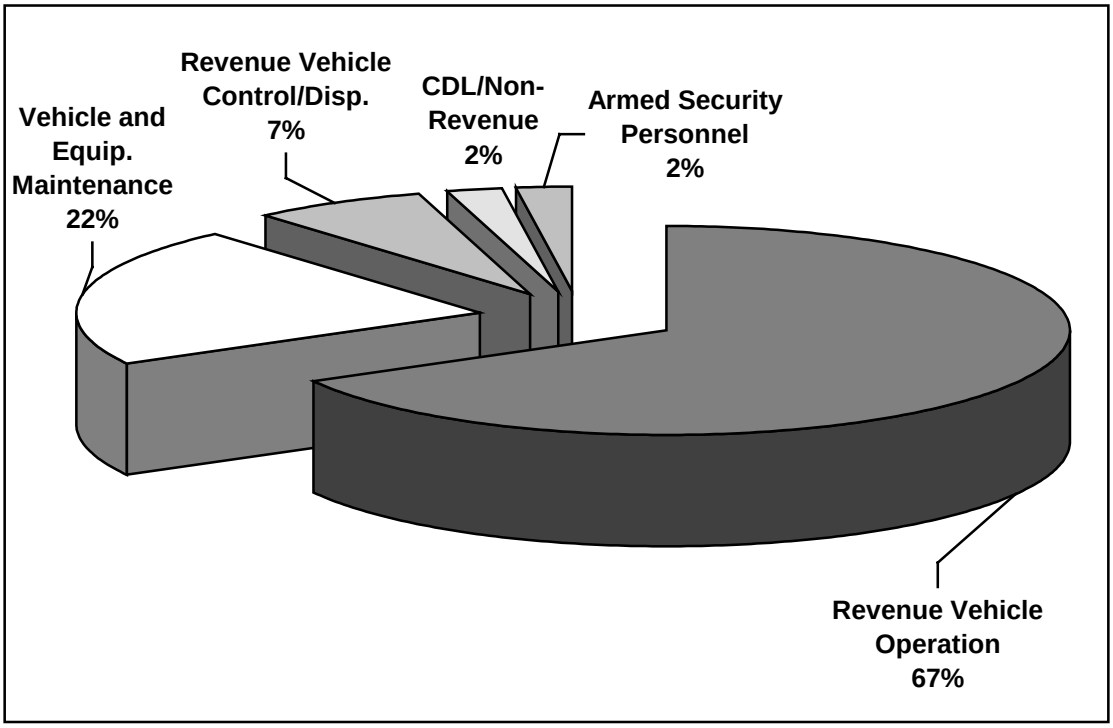


Figure 3-9. Percent of All FTA-Covered Employees for Large Operators

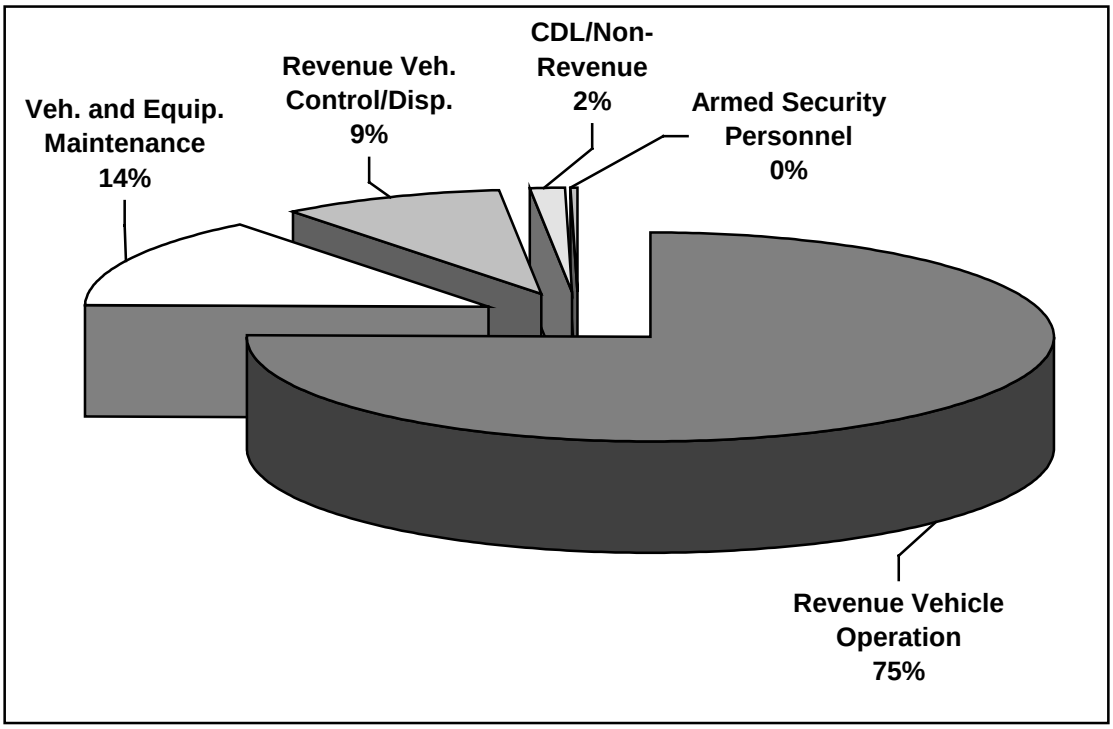


Figure 3-10. Percent of All FTA-Covered Employees for Small Operators

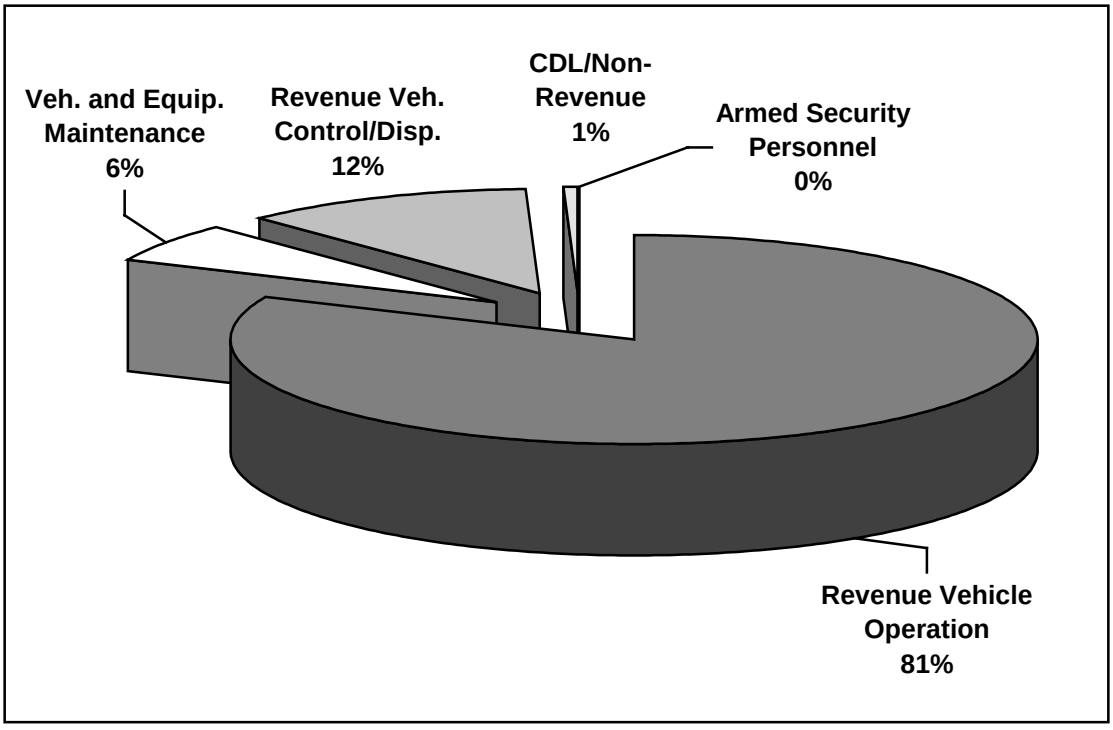
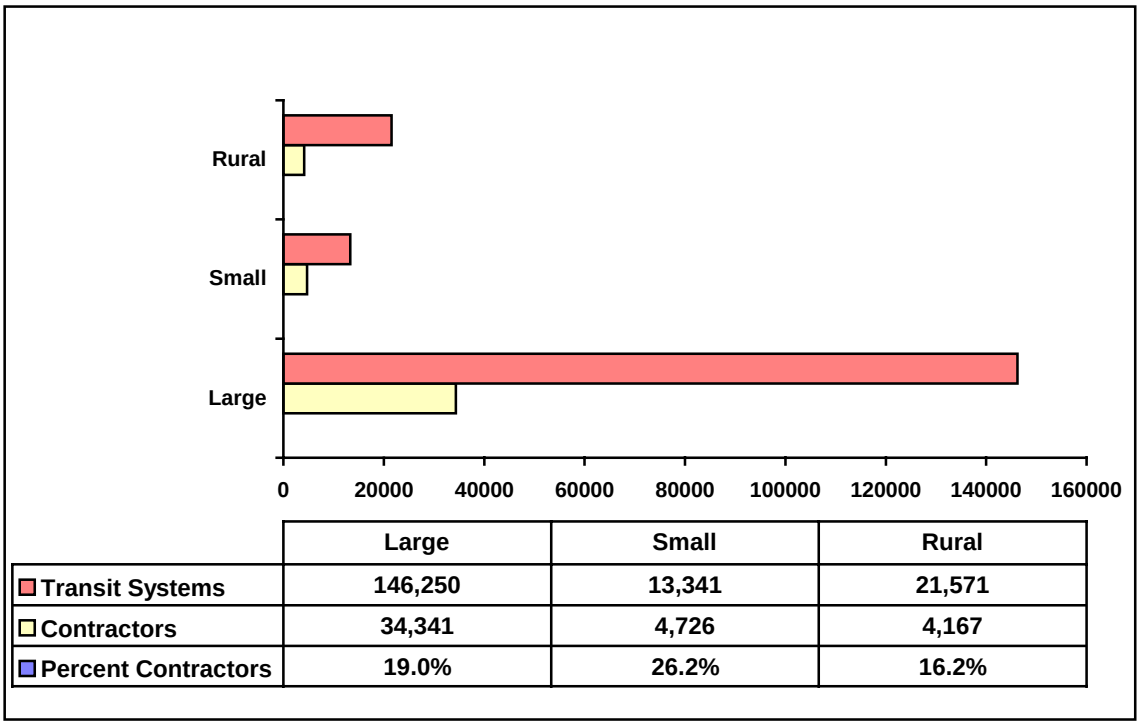


Figure 3-11. Percent of All FTA-Covered Employees Reporting for Rural Operators

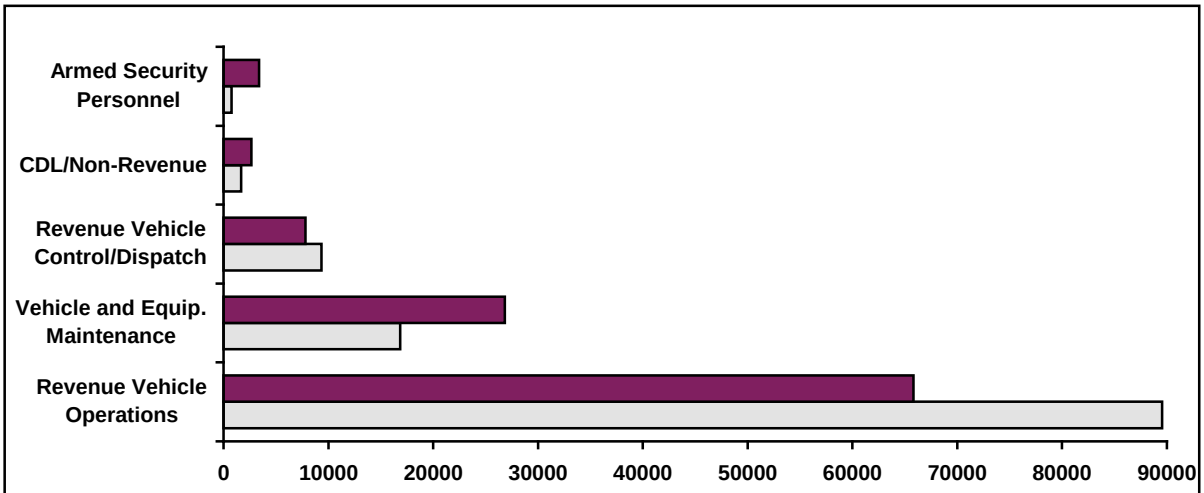
Figure 3-12 shows FTA-covered employees by employee category and by size of employer.



	Large	Small	Rural
Transit Systems	146,250	13,341	21,571
Contractors	34,341	4,726	4,167
Percent Contractors	19.0%	26.2%	16.2%

Figure 3-12. All FTA-Covered Employees by Employer Size

Figure 3-13 shows FTA-covered employees by employer category for rail and non-rail.



	Revenue Vehicle Operations	Vehicle and Equip. Maintenance	Revenue Vehicle Control/Dispatc	CDL/Non-Revenue	Armed Security Personnel
Rail	65,827	26,843	7,814	2,641	3,390
Non-Rail	89,538	16,858	9,328	1,694	763

Figure 3-13. FTA-Covered Employees by Employee Category for Rail and Non-Rail

Figures 3-14 and 3-15 show the percent of FTA-covered employees in each employee category for rail and non-rail operators.

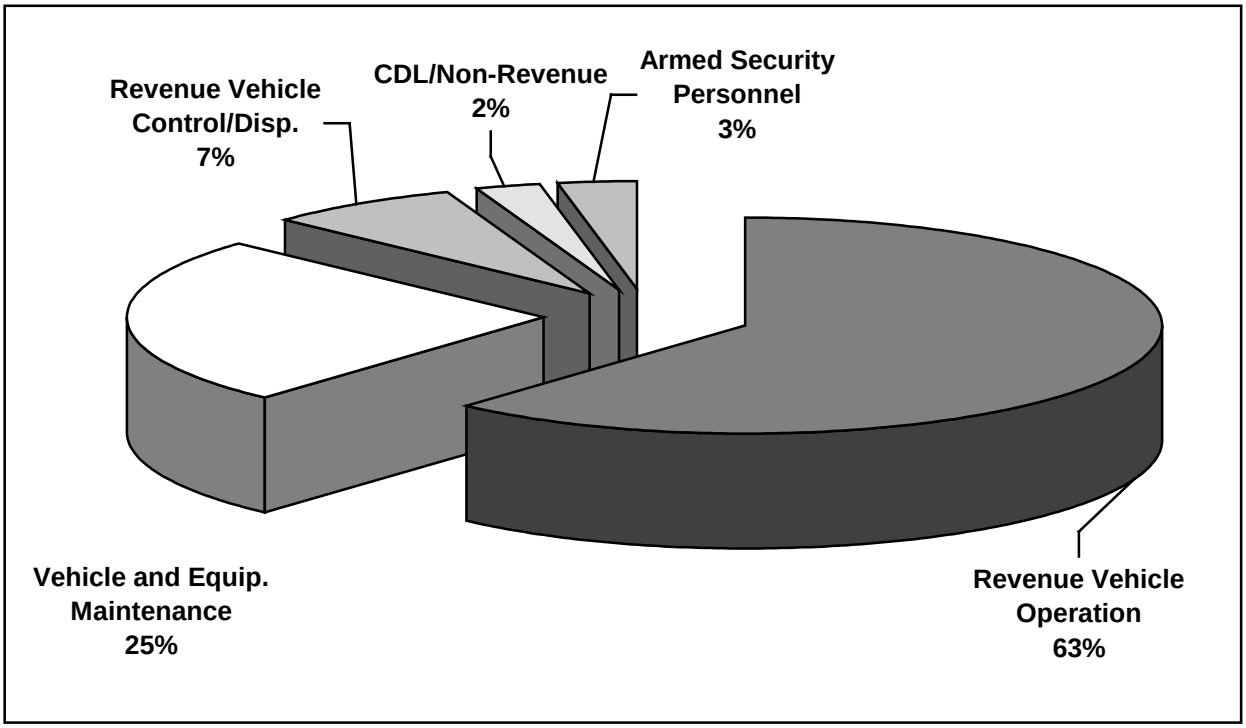


Figure 3-14. Percent of FTA-Covered Employees in Each Employee Category – Rail Operators

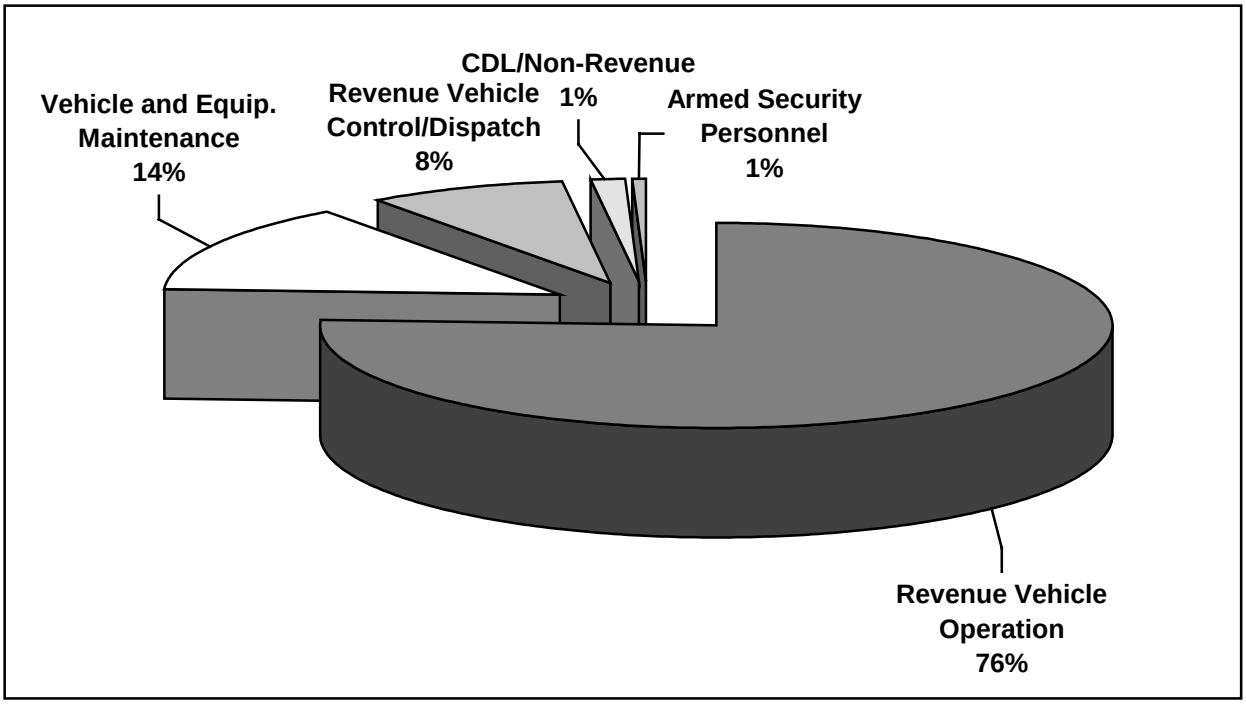
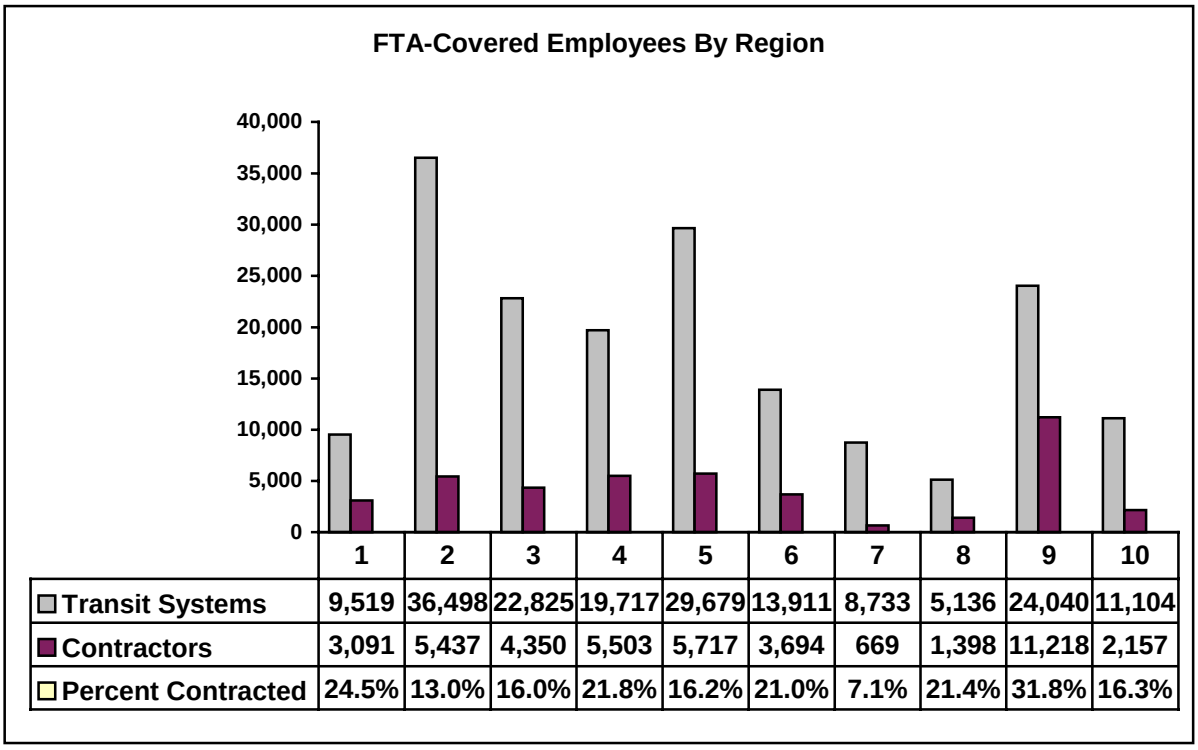


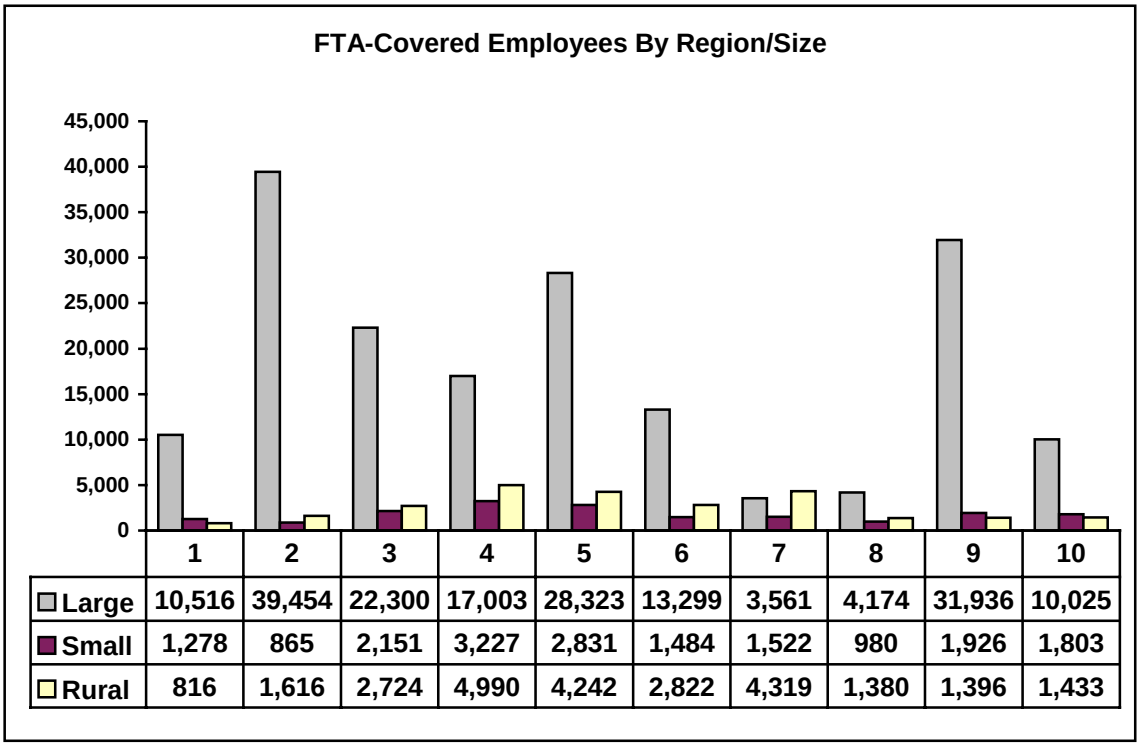
Figure 3-15. Percent of FTA-Covered Employees in Each Employee Category – Non-Rail Operators

Figures 3-16 and 3-17 show FTA-covered employees by region and by region and size.



