

State of New York
Office of the State Comptroller
Division of Management Audit

**METROPOLITAN TRANSPORTATION
AUTHORITY**

METRO-NORTH RAILROAD

**THE PRODUCTIVITY OF TICKET
SELLING OPERATIONS**

REPORT 94-S-93



H. Carl McCall
Comptroller



State of New York Office of the State Comptroller

Division of Management Audit

Report 94-S-93

Mr. Donald N. Nelson
President
Metropolitan Transportation Authority
Metro-North Railroad
347 Madison Avenue
New York, NY 10017

Dear Mr. Nelson:

The following is our report on the productivity of ticket selling operations at the Metro-North Railroad.

This audit was performed pursuant to the State Comptroller's authority as set forth in Article X, Section 5 of the State Constitution. Major contributors to this report are listed in Appendix A.

*Office of the State Comptroller
Division of Management Audit*

January 4, 1996

Executive Summary

Metropolitan Transportation Authority

Metro-North Railroad

The Productivity of Ticket Selling Operations

Scope of Audit

Each weekday the Metro-North Railroad (Railroad), a division of the Metropolitan Transportation Authority (MTA), carries about 200,000 passengers between New York City and suburban counties in Connecticut and New York State. Tickets are sold to passengers at 45 of the Railroad's 105 passenger stations. These tickets are sold by either ticket vending machines (TVMs) or ticket offices staffed by ticket sellers. At the time of our audit, a total of 129 ticket sellers were assigned to the 45 stations, while ten TVMs were deployed at four of the stations. Tickets are also sold through the mail and on the trains. During 1993, the Railroad incurred an operating deficit of almost \$180 million; this deficit was covered by State and Federal funding.

Our audit addressed the following questions about the Railroad's ticket selling operations:

- ! Does the Railroad assign ticket sellers to stations in an efficient and effective manner?
- ! Does the Railroad make optimal use of TVMs?

Audit Observations and Conclusions

We identified inefficiencies in the deployment of ticket sellers and TVMs. We concluded that more ticket sellers may be assigned to ticket offices than are necessary. Moreover, the efficiency of ticket selling operations might be improved by the acquisition of additional TVMs.

If ticket sellers are to be assigned in an efficient and effective manner, formal criteria are needed for deciding which stations require a ticket office, how long the offices should be open, and how many ticket sellers should be assigned to each office. However, Railroad officials have not developed such criteria. The officials told us they are awaiting the completion of a consultant's study before they develop such criteria. In the absence of this criteria, ticket seller assignments are less likely to be efficient and effective. (see p 5)

At many stations a single ticket seller is deployed for an eight-hour shift each weekday. We analyzed ticket sales at 20 such stations in order to assess the workload of these ticket sellers. We identified several stations where so few tickets were sold, especially during the second four hours of the work shift, that we questioned whether ticket sellers are needed for full eight-hour shifts at all 20 stations. At some stations, we questioned whether ticket sellers are needed at all. If ticket offices were closed at the four stations with the lowest sales, the Railroad could save about \$235,000 a year in salaries and fringe benefits. Also, by closing such ticket offices, the Railroad could derive other

savings through the elimination of certain non-personal service costs associated with the ticket selling function. We believe the workloads of these ticket offices could be absorbed by on-board conductors, ticket offices at other stations, and the Railroad's mail-in ticket program without significantly inconveniencing passengers. (see pp 5-9)

For the Railroad's Hudson, Harlem and New Haven lines, there are 13 standby ticket sellers who are assigned to ticket offices when the regularly scheduled ticket sellers are absent. On days when fewer than 13 regular ticket sellers are absent, the extra standby ticket sellers are assigned to ticket offices that are already fully staffed. To determine the extent to which standby ticket sellers are assigned to fully staffed offices, we analyzed their assignments during two three-month periods in 1994. We determined that at least one standby ticket seller was assigned to a fully staffed office on 43 percent of the workdays during these periods. We therefore concluded that there may be more standby ticket sellers than are necessary. (see pp 11-13)

