

**Regional Transportation District
Performance Audit
August 2006**

**Submitted by Pacey Economics Group
and
Battelle**

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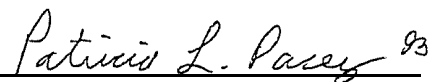
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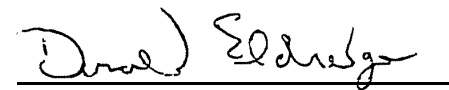
August 11, 2006

Members of the Legislative Audit Committee:

This report contains the results of a performance audit of the Regional Transportation District. The audit was conducted pursuant to Section 32-9-115(3), C.R.S., which requires the State Auditor to conduct or cause to be conducted a performance audit of the Regional Transportation District at least once every five years. The Office of the State Auditor contracted with Pacey Economics Group and Battelle to conduct this review. The report presents findings, conclusions, and recommendations, and the responses of the Regional Transportation District.



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Regional Transportation District Performance Audit, August 2006

Authority, Purpose, and Scope

This performance audit was conducted pursuant to Section 32-9-115(3), C.R.S., which requires the State Auditor to conduct or cause to be conducted a performance audit of the Regional Transportation District (RTD) at least once every five years. For this audit, the Office of the State Auditor contracted with two outside firms—Pacey Economics Group and Battelle. Audit work was performed from November 2005 through June 2006. The two primary objectives of the audit were to evaluate the RTD's fare-setting practices and to determine the adequacy of the RTD's security and emergency planning and response activities. Audit work included interviews with RTD bus and Light Rail drivers, review and analysis of RTD documents and databases, and analysis of other transportation districts' programs. We appreciate the cooperation and responsiveness of the RTD management and staff in conducting this audit.

Overview

The Colorado General Assembly created the Regional Transportation District as a political subdivision of the State in 1969. According to Section 32-9-102, C.R.S., the creation of the RTD was intended to “promote the public health, safety, convenience, economy, and welfare of the residents of the district and of the state of Colorado.” The geographic area served by the RTD is an eight-county, Denver metropolitan region including: the entire counties of Denver, Boulder, Broomfield, and Jefferson; the urbanized portions of Adams, Arapahoe, and Douglas counties; and a portion of Weld County annexed by Longmont and Erie. More than 2.5 million people, or approximately 55 percent of Colorado's total population, reside within the District's 2,327 square mile area. According to RTD data, approximately 86.4 million passengers boarded RTD services in Calendar Year 2005. This figure represents an average of about 292,500 weekday boardings.

The RTD's transportation network includes more than 10,366 bus stops and 66 Park-n-Ride transit facilities. In addition, the RTD has a fleet of 1,071 buses and 70 Light Rail vehicles. The RTD owns and directly operates all of the Light Rail vehicles and 654 of its buses. It owns and leases the remaining 417, or 39 percent, of its buses to its private carriers. By statute, the RTD is to implement a system whereby at least 50 percent of all vehicular service is provided by qualified businesses pursuant to competitively negotiated contracts. In January 2006 the RTD had contracts with three private bus operators to provide fixed-route bus services.

For further information on this report, contact the Office of the State Auditor at 303.869.2800.

Since 1983 the RTD has been governed by a statutorily-created, 15-member Board of Directors. Each member is elected to serve a four-year term. There are approximately 167,000 residents in each of the 15 director districts and most of the individual director districts cross county boundaries. In addition, the daily activities of the RTD are administered by the General Manager and eight department offices. In Calendar Year 2005 the RTD had total revenues (including federal capital grants and local contributions) of \$606.9 million and total expenses of \$376 million. The single largest source of revenue to the District is sales tax revenue. In Calendar Year 2005 revenue from this source exceeded \$386 million.

Summary of Audit Findings

Monitoring Performance

According to statute, the Regional Transportation District should be organized efficiently, economically, on a demand-responsive basis, and should consider least-cost alternatives in discharging its responsibilities. This provision clearly expresses the General Assembly's intent that the RTD operate in a fiscally prudent and effective manner. Monitoring factors such as demand, quality, market share, farebox revenue, and ridership, among others, is critical for evaluating surface transportation programs and making funding choices. As summarized below, we identified a number of compliance and performance issues related to the ways in which the RTD monitors and measures its performance. The Office of the State Auditor contracted with Pacey Economics Group, a Colorado-based economic analysis firm for this portion of the audit.

- **The RTD's internal operating cost recovery ratio more closely reflects the percentages of costs that are covered by farebox and sales tax revenues than does the statutorily-required farebox recovery ratio.** By statute, the RTD is to annually report to the General Assembly on a mandated farebox cost recovery ratio. We found that the RTD is calculating, reporting, and meeting legislative mandates for the statutory ratio. In addition to the statutory ratio, the RTD calculates an internal operating cost recovery ratio that it reports in its annual budget documents. We found that the RTD's internal ratio more directly reflects the percentage of costs that are funded primarily from farebox revenues. However, the RTD has not defined the basis for the 20 percent internal cost recovery goal (i.e., the percentage of operating costs to be covered by farebox revenue) or the actions to be taken if the goal is not achieved. The RTD did not meet its internal percent target for 4 of the 5 years we reviewed. Although RTD staff indicate that the internal ratio has a relationship to fares and services it is unclear whether the RTD would attempt to maintain or regain its percent goal by adjusting fares, increasing marketing efforts, or reducing services. In the absence of a formal policy statement on the basis for and purpose of the internal percentage goal, the effectiveness of the internal ratio as a measure of performance and thus, accountability, is diminished.

- **Although the RTD generally appears to have a basis for the different levels at which its various services are financed through sales tax and farebox revenues, it has not adopted formal policies or articulated the rationale for these differences.** Similar to its internal cost recovery ratio, the RTD uses financial models to allocate revenues and expenses to each type of service, such as Local, Regional, and Express bus service. These data are used to compare the performance of specific routes and services and to provide the RTD with a measure of the level of subsidy per boarding. Basically, the term subsidy per boarding refers to the amount of revenue, other than fare box revenue, that is needed to finance each passenger who boards the bus and Light Rail services within the RTD system. We found that the subsidy level differs depending upon the type of service. That is, some of the RTD's services such as call-n-Ride and Suburban Local are more heavily subsidized from revenue sources other than passenger fares—primarily sales tax revenue—than are other services such as skyRide and Light Rail. Differing levels of rider subsidies may be appropriate. However, the RTD has not clearly articulated the basis for the differences.
- **The RTD has not adequately evaluated the cost-effectiveness and equity of the EcoPass Program.** In addition to setting single-ride fares, RTD offers a variety of pass programs to its riders for which it must also set the fares. Pass programs are designed to encourage ridership by providing discounted fares while also generating a reliable source of farebox revenue. Passes allow for an unlimited number of rides during a specified period. More than one-half of the farebox revenue collected by RTD derives from the sale of passes, and more than one-third of all pass revenue derives from the sale of one pass, the EcoPass. We found that the RTD lacks the data necessary to thoroughly evaluate this particular pass program. Therefore, it is difficult to assess the appropriateness of the fares. The pricing inconsistencies and inequities we identified indicate the need for a comprehensive evaluation of the EcoPass and of all of the RTD's pass programs.
- **The RTD should do more to ensure the adequacy and comprehensiveness of its performance measures related to its goal of “providing cost-effective and efficient transportation service.”** As part of its annual budget process, the RTD Board adopts performance measures in association with its broader programmatic goals and objectives. We reviewed the RTD's performance measures and identified two primary weaknesses. First, we found the RTD did not report performance measures for more than one-half of the 11 objectives it established for its goal of cost-effective and efficient services. We also found that the performance measures the RTD has adopted are not always sufficient or adequately targeted toward the stated objectives and the overall goal.

Security Awareness and Emergency Response

Since September 11, 2001 the federal government has been working to strengthen the security and emergency-preparedness capabilities of the nation's mass transit systems. The effort has been led by the Federal Transit Administration (FTA), the Transportation Security Administration (TSA),

and the Department of Homeland Security. The RTD's Security Unit, organizationally located within the Office of General Counsel, is responsible for implementing and managing programs to safeguard the District's passengers, personnel, and property from terrorist attacks and other security risks. The Unit is responsible for undercover and plainclothes police officers, as well as security guards at District facilities and Light Rail assets. The Security Unit's Fiscal Year 2005 budget was approximately \$4.4 million and it employed five full-time staff under the supervision of the RTD's Manager of Public Safety.

Overall, we found that the RTD has taken a proactive approach to security and emergency planning and response. However, we identified several issues we believe the RTD should address to provide greater assurances about the effectiveness of its security and emergency management program in the event it would have to respond to a major emergency. The Office of the State Auditor contracted with Battelle, an international science and technology firm with expertise in transit security, for this portion of the audit.

- **The RTD has not developed a standardized security awareness training program for use by its contractors.** Statutes require that at least 50 percent of the RTD's vehicular service be provided by qualified contract businesses. As of January 2006 approximately 935, or approximately 49 percent, of the individuals operating fixed route bus services for the RTD were employed by one of three contracted firms. The RTD requires its contractors to ensure their employees are adequately trained. However, we identified inconsistencies in the security awareness training the RTD provides its own transit operators and the training provided by the RTD's three contract transit providers. Consequently, the RTD cannot ensure that all of the individuals operating public transit buses in the District are familiar with or employing identical security awareness procedures.
- **The RTD should ensure all transit operators meet the English language standard defined in RTD contracts.** According to the RTD's service contract with its private transit providers, bus operators must be able to read and speak the English language sufficiently to converse with the general public and to communicate clearly with the RTD Dispatch. As part of our audit, we interviewed bus and rail operators to determine their levels of security awareness and knowledge of the RTD's security awareness programs. During the interviews, auditors found that some of the RTD's bus operators were unable to adequately communicate in English. Specifically, of the 33 contract bus operators interviewed, 4 were only marginally able to communicate answers to the auditors' questions. This is of particular concern in relation to safety and security incidents or emergencies. During emergencies, bus operators must be able to communicate effectively and efficiently with the RTD Dispatch and with passengers.

Our recommendations and the responses of the Regional Transportation District can be found in the Recommendation Locator and in the body of the report.