	1	2	3	4	5	6	7	8	9	10
Transit Systems	9,519	36,498	22,825	19,717	29,679	13,911	8,733	5,136	24,040	11,104
Contractors	3,091	5,437	4,350	5,503	5,717	3,694	669	1,398	11,218	2,157
Percent Contracted	24.5%	13.0%	16.0%	21.8%	16.2%	21.0%	7.1%	21.4%	31.8%	16.3%

Figure 3-16. FTA-Covered Employees by Region



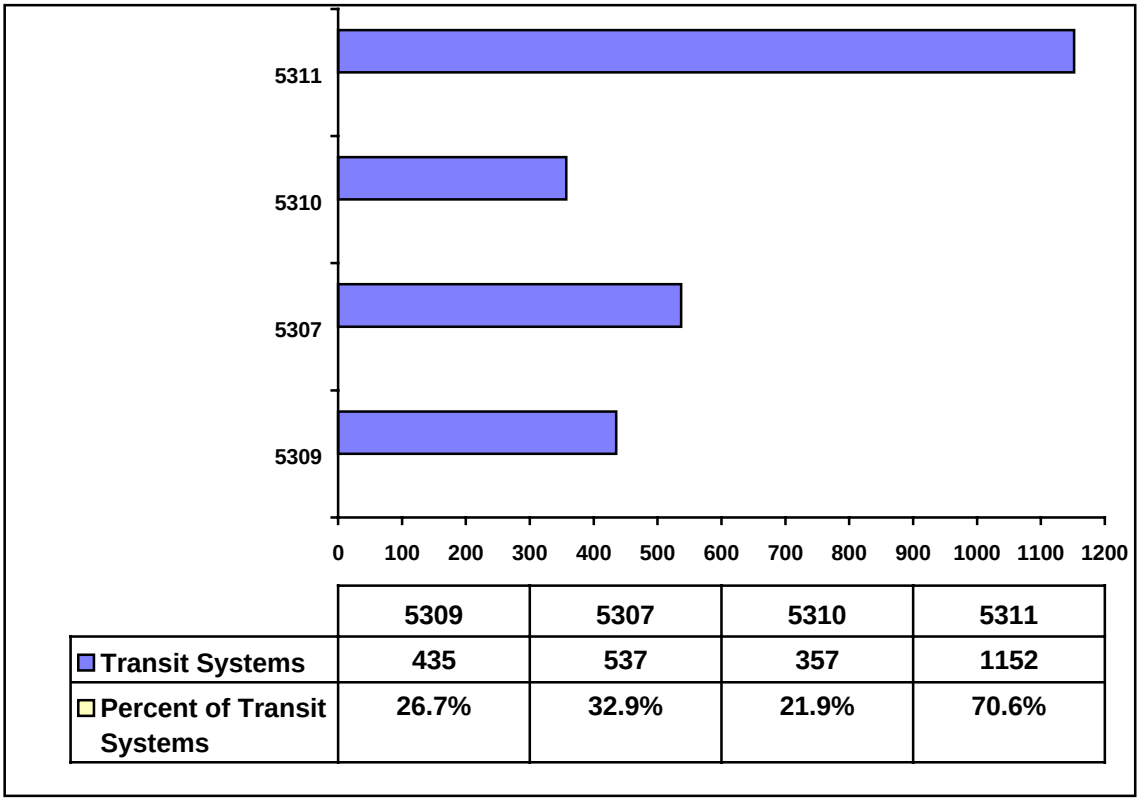
	1	2	3	4	5	6	7	8	9	10
Large	10,516	39,454	22,300	17,003	28,323	13,299	3,561	4,174	31,936	10,025
Small	1,278	865	2,151	3,227	2,831	1,484	1,522	980	1,926	1,803
Rural	816	1,616	2,724	4,990	4,242	2,822	4,319	1,380	1,396	1,433

Figure 3-17. FTA-Covered Employees by Region/Size

3.4 Federal Funds

Transit systems are required to report the types of FTA funds they received. Specifically, transit systems are required to identify the particular sections of the Federal Transit Act under which they received Federal funds (that is, Sections 5309, 5307, 5310, and 5311). Some of the transit systems received funding under multiple sections. Figure 3-18 shows the breakdown of Federal funds received by transit systems that submitted Drug and Alcohol MIS forms. Figure 3-19 shows the percent of transit systems that received Federal funds in 1998 by source of funding.

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 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 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.



	5309	5307	5310	5311
Transit Systems	435	537	357	1152
Percent of Transit Systems	26.7%	32.9%	21.9%	70.6%

Figure 3-18. Number and Percent of Transit Systems that Received Federal Funds by Source of Funding

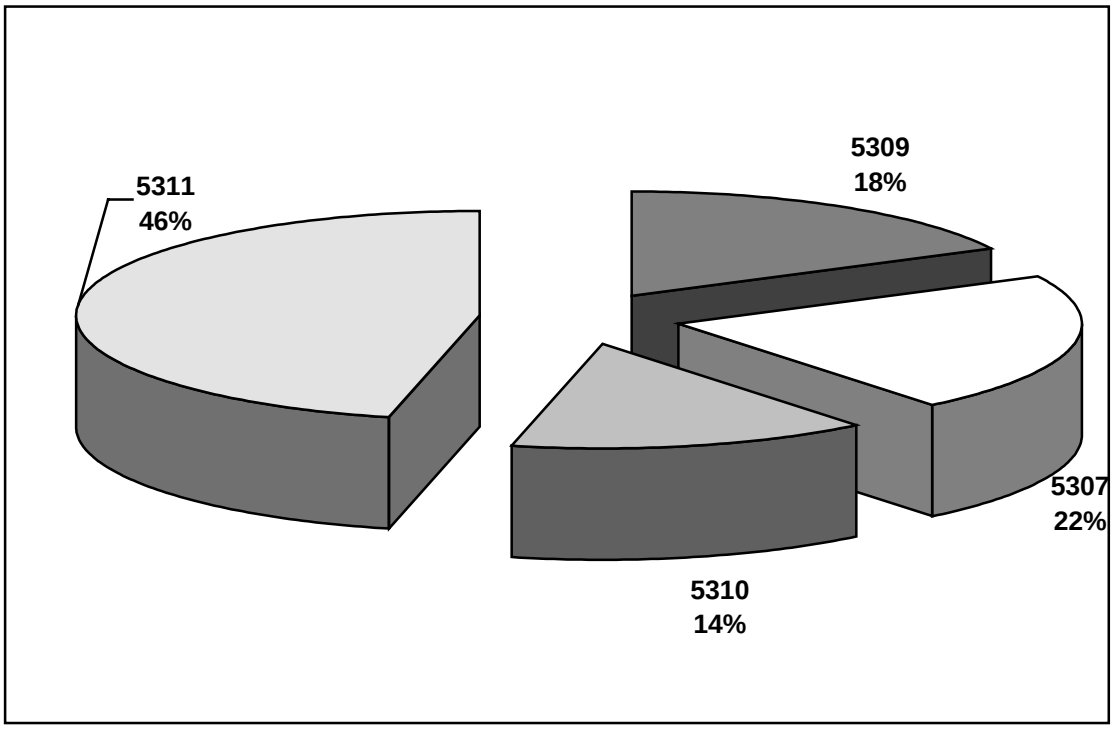
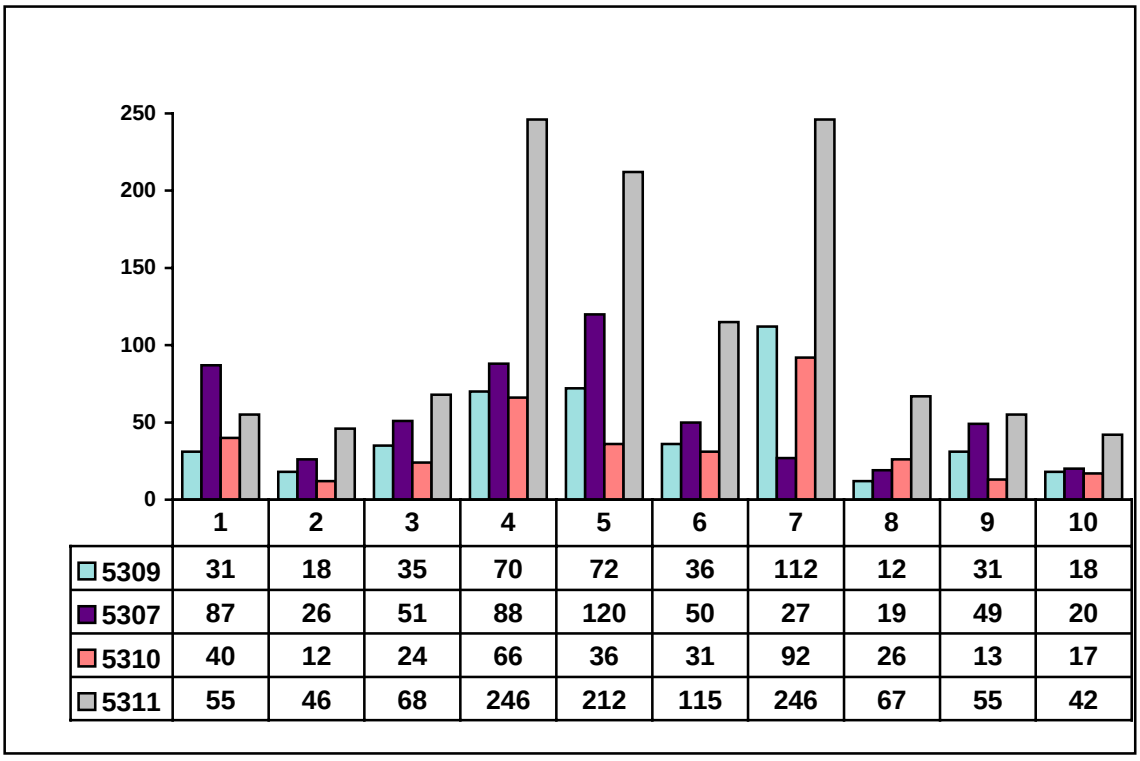


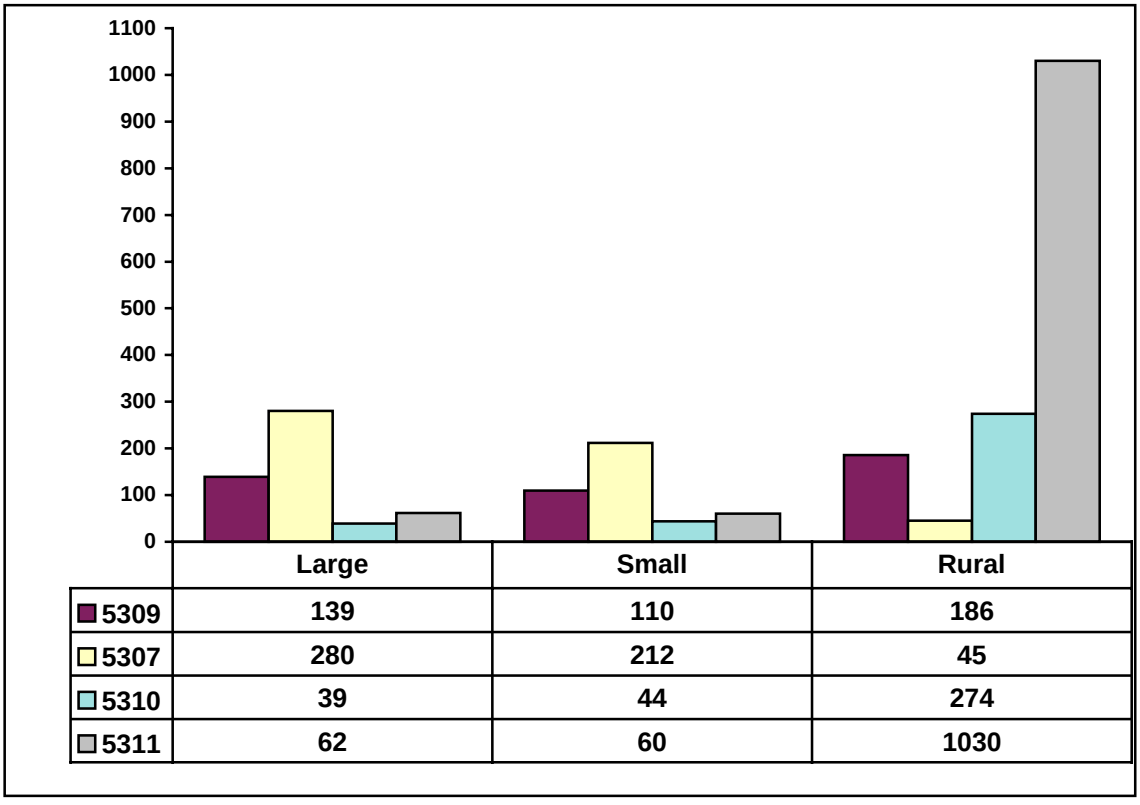
Figure 3-19. Percent of Total Funds by Funding Source

Figure 3-20 shows transit systems that received Federal funds in 1998 by FTA region. Following this is a breakdown by size, in Figure 3-21.



	1	2	3	4	5	6	7	8	9	10
5309	31	18	35	70	72	36	112	12	31	18
5307	87	26	51	88	120	50	27	19	49	20
5310	40	12	24	66	36	31	92	26	13	17
5311	55	46	68	246	212	115	246	67	55	42

Figure 3-20. Number of Transit Systems that Received Federal Funds by Source of Funding and by FTA Region



	Large	Small	Rural
5309	139	110	186
5307	280	212	45
5310	39	44	274
5311	62	60	1030

Figure 3-21. Number of Transit Systems that Received Federal Funds by Size and Source of Funding

4. DRUG TEST RESULTS

This chapter provides background information and a summary of the 1998 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, phencyclidine (PCP), opiates, and amphetamines.

A total of 200,748 samples were collected for all types of drug testing in 1998. Six types of tests were administered: pre-employment; random; post-accident; reasonable suspicion; return-to-duty; and follow-up. The results of the random drug testing provide an indication of the overall level of industry-wide drug use among FTA-covered transit system and contractor employees.

As Table 4-1 shows, a total of 111,490 specimens were collected under random drug testing in 1998. Overall, 1.07 percent of those specimens tested positive for one or more of the five prohibited drugs. Among transit systems, 0.94 percent of all random specimens tested positive; among contractors 1.69 percent tested positive.

Table 4-1. 1998 Random Drug Test Results

			Percent Positive
Transit Systems	90,855	847	0.94
Contractors	20,635	349	1.69
			1.07

Among large operators, 1.06 percent of all random specimens tested positive, among small operators, 1.19 percent tested positive, and among rural operators, 1.12 percent tested positive, as depicted in Table 4-2. 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, and 1997, the industry-wide random positive rate exceeded 1 percent.

Table 4-2. Random Drug Test Results by Operator Size

			Percent Positive
Large	90,980	961	1.06
Small	8,585	102	1.19
Rural	11,925	133	1.12
			1.07

4.1 Drug Test Results by FTA Region

This section reports random drug test results by FTA region. As shown in Figure 4-3, of the ten FTA regions, regions 5 and 8 had the highest percent of specimens testing positive for one or more drugs.

Table 4-3. Random Drug Test Results by FTA Region

			Percent Positive
1	6,069	59	0.97
2	21,475	146	0.68
3	13,132	121	0.92
4	13,114	153	1.17
5	17,493	249	1.42
6	9,206	110	1.19
7	4,074	46	1.13
8	3,039	43	1.41
9	17,370	211	1.21
10	6,518	58	0.89
			1.07

Table 4-4 presents random drug test results for rail systems and non-rail systems.

Table 4-4. Random Drug Test Results for Rail and Non-Rail

			Percent Positive
Rail Systems	54,173	520	0.96
Non-Rail Systems	57,317	676	1.18
			1.07

4.2 Results of Drug Tests Presented by Test Types

Table 4-5 presents drug test results by the six 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. The totals indicate that the positive drug test results show some variation when viewed by test types. Over all employment categories, 8.04 percent of the reasonable suspicion tests were positive. Of the return-to-duty tests, 2.98 percent were positive. Pre-employment, post-accident, and follow-up tests tested positive at 2.74, 1.45, and 1.53 percent, respectively. Random tests had the lowest percentage of positive results at 1.07 percent.

The positive results were higher for contractors than for transit systems in all six testing categories. For pre-employment testing, contractors had 3.77 percent positive versus 2.02 percent for transit systems. Positive random testing rates were 1.69 percent and 0.93 percent for contractors and transit systems, respectively. For post-accident testing, contractors exceeded transit systems with a positive rate of 2.34 percent versus 1.19 percent. Reasonable suspicion testing yielded a testing rate of 13.39 percent positive for contractors and 6.51 percent for transit systems. Contractors had 6.13 percent positive rate for return-to-duty testing versus 2.45 percent

for transit systems. For follow-up testing, contractors and transit systems had positive rates of 4.08 percent and 1.39 percent, respectively.

Table 4-6 presents drug test results by the six drug test types by employee category for large, small, and rural systems and their combined totals.

Table 4-7 presents drug test results by the six drug test types by employee category for rail and non-rail systems and their combined totals.

Table 4-5. Drug Test Results by Test Type and Employee Category

							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**
Pre-Employment	35,039	707	2.02%	24,574	927	3.77%	59,613	1,634	2.74%
Random	90,855	847	0.93%	20,635	349	1.69%	111,490	1,196	1.07%
Post-Accident	10,763	128	1.19%	3,205	75	2.34%	13,968	203	1.45%
Reasonable Suspicion	784	51	6.51%	224	30	13.39%	1,008	81	8.04%
Return-to-Duty	978	24	2.45%	163	10	6.13%	1,141	34	2.98%
Follow-Up	12,818	178	1.39%	710	29	4.08%	13,528	207	1.53%
TOTALS	**151,237**	**1,935**	**1.28%**	**49,511**	**1,420**	**2.87%**	**200,748**	**3,355**	**1.67%**
							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**
Revenue Vehicle Operation	28,148	575	2.04%	22,028	841	3.82%	50,176	1,416	2.82%
Revenue Veh. and Equip. Maint.	4,731	104	2.20%	1,286	51	3.97%	6,017	155	2.58%
Revenue Veh. Control/Disp.	1,310	10	0.76%	724	24	3.31%	2,034	34	1.67%
CDL/Non-Revenue Vehicle	381	17	4.46%	58	7	12.07%	439	24	5.47%
Armed Security Personnel	469	1	0.21%	478	4	0.84%	947	5	0.53%
Revenue Vehicle Operation	61,288	570	0.93%	15,913	283	1.78%	77,201	853	1.10%
Revenue Veh. and Equip. Maint.	19,827	218	1.10%	2,634	39	1.48%	22,461	257	1.14%
Revenue Veh. Control/Disp.	6,309	30	0.48%	1,565	17	1.09%	7,874	47	0.60%
CDL/Non-Revenue Vehicle	2,079	24	1.15%	131	3	2.29%	2,210	27	1.22%
Armed Security Personnel	1,352	5	0.37%	392	7	1.79%	1,744	12	0.69%

Table 4-5. Drug Test Results by Test Type and Employee Category (continued)

							Totals		
									Percent Positive
Revenue Vehicle Operation	9,735	122	1.25%	3,018	71	2.35%	12,753	193	1.51%
Revenue Veh. and Equip. Maint.	666	4	0.60%	148	4	2.70%	814	8	0.98%
Revenue Veh. Control/Disp.	177	0	0.00%	21	0	0.00%	198	0	0.00%
CDL/Non-Revenue Vehicle	85	2	2.35%	14	0	0.00%	99	2	2.02%
Armed Security Personnel	100	0	0.00%	4	0	0.00%	104	0	0.00%
Revenue Vehicle Operation	622	37	5.95%	202	28	13.86%	824	65	7.89%
Revenue Veh. and Equip. Maint.	96	8	8.33%	15	2	13.33%	111	10	9.01%
Revenue Veh. Control/Disp.	36	1	2.78%	5	0	0.00%	41	1	2.44%
CDL/Non-Revenue Vehicle	24	5	20.83%	0	0	0.00%	24	5	20.83%
Armed Security Personnel	6	0	0.00%	2	0	0.00%	8	0	0.00%
Revenue Vehicle Operation	693	15	2.16%	142	8	5.63%	835	23	2.75%
Revenue Veh. and Equip. Maint.	231	7	3.03%	13	1	7.69%	244	8	3.28%
Revenue Veh. Control/Disp.	27	2	7.41%	7	1	14.29%	34	3	8.82%
CDL/Non-Revenue Vehicle	27	0	0.00%	1	0	0.00%	28	0	0.00%
Armed Security Personnel	0	0	0.00%	0	0	0.00%	0	0	0.00%
Revenue Vehicle Operation	8,105	115	1.42%	592	26	4.39%	8,697	141	1.62%
Revenue Veh. and Equip. Maint.	3,407	40	1.17%	90	3	3.33%	3,497	43	1.23%
Revenue Veh. Control/Disp.	457	6	1.31%	28	0	0.00%	485	6	1.24%
CDL/Non-Revenue Vehicle	841	17	2.02%	0	0	0.00%	841	17	2.02%
Armed Security Personnel	8	0	0.00%	0	0	0.00%	8	0	0.00%