To evaluate the efficiency of the Railroad's deployment of TVMs, we analyzed the number of tickets sold by each TVM during 1993. According to our observations, the TVMs are capable of selling an average of 60 tickets an hour. However, we found that no TVM sold more than 12 tickets an hour and three TVMs sold no more than three tickets an hour. All ten TVMs are deployed at stations where ticket sellers are also assigned. We believe that three TVMs, at locations other than Grand Central Terminal, could be more efficiently deployed if they were moved to other stations. We also estimated that the Railroad could save more than \$40,000 annually (per station) at certain stations if a TVM was deployed instead of a ticket seller. In light of the low level of ticket sales at several of the stations, we recommended consideration be given to obtaining additional TVMs. (see pp 15-17)

Comments of Railroad Officials

In their response to the draft report, Railroad officials indicated that they agreed with the basic recommendations of the audit. Officials further indicated that they are moving forward in all of the areas mentioned in the report. Pending the results of a consultant's study, officials intend to begin implementation of a comprehensive ticket sales strategy by the end of 1995.

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The comments of Agency Officials are not available in an electronic format. Please contact our Office if you would like us to mail you a copy of the report that contains their

Introduction

Background

In 1983, the Metro-North Railroad (Railroad), a division of the Metropolitan Transportation Authority (MTA), was created to assume control over the Conrail commuter operations in New York and Connecticut. The Railroad's mission is "to preserve and enhance the quality of life and economic health of the region through the efficient provision of transportation service of the highest quality."

The Railroad operates a rail system originating from Grand Central Terminal in Manhattan and continuing to various destinations in New York, Bronx, Westchester, Putnam, and Dutchess counties in New York State and to Fairfield and New Haven counties in Connecticut. The Railroad has three main lines: the Hudson, the Harlem, and the New Haven lines. The Railroad has more than 700 passenger cars in service and operates 552 trains that carry over 200,000 passengers each weekday. The Railroad operates 311 trains each weekend. For the year ended December 31, 1993, the Railroad received over \$240 million in operating revenue and incurred an operating deficit of almost \$180 million. State and Federal funding subsidize the Railroad's annual deficits.

The Railroad has assigned ticket sellers to 45 of its 105 stations - 31 located in New York State and 14 located in Connecticut. Tickets are generally sold on weekdays, though tickets are also sold on weekends at some stations. At many stations a single ticket seller is deployed for an eight-hour shift each weekday, usually between 6 a.m. and 2 p.m. At busier stations, two or more ticket sellers may be deployed for overlapping eight-hour shifts. In addition, ticket vending machines (TVMs) are deployed at some stations. The counties reimburse the Railroad for the operating costs of the ticket selling operations. Passengers can also purchase monthly tickets by mail and one-way tickets from conductors on the trains.

At the time of our review, the Railroad employed 100 regular ticket sellers, 11 part-time ticket sellers and 18 ticket sellers who were on standby status (ticket sellers on standby status are said by Railroad officials to be on the guaranteed extra list). The Railroad also had ten TVMs. The Railroad generally uses part-time ticket sellers to extend the office hours of certain stations on weekday afternoons or to provide ticket office hours on weekends. Under the collective bargaining agreement with the ticket sellers, the maximum number of part-time ticket sellers the Railroad can employ cannot exceed 10 percent of the number of full-time ticket sellers. Ticket sellers in standby status are full-time, but are not permanently assigned to a specific station. They are assigned to cover job slots when the regularly-assigned employees are unavailable for work.

In addition to selling tickets for the Railroad's trains, the responsibilities of ticket sellers include selling AMTRAK tickets and New York City Transit tokens, providing general information to customers, checking and stocking

TVMs, preparing daily sales reconciliations, processing bank deposits, and maintaining inventories of financial stationery for the conductors. At the time of our audit, ticket sellers earned about \$36,000 a year, plus fringe benefits of about 42 percent of their base salary. Thus, total salary and fringe benefits for a full-time ticket seller averaged about \$51,000. During 1993, the Railroad's ticket sellers earned about \$5.8 million in wages and fringe benefits.

Audit Scope, Objectives and Methodology

We audited the productivity of the Railroad's ticket selling operations for the period January 1, 1993 through October 31, 1994. Our objectives were to determine whether the Railroad assigned tickets sellers to its stations efficiently and effectively and whether the Railroad made optimal use of TVMs. As part of our audit, we evaluated the policies established by the Railroad for assigning ticket sellers and placing TVMs in stations. To accomplish our objectives, we observed ticket sellers at five Railroad stations as well as customers buying tickets from TVMs in Grand Central Terminal. We also analyzed ticket sales by ticket sellers and by TVMs. In addition, we interviewed Railroad officials and employees, and reviewed other relevant Railroad records.