RECOMMENDATION LOCATOR
Agency Addressed: Regional Transportation District

Rec. No.	Page No.	Recommendation Summary	Agency Response	Implementation Date
1	23	Work with the Regional Transportation District Board of Directors to improve the effectiveness of the internal operating cost recovery ratio by formally adopting and documenting the basis for the goal. This should include: (a) evaluating the methodology for determining the recovery ratio, (b) defining the ways in which the ratio will be used in fare-setting or other activities, and (c) proposing legislative change to the methodology used in calculating the statutory cost recovery ratio, as appropriate.	Agree	December 2006
2	27	Adopt policies related to subsidies by service type by developing target subsidy percentages or target ranges for subsidy percentages for each type of service. Use these targets and percentages to evaluate fares and to support fare increases.	Agree	December 2006
3	31	Conduct thorough evaluations of the EcoPass and all of the RTD pass programs to ensure the programs are cost-effective and pricing structures are equitable and consistent. This should include developing the methods and technology needed to capture critical data, analyzing results, and reporting findings and recommendations to the RTD Board and the public.	Agree	June 2007 and Ongoing

RECOMMENDATION LOCATOR
Agency Addressed: Regional Transportation District

Rec. No.	Page No.	Recommendation Summary	Agency Response	Implementation Date
4	33	Ensure decisions regarding route service changes are made in a timely manner and are based on a consistent application of productivity standards. To accomplish this, adopt and implement procedures including time lines for monitoring routes and taking action on poorly performing routes and document the decision-making criteria in cases that deviate from the standard procedures.	Agree	Ongoing
5	37	Improve the performance measures related to providing cost-effective and efficient transportation services by: (a) systematically reviewing current goals, objectives, and performance measures to ensure linkages exist between them and performance measures address all objectives; (b) adopting objectives that include time frames for accomplishment; and (c) developing benchmarks and targets for performance measures.	Agree	September 2006
6	43	Ensure the adequacy and comparability of security awareness training for all bus operators and other front line personnel by adopting a standard training program for use by both internal staff and contract transit firms.	Agree	November 2006

RECOMMENDATION LOCATOR
Agency Addressed: Regional Transportation District

Rec. No.	Page No.	Recommendation Summary	Agency Response	Implementation Date
7	45	Ensure all transit operators have a sufficient command of the English language to effectively carry out security and emergency management plans and responses by: (a) working with contract providers to identify current bus operators with language limitations, (b) implementing training or other language programs and testing to verify language proficiency for current employees, (c) establishing time frames for achieving proficiency, and (d) monitoring results and enforcing contract provisions as needed.	Agree	September 2006
8	47	Make emergency response and communication information more readily accessible to bus operators by developing a separate quick-reference handbook from information contained in the Trailblazer manual.	Agree	December 2006

Description of the Regional Transportation District

Background

The General Assembly created the Regional Transportation District (the RTD) as a political subdivision of the State in 1969. According to Section 32-9-102, C.R.S., the creation of the RTD was intended to “promote the public health, safety, convenience, economy, and welfare of the residents of the district and of the state of Colorado.” The geographic area currently served by the RTD is an eight-county, Denver metropolitan region including: the entire counties of Denver, Boulder, Broomfield, and Jefferson; the urbanized portions of Adams, Arapahoe, and Douglas counties; and a portion of Weld County annexed by Longmont and Erie. More than 2.5 million people, or approximately 55 percent of Colorado's total population, reside within the District's 2,327 square mile area.

According to RTD data, approximately 86.4 million passengers boarded RTD services in Calendar Year 2005. This figure represents an average of about 292,500 weekday boardings and was about a 4.1 percent ridership increase from Calendar Year 2004. The passenger boardings occurred on one or more of the following RTD transportation services:

- **Regular bus services** are provided through 174 fixed routes, including access to Denver International Airport and a free shuttle on the 16th Street Mall in downtown Denver. Local bus services operate along major streets, and express and regional routes provide non-stop services over longer distances.
- **Access-a-Ride** is demand-responsive, curb-to-curb paratransit service for the disabled as mandated by the Americans with Disabilities Act of 1990 (ADA).
- **Light Rail** serves Denver and its southwest suburbs.
- **Special bus services** such as Broncos Ride and Rockies Ride provide transportation to sporting and other events.

- **VanPool** serves groups of 5-15 people who use a van to travel 15 or more miles to work together. VanPool is a collaborative effort between the RTD and the Denver Regional Council of Governments (DRCOG).

Overall, the RTD's transportation network includes more than 10,366 bus stops and 66 park-n-Ride transit facilities. In addition, the RTD has a fleet of 1,071 buses and 70 Light Rail vehicles. The RTD owns and directly operates all of the Light Rail vehicles and 654 of its buses. It owns and leases the remaining 417, or 39 percent, of its buses to its private carriers.

As the following exhibit shows, overall ridership increased from 2003 through 2005 by more than 9 percent. The only service category to experience a decrease was light rail which had almost 3 percent fewer riders in 2005 than in 2003.

Regional Transportation District System Ridership (In Millions) Calendar Years 2003 through 2005				
Service	Calendar Year 2003	Calendar Year 2004	Calendar Year 2005	Percent Change 2003-2005
Bus	50.1	54.0	56.7	13.2%
Light Rail	10.7	10.0	10.4	(2.8)%
Mall Shuttle	17.6	18.3	18.4	4.5%
Access-a-Ride	.4	.5	.5	25%
Vanpools	.2	.2	.3	50%
TOTAL Boardings	79.0	83.0	86.3	9.2%
Source: Regional Transportation District 2005 and 2006 Budget Documents.				

Organization Structure

Board of Directors

Since 1983 the RTD has been governed by a statutorily-created, 15-member Board of Directors. Each member is elected to serve a four-year term. Section 32-9-111, C.R.S., specifies that after each federal census, the Board of Directors shall apportion the composition of the Board into compact and contiguous director districts so that

the 15 directors will represent, to the extent practical, the people of the district on the basis of population.

There are more than 165,000 residents in each of the 15 director districts and most of the individual director districts cross county boundaries. Among its statutory powers, the Board of Directors may: adopt and amend bylaws and rules; elect board officers; enter into contracts and agreements; purchase or dispose of real property; levy and cause to be collected taxes within the district, subject to the laws of Colorado; and borrow money and issue district securities. In general, the Board is responsible for setting RTD policy; adopting the annual budget; and establishing short and long-range transit goals and plans in conjunction with local, state, and federal agencies. The Board's vision statement for the District is, "to deliver regional multi-modal transportation services and infrastructure improvements that significantly and continually increase transit market share." The District's mission is to:

. . . meet our constituents' present and future public transit needs by providing safe, clean, reliable, courteous, accessible, and cost-effective service throughout the District.

Department Offices

The daily activities of the RTD are administered by the General Manager and eight department offices, as follows:

- **General Manager's Office** - responsible for managing the District in support of the goals and objectives of the Board of Directors.
- **Bus Operations** - provides bus service throughout the District.
- **Rail Operations** - provides Light Rail transit service.
- **Contracted Services** - administers and oversees all of RTD's bus services.
- **Customer Services** - designs, markets, and promotes the District's services, and provides on-time information and passenger counts.
- **Planning and Development** - responsible for the planning, design, property acquisition, construction, and maintenance phases of transit projects, systems, and facilities.
- **General Counsel** - manages the legal affairs, security services, public safety, and risk management needs of the District.

- **Administration** - provides support services, including finance, human resources, materials management, treasury, and information technology.
- **Public Affairs** - manages the District's internal and external communications, government affairs, media relations, and internal audit.

In addition to its administrative headquarters in downtown Denver, the RTD has three bus operating facilities located in Denver, Aurora, and Boulder. A central maintenance facility is located in Denver and two Light Rail maintenance facilities are located in Denver and Englewood. The District also operates four walk-in customer service centers: two on the 16th Street Mall in Denver; one at Denver International Airport; and one in Boulder.

In January 2006 the RTD had a total of 2,510 budgeted employees. Of this figure, 591, or about 24 percent, were salaried employees and 1,919 (76 percent) were hourly, trade union-represented, employees. In addition, as described in the following section, the RTD's private contractors employed a total of 1,390 individuals during this period.

Contract Bus Services

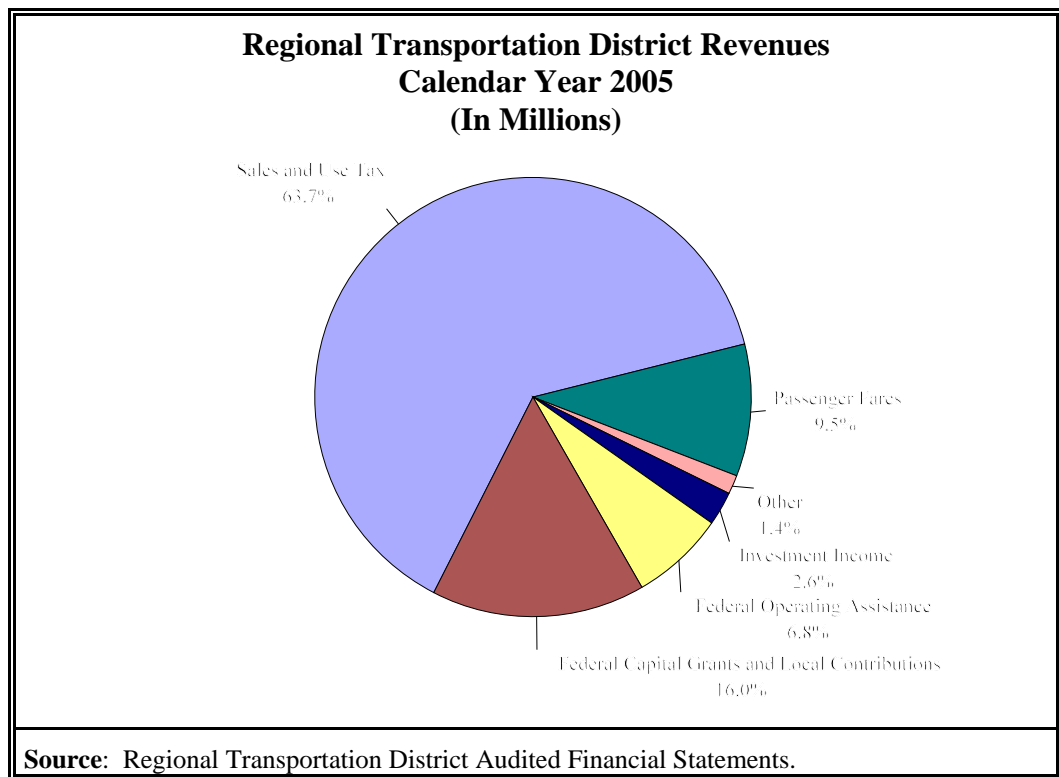
Section 32-9-119.5, C.R.S., states that:

Public transportation services are provided to assist the transit-dependent and the poor, to relieve congestion, and to minimize automotive pollution; public transportation service should be provided at the lowest possible cost consistent with desired service and safety; private transportation providers have been effectively used under competitive contracts to provide public transportation services at lower costs and with lower annual cost increases; obtaining cost-competitive public transportation services requires the establishment of a mechanism for competitive contracting

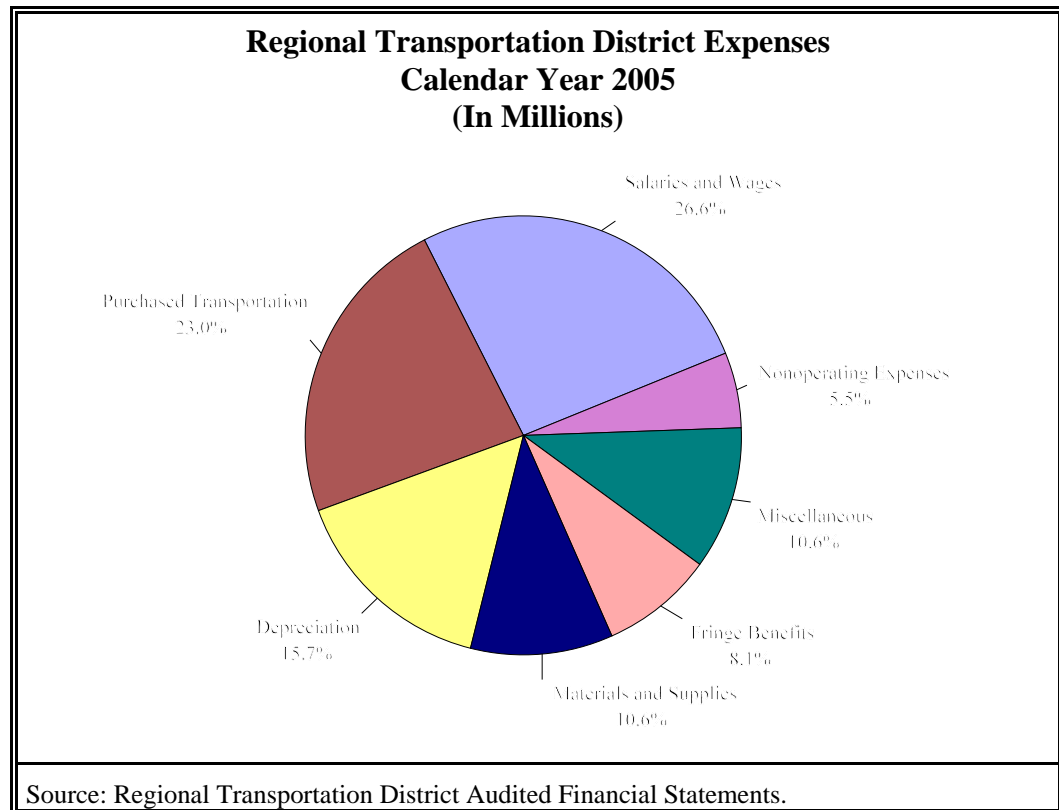
Further, the statute requires the RTD to "implement a system whereby at least 50 percent of all vehicular service shall be provided by qualified businesses pursuant to competitively negotiated contracts." In January 2006 the RTD had contracts with three private bus operators to provide fixed-route bus services. These private contractors employed 935 fixed-route bus operators. Seven private contractors employing 455 individuals provided para-transit services such as access-a-Ride. Access-a-Ride service is curb-to-curb demand response service for people with disabilities as required by the Americans with Disabilities Act (ADA) of 1990.

Budget

In Calendar Year 2005 the RTD had total revenues (including federal capital grants and local contributions) of \$606.9 million and total expenses of \$376 million. (See Appendix A). The RTD is not subject to the annual appropriation process and as the following chart shows, the single largest source of revenue to the District is sales and use tax revenue. In Calendar Year 2005 revenue from this source exceeded \$386 million. With the passage of the FasTracks initiative in November 2004, voters authorized an increase in the sales tax rate from 0.6 percent to 1 percent, effective January 2005. The revenue resulting from the rate increase is required to be used for the FasTracks transit expansion program. The Colorado Department of Revenue is responsible for collecting and processing all RTD sales tax revenue, and the Department retains a portion of the revenue to cover its administrative costs associated with these activities.



As the following chart shows, expenses for salaries and wages (\$100 million) and purchased transportation services (\$86 million) were the two greatest expense categories for the RTD in Calendar Year 2005.



Farebox Revenue

The second largest source of the RTD's total operating revenue is farebox revenue. As we describe in detail in Chapter 1, by statute, 30 percent of the RTD's operating costs are to be funded by non-tax (e.g., farebox) revenue. Farebox revenue includes passenger fares for regular route services, special service fares, and farebox revenue collected and retained by private carriers under contract with the RTD. The only service for which a fare is not charged is the 16th Street Mall Shuttle in Downtown Denver. Farebox revenue is all revenue collected from passengers including cash, prepaid tokens, multiple-ride tickets, and passes. As of January 2006 one-way general fares were: \$1.50 for local Denver, Boulder, Longmont service and some Light Rail; \$2.75 for Express and some Light Rail; and \$3.75 for Regional service. A more complete listing of fares is shown in Chapter 1 of this report.

In Calendar Year 2005, the RTD collected approximately \$58 million in farebox revenue. For Calendar Year 2006, the RTD estimates farebox revenue will be more than \$63 million. According to RTD budget documents, two primary reasons explain the significant single-year increase in projected farebox revenue. First, in January 2006 the RTD implemented a 20 percent increase on its local service fares and a 10 percent increase on the EcoPass program. Second, the opening of the

Southeast Corridor Light Rail line in late 2006 is expected to result in an increase in ridership and a corresponding increase in farebox revenue.

Audit Scope

Section 32-9-115 (3), C.R.S., requires that at least once every five years, or more frequently, the State Auditor is to conduct or cause to be conducted a performance audit of the Regional Transportation District to determine whether the RTD is effectively and efficiently fulfilling its statutory obligations. For this audit, the Office of the State Auditor contracted with two outside firms—Pacey Economics Group, a Colorado-based economics analysis firm and Battelle, an international science and technology enterprise based in Columbus, Ohio.

The two primary objectives of the audit were to:

- Evaluate the RTD's fare-setting practices for compliance with federal and state law and RTD Board policy, equity with regard to the different groups of riders, and consideration of fare increases on ridership.
- Determine the adequacy of the RTD's security and emergency planning and response activities.

Audit work included interviews with RTD staff, including bus and Light Rail drivers, review and analysis of RTD documents and databases, and analysis of other transportation districts' programs. We appreciate the cooperation and responsiveness of the RTD management and staff in conducting this audit.

Monitoring Performance

Chapter 1

Background

Section 32-9-119.7, C.R.S., states that:

. . . although mass transportation is one component of an effective surface transportation system, the allocation of resources to mass transportation must be in light of all surface transportation needs. The general assembly further finds that *the district should be organized efficiently, economically, and on a demand-responsive basis* and the district should consider least-cost alternatives in discharging its responsibilities. (Emphasis added).

This provision clearly expresses the General Assembly's intent that the Regional Transportation District (the RTD) operate in a fiscally prudent and effective manner. Monitoring factors such as demand, quality, market share, farebox revenue, ridership, and others are critical for evaluating surface transportation programs and for making funding choices. The Regional Transportation District has a responsibility and a statutory mandate to ensure its services are cost-effective and responsive to public need. Further, assurance about cost-effective and responsive services is important because the RTD receives significant sales tax revenue to support its operations.

In this chapter we discuss a number of compliance and performance issues and present findings related to the ways in which the RTD monitors and measures its performance. The Office of the State Auditor contracted with Pacey Economics Group, a Colorado-based economics analysis firm for this portion of the audit. Pacey conducted the audit work and prepared the audit comments and recommendations in this chapter of the audit report.

Fare-Setting

One of the RTD's fiscal policies is to annually establish a fare structure with due consideration for a number of factors, including:

- Consistency and equity throughout the District
- Ease of use and simplicity
- Maintaining or increasing ridership and fare revenues
- Acceptability and marketability of fare structure to customers and the general public.

The RTD maintains a variety of fares to meet the needs of its diverse customers and to provide adequate service coverage for its more than 2,300 square-mile service area. Fares by type of service and customer are displayed in the table below.

Regional Transportation District Single Trip Fares Effective January 2006		
Mode	Regular Fare	Senior/Disabled/ Student Fare
Mall Shuttle	Free	Free
Local – Denver, Boulder, Longmont	\$1.50	\$0.75
Express	\$2.75	\$1.35
Regional	\$3.75	\$1.85
Light Rail		
Travel in one zone	\$1.50	\$.75
Travel in two zones	\$1.50	\$.75
Travel in three zones	\$2.75	\$1.35
skyRide		
Zone 1	\$6.00	\$3.00
Zone 2	\$8.00	\$4.00
Zone 3	\$10.00	\$5.00
Source: Regional Transportation District.		

As the table shows, regular single-trip fares for local services are currently \$1.50 for adults and 75 cents for students and people who are elderly or have disabilities. Prior to January 2006, local service fares were \$1.25 and 50 cents for the same respective populations. The increase in single-trip local service fares was RTD's first fare increase since 2004. According to the RTD, the fare increase was necessary to keep pace with rising costs.

As part of our audit, we examined two basic aspects of the RTD's fare-setting practices. Specifically, we evaluated: (1) the adequacy of the RTD's practices in meeting federal and state laws and RTD policies and goals, and (2) whether fare-setting practices allow certain groups of riders to pay a lesser percentage of the costs of their service than other groups. We discuss our findings in each of these areas in the following sections.

Federal Fare-Setting Requirements

One of the objectives of this audit was to determine the whether the RTD's fare-setting practices comply with federal requirements. Specifically:

- **United States Code 49 U.S.C. 5307.** This federal law requires that, during non-peak hours, elderly and handicapped individuals or individuals presenting Medicare cards issued to them under the Social Security Act will not be charged more than 50 percent of the peak hour fare for any transportation using or involving a facility or equipment financed with federal funds.
- **Code of Federal Regulations 49 C.F.R. 37.** This regulation states that the fare for a trip charged to an Americans with Disabilities Act (ADA) paratransit-eligible individual for special paratransit service shall not exceed twice the fare that would be charged to an individual paying full fare for a trip of similar length, at a similar time of day, on the transit entity's fixed route system.