Table 4-6. Drug Test Results by Test Type and Employee Category by Size

							Rural		
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**
Pre-Employment	45,479	1,355	2.98%	5,240	126	2.40%	8,894	153	1.72%
Random	90,980	961	1.06%	8,585	102	1.19%	11,925	133	1.12%
Post-Accident	12,402	188	1.52%	820	8	0.98%	746	7	0.94%
Reasonable Suspicion	941	63	6.69%	37	9	24.32%	30	9	30.00%
Return-to-Duty	1,032	27	2.62%	57	5	8.77%	52	2	3.85%
Follow-Up	13,248	197	1.49%	190	8	4.21%	90	2	2.22%
TOTALS	**164,082**	**2,791**	**1.70%**	**14,929**	**258**	**1.73%**	**21,737**	**306**	**1.41%**
							Rural		
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**
Revenue Vehicle Operation	37,526	1,168	3.11%	4,598	109	2.37%	8,052	139	1.73%
Revenue Veh. and Equip. Maint.	5,254	131	2.49%	423	17	4.02%	340	7	2.06%
Revenue Veh. Control/Disp.	1,382	28	2.03%	178	0	0.00%	474	6	1.27%
CDL/Non-Revenue Vehicle	375	23	6.13%	36	0	0.00%	28	1	3.57%
Armed Security Personnel	942	5	0.53%	5	0	0.00%	0	0	0.00%
Revenue Vehicle Operation	61,005	681	1.12%	6,480	67	1.05%	9,788	105	1.07%
Revenue Veh. and Equip. Maint.	20,410	217	1.06%	1,307	27	2.07%	744	13	1.75%
Revenue Veh. Control/Disp.	5,824	28	0.48%	730	6	0.82%	1,320	13	0.98%
CDL/Non-Revenue Vehicle	2,017	23	1.14%	120	2	1.67%	73	2	2.74%
Armed Security Personnel	1,724	12	0.70%	20	0	0.00%	0	0	0.00%

Table 4-6. Drug Test Results by Test Type and Employee Category by Size (continued)

							Rural		
									Percent Positive
Revenue Vehicle Operation	11,289	178	1.58%	743	8	1.08%	721	7	0.97%
Revenue Veh. and Equip. Maint.	753	8	1.06%	52	0	0.00%	9	0	0.00%
Revenue Veh. Control/Disp.	168	0	0.00%	16	0	0.00%	14	0	0.00%
CDL/Non-Revenue Vehicle	88	2	2.27%	9	0	0.00%	2	0	0.00%
Armed Security Personnel	104	0	0.00%	0	0	0.00%	0	0	0.00%
Revenue Vehicle Operation	775	50	6.45%	24	7	29.17%	25	8	32.00%
Revenue Veh. and Equip. Maint.	102	8	7.84%	6	1	16.67%	3	1	33.33%
Revenue Veh. Control/Disp.	36	1	2.78%	3	0	0.00%	2	0	0.00%
CDL/Non-Revenue Vehicle	21	4	19.05%	3	1	33.33%	0	0	0.00%
Armed Security Personnel	7	0	0.00%	1	0	0.00%	0	0	0.00%
Revenue Vehicle Operation	743	17	2.29%	48	4	8.33%	44	2	4.55%
Revenue Veh. and Equip. Maint.	234	8	3.42%	7	0	0.00%	3	0	0.00%
Revenue Veh. Control/Disp.	28	2	7.14%	1	1	100.00%	5	0	0.00%
CDL/Non-Revenue Vehicle	27	0	0.00%	1	0	0.00%	0	0	0.00%
Armed Security Personnel	0	0	0.00%	0	0	0.00%	0	0	0.00%
Revenue Vehicle Operation	8,488	135	1.59%	138	4	2.90%	71	2	2.82%
Revenue Veh. and Equip. Maint.	3,449	40	1.16%	39	3	7.69%	9	0	0.00%
Revenue Veh. Control/Disp.	462	5	1.08%	13	1	7.69%	10	0	0.00%
CDL/Non-Revenue Vehicle	841	17	2.02%	0	0	0.00%	0	0	0.00%
Armed Security Personnel	8	0	0.00%	0	0	0.00%	0	0	0.00%

Table 4-7. Drug Test Results by Test Type and Employee Category by Rail and Non-Rail

							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
Pre-Employment	22,640	706	3.11%	36,973	928	2.51%	59,613	1,634	2.74%
Random	54,173	520	0.96%	57,317	676	1.18%	111,490	1,196	1.07%
Post-Accident	6,913	106	1.53%	7,055	97	1.39%	13,968	203	1.45%
Reasonable Suspicion	719	36	5.01%	289	45	15.57%	1,008	81	8.04%
Return-to-Duty	630	13	2.06%	511	21	4.11%	1,141	34	2.98%
Follow-Up	10,870	111	1.02%	2,658	96	3.62%	13,528	207	1.53%
TOTALS	**95,945**	**1,492**	**1.56%**	**104,803**	**1,873**	**1.79%**	**200,748**	**3,355**	**1.67%**
							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
Revenue Vehicle Operation	17,617	588	3.34%	32,559	828	2.54%	50,176	1,416	2.82%
Revenue Veh. and Equip. Maint.	3,252	82	2.52%	2,765	73	2.64%	6,017	155	2.58%
Revenue Veh. Control/Disp.	818	20	2.44%	1,216	14	1.15%	2,034	34	1.67%
CDL/Non-Revenue Vehicle	219	13	5.94%	220	11	5.00%	439	24	5.47%
Armed Security Personnel	734	3	0.41%	213	2	0.94%	947	5	0.53%
Revenue Vehicle Operation	33,809	351	1.04%	43,392	502	1.16%	77,201	853	1.10%
Revenue Veh. and Equip. Maint.	14,032	129	0.92%	8,429	128	1.52%	22,461	257	1.14%
Revenue Veh. Control/Disp.	3,443	15	0.44%	4,431	32	0.72%	7,874	47	0.60%
CDL/Non-Revenue Vehicle	1,466	18	1.23%	744	9	1.21%	2,210	27	1.22%
Armed Security Personnel	1,423	7	0.49%	321	5	1.56%	1,744	12	0.69%

Table 4-7. Drug Test Results by Test Type and Employee Category by Rail and Non-Rail (continued)

							Totals		
									Percent Positive
Revenue Vehicle Operation	6,171	99	1.60%	6,582	94	1.43%	12,753	193	1.51%
Revenue Veh. and Equip. Maint.	468	5	1.07%	346	3	0.87%	814	8	0.98%
Revenue Veh. Control/Disp.	134	0	0.00%	64	0	0.00%	198	0	0.00%
CDL/Non-Revenue Vehicle	59	2	3.39%	40	0	0.00%	99	2	2.02%
Armed Security Personnel	81	0	0.00%	23	0	0.00%	104	0	0.00%
Revenue Vehicle Operation	588	27	4.59%	236	38	16.10%	824	65	7.89%
Revenue Veh. and Equip. Maint.	73	6	8.22%	38	4	10.53%	111	10	9.01%
Revenue Veh. Control/Disp.	33	0	0.00%	8	1	12.50%	41	1	2.44%
CDL/Non-Revenue Vehicle	19	3	15.79%	6	2	33.33%	25	5	20.83%
Armed Security Personnel	6	0	0.00%	2	0	0.00%	8	0	0.00%
Revenue Vehicle Operation	426	8	1.88%	409	15	3.67%	835	23	2.75%
Revenue Veh. and Equip. Maint.	162	5	3.09%	82	3	3.66%	244	8	3.28%
Revenue Veh. Control/Disp.	18	0	0.00%	16	3	18.75%	34	3	8.82%
CDL/Non-Revenue Vehicle	24	0	0.00%	4	0	0.00%	28	0	0.00%
Armed Security Personnel	0	0	0.00%	0	0	0.00%	0	0	0.00%
Revenue Vehicle Operation	6,766	67	0.99%	1931	74	3.84%	8,697	141	1.62%
Revenue Veh. and Equip. Maint.	2,908	27	0.93%	589	16	2.72%	3,497	43	1.23%
Revenue Veh. Control/Disp.	387	3	0.78%	98	3	3.06%	485	6	1.24%
CDL/Non-Revenue Vehicle	802	14	1.75%	39	3	7.69%	841	17	2.02%
Armed Security Personnel	7	0	0.00%	1	0	0.00%	8	0	0.00%

4.3 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.

4.4 Accidents

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 is transported away from the scene by a tow truck or other vehicle;
- The mass transit vehicle involved is a rail car, trolley car, trolley bus, or vessel, and is removed from revenue service. See Tables 4-8 to 4-10.

Table 4-8. 1998 Accidents with Drug Positives

				Accidents per Covered Employee
Transit Systems	128	0	0	0.07
Contractors	71	0	0	0.16
				0.09

Table 4-9. Accidents with Drug Positives by Size

			Number of Fatalities
Large	183	0	0
Small	10	0	0
Rural	6	0	0
			0

Table 4-10. Accidents with Drug Positives by Region

				Accidents per Covered Employee
1	11	0	0	0.09
2	13	0	0	0.03
3	25	0	0	0.09
4	33	0	0	0.13
5	43	0	0	0.12
6	21	0	0	0.12
7	2	0	0	0.02
8	9	0	0	0.14
9	36	0	0	0.10
10	6	0	0	0.05
				0.09

Whenever there is an accident meeting the FTA threshold, post-accident testing is mandatory unless employee performance can be discounted completely as a causative or contributing factor. This means that safety-sensitive employees not on the vehicle (e.g., maintenance personnel), whose performance could have contributed to the accident (as determined by the transit agency using the best information available at the time of the accident) must be tested. As a result, it is possible for there to be multiple positive post-accident results in a single accident. See Table 4-11.

Table 4-11. Post-Accident Drug Test Positives

					Armed Security Personnel
Transit Systems	122	4	0	2	0
Contractors	71	4	0	0	0
					0

4.5 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-Tetrhydrocannabinol (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.

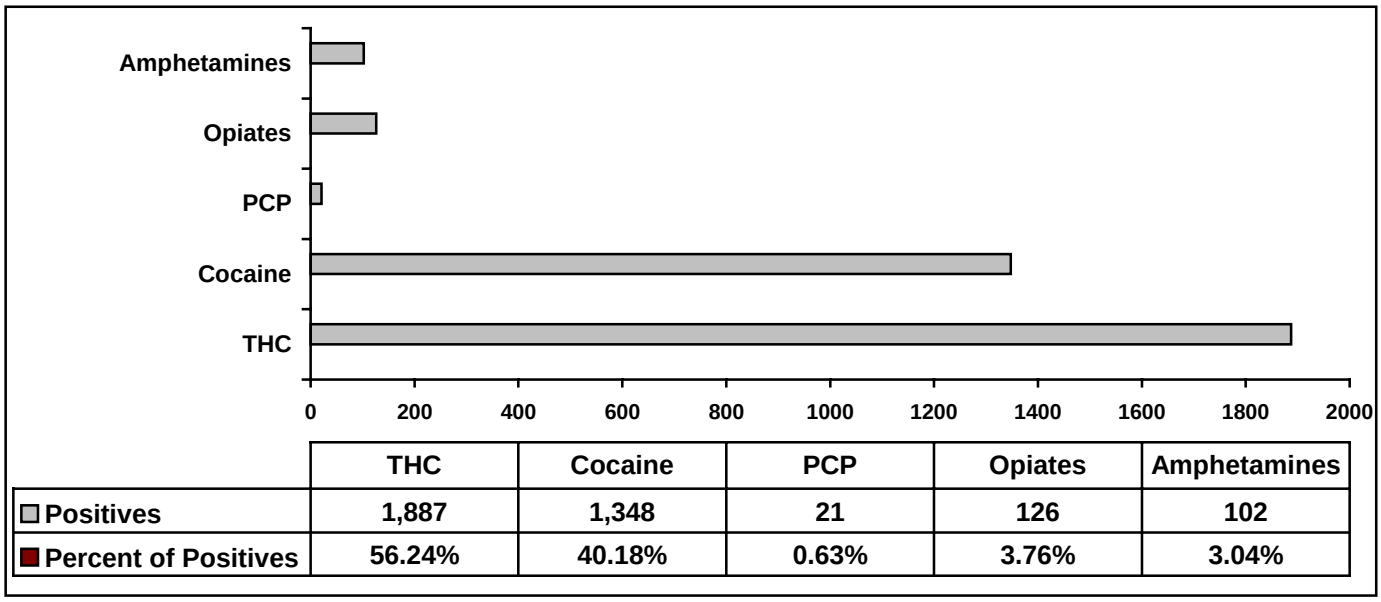
Cocaine is a chemical that has both local anesthetic properties, like Novocaine, and stimulant properties similar to adrenaline. Cocaine is used medically as a local anesthetic. Cocaine causes the brain to experience an exhilaration caused by a large release of neurohormones associated with mood elevation.

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.

Phencyclidine (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.

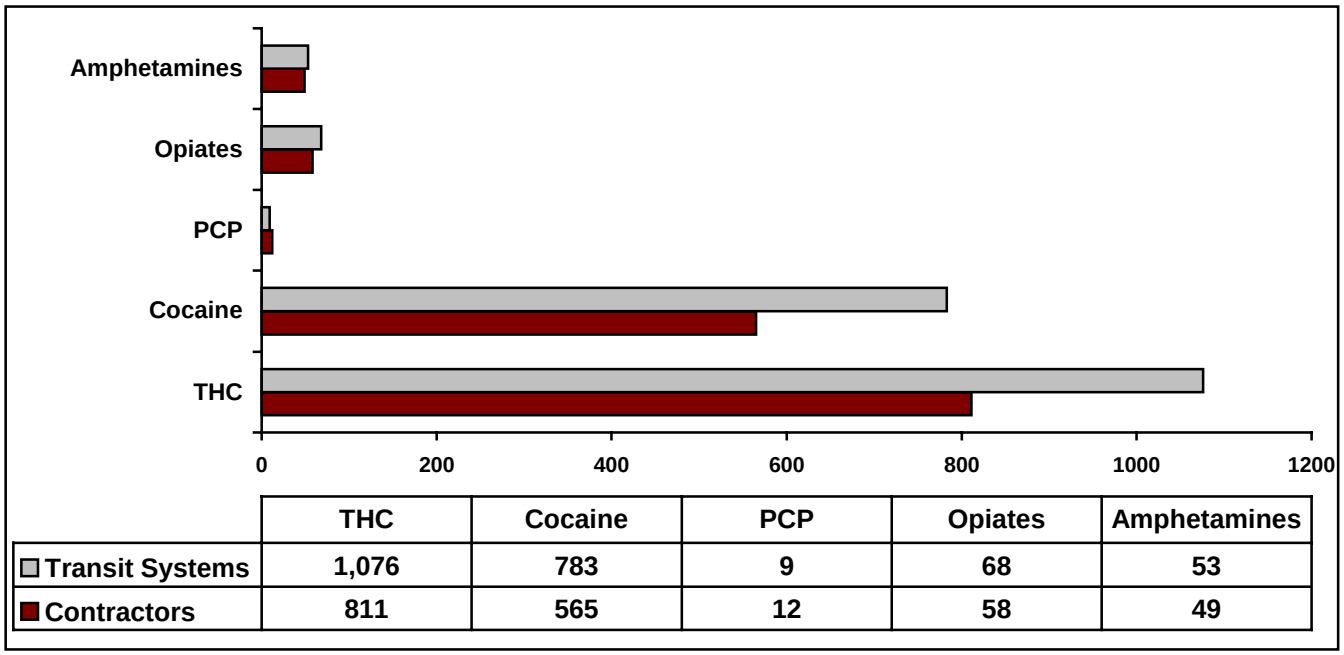
Amphetamines are central nervous system stimulants that speed up the mind and body. Although widely prescribed at one time for weight reduction and mood elevation, the legal use of amphetamines is now limited to a very narrow range of medical conditions.

Figures 4-1 to 4-8 and Table 4-12 provide details on the distribution of test results by type of drug.



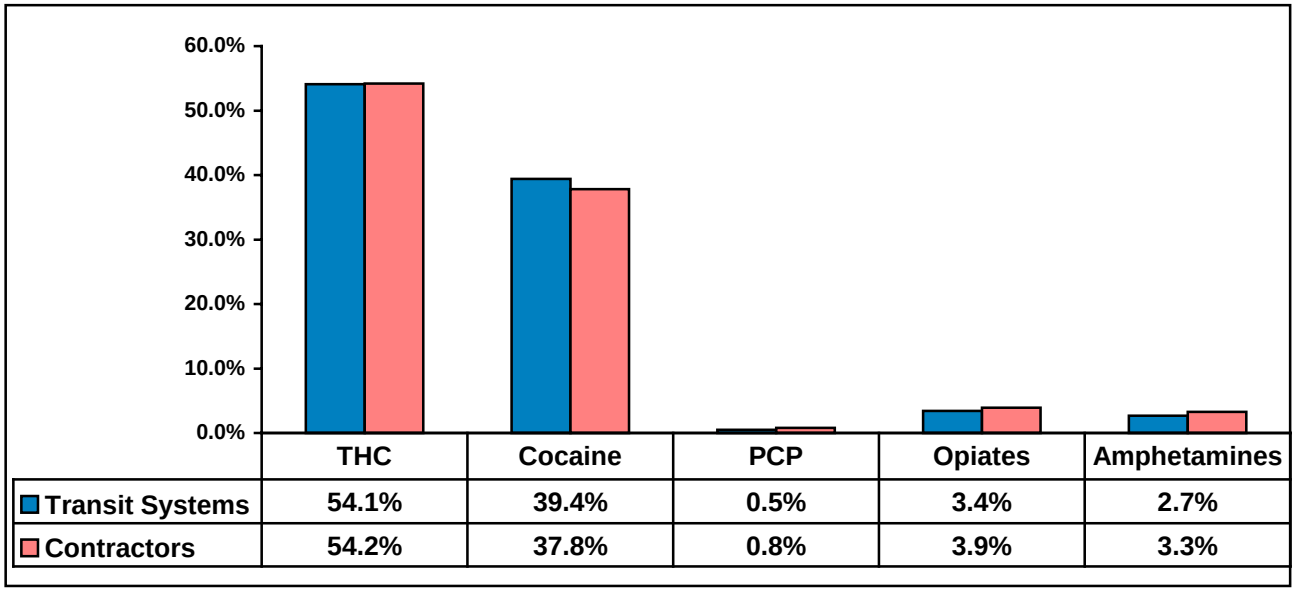
	THC	Cocaine	PCP	Opiates	Amphetamines
Positives	1,887	1,348	21	126	102
Percent of Positives	56.24%	40.18%	0.63%	3.76%	3.04%

Figure 4-1. Number and Percent of Positive Specimens by Type of Drug



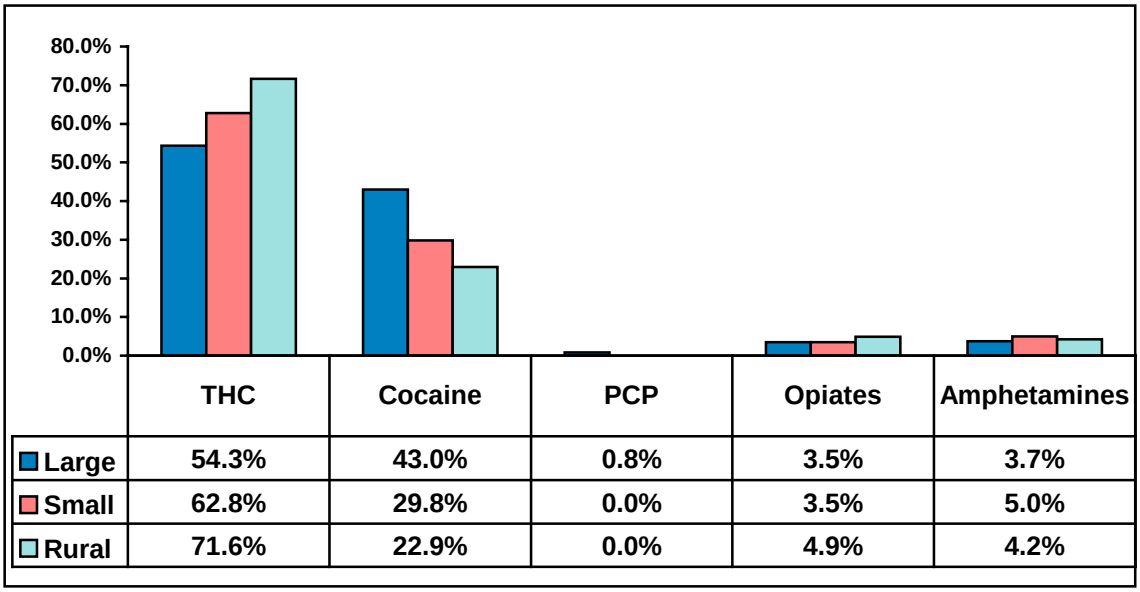
	THC	Cocaine	PCP	Opiates	Amphetamines
Transit Systems	1,076	783	9	68	53
Contractors	811	565	12	58	49