We reviewed the RTD's rates and rate-setting practices for the elderly and handicapped and found them to be in compliance with the aforementioned regulations. As the table on the previous page shows, the fares for seniors and the handicapped are no more than 50 percent of the fares charged to other passengers. In addition, access-a-Ride provides advanced reservation transportation to passengers with disabilities who are unable to board, ride, or exit a wheelchair lift-equipped bus or whose disability does not allow them to travel to and from a bus stop. These fares (\$3.00 Local, \$5.50 Express, \$7.50 Regional) are no more than twice the typical fare and thus, are in compliance with federal law.

Cost Recovery Ratios

The RTD calculates and monitors two different cost recovery ratios: a statutory farebox recovery ratio and its own internal operating cost recovery ratio. Generally, a farebox recovery ratio is intended to calculate the portion of operating costs that are funded by passenger-generated revenue (i.e., farebox revenue). Fluctuations in

operating costs, fares, and ridership may affect the ratio. For example, if costs remain stable but ridership or fares increase significantly, the portion of costs covered by passenger-generated revenue will increase. Conversely, if ridership and fares remain stable but costs increase significantly, the portion of costs covered by passenger-generated revenue will decrease. We reviewed the RTD's calculations and use of the two recovery ratios. As described in the following sections, we found that the RTD is calculating and reporting the statutory ratio in compliance with legislative mandates and meeting the threshold established in statutes. We also found that the RTD's internal ratio more directly reflects the percentage of costs that are funded primarily from farebox revenues.

Statutory Farebox Recovery Ratio

The statutory farebox recovery ratio became effective in Fiscal Year 1990, and statutes prescribed that it be increased gradually, over three years, to its current level of 30 percent effective in Fiscal Year 1993. Section 32-9-119.7, C.R.S., which established the recovery ratio, states that "the farebox ratio of the district must be improved so resources once allocated for mass transportation can be made available for other surface transportation needs." The statutory requirement ensures that the RTD's users contribute toward the costs of transit services and that public funding, or sales tax revenue, will pay no more than 70 percent of operating costs.

Specifically, Section 32-9-119.7, C.R.S., states that the RTD take "whatever measures it deems necessary" to ensure that 30 percent of its operating costs are funded by the revenues collected, where revenues collected are defined as:

. . . non-sales tax revenue generated through the operation and maintenance of the mass transit system, except for those revenues generated as a result of providing transportation service mandated by the federal Americans with Disabilities Act of 1990.

Revenues included in the statutory ratio include farebox, advertising, federal operating grant revenue (excluding federal ADA grant revenue), and other operating revenue. Operating costs included in the ratio are defined by statute as:

. . . all expenditures, including depreciation, except for those incurred in long-term planning and development of mass transportation and rapid transit infrastructures and those costs incurred as a result of providing transportation service mandated by the federal Americans with Disabilities Act of 1990.

Essentially, the statute provides that *all* expenditures are included in the ratio except for expenses related to long-term infrastructure planning and development and

expenses mandated by the federal ADA. We reviewed the RTD’s calculations for the statutory farebox recovery ratio for Fiscal Years 2001 through 2005 and found that the RTD included the appropriate adjustments, calculated the ratios correctly, and met the recovery requirement each year.

The RTD calculates both its statutory farebox recovery ratio and its internal operating cost recovery ratio annually and reports the results to the General Assembly in the RTD’s budget documents. Basically, the calculation of the RTD’s internal cost recovery ratio differs from the statutory ratio only in the revenues that are included. Both ratios include farebox, advertising, and other operating revenue in their calculations. The RTD’s ratio, however, excludes federal grant and investment-related revenue. By eliminating these two revenue sources, the internal cost recovery ratio more clearly demonstrates the portion of operating costs covered by passenger fare revenue. As distinguished from the statutory ratio, the RTD has established a long-term goal of 20 percent for its internal cost recovery ratio. The RTD’s statutory and internal farebox recovery ratios for Calendar Years 2001 through 2005 are shown in the following table.

Regional Transportation District Statutory Farebox and RTD Internal Cost Recovery Ratios Calendar Years 2001 through 2005					
	2001	2002	2003	2004	2005
Statutory Ratio	49.1%	40.3%	48.9%	37.4%	43.3%
RTD Ratio	18.9%	18.7%	18.8%	20.4%	19.2%
Source: Regional Transportation District 2001 through 2005 Budgets.					

As the table shows, the statutory farebox recovery ratio fluctuates significantly from year to year—between 37 and about 49 percent between 2001 and 2005. Fluctuations are due primarily to the inclusion of federal grant revenue, which can vary significantly from one year to the next.

The RTD’s Internal Ratio

According to RTD staff, the RTD does not use the statutory recovery ratio for its own management purposes. Rather, the RTD calculates that ratio for statutory compliance purposes only. By contrast, the RTD has established a specific performance goal for its internal ratio. In reviewing the RTD’s internal operating cost recovery ratio, we identified several factors that make it less meaningful for monitoring performance than it could be.

As shown in the previous table, the RTD routinely and significantly exceeded the 30 percent minimum statutory target from 2001 through 2005. This means that, according to the statutory calculation, the RTD recovered a greater percentage of its operating costs through non sales-tax revenue than the 30 percent set in statute. By contrast, the RTD did not meet its internal 20 percent target for 4 of the 5 years we reviewed.

According to RTD staff, the 20 percent goal is Board policy. We found that the RTD has not defined the basis for the 20 percent policy or the actions to be taken if the goal is not achieved. In other words, the RTD has not established a range within which variations from its 20 percent goal are acceptable or beyond which corrective actions would result. The RTD staff acknowledge that the ratio does have a relationship to fares and services. However, if the ratio deviates from the 20 percent target in one or more years, it is unclear whether the RTD would attempt to maintain or regain the 20 percent goal by identifying the cause of the deviation and implementing measures such as adjusting fares, increasing marketing efforts, or reducing services. Without a formal policy statement on the basis for and purpose of the percentage goal, the effectiveness of the ratio as a measure of performance and, thus, accountability is diminished.

With respect to the statutory ratio, the statute that created the farebox recovery ratio in 1989 included a requirement that the RTD make recommendations regarding the ratios to the General Assembly's Transportation Legislation Review Committee. Specifically, statute requires that no later than August 1, 1989, the District shall submit optional plans to address several objectives including the statutory farebox recovery ratio. Although this requirement was focused on the initial ratio, the mandate indicates the General Assembly's intent that the RTD provide input into the process of establishing the ratio. Additionally, one of the RTD's Fiscal Policies is to actively pursue legislation that would help ensure the continued accomplishment of RTD's goals and mission statement. More specifically, the Fiscal Policy states that "the Board will support efforts to ensure that legislative intent is realized in the allocation of state financial resources to public transit."

The statutory 30 percent farebox ratio has been in effect since Fiscal Year 1993. In keeping with its fiscal policy of ensuring legislative intent is realized, we believe the RTD should seek clarification from the General Assembly as to whether a revision of the statutory ratio is in order. Possibly, after the RTD evaluates and formally adopts its internal cost recovery ratio, the RTD could propose to the General Assembly that it adopt the same ratio. Adopting identical cost recovery ratios, including the methodology used to calculate them, could provide greater clarity and accountability with respect to the portion of operating costs covered by taxpayer revenue and the portion of operating costs covered by farebox revenues.

Finally, the RTD includes depreciation and interest expenses in the calculation of its internal ratio. This can reduce the stability of the ratio and does not align with measures of financial performance commonly used by private industry. Eliminating depreciation and interest from the cost basis allows for a more direct comparison between passenger-generated revenue and operating costs for the year and provides a benchmark that the RTD can use to compare its own performance with the performance of other transit agencies. The RTD should consider eliminating depreciation and interest from its cost recovery calculation.

Recommendation No. 1:

The Regional Transportation District should work with the Regional Transportation District Board of Directors to improve the effectiveness of its internal operating cost recovery ratio as a measure of performance by formally adopting and documenting the basis for the goal. This should include:

- a. Evaluating its methodology for determining the recovery ratio, including the percentage goal to be recovered through farebox revenues.
- b. Defining the ways in which the ratio will be used in fare-setting or other activities.
- c. Proposing legislative change to the methodology used in calculating the statutory cost recovery ratio, as appropriate.

Regional Transportation District Response:

Agree. Implementation date: December 2006.

Staff will recommend to the Board of Directors that a formal fiscal policy be adopted that defines the basis and the purpose of the operating recovery goal. The District will re-examine the methodology for determining the recovery ratio, including the percentage goal to be recovered through farebox revenues and re-evaluate the ways in which the ratio should be used in adjusting fares. Staff will refer to the Board of Directors' Legislative Committee the suitability of whether the District should seek to have the General Assembly make changes to the calculation of the statutory cost recovery ratio.

Subsidy by Service Type

As stated previously, a second purpose for our evaluation of fare-setting was to determine whether the RTD's practices allow certain groups of riders to pay a lesser percentage of the costs for their service than other groups pay for the services they use. As described in the following sections, we found that the portion of operating costs that is borne directly by riders does differ depending upon the type of service. Stated another way, some of the RTD's services are more heavily subsidized from revenue sources other than passenger fares—primarily sales tax revenue—than are other services. However, as we describe below, there may be some basis for differing levels of rider subsidies.

Similar to the cost recovery ratios discussed in the previous issue, the RTD uses financial models to allocate revenues and expenses to each type of service within its system. These data are used to compare the performance of specific routes and services and to provide the RTD with a measure of the level of subsidy per boarding. Basically, "subsidy per boarding" refers to the amount of revenue, other than fare box revenue, that is needed to finance each passenger boarding the bus and Light Rail services within the RTD system as follows:

$$\text{Subsidy per boarding} = \frac{\text{Operating cost} - \text{Farebox revenue}}{\text{Number of boarders}}$$

The subsidy per boarding can be calculated for comparative purposes by using the operating cost, farebox revenue, and number of boarders attributable to each service type. As the following table shows, subsidy per boarding ranges from a high of more than \$14 for call-n-Ride service to a low of about \$2.70 for each boarding on the Central Business District (CBD) Local Route. On the surface, such wide variations in the levels of subsidization do not appear to be in keeping with the RTD's fare-setting goal of consistency and equity throughout the District. Based solely on the measure of subsidy per passenger boarding, the January 2006 fare increases for Local service do not appear entirely justified, because each passenger on the CBD and Urban Local services was being subsidized significantly less than boarders on other types of services. Specifically, CBD Local and Urban Local had per boarding subsidies of \$2.72 and \$3.51, as compared with \$6.82 and \$7.12 subsidies for Regional and Express services, respectively.

Regional Transportation District Subsidy Per Boarding by Type of Service Calendar Year 2004			
Service	Boardings	Subsidy per Boarding	Subsidy Percentage
Central Business District Local	25,639,365	\$2.72	81.8%
Urban Local	15,828,008	\$3.51	84.4%
Suburban Local	3,648,985	\$7.95	92.4%
call-n-Ride	207,904	\$14.76	95.3%
Express	2,563,622	\$7.12	77.2%
Regional	2,777,037	\$6.82	72.4%
skyRide	1,803,748	\$4.26	59.3%
Light Rail Transit	10,028,459	\$2.76	78.3%
Other Services	1,803,748	\$4.09	61.8%
Source: Pacey Economics analysis of RTD data.			

However, a different measure—subsidy percentage—provides another perspective. This measure is calculated as follows:

$$\text{Subsidy percentage} = \frac{\text{Operating cost} - \text{farebox revenue}}{\text{Operating costs}}$$

The subsidy percentage measure conveys more appropriate information for use in fare-setting because it reflects the percent of subsidy required to finance the type of service in total, rather than on a per boarder basis. The RTD staff are familiar with this measure. However, they do not formally use or report it when assessing fares or making fare adjustments. We believe this measure provides a better understanding of the subsidy rates for various groups of riders as defined by the type of service used. For example, as noted, the CBD Local service has the lowest subsidy as measured on a per boarder basis. By contrast, calculating the subsidy percentage results in the CBD having the fourth highest level of subsidization at 81.8 percent. As the previous table shows, prior to the fare increase, nonfare revenue funded almost 82 percent of the costs per boarding for the CBD Local as compared with subsidy percentages of 72 and 77 percent, respectively for Regional and Express services.

However, as the table indicates, this measure also shows the significantly different levels of subsidization. The RTD staff report that there are reasons for these differences. For example, call-n-Ride is subsidized at a higher rate than any other service using both the per boarding (\$14.76) and the subsidy percentage (95.3 percent) measures. Call-n-Ride is a curb-to-curb service that covers specific geographic areas (Olde Town Arvada, Aurora, Brighton, Evergreen, Gateway, Longmont, Lone Tree, Thornton/Northglenn and US-36) within the District. It is designed to supplement existing RTD service in areas in which regular RTD service is not available because demand is not great enough to provide for cost-effective bus service. However, residents of these areas within the District are taxpayers and need to be served; both statutes and RTD policy refer to the need for the RTD to be demand-responsive. Therefore, although the subsidy level for call-n-Ride is high compared with the subsidies for other services, providing regular bus service in these areas would be cost prohibitive.

In contrast with call-n-Ride service, only 59.3 percent of the costs for skyRide are funded through sources other than rider fares. SkyRide provides customers with transportation to Denver International Airport (DIA). According to RTD staff, skyRide provides customers with savings on airport parking and personal vehicle wear and tear. In addition, according to a March 2006 RTD study, in 2005, the majority of passengers rode skyRide for commuting to/from work at DIA. Therefore, it may not be unreasonable to expect that skyRide users should pay a larger share of their service costs. Urban local routes, on the other hand, may serve more people who are transit dependent and who may not be able to afford to pay higher fares and a larger share of the cost of their services. In addition to ensuring these customers have transportation, a relatively low fare encourages ridership and reduces congestion in these densely populated areas.

We evaluated the subsidy percentages by type of service and found that, although the RTD generally appears to have a rationale for the subsidy levels of its different service types, it has not adopted formal policies or articulated the rationale for these differences in a manner that provides for public understanding or accountability. Furthermore, the RTD needs to set targets or acceptable percentage ranges for subsidies for each service type and communicate these standards to the public. This should include establishing a clear basis for these standards. As discussed previously, one of RTD's fare-setting goals is to ensure "consistency and equity throughout the District." Adopting policies, targets, and standards for differing subsidy levels will enhance the public's understanding of and increase the RTD's accountability for fare-setting.

Recommendation No. 2:

The Regional Transportation District should adopt policies related to subsidies by service type by developing target subsidy percentages or target ranges for subsidy percentages for each type of service. The RTD should use these targets and percentages to evaluate fares and to support fare increases.

Regional Transportation District Response:

Agree. Implementation date: December 2006.

RTD has service standards, adopted by the RTD Board of Directors in December 2002, that contain a methodology to annually determine average subsidy per boarding by service type and on a route by route basis. The annual summary report provided to the RTD Board also identifies those routes that are among the bottom 10 percent and bottom 25 percent of routes with regard to the subsidy standard and the ridership measure, which are then candidates for appropriate marketing and possible revision or elimination.

The audit recommends that RTD adopt an additional standard related to subsidy percentage by service type to evaluate its fares and to support fare increases. Based on this recommendation, staff will develop a proposal for consideration by the RTD Board of Directors

Pass Fare-Setting

In addition to setting single-ride fares, RTD offers a variety of pass programs to its riders for which it must also set the fares. Pass programs are designed to encourage ridership and benefit riders through a convenient form of discounted fares while also generating a reliable source of farebox revenue. Passes allow for an unlimited number of rides during a specified period. Regular rider passes may be purchased for a single calendar day, for one month, or for one year. In addition to regular rider passes, the RTD offers several categories of special passes targeted toward specific passenger groups. These include: the Neighborhood Pass which allows residents of a community to purchase service for a per housing unit fixed fee; the College Pass for students at Auraria Campus, the University of Denver, and the University of Colorado; and the EcoPass, an annual transit pass purchased by participating businesses for use by their employees. The pricing concept for these special types of pass programs is that a group of similar entities or individuals collectively agrees to pay a set, per person price for an annual pass. The price per person remains fixed,

regardless of the number of individuals within the group that use the pass, and the per person price is generally less than the price the individual would pay for a regular monthly pass.

More than one-half of the farebox revenue collected by RTD derives from the sale of passes. Specifically, in Calendar Year 2005 about one-half, or about \$29.2 million of the total \$57.6 million in farebox revenue was generated from this source. More than one-third, or \$10.6 million, of pass revenue derived from the sale of one pass, the EcoPass. We evaluated the EcoPass to determine whether fares are set appropriately. Overall, we found that the RTD lacks the data necessary to thoroughly evaluate this particular pass program. Therefore, it is difficult to assess the appropriateness of the fares. Furthermore, we identified pricing inconsistencies and inequities that indicate the need for a comprehensive evaluation.

EcoPass Pricing

In 1991 the RTD, in conjunction with the City of Boulder, piloted an employer-sponsored monthly pass program. The EcoPass program allows employers to purchase discounted annual transit passes for all employees at a fixed price, based upon the workplace location and the total number of employees. The RTD expanded the EcoPass in 1992 to include any employer within the District. In Calendar Year 2006 slightly more than 1400 employers, representing more than 78,500 employees, participated in the program. It is important to note that although the number of employees represented by participating employers is 78,500, the number of employees using the pass is less than this figure. The EcoPass pricing structure is based upon the number of individuals employed by a participating business and not the number of employees that use the pass.

Pricing Inconsistencies

One of the RTD's revenue policies is to "establish a fare structure with due consideration for consistency and equity throughout the District." In addition, the RTD Board has adopted a goal of meeting "the present transportation needs of the District by providing cost-effective transportation service." We evaluated the EcoPass program in the context of these directives. Overall, we found that the RTD has no reliable means of determining whether EcoPass pricing is equitable among EcoPass customers or as compared with regular transit fares. Although the RTD does routinely collect and analyze data on the EcoPass and has adjusted the pricing structure numerous times, existing data are not adequate to provide for a comprehensive evaluation of the program. Consequently, it is unclear whether the EcoPass contributes to a consistent and equitable fare structure or to cost-effective

transportation service. We identified several issues that indicate the need for a comprehensive evaluation of the program. Specifically, we found:

- **Questions of equity surrounding one participant group as compared with other participants and with the general public.** The Central Area General Improvement District (CAGID) represents businesses within a defined downtown area of the City of Boulder. The CAGID has negotiated with RTD to purchase the EcoPass for all employees of the businesses represented by the CAGID at a significantly reduced price. Almost 60 percent of the businesses participating in the EcoPass program are located in the CAGID area of downtown Boulder. However, 93 percent of the EcoPass employees work for participating businesses located outside of this area.

The CAGID per employee price is set at \$86. This is the same price that applies to EcoPass businesses located in the fringe areas of the Central Business District of Denver employing more than 2,000 employees each. Most (84 percent) of the businesses represented by CAGID are small businesses employing 10 or fewer employees, and a total of 246 are one-person businesses. The annual, per-person price for these employees is \$86 for the EcoPass as compared with regular transit riders who pay \$54 for the Local/Limited, \$99 for the Express, or \$135 for the Regional passes on a *monthly* basis.

- **Questions of consistency related to a pricing structure that is not always progressively higher or lower.** The EcoPass pricing structure is not consistently progressive. Some businesses will pay more, less, or the same as other businesses with one more employee. For example, a business with 10 employees pays a contract minimum price of \$648. A business with 11 employees, or one more, pays \$1,296. For businesses with 249 employees, the contract price is \$11,952, but for businesses with 250 employees, the contract price decreases to \$10,500.

EcoPass Data

The RTD staff routinely compile and review data on the EcoPass. In addition, since the Program was implemented throughout the District in 1992, the RTD has made a number of changes to the program, including pricing and boundary adjustments. However, staff reviews of the Program are limited by a lack of adequate data. Although the RTD has data on the numbers of individuals employed by EcoPass participating businesses, it does not have reliable figures on the number of employees that use the pass. When an individual boards a bus using an EcoPass, the driver records the use of the pass into the farebox. Therefore, the RTD knows the number

of EcoPass boardings on a particular route. However, as with regular passes, the RTD is unable to track whether these customers transfer to another service or route. So, while the number of boardings is recorded, the number of unique EcoPass users on a particular day or in a month is not. In addition, the RTD is unable to associate EcoPass use with specific participating employers. Such information would allow the RTD to better track the size of the companies whose employees are more or less likely to use the pass, their locations, and other useful characteristics. All of these data are important for gauging use and for setting appropriate fares.

The RTD has issued a request for proposal to implement new farebox technology that will allow it to more accurately track ridership, including EcoPass riders. The technology the RTD is proposing is similar to a system in use by Valley Metro in Phoenix, Arizona. The “Bus Card Plus” program allows Valley Metro to charge employers for their employees’ actual transit use based on technology that tracks individual riders. The RTD estimates the cost of the new technology will be \$8.5 million to \$9 million. In addition, RTD staff told us that they recently issued a request for proposal to implement similar technology on Light Rail service. Without such technology, the ability to track ridership on Light Rail likely will result in a similar lack of accurate and complete data. This means that although the use of this particular service is expected to increase as the service expands, it may be difficult to accurately measure the change due to a lack of reliable data.