Figure 4-2. Number of Positive Specimens by Type of Drug for Each Employer Type



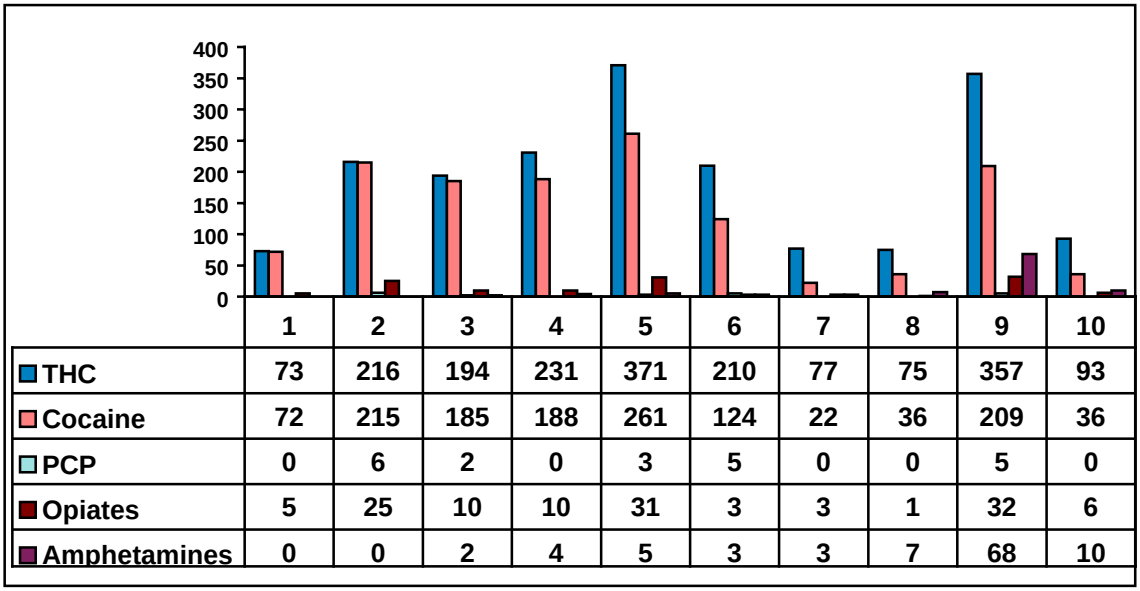
	THC	Cocaine	PCP	Opiates	Amphetamines
Transit Systems	54.1%	39.4%	0.5%	3.4%	2.7%
Contractors	54.2%	37.8%	0.8%	3.9%	3.3%

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



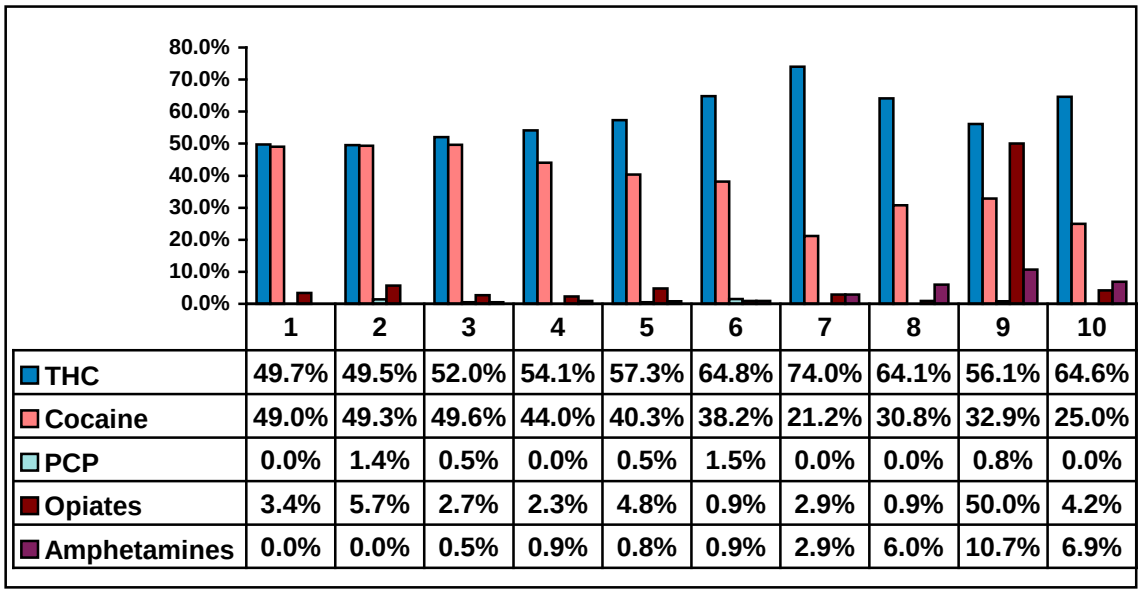
	THC	Cocaine	PCP	Opiates	Amphetamines
Large	54.3%	43.0%	0.8%	3.5%	3.7%
Small	62.8%	29.8%	0.0%	3.5%	5.0%
Rural	71.6%	22.9%	0.0%	4.9%	4.2%

Figure 4-4. Percent of Positive Specimens by Type of Drug and Operator Size



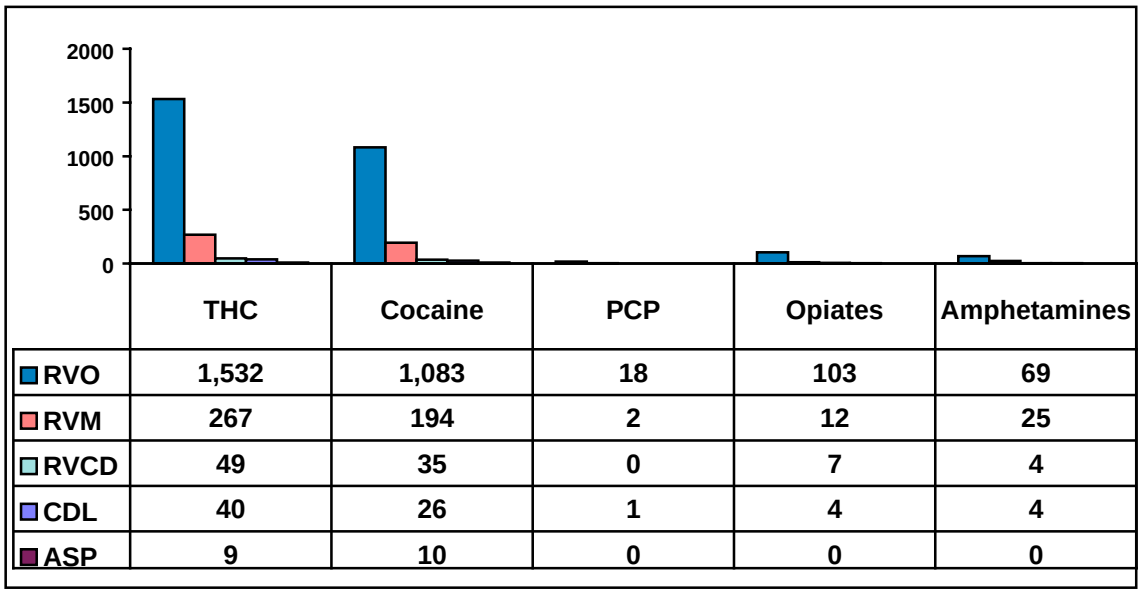
	1	2	3	4	5	6	7	8	9	10
THC	73	216	194	231	371	210	77	75	357	93
Cocaine	72	215	185	188	261	124	22	36	209	36
PCP	0	6	2	0	3	5	0	0	5	0
Opiates	5	25	10	10	31	3	3	1	32	6
Amphetamines	0	0	2	4	5	3	3	7	68	10

Figure 4-5. Number and Type of Drug by FTA Region



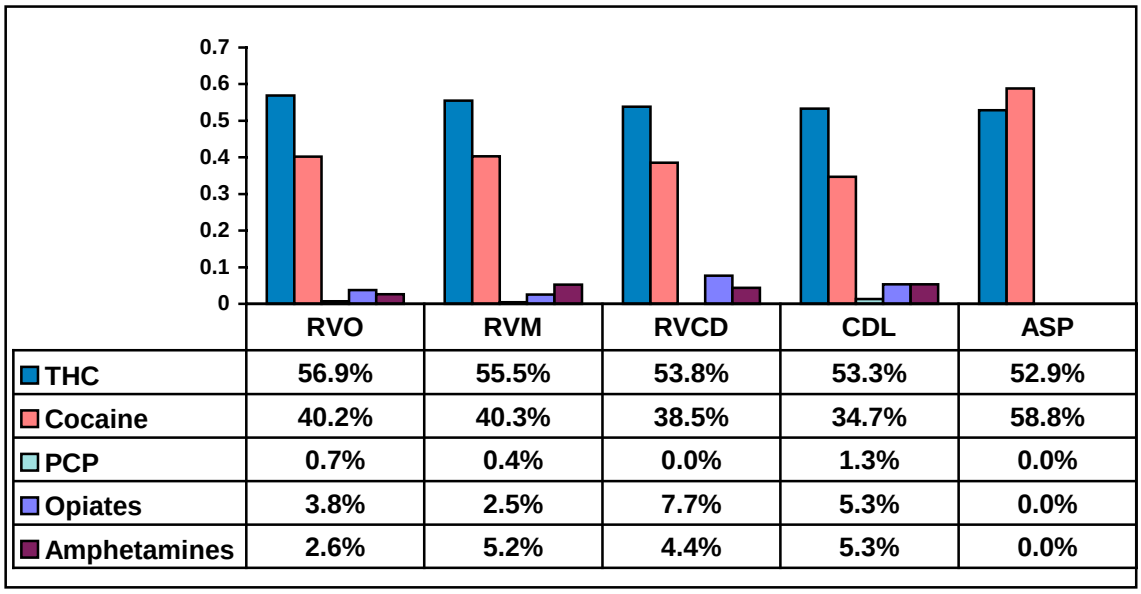
	1	2	3	4	5	6	7	8	9	10
THC	49.7%	49.5%	52.0%	54.1%	57.3%	64.8%	74.0%	64.1%	56.1%	64.6%
Cocaine	49.0%	49.3%	49.6%	44.0%	40.3%	38.2%	21.2%	30.8%	32.9%	25.0%
PCP	0.0%	1.4%	0.5%	0.0%	0.5%	1.5%	0.0%	0.0%	0.8%	0.0%
Opiates	3.4%	5.7%	2.7%	2.3%	4.8%	0.9%	2.9%	0.9%	50.0%	4.2%
Amphetamines	0.0%	0.0%	0.5%	0.9%	0.8%	0.9%	2.9%	6.0%	10.7%	6.9%

Figure 4-6. Percent of Positive Specimens by FTA Region and Type of Drug



	THC	Cocaine	PCP	Opiates	Amphetamines
RVO	1,532	1,083	18	103	69
RVM	267	194	2	12	25
RVCD	49	35	0	7	4
CDL	40	26	1	4	4
ASP	9	10	0	0	0

Figure 4-7. Number of Positive Specimens by Employee Category and Type of Drug



	RVO	RVM	RVCD	CDL	ASP
THC	56.9%	55.5%	53.8%	53.3%	52.9%
Cocaine	40.2%	40.3%	38.5%	34.7%	58.8%
PCP	0.7%	0.4%	0.0%	1.3%	0.0%
Opiates	3.8%	2.5%	7.7%	5.3%	0.0%
Amphetamines	2.6%	5.2%	4.4%	5.3%	0.0%

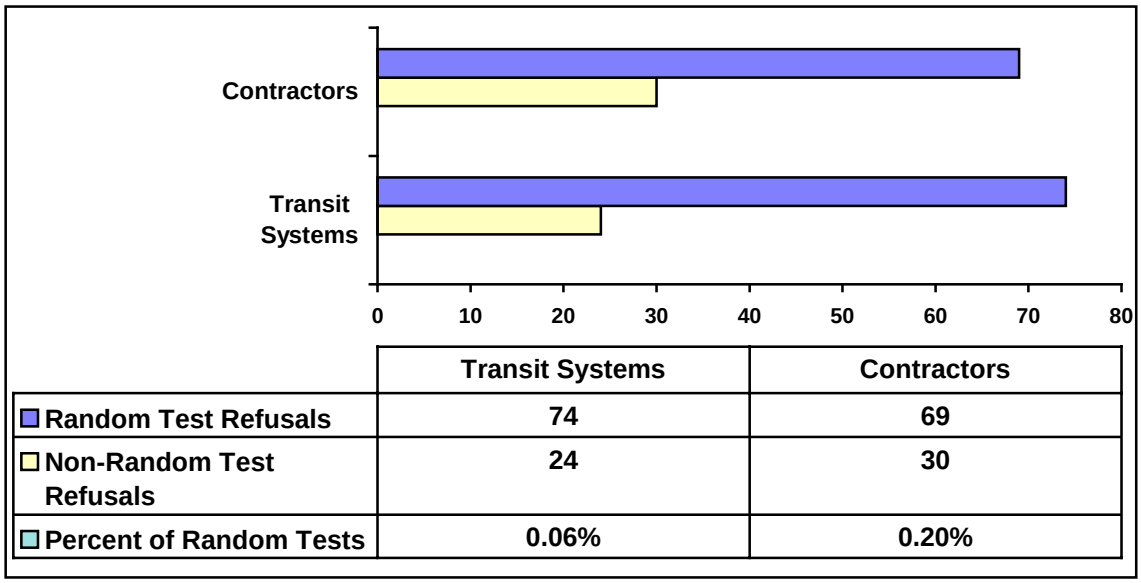
Figure 4-8. Percent of Positive Specimens by Type of Drug and Employee Category

Table 4-12. Multiple Drug Combinations

	Number of Specimens
THC/Cocaine	77
THC/PCP	11
	4
	15
	1
	15
	3
	2
	6
	1
	135

4.6 Drug Test Refusals

When directed to provide specimens for drug testing, some employees refused to be tested. In 1998, there were 143 reported cases of a covered employee refusing a random drug test and 54 cases of a covered employee refusing a non-random drug test. These refusals reflect 0.10 percent of the total number of drug tests attempted. See Figure 4-9.



	Transit Systems	Contractors
Random Test Refusals	74	69
Non-Random Test Refusals	24	30
Percent of Random Tests	0.06%	0.20%

Figure 4-9. Drug Test Refusals

4.7 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 954. 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 4-13.

Table 4-13. Returned-to-Duty Covered Employees

		Percent of Total
Transit Systems	821	86.1
Contractors	133	13.9
		100.0

4.8 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 4-14 identifies the number of specimens collected, the number of positive results, and the percent of positive results. Table 4-15 presents drug test results by employee category for large, small, and rural systems and their combined totals. Table 4-16 presents drug test results by employee category for transit systems and contractors and their combined totals.

Table 4-14. Drug Test Results by Employee Category and Test Type by Transit System and Contractor

							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**
Revenue Vehicle Operation	108,591	1,434	1.32%	41,895	1,257	3.00%	150,486	2,691	1.79%
Revenue Veh. and Equip. Maint.	28,958	381	1.32%	4,186	100	2.39%	33,144	481	1.45%
Revenue Veh. Control/Disp.	8,316	49	0.59%	2,350	42	1.79%	10,666	91	0.85%
CDL/Non-Revenue Vehicle	3,437	65	1.89%	204	10	4.90%	3,641	75	2.06%
Armed Security Personnel	1,935	6	0.31%	876	11	1.26%	2,811	17	0.60%
TOTALS	**151,237**	**1,935**	**1.28%**	**49,511**	**1,420**	**2.87%**	**200,748**	**3,355**	**1.67%**
							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**
Pre-Employment	28,148	575	2.04%	22,028	841	3.82%	50,176	1,416	2.82%
Random	61,288	570	0.93%	15,913	283	1.78%	77,201	853	1.10%
Post-Accident	9,735	122	1.25%	3,018	71	2.35%	12,753	193	1.51%
Reasonable Suspicion	622	37	5.95%	202	28	13.86%	824	65	7.89%
Return-to-Duty	693	15	2.16%	142	8	5.63%	835	23	2.75%
Follow-Up	8,105	115	1.42%	592	26	4.39%	8,697	141	1.62%
Pre-Employment	4,731	104	2.20%	1,286	51	3.97%	6,017	155	2.58%
Random	19,827	218	1.10%	2,634	39	1.48%	22,461	257	1.14%
Post-Accident	666	4	0.60%	148	4	2.70%	814	8	0.98%
Reasonable Suspicion	96	8	8.33%	15	2	13.33%	111	10	9.01%
Return-to-Duty	231	7	3.03%	13	1	7.69%	244	8	3.28%
Follow-Up	3,407	40	1.17%	90	3	3.33%	3,497	43	1.23%

Table 4-14. Drug Test Results by Employee Category and Test Type by Transit System and Contractor (continued)

							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**
Pre-Employment	1,310	10	0.76%	724	24	3.31%	2,034	34	1.67%
Random	6,309	30	0.48%	1,565	17	1.09%	7,874	47	0.60%
Post-Accident	177	0	0.00%	21	0	0.00%	198	0	0.00%
Reasonable Suspicion	36	1	2.78%	5	0	0.00%	41	1	2.44%
Return-to-Duty	27	2	7.41%	7	1	14.29%	34	3	8.82%
Follow-Up	457	6	1.31%	28	0	0.00%	485	6	1.24%
Pre-Employment	381	17	4.46%	58	7	12.07%	439	24	5.47%
Random	2,079	24	1.15%	131	3	2.29%	2,210	27	1.22%
Post-Accident	85	2	2.35%	14	0	0.00%	99	2	2.02%
Reasonable Suspicion	24	5	20.83%	0	0	0.00%	24	5	20.83%
Return-to-Duty	27	0	0.00%	1	0	0.00%	28	0	0.00%
Follow-Up	841	17	2.02%	0	0	0.00%	841	17	2.02%
Pre-Employment	469	1	0.21%	478	4	0.84%	947	5	0.53%
Random	1,352	5	0.37%	392	7	1.79%	1,744	12	0.69%
Post-Accident	100	0	0.00%	4	0	0.00%	104	0	0.00%
Reasonable Suspicion	6	0	0.00%	2	0	0.00%	8	0	0.00%
Return-to-Duty	0	0	0.00%	0	0	0.00%	0	0	0.00%
Follow-Up	8	0	0.00%	0	0	0.00%	8	0	0.00%

Table 4-15. Drug Test Results by Employee Category and Test Type by Size

							Rural		
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
Revenue Vehicle Operation	119,826	2,229	1.86%	11,959	199	1.66%	18,701	263	1.41%
Revenue Veh. and Equip. Maint.	30,202	412	1.36%	1,834	48	2.62%	1,108	21	1.90%
Revenue Veh. Control/Disp.	7,900	64	0.81%	941	8	0.85%	1,825	19	1.04%
CDL/Non-Revenue Vehicle	3,369	69	2.05%	169	3	1.78%	103	3	2.91%
Armed Security Personnel	2,785	17	0.61%	44	0	0.00%	0	0	0.00%
TOTALS	**164,082**	**2,791**	**1.70%**	**14,947**	**258**	**1.73%**	**21,737**	**306**	**1.41%**
							Rural		
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
Pre-Employment	37,526	1,168	3.11%	4,598	109	2.37%	8,052	139	1.73%
Random	61,005	681	1.12%	6,408	67	1.05%	9,788	105	1.07%
Post-Accident	11,289	178	1.58%	743	8	1.08%	721	7	0.97%
Reasonable Suspicion	775	50	6.45%	24	7	29.17%	25	8	32.00%
Return-to-Duty	743	17	2.29%	48	4	8.33%	44	2	4.55%
Follow-Up	8,488	135	1.59%	138	4	2.90%	71	2	2.82%
Pre-Employment	5,254	131	2.49%	423	17	4.02%	340	7	2.06%
Random	20,410	217	1.06%	1,307	27	2.07%	744	13	1.75%
Post-Accident	753	8	1.06%	52	0	0.00%	9	0	0.00%
Reasonable Suspicion	102	8	7.84%	6	1	16.67%	3	1	33.33%
Return-to-Duty	234	8	3.42%	7	0	0.00%	3	0	0.00%
Follow-Up	3,449	40	1.16%	39	3	7.69%	9	0	0.00%

Table 4-15. Drug Test Results by Employee Category and Test Type by Size (continued)

							Rural		
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**
Pre-Employment	1,382	28	2.03%	178	0	0.00%	474	6	1.27%
Random	5,824	28	0.48%	726	6	0.83%	1,320	13	0.98%
Post-Accident	168	0	0.00%	16	0	0.00%	14	0	0.00%
Reasonable Suspicion	36	1	2.78%	3	0	0.00%	2	0	0.00%
Return-to-Duty	28	2	7.14%	1	1	100.00%	5	0	0.00%
Follow-Up	462	5	1.08%	13	1	7.69%	10	0	0.00%
Pre-Employment	375	23	6.13%	36	0	0.00%	28	1	3.57%
Random	2,017	23	1.14%	120	2	1.67%	73	2	2.74%
Post-Accident	88	2	2.27%	9	0	0.00%	2	0	0.00%
Reasonable Suspicion	21	4	19.05%	3	1	33.33%	0	0	0.00%
Return-to-Duty	27	0	0.00%	1	0	0.00%	0	0	0.00%
Follow-Up	841	17	2.02%	0	0	0.00%	0	0	0.00
Pre-Employment	942	5	0.53%	5	0	0.00%	0	0	0.00%
Random	1,724	12	0.70%	20	0	0.00%	0	0	0.00%
Post-Accident	104	0	0.00%	0	0	0.00%	0	0	0.00%
Reasonable Suspicion	7	0	0.00%	1	0	0.00%	0	0	0.00%
Return-to-Duty	0	0	0.00%	0	0	0.00%	0	0	0.00%
Follow-Up	8	0	0.00%	0	0	0.00%	0	0	0.00%

Table 4-16. Drug Test Results by Employee Category and Test Type by Rail and Non-Rail

							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**
Revenue Vehicle Operation	65,377	1,140	1.74%	85,109	1,551	1.82%	150,486	2,691	1.79%
Revenue Veh. and Equip. Maint.	20,895	254	1.22%	12,249	227	1.85%	33,144	481	1.45%
Revenue Veh. Control/Disp.	4,833	38	0.79%	5,833	53	.091%	10,666	91	0.85%
CDL/Non-Revenue Vehicle	2,589	50	1.93%	1,052	25	2.38%	3,641	75	2.06%
Armed Security Personnel	2,251	10	0.44%	560	7	1.25%	2,811	17	0.60%
TOTALS	**95,945**	**1,492**	**1.56%**	**104,803**	**1,863**	**1.78%**	**200,748**	**3,355**	**1.67%**
							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**
Pre-Employment	17,617	588	3.34%	32,559	828	2.54%	50,176	1,416	2.82%
Random	33,809	351	1.04%	43,212	502	1.16%	77,201	853	1.10%
Post-Accident	6,171	99	1.60%	6,582	94	1.43%	12,753	193	1.51%
Reasonable Suspicion	588	27	4.59%	236	38	16.10%	824	65	7.89%
Return-to-Duty	426	8	1.88%	409	15	3.67%	835	23	2.75%
Follow-Up	6,766	67	0.99%	1,931	74	3.83%	8,697	141	1.62%
Pre-Employment	3,252	82	2.52%	2,765	73	2.64%	6,017	155	2.58%
Random	14,032	129	0.92%	8,429	128	1.52%	22,461	257	1.14%
Post-Accident	468	5	1.07%	346	3	0.87%	814	8	0.98%
Reasonable Suspicion	73	6	8.22%	38	4	10.53%	111	10	9.01%
Return-to-Duty	162	5	3.09%	82	3	3.66%	244	8	3.28%
Follow-Up	2,908	27	0.93%	589	16	2.72%	3,497	43	1.23%

Table 4-16. Drug Test Results by Employee Category and Test Type by Rail and Non-Rail (continued)

							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**
Pre-Employment	818	20	2.44%	1,216	14	1.15%	2,034	34	1.67%
Random	3,443	15	0.44%	4,431	32	0.72%	7,874	47	0.60%
Post-Accident	134	0	0.00%	64	0	0.00%	198	0	0.00%
Reasonable Suspicion	33	0	0.00%	8	1	12.50%	41	1	2.44%
Return-to-Duty	18	0	0.00%	16	3	18.75%	34	3	8.82%
Follow-Up	387	3	0.78%	98	3	3.06%	485	6	1.24%
Pre-Employment	219	13	5.94%	220	11	5.00%	439	24	5.47%
Random	1,466	18	1.23%	744	9	1.21%	2,210	27	1.22%
Post-Accident	59	2	3.39%	40	0	0.00%	99	2	2.02%
Reasonable Suspicion	19	3	15.79%	5	2	40.00%	24	5	20.83%
Return-to-Duty	24	0	0.00%	4	0	0.00%	28	0	0.00%
Follow-Up	802	14	1.75%	39	3	7.69%	841	17	2.02%
Pre-Employment	734	3	0.41%	229	2	0.87%	963	5	0.52%
Random	1,423	7	0.49%	322	5	1.55%	1,745	12	0.69%
Post-Accident	81	0	0.00%	24	0	0.00%	105	0	0.00%
Reasonable Suspicion	6	0	0.00%	2	0	0.00%	8	0	0.00%
Return-to-Duty	0	0	0.00%	0	0	0.00%	0	0	0.00%
Follow-Up	7	0	0.00%	2	0	0.00%	9	0	0.00%

5. ALCOHOL TEST RESULTS

This chapter provides background information on the alcohol testing procedures and a summary of the 1998 alcohol test results. This section also discusses results of random alcohol testing for transit systems and contracts, by size, by rail, and by region.