In the absence of an integrated tracking system, the RTD could obtain data on EcoPass usage by conducting routine surveys of employers. We contacted 12 participating businesses and found that smaller businesses are more likely to know the exact number of employees using the pass. For example, one seven-person business reported that four employees regularly use the pass on a daily basis. By contrast, it is more difficult for larger employers to gauge use of the pass by their employees. However, one large company we contacted with 1595 employees charges employees a nominal fee for the pass. This practice gives the employer some idea of the number of employees using the pass. According to the employer, approximately one-third of its workers pay the fee.

EcoPass Evaluation

We believe the RTD needs to evaluate the cost-effectiveness, equity, and consistency of EcoPass pricing and of the program in its entirety. The consensus among the RTD staff we spoke with is that the pricing structure and the program itself is in need of adjustment. If staff believe this to be the case, they need to develop a method to collect the data to evaluate the program and propose program or fare changes. Appropriate recommendations for change, if needed, should be presented to the RTD Board. As part of this process, the RTD needs to better communicate the purpose for the program and identify goals and measurable objectives. Cost recovery should be

a consideration, and the RTD should determine the level at which EcoPass revenues cover costs as compared with other pass programs and regular fares. The RTD should also conduct and report on similar reviews of other pass programs.

Recommendation No. 3:

The Regional Transportation District should conduct thorough evaluations of the EcoPass and all of the RTD pass programs to ensure the programs are cost-effective and pricing structures are equitable and consistent. This should include developing the methods and technology needed to capture critical data, analyzing results, and reporting findings and recommendations to the RTD Board and the public.

Regional Transportation District Response:

Agree. Implementation date: June 2007 and ongoing.

The RTD will continue to address the cost-effectiveness of all of its pass programs, including EcoPass, Neighborhood Pass and the College Pass programs. As the audit has noted, RTD is currently in the process of receiving proposals for a Pass Utilization Monitoring System that would enable staff to accurately gauge the true value of these products. Exact implementation timelines are not yet finalized, since proposals have not yet been received. The RTD staff's estimate is that complete installation of this system would take approximately 18 months from contract award. Following installation, a period of data collection would be required prior to recommending changes in program pricing structures.

The audit also pointed out several pricing anomalies in the EcoPass pricing structure that will be examined by RTD staff. The pricing structure for 2007 has already been adopted by the RTD Board. Staff will develop a set of proposals for the 2008 contract year based on the items identified by the audit. These proposals will be presented to the RTD Board of Directors for consideration. This will be completed by mid 2007.

Route Service Standards

To help ensure the services it provides are cost-effective, efficient, and suited to a variety of markets, the RTD has established productivity standards. One set of the standards is used to measure productivity related to the RTD's transit routes and to make changes, where needed. Route changes include eliminating underperforming

routes, adjusting service frequency to better reflect demand, and marketing less patronized routes. The two standards used to measure route service productivity are boardings per hour (unlinked passenger trips) and subsidy (cost minus fare revenue) per passenger. Routes falling into the bottom 10 percent of all routes for either standard or those falling into the bottom 25 percent for both standards are defined as being the least productive and in need of evaluation. That is, if a particular route's boardings per hour or subsidy per passenger falls into the bottom 10 percent of all routes by type of service, staff are to monitor the route.

Each year, RTD staff provide the Board with a written report outlining the service productivity results for each route. The report also identifies actions recommended for any route falling in the least productive categories, or in other words, that did not meet acceptable standards of productivity. We reviewed the service productivity reports for Calendar Years 2000 through 2004 for the RTD's approximately 200 routes. The reports identified a total of 95 routes that fell within the least productive categories for one or more years. Of the 95 routes, we found that 27 were never addressed or included in the staff reports to the Board. Of the 68 routes that staff referred to the Board, the following occurred:

- **Elimination** - 19 routes were eliminated.
- **Changes** - 22 routes underwent changes including changes in frequency, elimination of nonpeak trips, and merging with other routes.
- **Monitoring** - For the remaining 27 routes, at some time during the period 2000 through 2004 the RTD staff monitored the routes for changes in productivity. In some cases, RTD staff proposed changes to the Board. However, the Board did not make any of the proposed changes during the four-year period we reviewed. Additionally, staff continued to monitor the other routes. We noted that although improvements in performance did not occur, no recommendations for changes in the routes were made to the Board.

In some cases, routes that were among the least productive in one year rose to an acceptable performance level by 2004. However, staff did not always note the unacceptable performance to the Board prior to the positive turnarounds. In some cases in which changes were made, little improvement occurred following the changes.

Standard Procedures

The RTD staff use the service productivity standards to evaluate routes. However, the RTD Board has not adopted a uniform process for using the service productivity standards to effect change in a timely and consistent manner. We understand that underperforming routes should not necessarily be eliminated immediately. Actions to adjust or eliminate routes should undergo careful scrutiny and decisions should be based on comprehensive data, including public comment, as is the RTD's current policy. However, the inconsistencies and lack of timely action in the cases we identified are of concern. Allowing underperforming routes to continue is also incongruous with the RTD's overall goal to provide cost effective and efficient transportation service. Poorly performing routes increase operating costs in the absence of corresponding farebox revenue. The RTD's implementation of changes on underperforming routes could result in better use of resources and increased passenger revenue. Ultimately, inconsistent use of the standards renders them less effective.

We believe the RTD Board and the RTD staff should adopt and implement procedures for monitoring, reporting on, and making recommendations for underperforming service routes. These procedures should include timetables for monitoring and taking action. The timelines would also provide a means of demonstrating accountability for decisions. Criteria should also be adopted for justifying and documenting the RTD Board's decisions to maintain poorly performing routes if it is determined that certain routes meet particular needs such as serving low income and/or transit dependent populations as well as providing for geographic equity in service delivery.

Recommendation No. 4:

The Regional Transportation District should ensure its decisions regarding route service changes are made in a timely manner and are based on a consistent application of productivity standards. To accomplish this, the RTD Board and the RTD staff should adopt and implement procedures including time lines for monitoring routes and taking action on poorly performing routes. The rationale and decision-making criteria should be documented in cases which deviate from the standard procedures.

Regional Transportation District Response:

Agree. Implementation date: Ongoing.

RTD staff developed and the RTD Board has adopted a very detailed set of service standards, most recently revised in December 2002. The standards are used to identify routes and services for appropriate marketing and possible revision or elimination. Routes are evaluated within classifications of similar routes on the basis of a ridership measure and a subsidy per passenger measure. Reports are provided to the RTD Board of Directors annually, indicating which routes do not meet the standards.

The audit has recommended that RTD establish timelines for taking action on poor performing routes. There are often factors besides pure numeric performance (such as service equity, transit dependency, long-standing community interactions and stakeholder input, sequencing of scheduled service transitions, interdependency of route performance, and funding availability) that are a part of the decision making process of the 15-member elected RTD Board of Directors. Staff will continue to monitor and report on route performance and will make recommendations for service changes based on the adopted service standards, and document rationale when decisions deviate from recommendations or standard procedures.

Performance Measures

As part of its annual budget process, the RTD Board adopts performance measures in association with its broader programmatic goals and objectives. Basically, performance measures are quantitative or numeric indicators of the success of an agency or organization in achieving its goals and objectives. Performance measures should represent more than the number of units produced or times an event occurs. Rather, they should serve as a means of evaluating the impacts of an organization's actions by providing quantified comparisons between the actual and the intended results.

We reviewed the performance measures the RTD reported in its 2006 Adopted Budget. Specifically, we analyzed the performance measures the RTD established related to its goal of "providing cost-effective and efficient transportation service." Overall, we found the RTD could do more to ensure the adequacy and comprehensiveness of its performance measures in this area. We identified two primary weaknesses. First, we found the RTD did not report performance measures for more than one-half of the 11 objectives it established for its goal of cost-effective

and efficient services. For example, the RTD reported no performance measures related to its objectives of: improving route efficiency, analyzing cost-benefit (cost per hour, cost per mile, etc.), providing support to bus and rail operators, hiring and training competent staff, and providing accurate financial planning, reporting, and analysis. Consequently, it is unclear whether the RTD achieved these objectives. Objectives should be clear targets for specific action. As such, they should be achievable, be directly linked to performance measures, and include timetables for achievement.

We also found that the performance measures the RTD has adopted are not always sufficient or adequately targeted toward the stated objectives and the overall goal. For example, we identified weaknesses related to the following measures:

- **Maintaining operating cost recovery ratios.** One of the RTD's objectives and one of its performance measures is to maintain all required recovery ratios. As described earlier in this chapter, RTD reports two different operating cost recovery ratios in its Annual Budgets. These ratios attempt to reflect the portion of operating costs that are covered by non sales tax revenue. However, neither ratio measures cost-effectiveness or efficiency. Such ratios do not account for excessive or unnecessary costs that may be embedded into operational budgets. For example, if the RTD had unreasonably high maintenance costs, this would not be reflected in the cost recovery ratio because the ratio simply reflects incurred costs. Without better performance measures, cost inefficiencies or the potential for cost inefficiencies remain undetected. There are alternative measures of efficiency that are standard in the transit industry. These include operating expense per passenger mile and per vehicle revenue hour and/or mile. These measures can be used to evaluate the cost effectiveness of the RTD and will be indicative of its performance at one point in time or to its own operations over time. The RTD staff collect operating expense per passenger mile and per vehicle revenue hour and/or mile data, but they are not used as measures of performance in achieving program goals and objectives.
- **Ridership and market share.** Another of the RTD's objectives related to its goal of providing cost-effective and efficient transportation service is to increase ridership. Ridership directly impacts the RTD's ability to earn revenue and provide services. That is, when the number of people using RTD services increases, revenues will also increase, allowing for service expansions as long as costs remain stable. Similarly, when the number of people using RTD services decreases, revenues decline and service may be curtailed. If the number of riders (and RTD's corresponding revenue) decline substantially, routes may run less frequently or be eliminated. Changes in ridership should, in theory, bear a parallel relationship to changes

in the RTD's service population. Therefore, as the District population increases, so should its ridership. The transit industry uses the term "market share" to describe this relationship between riders and population. Both ridership and market share are key to accomplishing RTD's goals and objectives and of ensuring accountability to the public.

The RTD's vision statement is "to deliver regional multi-modal transportation services and infrastructure improvement that *significantly and continually increase transit market share.*" (Emphasis added.) Yet, the RTD does not include market share among its performance measures. From 1995 through 2005 the RTD maintained, but did not increase, its market share. Therefore, although ridership increased in 2004 and 2005, market share did not. The RTD staff are aware of the District's market share. However, staff do not report this measure or include it among the RTD's performance measures. We believe the RTD needs to incorporate market share into performance measures for evaluating its goal of cost-effective and efficient transportation service. Additionally, it should establish performance benchmarks and targets for both ridership and market share and identify and address factors contributing to performance. The RTD should establish a basis for ridership targets that ensure ridership increases make appropriate progress toward increasing market share.

In addition to these two examples, we also identified other measures which are inadequate to establish the RTD's success in achieving its objectives related to cost-effective and efficient services. For example, one of the RTD's performance measures is to monitor selected internal functions for efficiency through the use of audits. Although we agree that audits are one mechanism for identifying irregularities and inefficiencies, we do not agree that the number of audits completed each year is an adequate indicator of efficient or cost-effective services.

We believe the RTD has a statutory mandate and a public responsibility to provide accountability for the economy, efficiency, and effectiveness of the services it provides. Relevant, specific, and quantifiable program objectives and performance measures aid in decision-making and provide needed accountability for public resources by focusing on specific actions and activities and measuring their impacts. The RTD needs to improve the quality of its program objectives and performance measures by conducting a systematic review of current goals, objectives, and measures. The RTD should ensure each of its goals is linked to clear, realistic, and attainable objectives that have specific time frames for accomplishment or completion. Program objectives, in turn, should link to performance measures which provide quantified comparisons between objectives and actual results. Benchmarks and targets should be developed and all results reported in the RTD's Budget Document and/or other public formats.

Recommendation No. 5:

The Regional Transportation District should improve the performance measures used to assess the impact of its actions and activities related to providing cost-effective and efficient transportation services by:

- a. Systematically reviewing current goals, objectives, and performance measures to ensure linkages exist between them and that performance measures address all objectives.
- b. Adopting objectives that include time frames for accomplishment.
- c. Developing benchmarks and targets for performance measures.

Regional Transportation District Response:

Agree. Implementation date: September 2006.

The District will continue to systematically review current goals, objectives, and performance measures to ensure linkage exists between them and all performance measures. The RTD will also add a performance measure evaluating market share, and with the FasTracks expansion, RTD staff estimates that market share will increase significantly and continually. As each new rapid transit corridor opens over the next ten years, RTD will be tracking market share for the then current goals. Staff will continue updates to the Board of Directors on the District's current 109 performance measures relative to the Board adopted Goals and Objectives. In conjunction with the 2007 Budget process, staff will present to the Board of Directors at the September 2006 Board meeting revised performance measures that provide additional linkages to all objectives as well as performance measures that assess the District's actions and activities related to providing cost-effective and efficient transportation services.

Security Awareness and Emergency Response

Chapter 2

Background

Since September 11, 2001, the federal government has been working to strengthen the security and emergency-preparedness capabilities of the nation's mass transit systems. The effort has been led by the Federal Transit Administration (FTA), the Transportation Security Administration (TSA), and the Department of Homeland Security. In January 2003 the FTA released its "Top 20 Security Program Action Items for Transit Agencies." The items on the list are considered by the FTA to be the most important elements transit agencies should incorporate into their security programs and plans. The 20 priorities include written security program and emergency management plans, a vulnerability assessment resolution process, background checks on all new front-line operations and maintenance staff, and ongoing training. A complete list of the FTA's Top 20 Priorities is available in Appendix B.

As part of its efforts to secure the nation's transit infrastructure, the FTA implemented a Security and Emergency Management Technical Assistance Program. Emergency response planning and technical assistance teams were sent to approximately 50-60 transit agencies, including the Regional Transportation District (RTD). The purpose of the Technical Assistance Program was to assist transit agencies in implementing the major components of a systematic security program including security and emergency response plans, training assessments, and security awareness materials for transit employees and customers. The Technical Assistance Program for the RTD was completed in 2004.

The RTD's Security Unit, organizationally located within the Office of General Counsel, is responsible for implementing and managing programs to safeguard the District's passengers, personnel, and property from terrorist attacks and other security risks. The Unit is responsible for undercover and plainclothes police officers, as well as security guards at District facilities and Light Rail assets. The Security Unit's Fiscal Year 2005 budget was approximately \$4.4 million and it employed five full-time staff under the supervision of the RTD's Manager of Public Safety.

Scope of Audit Work

The Office of the State Auditor contracted with Battelle, an international science and technology firm with expertise in transit security, for this portion of the audit. Battelle conducted the audit work and prepared the audit comments and recommendations in this section of the report. The primary focus of the audit work in this area was to evaluate the security and emergency planning and management activities of the RTD. Specifically, the audit work in this area had three primary objectives. These objectives were to determine whether the RTD has:

- **Conducted a systematic, department-wide risk assessment of its operations to identify critical infrastructure, potential security risks, and areas of operational weaknesses.** We found that the RTD is pursuing a security and emergency management program that is in accordance with the FTA's directives and guidance. The RTD has conducted four vulnerability assessments since September 11, 2001. Through these assessments, the RTD has focused on key areas such as level of visibility, criticality of target site to the District, site population, and access to target.
- **Developed plans and security measures to mitigate potential security risks and areas of vulnerability.** The RTD has an ongoing program intended to address the system's vulnerabilities and to provide opportunities for continued improvement. Addressing system vulnerabilities requires periodic assessment so that new or emerging vulnerabilities and risks are identified, prioritized, and mitigated. Based on the information obtained during this audit, it appears that the RTD has established such a process.
- **Developed sufficient response plans for potential emergencies and adequately trained its staff and contractors on these plans and procedures.** The RTD has developed and routinely updates its security plans and measures. For example, RTD engineers and planners have used design criteria and contract specifications to address safety and security issues during the planning, design, and engineering of all of the FasTracks corridors. Additionally, the RTD has developed response plans for potential emergencies. Further, it has instituted training programs and developed security awareness materials for both its employees and its transit passengers.

Overall, we believe the RTD has taken a proactive approach to security and emergency planning and response. However, we identified several issues we believe the RTD should address to provide greater assurances about the effectiveness of its security and emergency management program in the event the RTD would have to respond to a major emergency. Most significantly, we found that RTD needs to standardize the security awareness training for all of its bus services. Consistency

is needed to provide the public with a seamless system of security awareness and response. However, as we describe in the following sections, there are several areas in which differences exist between the practices of the RTD's contract providers and those in use by the RTD.

Security Awareness Training

The Regional Transportation District provides safety and security awareness training and related materials to all of its front-line employees. The purpose of the training is to provide transit system personnel with the specific knowledge necessary to perform critical functions. Training topics typically address hazards in the transit environment including live power, track and roadway safety, and hazardous materials. Response to passenger emergencies including medical situations, blood-borne pathogen awareness, personal safety, and injury and accident prevention are also covered topics. Security awareness or first responder training components include recognition and reporting of suspicious packages, substances, and devices, and the identification and reporting of suspicious persons and behaviors.

Prior to 2001, security awareness training did not have the level of priority within the RTD that it has today. For all directly employed bus and Light Rail train operators, the RTD now provides security awareness training as part of new transit operator training and in refresher courses for longer-term employees. The RTD's security awareness training is based on training designed by the National Transit Institute (NTI) at Rutgers University. The NTI is funded through a grant from the FTA, and its training program is the standard that has been adopted by many transit agencies throughout the United States.

We reviewed RTD training records to determine whether bus and Light Rail operators are attending the security awareness refresher training courses. The RTD's fixed-route bus operators are based at one of three divisions—East Metro, Boulder, and Platte. The RTD's Light Rail operations are based at the Elati Light Rail Maintenance Yard in Denver. We selected a sample of training course sign-in sheets for operators based at each of these locations. We found that all of the 60 bus operators and the 20 Light Rail train operators in our sample had attended updated security awareness refresher courses.

We also interviewed a sample of the RTD's bus and Light Rail operators to determine their general levels of security awareness and knowledge of RTD's security awareness programs. A total of 44 bus operators and 10 Light Rail operators were interviewed at various locations including the RTD's Platte Facility, the 10th and Larimer layover site, the Elati maintenance facility, Mineral Station, and Union Station. Most (33, or 75 percent) of the 44 bus operators we interviewed were employed by the three contract firms that provide fixed-route service for the

RTD. The remaining 11 were employed by the RTD directly. For the most part, the more senior bus operators told us that they had little or no security awareness training as part of their initial training, prior to 2001. However, most indicated that they did have the most recent security awareness training or refresher course within one month of our interview. Also, both the bus and Light Rail operators expressed confidence that should a security event or other emergency occur, they knew and understood the RTD's communications and control procedures and that they would be able to respond effectively to any incident.

Contractor Training and Awareness

As stated previously, statutes require that at least 50 percent of the RTD's vehicular service be provided by qualified contract businesses. As of January 2006 approximately 935, or approximately 49 percent, of the individuals operating fixed-route bus services for the RTD were employed by one of three contracted firms—Connex, First Transit, and Laidlaw. Another 455 individuals were employed by contractors who provide paratransit (Americans with Disabilities Act) and call-n-Ride services. The RTD does not contract for any Light Rail train operators.

The RTD requires its contractors to ensure their employees are adequately trained. However, the RTD has not developed a standardized security awareness training program for use by its contractors. Consequently, the RTD cannot ensure that all of the individuals operating public transit buses in the District are familiar with or employing identical security awareness procedures. As part of the audit, we interviewed representatives from each of the three fixed-route contractors. We also reviewed training materials and a sample of employee training records from the three large contract firms and six of the smaller contractors who operate paratransit services. The purpose of these activities was to determine whether contract firms are consistent in their application of security training and in compliance with RTD requirements. We found that all three of the major contract firms provide security awareness training to their respective employees. In addition, all of the smaller contract transit providers had documentation indicating that security awareness is a component of their new driver training. However, we found a general lack of consistency among the three major contract firms and with the security awareness program offered internally by the RTD. Specifically, we found:

- **Disparities in training content.** The RTD is using the latest National Transit Institute security awareness training materials as part of a mandatory safety seminar for all of its noncontracted bus and rail operators. We found that two of the three fixed-route contractors were not using this updated program and its associated materials.

- **Testing.** Not all of the contract operators conduct post-training tests of the attendees. Rather, such testing seems to be at the discretion of the individual trainers. For example, personnel from one of the three large contract firms told us that in some cases, if the instructor believes additional assurance of trainee comprehension is needed, he or she will conduct a brief exam. By contrast, the RTD administers post training tests to all of its bus operators.
- **Differing approaches.** The training approaches of the three major contract firms vary widely. Differences included the structure of the classroom presentations, the methods and materials used by the instructors, and the frequency of updates or refresher courses. For example, courses ranged from showing a short video to several hours of classroom instruction.