FTA regulations prohibit covered employees who perform safety-sensitive functions from reporting to duty or staying on duty while having an alcohol concentration ≥ 0.02. In addition, employees are prohibited from using alcohol within four hours prior to performing safety-sensitive functions and from consuming alcohol while on call. 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). The FTA provides different sets of consequences (see Figure 5-1) should an alcohol confirmation test show that an employee's alcohol concentration is (1) ≥ 0.02 but < 0.04, or (2) ≥ 0.04. A confirmation test that shows an alcohol concentration ≥ 0.04 results in the employee's removal from his or her safety-sensitive position. 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 whose screening test result indicates a ≥ 0.02 alcohol concentration.

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 5-1. Consequences of an Alcohol Test for FTA-Covered Employees

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 5-1 shows the percent of alcohol forms received for 1998 from transit systems and contractors with at least one positive test result.

Table 5-1. Percent of Alcohol Forms Received for 1998 With at Least One Positive Test Result

					Percent with a Positive
Transit Systems	1,631	33	2.02	50	3.07
Contractors	846	10	1.18	43	5.08
					3.75

Table 5-2 shows the results of random alcohol testing for transit systems and contractors. For 1998, the FTA reduced the random alcohol testing rate to 10 percent. The January 6, 1998 issue of the Federal Register announced that this was effective as of January 1, 1998.

Random alcohol testing was the type of test conducted most frequently, 41,206 tests out of 64,546 total tests. Although Table 5-2 shows the number of random "positives" for alcohol tests ≥ 0.02 but < 0.04, for reporting purposes verified positives are considered ≥ 0.04.

Table 5-2 provides the random test results for transit systems and contractors and their combined totals at both the lower level (0.02 to < 0.04) and at the higher level (≥ 0.04) alcohol concentrations. The results differed only slightly between transit systems and contractors. Transit systems had a slightly greater percent of random alcohol test results at the higher level, ≥ 0.04. At the higher level of ≥ 0.04, transit systems had a 0.13 percent positive rate and contractors had a 0.14 percent positive rate. At the lower level, transit systems had a 0.14 percent positive rate and contractors were lower with a 0.03 percent positive rate. Since there were a greater number of tests administered by transit systems, the number of random alcohol tests at ≥ 0.04 percent are also greater for transit systems (44) than for contractors (10).

Table 5-2. Random Alcohol Test Results at Both Levels for Transit Systems and Contractors

					Percent ≥ 0.04
Transit Systems	34,039	47	44	0.14	0.13
Contractors	7,167	2	10	0.03	0.14
					0.13

Table 5-3 provides random alcohol test results at both levels by size.

Table 5-3. Random Alcohol Test Results at Both Levels by Size

					Percent ≥ 0.04
Large	34,315	37	52	0.11	0.15
Small	2,867	2	1	0.07	0.03
Rural	4,024	10	1	0.25	0.02
					0.13

Table 5-4 presents random alcohol test results by rail and non-rail systems.

Table 5-4. Random Alcohol Test Results by Rail and Non-Rail

					Percent ≥ 0.04
Rail	20,474	27	34	0.13	0.17
Non-Rail	20,732	22	20	0.11	0.10
					0.13

5.1 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 5-5, of the ten FTA regions, regions 2 and 4 had the highest percent of specimens testing positive for alcohol.

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

					Percent ≥ 0.04
1	1,954	4	2	0.20	0.10
2	7,570	13	15	0.17	0.20
3	5,663	5	13	0.09	0.23
4	6,152	12	11	0.19	0.18
5	6,050	8	9	0.13	0.15
6	4,082	1	1	0.02	0.02
7	1,613	1	0	0.06	0.00
8	822	0	1	0.00	0.12
9	4,913	5	2	0.10	0.04
10	2,387	0	0	0.00	0.00
					0.13

5.2 Results of Alcohol Testing by Test Types

Alcohol test information was required from transit systems and their contractors for five 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 5-6 presents the alcohol test results by test type and by employee category for transit systems and contractors and identifies the combined totals. This table presents the number of screening tests administered, the number of test results ≥ 0.04, and the percent of test results ≥ 0.04.

The totals indicate that alcohol test results ranged from 0.12 percent for random to 9.52 percent for reasonable suspicion.

Table 5-7 presents the alcohol test results by test type and employee category for large, small, and rural systems. Table 5-8 presents the alcohol test results by test type and employee category for rail and non-rail systems.

5.3 Results of Alcohol Testing by Employee Category

Table 5-9 presents alcohol testing information by employee category and test type for transit systems, contractors, and totals. This table information shows the number of screening tests administered, the number of test results ≥ 0.04, and the percent of test results ≥ 0.04. In examining each employee category, random tests were the most frequently conducted test and may be the most indicative of alcohol use by FTA-covered employees of transit systems and contractors.

Table 5-10 presents the alcohol test results by employee category and test type for large, small, and rural systems and their combined totals. Table 5-11 presents the alcohol test results by employee category and test type for rail and non-rail systems and their combined totals.

Table 5-6. Alcohol Test Results by Test Type and Employee Category by Transit System and Contractor

							Totals		
Test Type	**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**
Random	34,039	44	0.13%	7,167	10	0.14%	41,206	54	0.13%
Post-Accident	10,315	7	0.68%	2,556	8	0.32%	12,871	15	0.12%
Reasonable Suspicion	763	56	7.34%	203	36	17.73%	966	92	9.52%
Return-to-Duty	661	0	0.00%	58	4	6.90%	719	4	0.56%
Follow-Up	8,328	24	0.29%	456	0	0.00%	8,784	24	0.27%
TOTALS	**54,106**	**131**	**0.24%**	**10,440**	**58**	**0.56%**	**64,546**	**189**	**0.29%**
							Totals		
Employee Category	**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	23,003	22	0.10%	5,437	6	0.11%	28,440	28	0.10%
Vehicle and Equipment Maintenance	7,237	18	0.25%	1,014	4	0.39%	8,251	22	0.27%
Revenue Vehicle Control/Dispatch	2,086	3	0.14%	537	0	0.00%	2,623	3	0.11%
CDL/Non-Revenue Vehicle	1,041	1	0.10%	58	0	0.00%	1,099	1	0.09%
Armed Security Personnel	672	0	0.00%	121	0	0.00%	793	0	0.00%

Table 5-6. Alcohol Test Results by Test Type and Employee Category by Transit System and Contractor (continued)

							Totals		
Employee Category	**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	9,352	7	0.07%	2,406	8	0.33%	11,758	15	0.13%
Vehicle and Equipment Maintenance	629	0	0.00%	115	0	0.00%	744	0	0.00%
Revenue Vehicle Control/Dispatch	160	0	0.00%	18	0	0.00%	178	0	0.00%
CDL/Non-Revenue Vehicle	79	0	0.00%	12	0	0.00%	91	0	0.00%
Armed Security Personnel	95	0	0.00%	5	0	0.00%	100	0	0.00%
Revenue Vehicle Operations	595	36	6.05%	166	31	18.67%	761	67	8.80%
Vehicle and Equipment Maintenance	105	12	11.42%	27	3	11.11%	132	15	11.36%
Revenue Vehicle Control/Dispatch	33	5	15.15%	8	2	25.00%	41	7	17.07%
CDL/Non-Revenue Vehicle	24	3	12.50%	0	0	0.00%	24	3	12.50%
Armed Security Personnel	6	0	0.00%	2	0	0.00%	8	0	0.00%
Revenue Vehicle Operations	450	0	0.00%	47	1	2.13%	497	1	0.20%
Vehicle and Equipment Maintenance	172	0	0.00%	7	1	14.29%	179	1	0.56%
Revenue Vehicle Control/Dispatch	21	0	0.00%	3	1	33.33%	24	1	4.17%
CDL/Non-Revenue Vehicle	18	0	0.00%	0	0	0.00%	18	0	0.00%
Armed Security Personnel	0	0	0.00%	1	0	0.00%	1	0	0.00%
Revenue Vehicle Operations	4,944	9	0.18%	357	0	0.00%	5,301	9	0.17%
Vehicle and Equipment Maintenance	2,388	8	0.33%	86	0	0.00%	2,474	8	0.32%
Revenue Vehicle Control/Dispatch	310	4	1.29%	13	0	0.00%	323	4	1.24%
CDL/Non-Revenue Vehicle	680	3	0.44%	0	0	0.00%	690	3	0.44%
Armed Security Personnel	6	0	0.00%	0	0	0.00%	6	0	0.00%

Table 5-7. Alcohol Test Results by Test Type and Employee Category by Size

							Rural		
Test Type	**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**
Random	34,315	52	0.15%	2,867	1	3.49%	4,024	1	0.25%
Post-Accident	11,654	14	0.12%	675	0	0.00%	542	1	1.84%
Reasonable Suspicion	902	79	8.76%	32	4	12.50%	32	9	28.12%
Return-to-Duty	681	1	0.15%	32	2	6.25%	6	1	16.67%
Follow-Up	8,668	23	0.27%	84	1	1.19%	32	0	0.00%
TOTALS	**56,220**	**169**	**0.30%**	**3,690**	**8**	**0.22%**	**4,636**	**12**	**0.26%**
							Rural		
Employee Category	**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	23,090	28	0.12%	2,090	0	0.21%	3,260	0	0.00%
Vehicle and Equipment Maintenance	7,498	20	0.27%	480	1	0.00%	273	1	0.37%
Revenue Vehicle Control/Dispatch	1,919	3	0.16%	245	0	0.00%	459	0	0.00%
CDL/Non-Revenue Vehicle	1,026	1	0.10%	41	0	0.00%	32	0	0.00%
Armed Security Personnel	782	0	0.00%	11	0	0.00%	0	0	0.00%

Table 5-7. Alcohol Test Results by Test Type and Employee Category by Size (continued)

							Rural		
Employee Category	**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	10,606	14	0.13%	621	0	0.00%	531	1	0.19%
Vehicle and Equipment Maintenance	698	0	0.00%	41	0	0.00%	5	0	0.00%
Revenue Vehicle Control/Dispatch	167	0	0.00%	6	0	0.00%	5	1	0.00%
CDL/Non-Revenue Vehicle	83	0	0.00%	7	0	0.00%	1	1	0.00%
Armed Security Personnel	100	0	0.00%	0	0	0.00%	0	1	0.00%
Revenue Vehicle Operations	711	56	7.88%	21	4	19.05%	29	7	24.14%
Vehicle and Equipment Maintenance	126	14	11.11%	5	0	0.00%	1	1	100.00%
Revenue Vehicle Control/Dispatch	36	6	16.67%	3	0	0.00%	2	1	50.00%
CDL/Non-Revenue Vehicle	22	3	13.64%	2	0	0.00%	0	0	0.00%
Armed Security Personnel	7	0	0.00%	1	0	0.00%	0	0	0.00%
Revenue Vehicle Operations	466	1	0.21%	26	0	0.00%	5	0	0.00%
Vehicle and Equipment Maintenance	173	0	0.00%	6	1	16.67%	0	0	0.00%
Revenue Vehicle Control/Dispatch	23	0	0.00%	0	0	0.00%	1	1	100.00%
CDL/Non-Revenue Vehicle	18	0	0.00%	0	0	0.00%	0	0	0.00%
Armed Security Personnel	1	0	0.00%	0	0	0.00%	0	0	0.00%
Revenue Vehicle Operations	5,228	9	0.17%	49	0	0.00%	24	0	0.00%
Vehicle and Equipment Maintenance	2,443	7	0.29%	26	1	3.85%	5	0	0.00%
Revenue Vehicle Control/Dispatch	314	4	1.27%	9	0	0.00%	0	0	0.00%
CDL/Non-Revenue Vehicle	677	3	0.44%	0	0	0.00%	3	0	0.00%
Armed Security Personnel	6	0	0.00%	0	0	0.00%	0	0	0.00%

Table 5-8. Alcohol Test Results by Test Type and Employee Category by Rail and Non-Rail

							Totals		
Test Type	**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**
Random	20,474	34	0.17%	20,732	20	0.14%	41,206	54	0.13%
Post-Accident	6,532	9	0.14%	6,339	6	0.32%	12,871	15	0.12%
Reasonable Suspicion	688	39	5.67%	278	53	17.73%	966	92	9.52%
Return-to-Duty	457	0	0.00%	262	4	6.90%	719	4	0.56%
Follow-Up	7,155	18	0.25%	1,629	6	0.00%	8,784	24	0.27%
TOTALS	**35,306**	**100**	**0.28%**	**29,240**	**89**	**0.30%**	**64,546**	**189**	**0.29%**
							Totals		
Employee Category	**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	13,038	17	0.13%	15,402	11	0.07%	28,440	28	0.10%
Vehicle and Equipment Maintenance	4,857	14	0.29%	3,394	8	0.24%	8,251	22	0.27%
Revenue Vehicle Control/Dispatch	1,130	2	0.18%	1,493	1	0.01%	2,623	3	0.11%
CDL/Non-Revenue Vehicle	791	1	0.13%	308	0	0.00%	1,099	1	0.09%
Armed Security Personnel	658	0	0.00%	135	0	0.00%	793	0	0.00%

Table 5-8. Alcohol Test Results by Test Type and Employee Category by Rail and Non-Rail (continued)									
							Totals		
Employee Category	**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	5,804	9	0.16%	5,954	6	0.10%	11,758	15	0.13%
Vehicle and Equipment Maintenance	457	0	0.00%	287	0	0.00%	744	0	0.00%
Revenue Vehicle Control/Dispatch	134	0	0.00%	44	0	0.00%	178	0	0.00%
CDL/Non-Revenue Vehicle	56	0	0.00%	35	0	0.00%	91	0	0.00%
Armed Security Personnel	81	0	0.00%	19	0	0.00%	100	0	0.00%
Revenue Vehicle Operations	552	26	4.71%	209	41	19.62%	761	67	8.80%
Vehicle and Equipment Maintenance	79	7	8.86%	53	8	15.09%	132	15	11.36%
Revenue Vehicle Control/Dispatch	31	4	12.90%	10	3	30.00%	41	7	17.07%
CDL/Non-Revenue Vehicle	20	2	10.00%	4	1	25.00%	24	3	12.50%
Armed Security Personnel	6	0	0.00%	2	0	0.00%	8	0	0.00%
Revenue Vehicle Operations	307	0	0.00%	190	1	0.53%	497	1	0.20%
Vehicle and Equipment Maintenance	121	0	0.00%	58	1	1.72%	179	1	0.56%
Revenue Vehicle Control/Dispatch	13	0	0.00%	11	1	9.09%	24	1	4.17%
CDL/Non-Revenue Vehicle	16	0	0.00%	2	0	0.00%	18	0	0.00%
Armed Security Personnel	1	0	0.00%	1	0	0.00%	1	0	0.00%
Revenue Vehicle Operations	4,169	7	0.17%	1,132	2	0.18%	5,301	9	0.17%
Vehicle and Equipment Maintenance	2,068	7	0.34%	406	1	0.25%	2,474	8	0.32%
Revenue Vehicle Control/Dispatch	258	2	0.78%	65	2	3.08%	323	4	1.24%
CDL/Non-Revenue Vehicle	655	2	0.31%	35	1	2.86%	690	3	0.44%
Armed Security Personnel	5	0	0.00%	1	0	0.00%	6	0	0.00%

Table 5-9. Alcohol Test Results by Employee Category and Test Type by Transit System and Contractor

							Totals		
Employee Category	**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	38,344	74	0.19%	8,413	46	0.55%	46,757	120	0.26%
Revenue Veh. and Equip. Maint.	10,531	38	0.36%		8	0.64%	11,780	46	0.39%
Revenue Veh. Control/Dispatch	2,610	12	0.46%	579	3	0.52%	3,189	15	0.47%
CDL/Non-Revenue Vehicle		7	0.38%	70	1	1.43%	1,912	8	0.42%
Armed Security Personnel	779		0.00%	129	0	0.00%	908	0	0.00%
TOTALS	**54,106**		**0.24%**			**0.56%**	**64,546**	**189**	**0.29%**

							Totals		
Test Type	**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	23,003	22	0.10%	5,437	6	0.11%	28,440	28	0.10%
Post-Accident	9,352	7	0.07%	2,406	8	0.33%	11,758	15	0.13%
Reasonable Suspicion	595	36	6.05%	166	31	18.67%	761	67	8.80%
Return-to-Duty	450	0	0.00%	47	1	2.13%	497	1	0.20%
Follow-Up	4,944	9	0.18%	357	0	0.00%	5,301	9	0.17%
REVENUE VEHICLE AND EQUIPMENT MAINTENANCE									
Random	7,237	18	0.25%	1,014	4	0.39%	8,251	22	0.27%
Post-Accident	629	0	0.00%	115	0	0.00%	744	0	0.00%
Reasonable Suspicion	105	12	11.43%	27	3	11.11%	132	15	11.36%
Return-to-Duty	172	0	0.00%	7	1	14.29%	179	1	0.56%
Follow-Up	2,388	8	0.33%	86	0	0.00%	2,474	8	0.32%

Table 5-9. Alcohol Test Results by Employee Category and Test Type by Transit System and Contractor (continued)

							Totals		
Test Type	**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	2,086	3	0.14%	537	0	0.00%	2,623	3	0.11%
Post-Accident	160	0	0.00%	18	0	0.00%	178	0	0.00%
Reasonable Suspicion	33	5	15.15%	8	2	25.00%	41	7	17.07%
Return-to-Duty	21	0	0.00%	3	1	33.33%	24	1	4.17%
Follow-Up	310	4	1.29%	13	0	0.00%	323	4	1.24%
CDL/NON-REVENUE VEHICLE									
Random	1,041	1	0.10%	58	0	0.00%	1,099	1	0.09%
Post-Accident	79	0	0.00%	12	0	0.00%	91	0	0.00%
Reasonable Suspicion	24	3	12.50%	0	0	0.00%	24	3	12.50%
Return-to-Duty	18	0	0.00%	0	0	0.00%	18	0	0.00%
Follow-Up	680	3	0.44%	0	0	0.00%	323	4	1.24%
ARMED SECURITY PERSONNEL									
Random	672	0	0.00%	121	0	0.00%	793	0	0.00%
Post-Accident	95	0	0.00%	5	0	0.00%	100	0	0.00%
Reasonable Suspicion	6	0	0.00%	2	0	0.00%	8	0	0.00%
Return-to-Duty	0	0	0.00%	1	0	0.00%	1	0	0.00%
Follow-Up	6	0	0.00%	0	0	0.00%	6	0	0.00%

Table 5-10. Alcohol Test Results by Employee Category and Test Type by Size									
							Rural		
Employee Category	**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	40,101	108	0.27%	2,807	4	0.14%	3,849	8	0.21%
Revenue Veh. and Equip. Maint.	10,938	41	0.37%		3	0.54%	284	2	0.70%
Revenue Veh. Control/Dispatch	2,459	13	0.53%	263	0	0.00%	467	2	0.43%
CDL/Non-Revenue Vehicle		7	0.38%	50	1	2.00%	36	0	0.00%
Armed Security Personnel	896		0.00%	12	0	0.00%	0	0	0.00%
TOTALS	**56,220**		**0.30%**			**0.22%**	**4,636**	**12**	**0.26%**
							Rural		
Test Type	**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	23,090	28	0.12%	2,090	0	0.00%	3,260	0	0.00%
Post-Accident	10,606	14	0.13%	621	0	0.00%	531	1	0.19%
Reasonable Suspicion	711	56	7.88%	21	4	19.05%	29	7	24.14%
Return-to-Duty	466	1	0.21%	26	0	0.00%	5	0	0.00%
Follow-Up	5,228	9	0.17%	49	0	0.00%	24	0	0.00%
REVENUE VEHICLE AND EQUIPMENT MAINTENANCE									
Random	7,498	20	0.27%	480	1	0.21%	273	1	0.37%
Post-Accident	698	0	0.00%	41	0	0.00%	5	0	0.00%
Reasonable Suspicion	126	14	11.11%	5	0	0.00%	1	1	100.00%
Return-to-Duty	173	0	0.00%	6	1	16.67%	0	0	0.00%
Follow-Up	2,443	7	0.29%	26	1	3.85%	5	0	0.00%