According to RTD staff since the time our audit work was performed, the RTD has taken steps to address the concerns we identified.

We believe the RTD needs to ensure that all of its drivers, whether contract or noncontract, have received comparable training and are competent to respond to security or emergency situations. To do this, the RTD should work with the contract firms to design and implement a standard training program. This should include the content and frequency of training, testing, and course materials. The RTD should also ensure the competence of instructors and conduct routine audits of contractor training programs and records.

Recommendation No. 6:

The Regional Transportation District should ensure the adequacy and comparability of security awareness training for all bus operators and other front line personnel by adopting a standard training program for use by both the RTD and its contract transit firms. Program components that should be addressed include content and frequency of training and testing.

Regional Transportation District Response:

Agree. Implementation date: November 2006.

RTD agrees with the observation that RTD, the three fixed-route contract providers, and all of the smaller contract providers currently do provide security awareness training programs developed by the Federal Transit Administration (FTA). To improve and standardize the contractor training, RTD provided a train-the-trainer workshop on March 1, 2006, in which RTD trained all fixed-route contract providers in accordance with RTD's security

awareness training program which includes the latest security awareness training information available from the FTA. The exact program content was also provided to the fixed route contractors for their use on March 2, 2006. Additionally, RTD will expand testing beyond oral evaluations conducted in the RTD training, by developing a written test as part of the program content that will be administered to RTD and contractor personnel at the completion of the security awareness training module. RTD will also standardize the frequency of refresher training by requiring operator refresher training every three years. If significant new information becomes available from the FTA, RTD may increase the frequency of refresher training as appropriate.

English Language Proficiency

According to the RTD's service contract with its private transit providers, bus operators must be able to read and speak the English language sufficiently to converse with the general public and to communicate clearly with the RTD Dispatch. As part of our audit, we interviewed bus and rail operators to determine their levels of security awareness and knowledge of the RTD's security awareness programs. During the interviews, auditors found that some of the RTD's bus operators were unable to adequately communicate in English. Specifically, of the 33 contract bus operators interviewed, 4 were only marginally able to communicate answers to the auditors' questions. This language difficulty was evidenced by the use of partial sentence responses, single word responses, and other similar communications difficulties. These instances raise serious questions about the English language fluency of the RTD's contract bus operators. This is of particular concern in relation to safety and security incidents or emergencies. During emergencies, bus operators must be able to communicate effectively and efficiently with the RTD dispatch and with passengers. Momentary or consistent lapses in communication due to a lack of English language proficiency could seriously impact the safety and security of transit passengers and others and impede response actions.

The language difficulties identified by the auditors were isolated to RTD's contract bus operators. No English language communication issues were noted for RTD's direct bus or rail operator employees. We believe the RTD needs to ensure that all of its bus operators, whether directly employed by the District or employed by private contractors, meet the language standard defined in RTD contracts. The RTD should work with the contract providers to identify those individuals with language limitations. Consideration should be given to providing remedial language instruction and testing to ensure current transit operators are able to effectively communicate. Special emphasis should be placed on radio procedures and passenger communication in emergencies as well as standard operational situations. The RTD should review contractors' hiring procedures to ensure they are sufficient to identify

and screen for individuals with language limitations and to ensure the language standard is met. Corrective actions should be taken if language issues are not addressed and resolved by contractors.

Recommendation No. 7:

The Regional Transportation District should ensure all of its transit operators have a sufficient command of the English language to effectively carry out security and emergency management plans and responses. This should involve:

- a. Working with contract providers to identify current bus operators with language limitations.
- b. Implementing training or other language programs and testing to verify language proficiency for current employees. Time frames for achieving proficiency should be established and monitored.
- c. Reviewing contractor hiring procedures and practices to ensure that applicants are sufficiently screened for language limitations and that future hires meet the language standard in the RTD's service contract.
- d. Periodically reviewing contractor records for documentation of employee language skills and taking corrective actions including enforcement of contract provisions, as needed.

Regional Transportation District Response:

Agree. Implementation date: September 2006.

To some extent an operator's ability to fulfill the English language requirements is demonstrated by the fact that they must successfully fill out job applications and recruitment tests, complete interviews and training, and complete Commercial Drivers License (CDL) tests – all conducted in English. The RTD staff recognizes that verbal communications are of paramount importance in communicating with RTD customers and RTD dispatch. The RTD staff has worked with contractor staff to reinforce the importance of verbal language/communications skills and to improve the hiring screening process for new bus operators to ensure that English language skills (written and spoken) meet the needs of the bus operator position. This item will be added to the existing audit checklist/process utilized by RTD to monitor contractor compliance with RTD hiring requirements.

RTD now requires, and all contractors have agreed, to remind contract employees of the importance of good communications skills, and will offer assistance with improving communications skills. Contractors will also add “live” radio communications “role playing” exercises and will utilize monthly safety meetings to administer refresher training. RTD dispatch staff will help identify bus operators that exhibit difficulties in radio communications and tapes will be provided to the contractors. These training programs and exercises should provide employees with sufficient language/communications skills.

Trailblazer Manual

The Trailblazer is the RTD bus operators’ manual. It contains RTD route descriptions, general operating procedures, legal procedures, and other important information that bus operators need to access for the successful operation of buses within the RTD system. The RTD requires that each bus operator have the Trailblazer in his or her possession when operating an RTD bus. The majority of the bus operator rules for security, safety, emergency response and communications are included within one section of the extensive Trailblazer.

In reviewing the Trailblazer, we found improvements could be made to enhance the usefulness and accessibility of security and emergency response information. Specifically, we found that in the event of an emergency, the Trailblazer is much too cumbersome for operators to find and locate essential information. The bus operators we interviewed generally indicated they had an appropriate understanding of emergency communication and control protocols, as outlined in the Trailblazer. However, there are some instances in which bus operators may need to respond immediately in the absence of communication with the dispatcher or other emergency personnel. The Trailblazer does not serve as a source for easily retrievable information in these situations. Furthermore, we found it does not contain all needed directions. For example, it does not explicitly direct bus operators as to the appropriate response when “Immediate Actions” are called for or if they are unable to contact the RTD dispatcher. The RTD should consider developing a quick-reference document, possibly in the form of an easy-to-use “Pocket Guide” to provide bus operators with easily retrievable emergency information.

Recommendation No. 8:

The Regional Transportation District should make emergency response and communication information more readily accessible to bus operators by developing a separate quick-reference handbook from information contained in the Trailblazer manual.

Regional Transportation District Response:

Agree. Implementation dates: Trailblazer November 2006;
Quick Reference Guide December 2006.

APPENDICES

Appendix A

Regional Transportation District Summary of Revenues, Expenses, and Changes in Net Assets Calendar Years 2003 through 2005 (In Millions)				
	Year			Percent Change 2003 - 2005
	2003	2004	2005	
Revenue				
Sales and use tax	\$210.4	\$221.3	\$386.4	84%
Passenger fares	\$50.5	\$55.4	\$57.6	14%
Federal operating assistance	\$37.8	\$39.6	\$41.3	9%
Investment income	\$10.1	\$9.4	\$15.6	54%
Other	\$7.6	\$9.2	\$8.6	13%
Total Revenue	\$316.4	\$334.9	\$509.5	61%
Expenses				
Salaries and wages	\$102.6	\$99.7	\$99.9	-3%
Purchased transportation	\$67.0	\$76.8	\$86.3	29%
Depreciation	\$58.6	\$58.8	\$58.9	1%
Materials and supplies	\$25.4	\$27.8	\$39.8	57%
Fringe benefits	\$27.8	\$27.7	\$30.5	10%
Miscellaneous	\$38.9	\$37.4	\$40.0	3%
Nonoperating expenses	\$21.9	\$19.7	\$20.5	-6%
Total Expenses	\$342.2	\$347.9	\$375.9	10%
Income (Loss) before capital grants and local contributions	(\$25.8)	(\$13.0)	\$133.6	618%
Federal capital grants and local contributions	\$139.9	\$71.8	\$97.4	-30%
Increase in Net Assets	\$114.1	\$58.8	\$231.0	102%
Net assets, beginning of year	\$967.9	\$1,082.0	\$1,135.2	17%
Net assets, end of year	\$1,082.0	\$1,140.8	\$1,366.2	26%
Source: RTD Audited Financial Statements. ¹ Includes a prior period adjustment of (\$5,588,628) to beginning net assets.				

Appendix B

Federal Transit Administration Security and Emergency Management Top 20 Priorities

Management and Accountability

1. Written security program and emergency management plans are established.
2. The security and emergency management plans are updated to reflect anti-terrorist measures and any current threat conditions.
3. The security and emergency management plans are an integrated system security program, including regional coordination with other agencies, security design criteria in procurements, and organizational charts for incident command and management systems.
4. The security and emergency management plans are signed, endorsed, and approved by top management.
5. The security and emergency management programs are assigned to a senior level manager.
6. Security responsibilities are defined and delegated from management through to the front-line employees.
7. All operations and maintenance supervisors, forepersons, and managers are held accountable for security and emergency management issues under their control.

Security Problem Identification

8. A threat and vulnerability assessment resolution process is established and used.
9. Security sensitive intelligence information sharing is improved by joining the FBI Joint Terrorism Task Force (JTTF) or other regional anti-terrorism task force; the Surface Transportation Intelligence Sharing & Analysis Center (ISAC); and security information is reported through the National Transit Database (NTD).

Employee Selection

10. Background investigations are conducted on all new front-line operations and maintenance employees.
11. Criteria for background investigations are established.

Training

12. Security orientation or awareness materials are provided to all front-line employees.
13. Ongoing training programs on safety, security, and emergency procedures by work area are provided.
14. Public awareness materials are developed and distributed on a system-wide basis.

Audits and Drills

15. Periodic audits of security and emergency management policies and procedures are conducted.
16. Tabletop and functional drills are conducted at least once every six months and full-scale exercises, coordinated with regional emergency response providers, are performed at least annually.

Document Control

17. Access to documents of security critical systems and facilities is controlled.
18. Access to security sensitive documents is controlled.

Access Controls for Contractors and Visitors

19. Background investigations are conducted of contractors or others who require access to security critical facilities, and ID badges are used for all visitors, employees, and contractors to control access to key facilities.

Homeland Security

20. Protocols have been established to respond to the Office of Homeland Security Threat Advisory Levels.

Source: Federal Transit Administration.

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