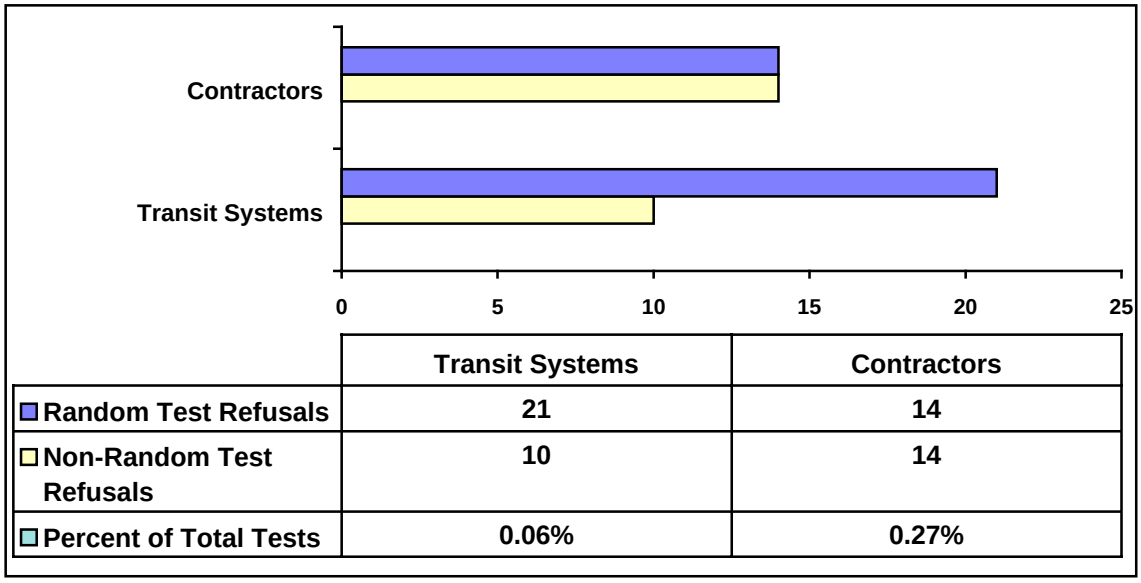
Table 5-10. Alcohol Test Results by Employee Category and Test Type by Size (continued)									
							Rural		
Test Type	**Number of Screening Tests**	**Number of Results ≥ 0.04**	**Percent ≥ 0.04**	**Number of Screening Tests**	**Number of Results ≥ 0.04**	**Percent ≥ 0.04**	**Number of Screening Tests**	**Number of Results ≥ 0.04**	**Percent ≥ 0.04**
REVENUE VEHICLE CONTROL/DISPATCH									
Random	1,919	3	0.16%	245	0	0.00%	459	0	0.00%
Post-Accident	167	0	0.00%	6	0	0.00%	5	0	0.00%
Reasonable Suspicion	36	6	16.16%	3	0	0.00%	2	1	50.00%
Return-to-Duty	23	0	0.00%	0	0	0.00%	1	1	100.00%
Follow-Up	314	4	1.27%	9	0	0.00%	0	0	0.00%
CDL/NON-REVENUE VEHICLE									
Random	1,026	1	0.10%	41	0	0.00%	32	0	0.00%
Post-Accident	83	0	0.00%	7	0	0.00%	1	0	0.00%
Reasonable Suspicion	22	3	13.64%	2	0	0.00%	0	0	0.00%
Return-to-Duty	18	0	0.00%	0	0	0.00%	0	0	0.00%
Follow-Up	677	3	0.44%	0	0	0.00%	3	0	0.00%
ARMED SECURITY PERSONNEL									
Random	782	0	0.00%	11	0	0.00%	0	0	0.00%
Post-Accident	100	0	0.00%	0	0	0.00%	0	0	0.00%
Reasonable Suspicion	7	0	0.00%	1	0	0.00%	0	0	0.00%
Return-to-Duty	1	0	0.00%	0	0	0.00%	0	0	0.00%
Follow-Up	6	0	0.00%	0	0	0.00%	0	0	0.00%

Table 5-11. Alcohol Test Results by Employee Category and Test Type by Rail and Non-Rail									
							Totals		
Employee Category	**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	23,870	59	0.25%	22,887	61	0.27%	46,757	120	0.26%
Revenue Veh. and Equip. Maint.	7,582	28	0.37%	4,198	18	0.43%	11,780	46	0.39%
Revenue Veh. Control/Dispatch	1,566	8	0.51%	1,623	7	0.43%	3,189	15	0.47%
CDL/Non-Revenue Vehicle		5	0.33%	374	3	0.80%	1,912	8	0.42%
Armed Security Personnel	751		0.00%	157	0	0.00%	908	0	0.00%
TOTALS	**35,307**	**100**	**0.28%**	**29,239**	**89**	**0.30%**	**64,546**	**189**	**0.29%**
							Totals		
Test Type	**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	13,038	17	0.13%	15,402	11	0.07%	28,440	28	0.10%
Post-Accident	5,804	9	0.16%	5,954	6	0.10%	11,758	15	0.13%
Reasonable Suspicion	552	26	4.71%	209	41	19.62%	761	67	8.80%
Return-to-Duty	307	0	0.00%	190	1	0.53%	497	1	0.20%
Follow-Up	4,169	7	0.17%	1,132	2	0.18%	5,301	9	0.17%
REVENUE VEHICLE AND EQUIPMENT MAINTENANCE									
Random	4,857	14	0.29%	3,394	8	0.24%	8,251	22	0.27%
Post-Accident	457	0	0.00%	287	0	0.00%	744	0	0.00%
Reasonable Suspicion	79	7	8.86%	53	8	15.09%	132	15	11.36%
Return-to-Duty	121	0	0.00%	58	1	1.72%	179	1	0.56%
Follow-Up	2,068	7	0.34%	406	1	0.25%	2,474	8	0.32%

Table 5-11. Alcohol Test Results by Employee Category and Test Type by Rail and Non-Rail (continued)									
							Totals		
Test Type	**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	1,130	2	0.18%	1,493	1	0.07%	2,623	3	0.11%
Post-Accident	134	0	0.00%	44	0	0.00%	178	0	0.00%
Reasonable Suspicion	31	4	12.90%	10	3	30.00%	41	7	17.07%
Return-to-Duty	13	0	0.00%	11	1	9.09%	24	1	4.17%
Follow-Up	258	2	0.18%	65	2	3.08%	323	4	1.24%
CDL/NON-REVENUE VEHICLE									
Random	791	1	0.13%	308	0	0.00%	1,099	1	0.09%
Post-Accident	56	0	0.00%	35	0	0.00%	91	0	0.00%
Reasonable Suspicion	20	2	10.00%	4	1	25.00%	24	3	12.50%
Return-to-Duty	16	0	0.00%	2	0	0.00%	18	0	0.00%
Follow-Up	655	2	0.31%	25	2	8.00%	680	4	0.59%
ARMED SECURITY PERSONNEL									
Random	658	0	0.00%	135	0	0.00%	793	0	0.00%
Post-Accident	81	0	0.00%	19	0	0.00%	100	0	0.00%
Reasonable Suspicion	6	0	0.00%	2	0	0.00%	8	0	0.00%
Return-to-Duty	1	0	0.00%	0	0	0.00%	1	0	0.00%
Follow-Up	5	0	0.00%	1	0	0.00%	6	0	0.00%

5.4 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. Figure 5-2 shows that the number of employees who refused to be tested is small.



	Transit Systems	Contractors
Random Test Refusals	21	14
Non-Random Test Refusals	10	14
Percent of Total Tests	0.06%	0.27%

Figure 5-2. Alcohol Test Refusals

5.5 Employees Returned to Duty

For 1998, 239 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. This figure was the total of all responses to the question on the MIS form that instructed employers to record the number of employees who had engaged in alcohol misuse and were returned to duty during the reporting period. In another section of the form, employers were asked to record the total number of return-to-duty tests conducted. See Table 5-12.

Table 5-12. Covered Employees Returned-to-Duty

		Percent of Total
Transit Systems	206	86.2
Contractors	33	13.8
		100.0

5.6 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.

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 such testing, both a drug and alcohol post-accident test should be performed). If both tests are not conducted, reasons should be documented.

Tables 5-13 and 5-14 present the 1998 accident data for non-fatal and fatal accidents with alcohol positives, by both transit systems and contractors and by size, respectively.

Table 5-13. Accidents with Alcohol Positives

			Number of Fatalities
Transit Systems	7	0	0
Contractors	8	0	0
			0

Table 5-14. Accidents with Alcohol Positives by Size

			Number of Fatalities
Large	14	0	0
Small	0	0	0
Rural	1	0	0
			0

5.7 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. Results appear in Table 5-15 below.

Table 5-15. Post-Accident Alcohol Positives

					Armed Security Personnel
Number 0.02 – 0.04	6	2	0	4	0
Number ≥ 0.04	15	0	0	0	0
					0

5.8 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 5-16 to 5-18 for details.

$$\frac{\textit{Random alcohol test results} \geq 0.04\% + \textit{number refused random testing}}{\textit{Total random tests} + \textit{number refused random testing}} = \frac{(54 + 35)}{(41{,}206 + 35)} = \frac{89}{41{,}241} = 0.22\%$$

Table 5-16. Violation Rate by Transit System/Contractor

				Violation Rate
Transit Systems	34,039	44	21	0.20
Contractors	7,167	10	14	0.29
				0.22

Table 5-17. Violation Rate by Employer Size

				Violation Rate
Large	34,315	52	27	0.23
Small	2,867	1	2	0.10
Rural	4,024	1	6	0.17
				0.22

Table 5-18. Violation Rate by FTA Region

				Violation Rate
1	1,954	2	1	0.15
2	7,570	15	3	0.24
3	5,663	13	4	0.30
4	6,152	11	4	0.24
5	6,050	9	10	0.31
6	4,082	1	1	0.05
7	1,613	0	2	0.12
8	822	1	3	0.48
9	4,913	2	5	0.14
10	2,387	0	2	0.08
				0.22

5.9 Other Violations

Table 5-19 provides information for alcohol violations other than those detected through the alcohol testing process.

Table 5-19. Other Alcohol Violations

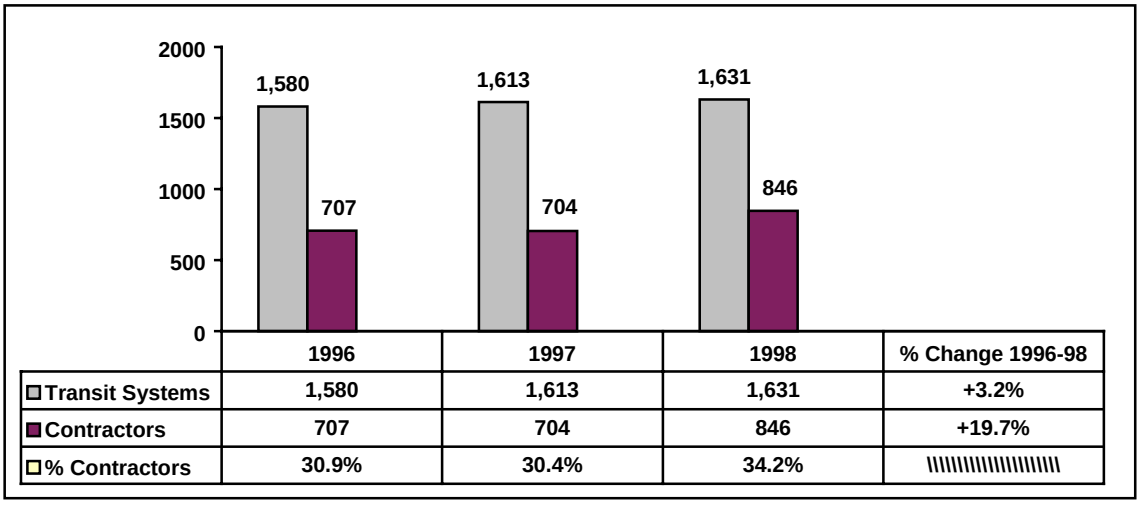
			Other Violations
45	**25**	**20**	Covered employee used alcohol while performing safety-sensitive function.
35	**21**	**14**	Covered employee used alcohol within 4 hours of performing safety-sensitive function.
			Covered employee used alcohol before taking a required post-accident alcohol test.

6. TREND ANALYSIS

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

6.1 Drug and Alcohol Reports Received

In 1996, a total of 2,287 individual employees submitted MIS forms. In 1997, a total of 2,317 individual employers submitted MIS forms; in 1998 the total was 2,477. The number of drug and alcohol reports received has increased from 1996 to 1998 by 8.7 percent. Most of this growth is due to the increase in number of contractors reporting – the increase may be indicative of an industry-wide trend in contracting for services. Figure 6-1 illustrates this trend.



	1996	1997	1998	% Change 1996-98
Transit Systems	1,580	1,613	1,631	+3.2%
Contractors	707	704	846	+19.7%
% Contractors	30.9%	30.4%	34.2%	\\\\\\\\\\\\\\\\\\\\

Figure 6-1. Drug and Alcohol Reports Received

The number of FTA-covered contract employees has increased at half the rate as the number of contract employers, indicating that these employers have, on the average, fewer FTA-covered employees. The number of FTA-covered employees per contractor has decreased by 8.3 percent from 1996 to 1998. The average number of FTA-covered employees and contractor employers has declined from 55.7 in 1996 to 53.6 in 1997 to 51.1 in 1998. The number of FTA-covered employees per transit system has remained constant, fluctuating by approximately 1 percent. See Figure 6-2.

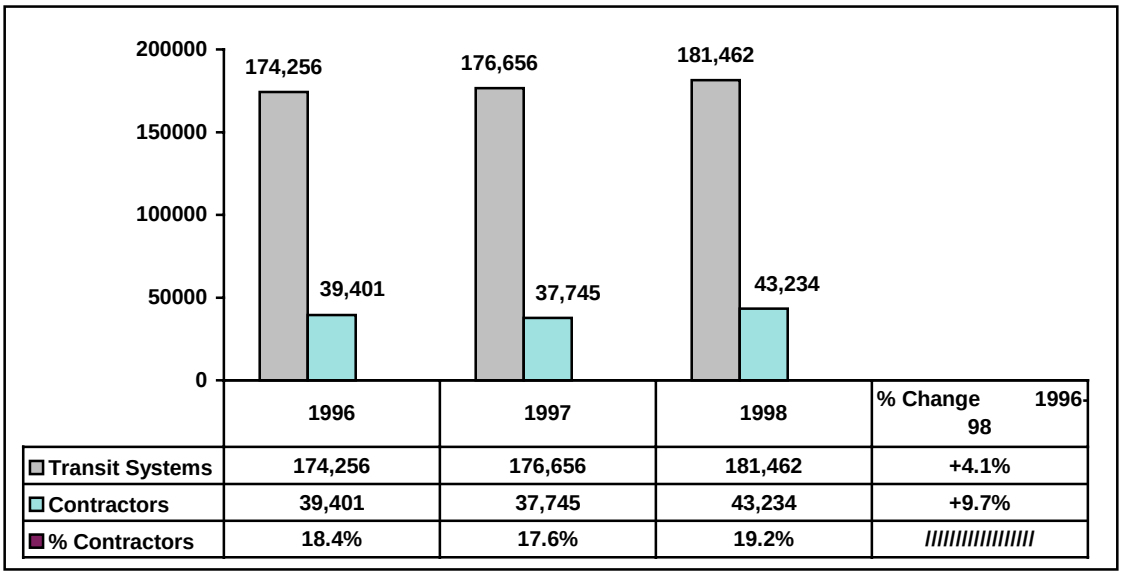
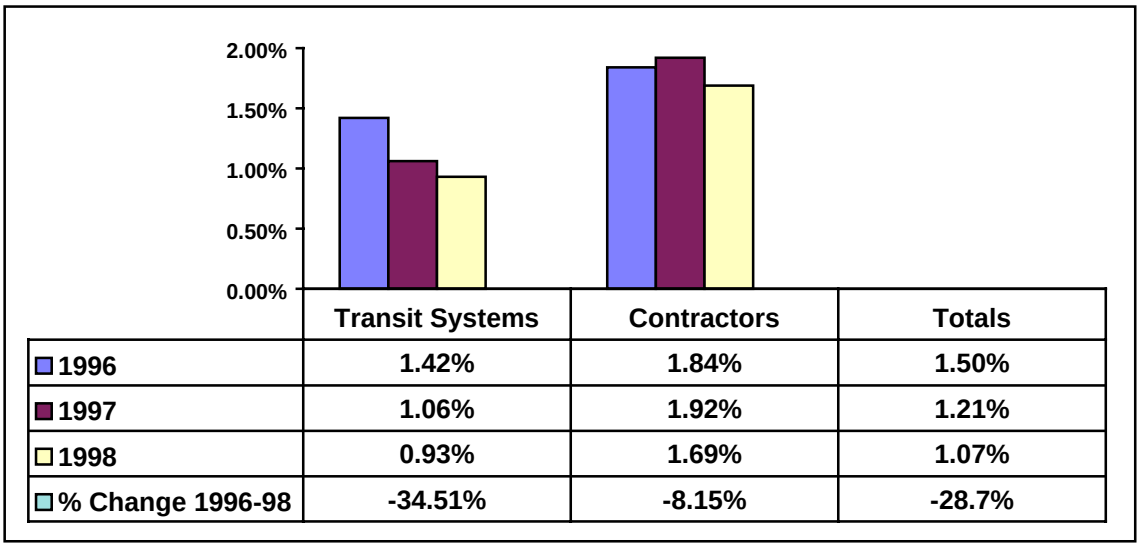


Figure 6-2. FTA-Covered Employees

The number of drug MIS reports with at least one positive test result has decreased for each of the last three years for both transit systems and contractors; however, the percent of drug reports with a positive result is significantly higher for contractors than for transit systems. The total number of alcohol reports with test results ≥ 0.04 has also decreased overall, but has increased for contractors. See Table 6-1.

Table 6-1. Percent of Drug Reports with a Positive and Alcohol Reports with a Test ≥ 0.04

				Alcohol		
						1998
Transit Systems	24.56	23.56	23.06	4.30	3.66	3.06
Contractors	37.34	40.91	35.10	3.82	4.26	5.08
Totals	30.95	28.83	27.57	4.06	3.84	3.75

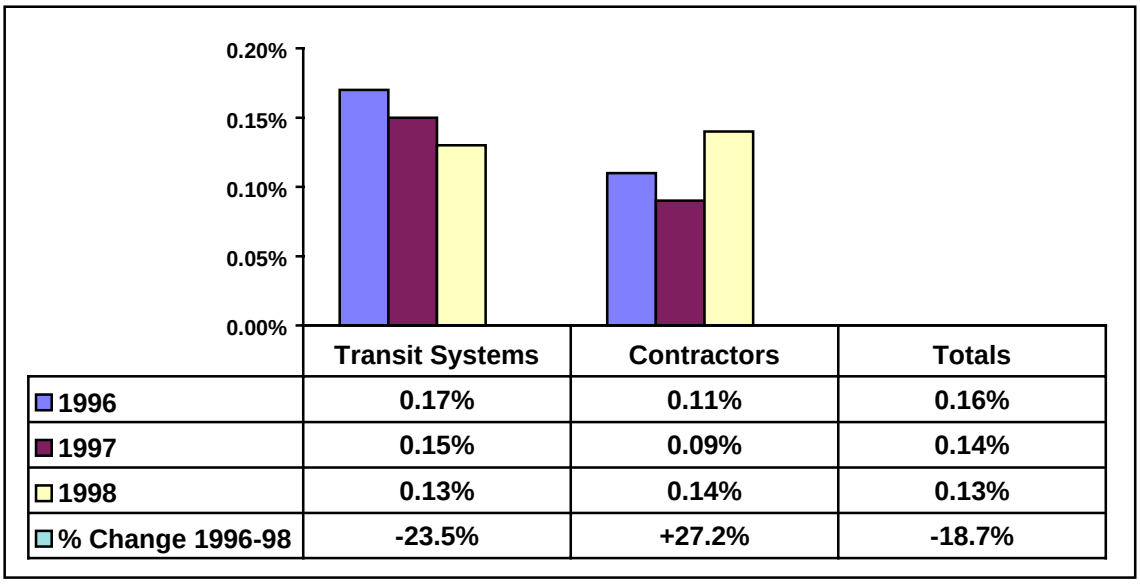


	Transit Systems	Contractors	Totals
1996	1.42%	1.84%	1.50%
1997	1.06%	1.92%	1.21%
1998	0.93%	1.69%	1.07%
% Change 1996-98	-34.51%	-8.15%	-28.7%

Figure 6-3. Comparison of Positive Random Drug Results

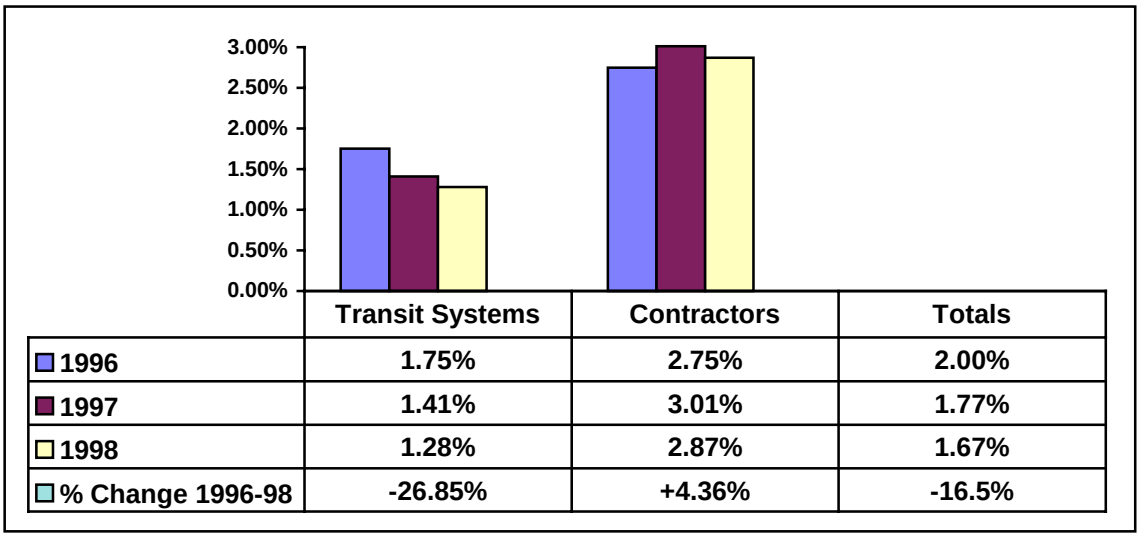
6.2 Positive Random Drug Tests

The transit industry-wide positive random drug test rate and random alcohol test results $\geq$ 0.04 have declined over three consecutive 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 level than transit systems, and in the case of random alcohol tests $\geq$ 0.04 are increasing. The overall rates for both random positive drug test results and random alcohol test results $\geq$ 0.04 are declining, but the rates of decline appear to be slowing. See Figures 6-3 and 6-4.



	Transit Systems	Contractors	Totals
1996	0.17%	0.11%	0.16%
1997	0.15%	0.09%	0.14%
1998	0.13%	0.14%	0.13%
% Change 1996-98	-23.5%	+27.2%	-18.7%

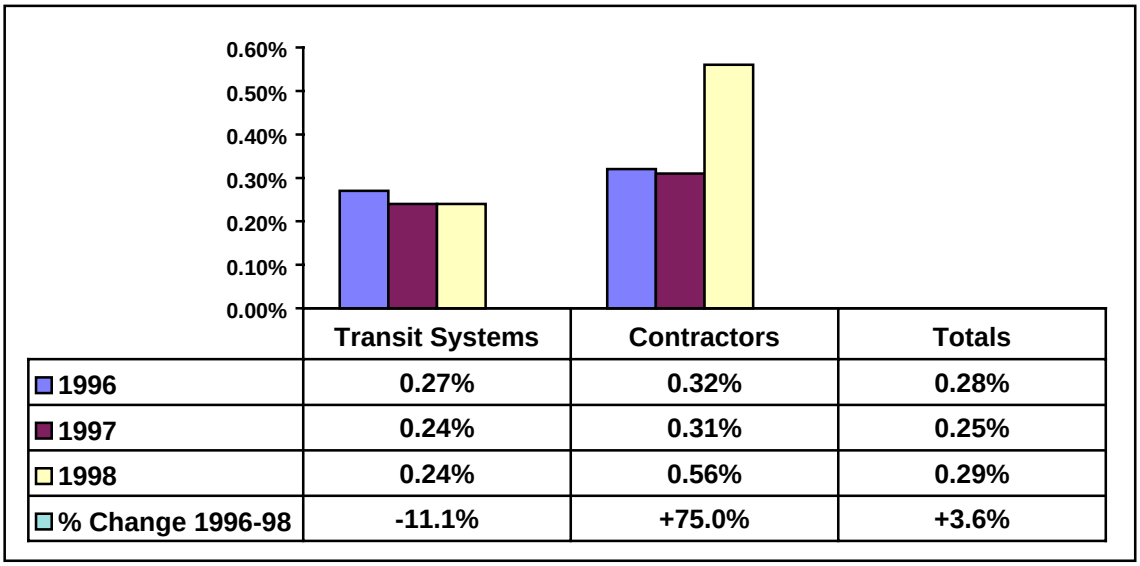
Figure 6-4. Comparison of Random Alcohol Test Results $\geq$ 0.04



	Transit Systems	Contractors	Totals
1996	1.75%	2.75%	2.00%
1997	1.41%	3.01%	1.77%
1998	1.28%	2.87%	1.67%
% Change 1996-98	-26.85%	+4.36%	-16.5%

Figure 6-5. Total Positive Drug Test Rate

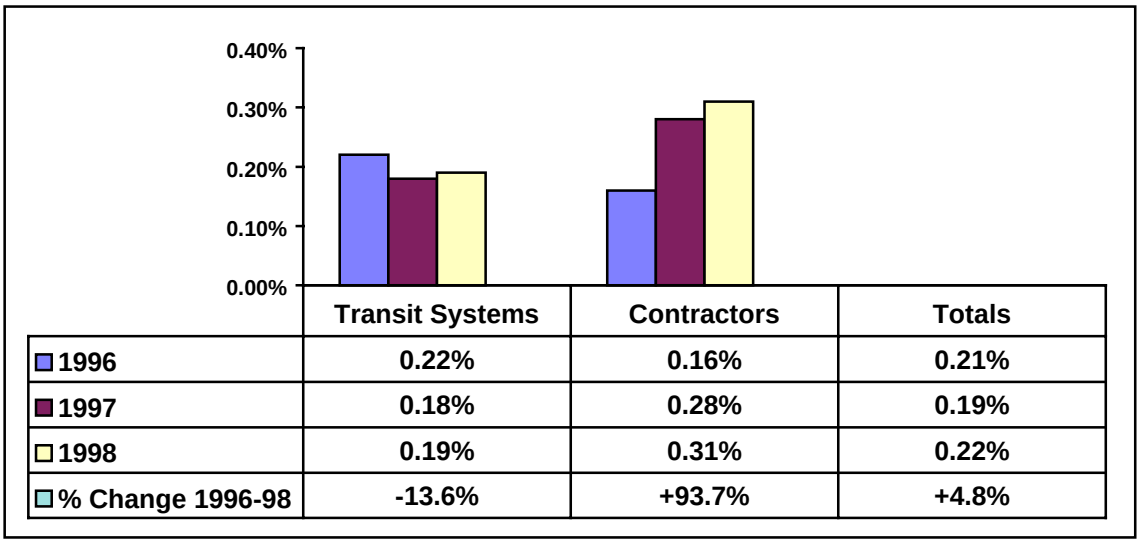
The positive drug test rate for all types of tests declined for three consecutive years. Test rates for contractors were significantly higher than those of transit systems and in fact have showed an opposite trend from the transit systems. As with the positive random drug tests rates, the positive drug rate for all types of tests is declining but the rate of decline is slowing. See Figure 6-5 (above) and Figure 6-6.



	Transit Systems	Contractors	Totals
1996	0.27%	0.32%	0.28%
1997	0.24%	0.31%	0.25%
1998	0.24%	0.56%	0.29%
% Change 1996-98	-11.1%	+75.0%	+3.6%

Figure 6-6. Total Results of Alcohol Tests $\geq$ 0.04

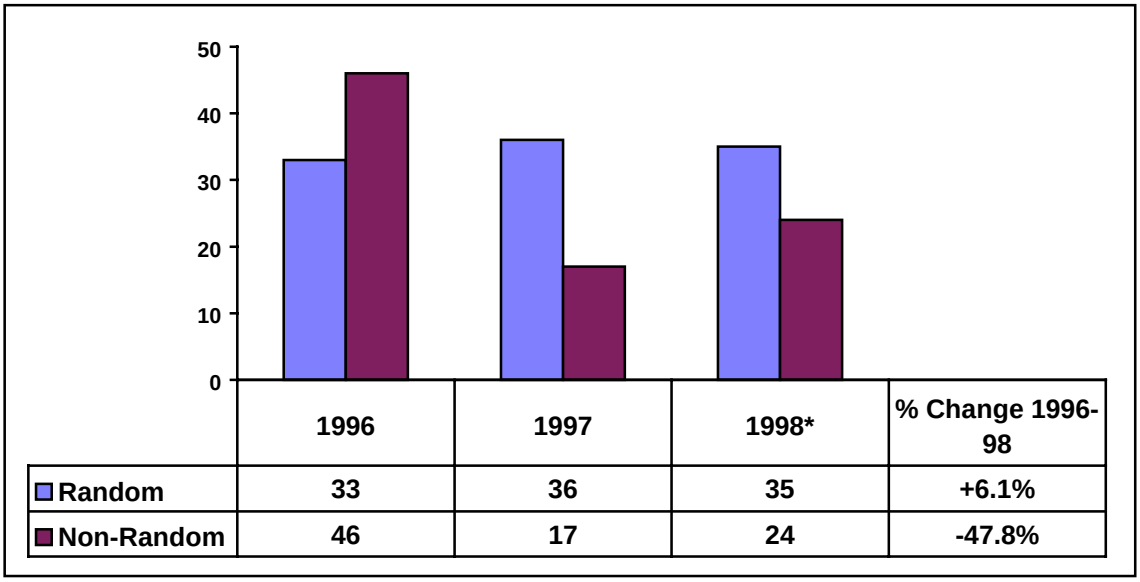
The alcohol test rate $\geq$ 0.04 for all types of tests has remained fairly constant for three consecutive years, increasing slightly between 1997 and 1998. Test rates for contractors were significantly higher than those of transit systems and, in fact, have shown an opposite trend from the transit systems. Unlike the random alcohol tests rates $\geq$ 0.04, the alcohol rate $\geq$ 0.04 for all types of tests is not declining in a consistent manner.



	Transit Systems	Contractors	Totals
1996	0.22%	0.16%	0.21%
1997	0.18%	0.28%	0.19%
1998	0.19%	0.31%	0.22%
% Change 1996-98	-13.6%	+93.7%	+4.8%

Figure 6-7. Violation Rate (Alcohol)

The FTA alcohol testing rule defines the violation rate as the number of random alcohol test results $\geq$ 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. Random alcohol test results $\geq$ 0.04 have declined, but the violation rate has increased. The reason for the increase of the violation rate is the increase in the rate of random alcohol test refusals. Random alcohol test refusals have increased in actual number despite the fact that the requirement for random alcohol testing has been lowered from 25 percent to 10 percent, resulting in a decrease in the actual number of random alcohol tests conducted. See Figure 6-7 (above) and Figure 6-8.



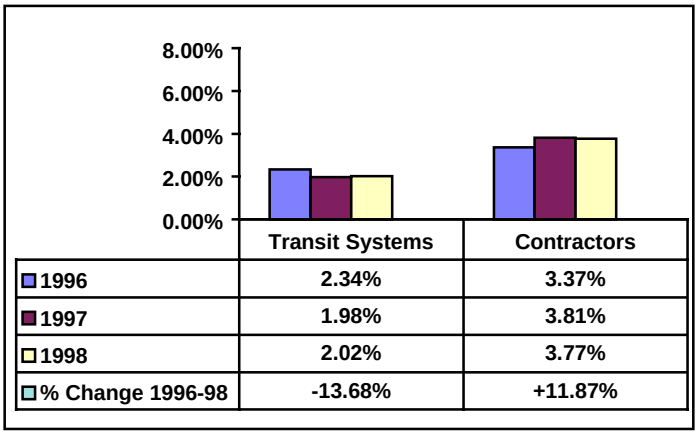
	1996	1997	1998*	% Change 1996-98
Random	33	36	35	+6.1%
Non-Random	46	17	24	-47.8%

Figure 6-8. Alcohol Test Refusals

* Required random alcohol test rate lowered from 25 percent to 10 percent.

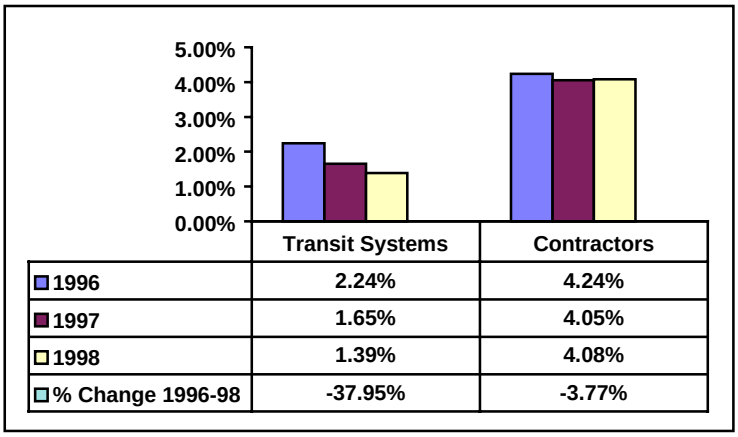
Overall, positive drug test results have declined, as have the drug test results for individual test types with the exception of reasonable suspicion testing. See Figure 6-9. Reasonable suspicion tests are conducted when a determination based on training is made

Pre-Employment



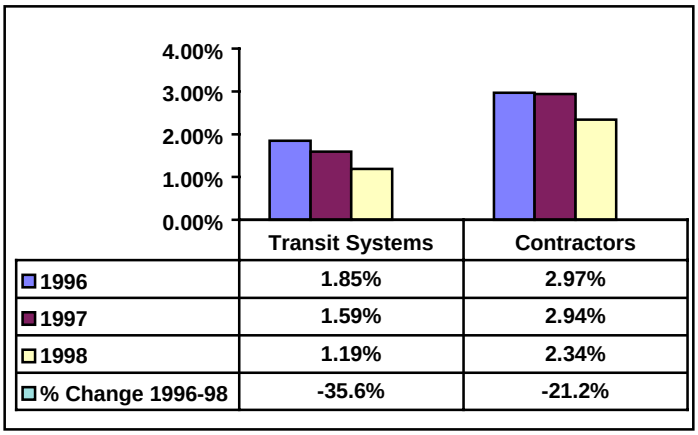
	Transit Systems	Contractors
1996	2.34%	3.37%
1997	1.98%	3.81%
1998	2.02%	3.77%
% Change 1996-98	-13.68%	+11.87%

Random



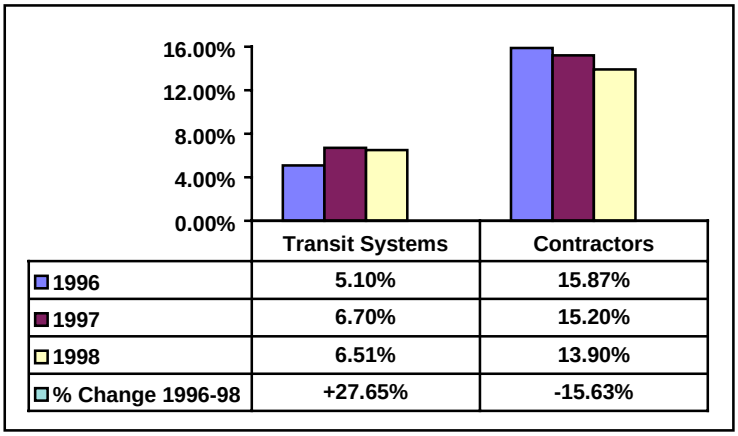
	Transit Systems	Contractors
1996	2.24%	4.24%
1997	1.65%	4.05%
1998	1.39%	4.08%
% Change 1996-98	-37.95%	-3.77%

Post-Accident



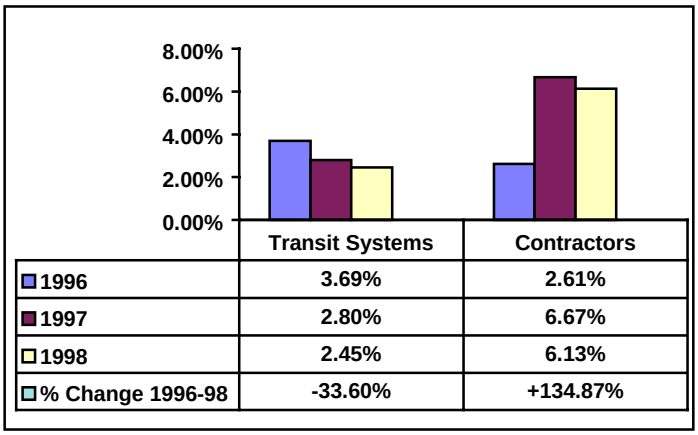
	Transit Systems	Contractors
1996	1.85%	2.97%
1997	1.59%	2.94%
1998	1.19%	2.34%
% Change 1996-98	-35.6%	-21.2%

Reasonable Suspicion



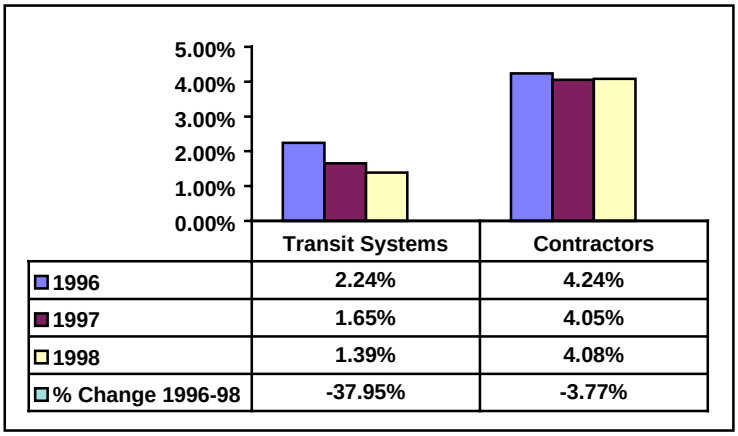
	Transit Systems	Contractors
1996	5.10%	15.87%
1997	6.70%	15.20%
1998	6.51%	13.90%
% Change 1996-98	+27.65%	-15.63%

Return-to-Duty



	Transit Systems	Contractors
1996	3.69%	2.61%
1997	2.80%	6.67%
1998	2.45%	6.13%
% Change 1996-98	-33.60%	+134.87%

Follow-up

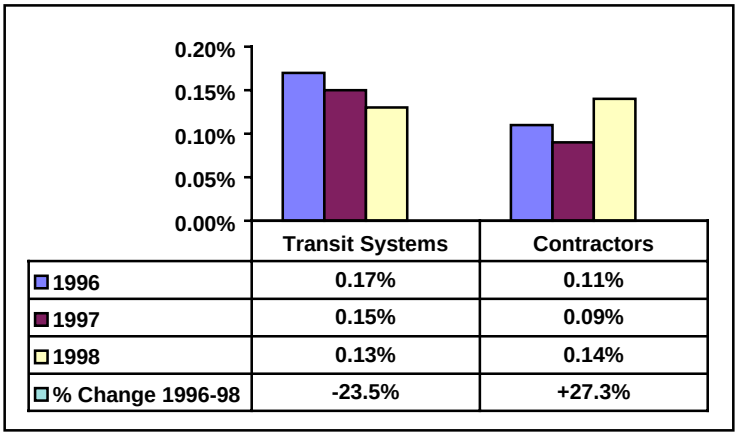


	Transit Systems	Contractors
1996	2.24%	4.24%
1997	1.65%	4.05%
1998	1.39%	4.08%
% Change 1996-98	-37.95%	-3.77%

Figure 6-9. Drug Test Results by Test Type 1996 to 1998

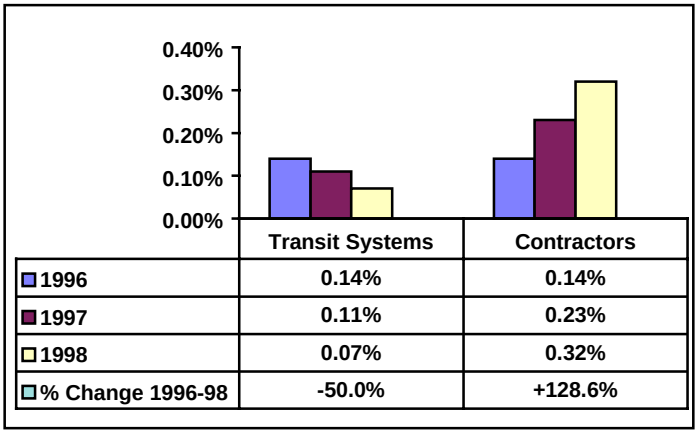
by supervisors. The goal is to become more proficient in making this determination, which would result in a higher positive drug test rates and a lower number of reasonable suspicion tests conducted, for this particular test type. This is the trend with transit systems but it is the opposite for contractors where the number of reasonable suspicion drug tests conducted has increased by 18.5 percent between 1996 and 1998 and the positive drug test result has declined. See Figures 6-10 to 6-14.

Random



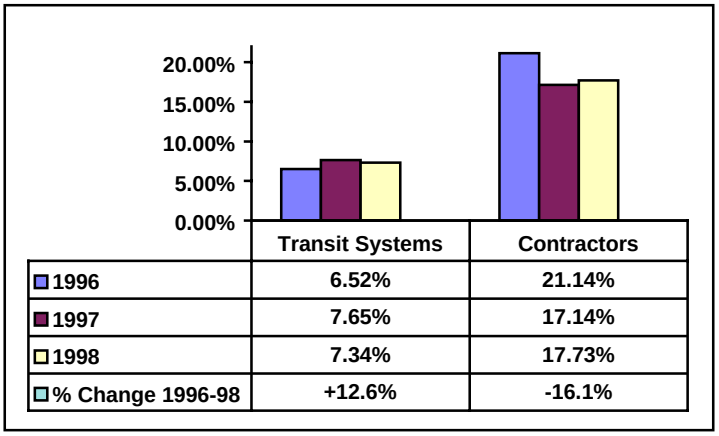
	Transit Systems	Contractors
1996	0.17%	0.11%
1997	0.15%	0.09%
1998	0.13%	0.14%
% Change 1996-98	-23.5%	+27.3%

Post-Accident



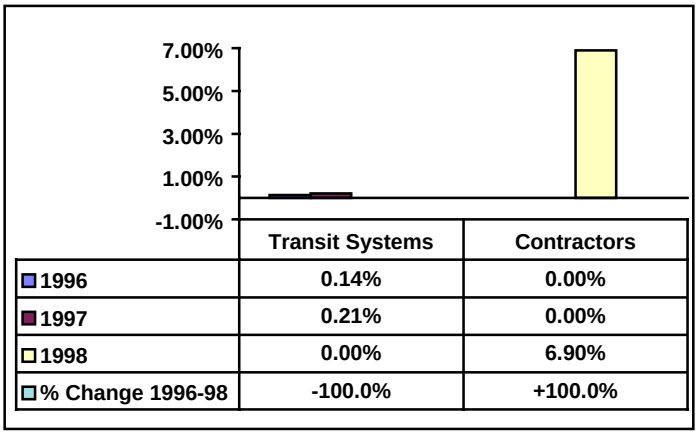
	Transit Systems	Contractors
1996	0.14%	0.14%
1997	0.11%	0.23%
1998	0.07%	0.32%
% Change 1996-98	-50.0%	+128.6%

Reasonable Suspicion



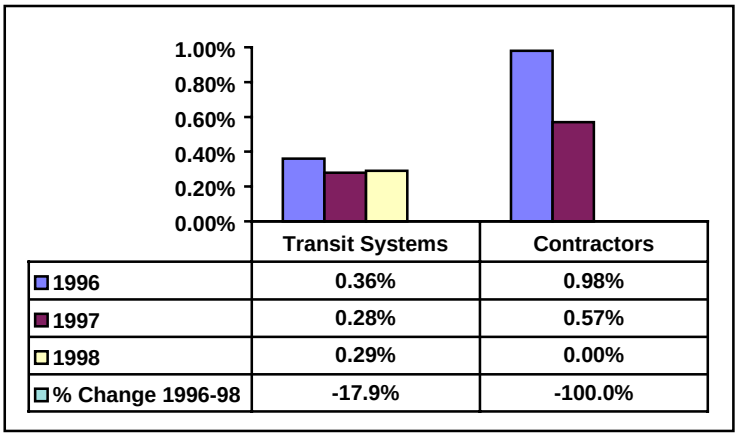
	Transit Systems	Contractors
1996	6.52%	21.14%
1997	7.65%	17.14%
1998	7.34%	17.73%
% Change 1996-98	+12.6%	-16.1%

Return-to-Duty



	Transit Systems	Contractors
1996	0.14%	0.00%
1997	0.21%	0.00%
1998	0.00%	6.90%
% Change 1996-98	-100.0%	+100.0%

Follow-up

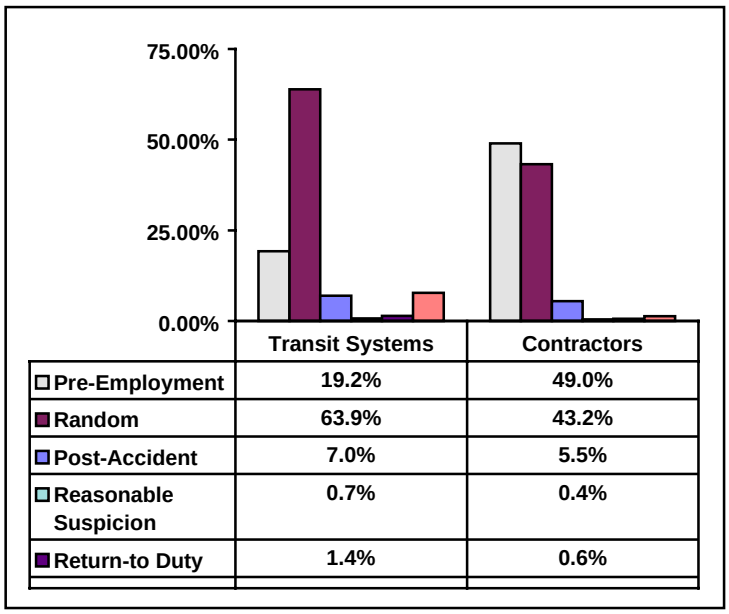


	Transit Systems	Contractors
1996	0.36%	0.98%
1997	0.28%	0.57%
1998	0.29%	0.00%
% Change 1996-98	-17.9%	-100.0%

Figure 6-10. Alcohol Test Results ≥ 0.04 by Test Type 1996 to 1998

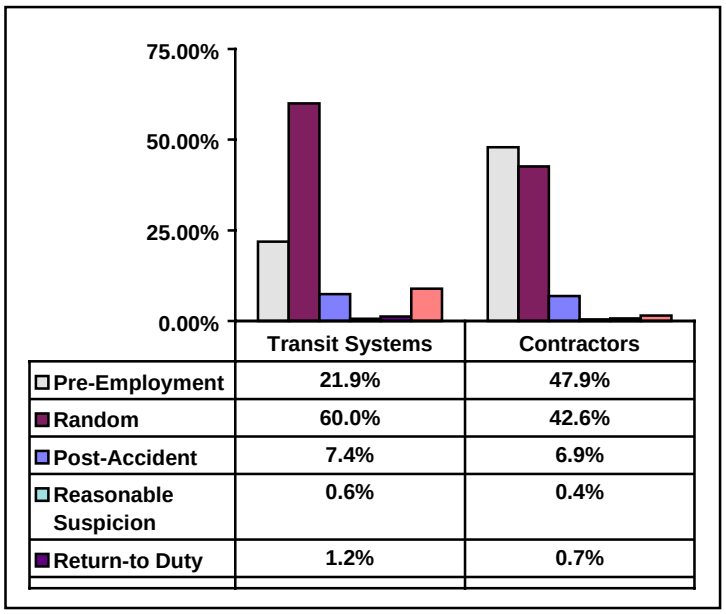
Overall, alcohol test results ≥ 0.04 have increased slightly from 1996 to 1998. Generally, transit systems' rates have declined and contractors' rates have increased. Comparisons between results from 1998 and results prior to 1998 are difficult due to the fact that the required random testing rate was reduced from 25 percent to 10 percent, thereby reducing the actual number of tests conducted.

1996 Percent of Total Drug Tests

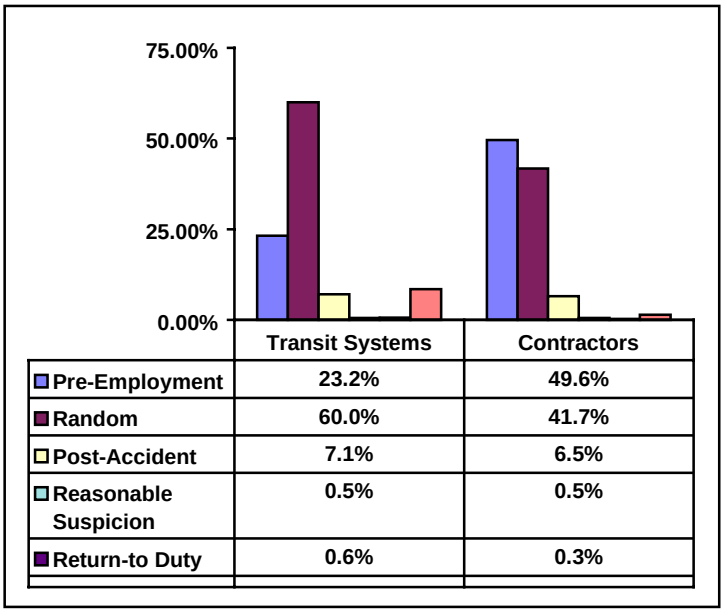


	Transit Systems	Contractors
Pre-Employment	19.2%	49.0%
Random	63.9%	43.2%
Post-Accident	7.0%	5.5%
Reasonable Suspicion	0.7%	0.4%
Return-to Duty	1.4%	0.6%

1997 Percent of Total Drug Tests



	Transit Systems	Contractors
Pre-Employment	21.9%	47.9%
Random	60.0%	42.6%
Post-Accident	7.4%	6.9%
Reasonable Suspicion	0.6%	0.4%
Return-to Duty	1.2%	0.7%

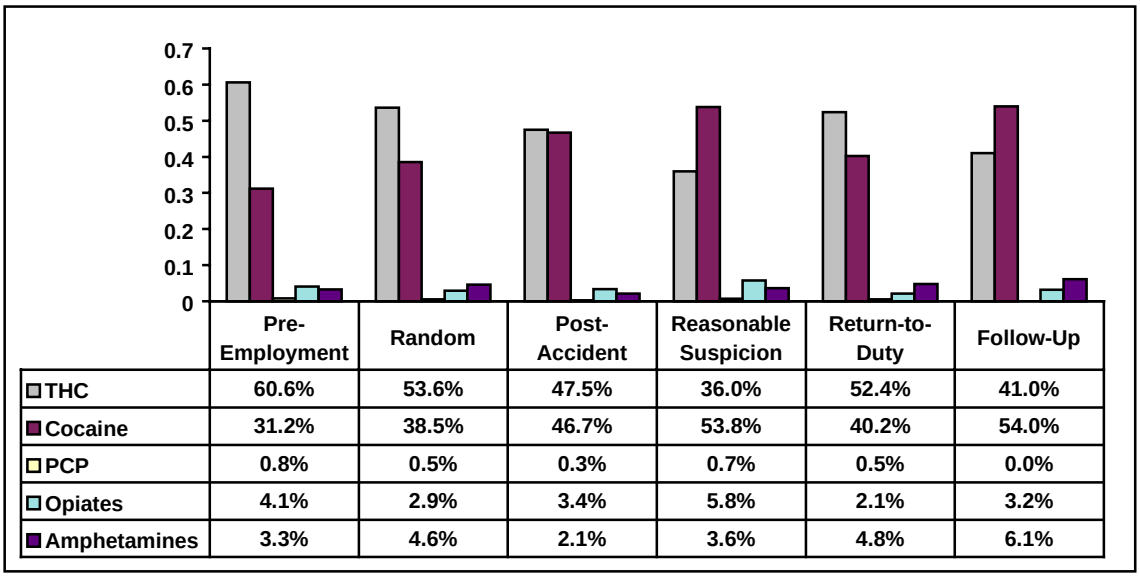


	Transit Systems	Contractors
Pre-Employment	23.2%	49.6%
Random	60.0%	41.7%
Post-Accident	7.1%	6.5%
Reasonable Suspicion	0.5%	0.5%
Return-to Duty	0.6%	0.3%

Figure 6-11. 1998 Percent of Total Drug Tests

The highest percentage of specimens collected has been for random drug tests for transit systems and pre-employment drug tests for contractors. Contractors may conduct more pre-

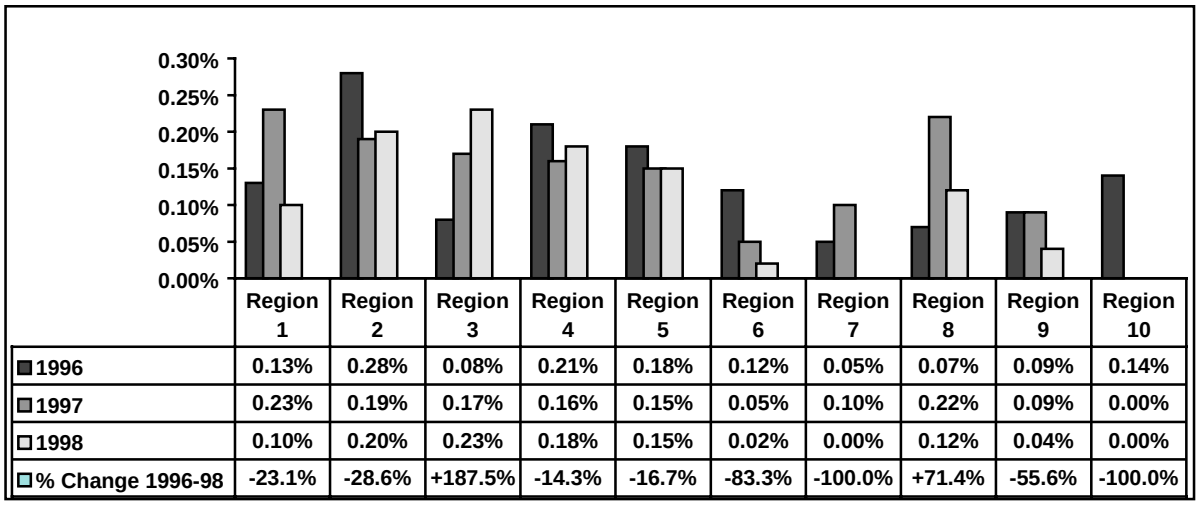
employment drug tests due to a higher turnover rate. Industry-wide, positive pre-employment drug test rates are approximately double that of positive random drug test rates. Pre-employment drug testing is the one test conducted on individuals who do not yet occupy a safety-sensitive position and who have not undergone the required 60 minutes of training.



	Pre-Employment	Random	Post-Accident	Reasonable Suspicion	Return-to-Duty	Follow-Up
THC	60.6%	53.6%	47.5%	36.0%	52.4%	41.0%
Cocaine	31.2%	38.5%	46.7%	53.8%	40.2%	54.0%
PCP	0.8%	0.5%	0.3%	0.7%	0.5%	0.0%
Opiates	4.1%	2.9%	3.4%	5.8%	2.1%	3.2%
Amphetamines	3.3%	4.6%	2.1%	3.6%	4.8%	6.1%

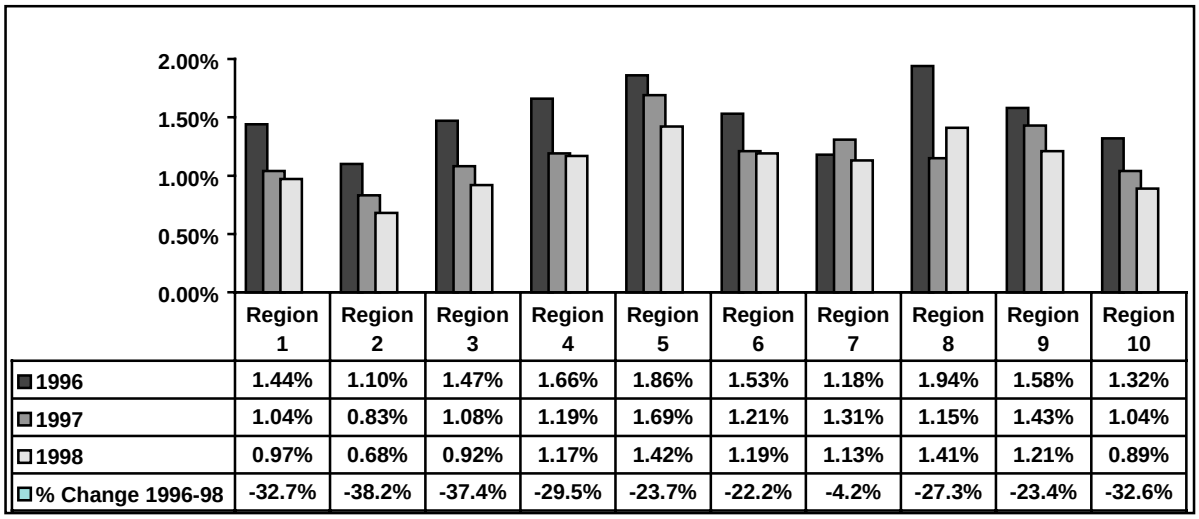
Figure 6-12. Comparison of Test Results by Drug Type

From 1996 through 1998 marijuana (THC) has been the most frequently detected drug, followed by cocaine. Pre-employment drug testing accounts for the largest differential of the positive drug test rate between marijuana and other prohibited drugs. In the other 5 test types, the percent of differential is much less. Cocaine is detected more often in two of the other five test types and is virtually equal in a third test type. Marijuana and cocaine were responsible for 50.4 percent and 42.4 percent, respectively, of drug tests conducted for non pre-employment tests, in 1996. For 1998 the figures were 47.8 percent and 45.0 percent, indicating a trend toward an increased detection of cocaine. This is especially significant given the fact that marijuana is usually detectable for a longer period of time than cocaine.



	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10
1996	0.13%	0.28%	0.08%	0.21%	0.18%	0.12%	0.05%	0.07%	0.09%	0.14%
1997	0.23%	0.19%	0.17%	0.16%	0.15%	0.05%	0.10%	0.22%	0.09%	0.00%
1998	0.10%	0.20%	0.23%	0.18%	0.15%	0.02%	0.00%	0.12%	0.04%	0.00%
% Change 1996-98	-23.1%	-28.6%	+187.5%	-14.3%	-16.7%	-83.3%	-100.0%	+71.4%	-55.6%	-100.0%

Figure 6-13. Random Alcohol Test Results $\geq$ 0.04 by Region



	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10
1996	1.44%	1.10%	1.47%	1.66%	1.86%	1.53%	1.18%	1.94%	1.58%	1.32%
1997	1.04%	0.83%	1.08%	1.19%	1.69%	1.21%	1.31%	1.15%	1.43%	1.04%
1998	0.97%	0.68%	0.92%	1.17%	1.42%	1.19%	1.13%	1.41%	1.21%	0.89%
% Change 1996-98	-32.7%	-38.2%	-37.4%	-29.5%	-23.7%	-22.2%	-4.2%	-27.3%	-23.4%	-32.6%

Figure 6-14. 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, 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 25 percent of the total number of safety-sensitive employees must be conducted each year by this method. As of 1998, the random testing rate for alcohol was reduced to 10 percent by FTA.

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 any 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 activity that violates 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 comprises the 10 regions identified below. The data provided by these regions has facilitated the comparison of drug and alcohol test results and the identification of regional trends and patterns.

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 Columbia	Florida	Indiana
Massachusetts	Puerto Rico	Maryland	Georgia	Michigan
New Hampshire	Virgin Islands	Pennsylvania	Kentucky	Minnesota
Rhode Island		Virginia	Mississippi	Ohio
Vermont		West Virginia	North Carolina	Wisconsin
			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	BOSTON	MA
VETERANS TRANSPORTATION SERVICES	WALTHAM	MA
KIT CLARK SENIOR SERVICES	DORCHESTER	MA
GREATER LYNN SENIOR SERVICES, INC.	LYNN	MA
THOMPSON TRANSIT, INC.	FRAMINGHAM	MA
TOWN OF BEDFORD	BEDFORD	MA
CAVALIER COACH CORP.	BOSTON	MA
UNDA'S BUS SERVICE, INC.	STOUGHTON	MA
H & L BLOOM, INC.	TAUNTON	MA
J B L BUS LINES, INC.	BRAINTREE	MA
YCN TRANSPORTATION	NORWOOD	MA
JOSEPH'S LIMOUSINE SERVICES, INC.	MEDFORD	MA
ABC BUS COMPANY, INC.	NO. ANDOVER	MA
PAUL REVERE TRANSPORTATION	CHELSEA	MA
BRUSH HILL TRANSPORTATION COMPANY	RANDOLPH	MA
THE COACH COMPANY	PLAISTOW	NH
PETER PAN BUS LINES, INC.	SPRINGFIELD	MA
POWER LINE CONTRACTORS, INC.	READING	MA
EXECUTIVE PERSONNEL SERVICES, INC.	WASHINGTON	DC
KIESSLING TRANSIT, INC.	BRAINTREE	MA
A+A CHARTER, INC.	WOBURN	MA
HARBOR CRUISE, LLC	BOSTON	MA
NATICK NEIGHBORHOOD BUS, TOWN OF NATICK	NATICK	MA
KNORR BRAKE CORPORATION	WESTMINSTER	MD
WATER TRANSPORTATION ALTERNATIVES	QUINCY	MA
A&B COACH LINES	BRAINTREE	MA
LAIDLAW TRANSIT	CAMBRIDGE	MA
NIAGARA FRONTIER TRANSPORTATION METRO SYSTEM, INC.	BUFFALO	NY
MTA-NEW YORK CITY TRANSIT	BROOKLYN	NY
RJR PARATRANSIT CORPORATION	STATEN ISLAND	NY
HALLS SECURITY ANALYSTS, INC.	BELLE ROSE	NY
UNICCO SERVICE COMPANY	MACCLENNY	FL
GOODYEAR MILEAGE SALES AUTHORITY	AKRON	OH
AMERICAN AMBULETTE CORP.	YONKERS	NY
ATLANTIC PARATRANS	RIDGEWOOD	NY
PORT AUTHORITY TRANSIT CORPORATION (PATCO)	LINDENWOLD	NJ
NJ TRANSIT	NEWARK	NJ
ATLANTIC COUNTY GOVERNMENT	NORTHFIELD	NJ
SENIOR CITIZENS UNITED COMMUNITY SERVICES	MT. EPHRAIM	NJ
COUNTY OF GLOUCESTER	WOODBURY	NJ
LION CORP.	RIO GRANDE	NJ
GOODYEAR MILEAGE SALES AUTHORITY	AKRON	OH
UNICCO SERVICE COMPANY AUTHORITY	MACCLENNY	FL
FIRESTONE MILEAGE SALES	SAN ANTONIO	TX
LAIDLAW TRANSIT SERVICE, INC.	UNION	NJ
LAIDLAW TRANSIT SERVICES	CINNAMINSON	NJ
LAIDLAW TRANSIT SERVICES, INC.	SAYERVILLE	NJ
ATLANTIC PARATRANS	EGG HARBOR TWP.	NJ
CAMBRIA COUNTY TRANSIT AUTHORITY	JOHNSTOWN	PA
UNITED CEREBRAL PALSY	JOHNSTOWN	PA

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY	PHILADELPHIA	PA
ATLANTIC PARATRANS, INC.	PHILADELPHIA	PA
METRO CARE INC.	BONSALOM	PA
COMMUNITY TRANSIT OF DELAWARE COUNTY	EDDYSTONE	PA
TRIAGE, INC.	PHILADELPHIA	PA
KRAPF'S PARA TRANSIT DIVISION	GLENMOORE	PA
GOODYEAR MILEAGE SALES	AKRON	OH
UNICCO SERVICE COMPANY	MACCLENNY	FL
KING PARATRANSIT SERVICE, INC.	KING OF PRUSSIA	PA
PORT AUTHORITY OF ALLEGHENY	PITTSBURGH	PA
ACCESS TRANSPORTATION SYSTEMS, INC.	PITTSBURGH	PA
DUQUESNE INCLINE	PITTSBURGH	PA
GENESIS VII, INC. - PITTSBURGH	TITUSVILLE	FL
EXECUTIVE PERSONNEL SERVICES, INC.	WASHINGTON	DC
FIRESTONE MILEAGE SALES	SAN ANTONIO	TX
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY	WASHINGTON	DC
DIAMOND TRANSPORTATION SERVICES, INC.	ALEXANDRIA	VA
METRO ACCESS OF MARYLAND	TUXEDO	MD
CLEAN VENTURE, INC.	BALTIMORE	MD
BIG APPLE TIRE, INC.	BROOKLYN	NY
A&A WASTE OIL CO.	LINTHICUM HEIGHTS	MD
GOODYEAR MILEAGE SALES - WMATA	AKRON	OH
EASTER TRANS WASTE OF MD INC.	CAPITOL HEIGHTS	MD
TRANSPORTATION MGMT. SERVICES, INC.	FORESTVILLE	MD
MASS TRANSIT ADMINISTRATION	BALTIMORE	MD
EYRE BUS SERVICE, INC.	GLENELY	MD
DILLON'S BUS SERVICE, INC.	MILLE RSVILLE	MD
FIRESTONE MILEAGE SALES	SAN ANTONIO	TX
KELLER TRANSPORTATION INC	WALDORF	MD
CHATTANOOGA AREA REGIONAL TRANS AUTHORITY (CARTA)	CHATTANOOGA	TN
MIDSOUTH TRANSPORTATION MGMT., INC. (MATA)	MEMPHIS	TN
METROPOLITAN ATLANTA RAPID TRANSIT	ATLANTA	GA
MICHELIN NORTH AMERICA	GREENVILLE	SC
MAXIMUM SAFETY/SECURITY ASSOC., INC.	DECATUR	GA
S & W SERVICES OF ATLANTA, INC.	TUCKER	GA
ADVANCED RAIL MANAGEMENT CORPORATION	INDIALANTIC	FL
MARTA TRACK CONSTRUCTORS, INC.	DECATUR	GA
SPERRY RAIL SERVICE	DANBURY	CT
LAIDLAW TRANSIT SERVICES	NEW ORLEANS	LA
MIAMI-DADE TRANSIT AGENCY	MIAMI	FL
ALANIS SECURITY, INC.	MIAMI	FL
AMERICAN BRAKE & CLUTCH	TROY	MI
CUMMINS SOUTHEASTERN POWER, INC.	HIALEAH GARDENS	FL
FEICK SECURITY	MIAMI	FL
FLORIDA DETROIT DIESEL-ALLISON, INC.	JACKSONVILLE	FL
HANDI-VAN, INC.	MIAMI	FL
KAUFFS OF MIAMI, INC.	OPA-LOCKA	FL
MILEX SECURITY SERVICES	MIAMI	FL
PRECISION AUTO & TRUCK SERVICE, INC.	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
ATC\VANCOM 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 MILEAG 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
ATC/VANCOM	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.	SEATTLE	WA
FIRESTONE MILEAGE SALES	SAN ANTONIO	TX

LAIDLAW TRANSIT SERVICES, INC.	WOODINVILLE	WA
LAIDLAW TRANSIT SERVICES, INC.	SEATTLE	WA
RYDER TRUCK RENTAL, INC.	TUKWILA	WA
RYDER/ATE	FEDERAL WAY	WA
ATC/VANCOM OF KING COUNTY	KENT	WA
TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT	PORTLAND	OR
BROADWAY CAB , INC.	PORTLAND	OR
LAIDLAW TRANSIT SERVICES	PORTLAND	OR
LAIDLAW TRANSIT SERVICES	PORTLAND	OR
ATC/VANCOM MANAGEMENT SERVICES	PORTLAND	OR
LAIDLAW TRANSIT SERVICES	BEAVERTON	OR
RYDER/ATE	PORTLAND	OR
SEATTLE CENTER/CITY OF SEATTLE	SEATTLE	WA