We conducted our audit in accordance with generally accepted government auditing standards. Such standards require that we plan and perform our audit to adequately assess those operations of the Railroad included in our audit scope. Further, these standards require that we understand the Railroad's internal control structure and its compliance with those laws, rules and regulations that are relevant to the operations included in our audit scope. An audit includes examining, on a test basis, evidence supporting transactions recorded in the accounting and operating records and applying other auditing procedures as we consider necessary in the circumstances. An audit also includes assessing the estimates, judgments, and decisions made by management. We believe our audit provides a reasonable basis for our findings, conclusions and recommendations.

We use a risk-based approach when selecting activities to be audited. This approach focuses our audit efforts on those operations identified through a preliminary survey as having the greatest probability for needing improvement. Consequently, by design, finite audit resources are used to identify where and how improvements can be made. Thus, little audit effort is devoted to reviewing operations that may be relatively efficient or effective. As a result, our audit reports are prepared on an "exception basis." This report, therefore, highlights those areas needing improvement and does not address activities that may be functioning properly.

Response of Railroad Officials

Draft copies of this report were provided to Railroad officials for their review and formal comment. Their comments have been considered in preparing this report and are included as Appendix B.

Within 90 days after final release of this report, as required by Section 170 of the Executive Law, the President of the Metro-North Railroad shall report to the Governor, the State Comptroller, and the leaders of the Legislature and fiscal committees, advising what steps were taken to implement the recommendations contained herein, and where recommendations were not implemented, the reasons therefor.

Analysis of Station Workloads

The Railroad's Station Services and Facilities Department (Station Department) is responsible for ticket selling operations, including the deployment of the employees who sell tickets at the stations. The Station Department determines which stations require a ticket office, establishes the service hours for each office, decides how many ticket sellers to assign to each office and decides where to deploy TVMs. According to Station Department officials, the Railroad has six fewer ticket sellers (coincident with the acquisition of the TVMs) than it had at its inception in 1983.

If ticket sellers are to be deployed in an efficient and effective manner, formal criteria are needed for deciding which stations require a ticket office, how long the offices should be open, and how many ticket sellers should be assigned to each office. To ensure efficiency and effectiveness, these criteria should relate the number of tickets that are sold at each station to the number of tickets that can be sold by a ticket seller who is working efficiently. For example, if a ticket seller can efficiently sell 100 tickets an hour and the passengers at a station buy a total of 200 tickets an hour, then it is probably efficient to assign two ticket sellers to this station. However, if the passengers at another station buy a total of only ten tickets an hour, then it may not be efficient to assign any ticket sellers to this other station.

We asked Station Department officials if they had developed any formal criteria for deploying ticket sellers. The officials told us that they have not developed any such criteria, because ridership has recently increased and they are awaiting the completion of a consultant's study (called the Long Term Revenue Collection and Ticket Sales Study) before they develop such criteria. In the absence of such criteria, ticket seller assignments are less likely to be efficient and effective.

Station Department officials did tell us that they have developed an informal staffing standard which they use in certain circumstances. The officials told us that when, due to absences, there are not enough ticket sellers for the available ticket selling positions, they generally assign ticket sellers to locations where at least 250 to 300 tickets are likely to be sold that day. This level of activity equates to between 31.3 and 37.5 tickets sold per hour, and between 5,500 and 6,600 tickets sold per month (in a month with 22 weekdays).

To evaluate the reasonableness of this informal standard, we observed ticket sellers working at five train stations (Crestwood, Harrison, Hastings, Mt. Vernon East, and Tuckahoe) over the course of a day at each of the stations. We concluded that a ticket seller can sell more than 100 tickets an hour, if customer demand corresponds to that level of sales. We also noted that the ticket sellers needed relatively little time to complete their other duties.

Therefore, we believe the Station Department's informal assignment standard of 37.5 tickets sold per hour constitutes a light workload.

To assess the workloads of the Railroad's ticket sellers, we analyzed ticket sales for the 19 months ended July 31, 1994 for the 20 stations in New York State at which a single ticket seller is deployed for an eight-hour shift each weekday. (We excluded stations in Connecticut from this analysis.) Using ticket sales data obtained from the Railroad's central computer system, we determined ticket sales by month for the 20 stations. For each station, we selected the three months during this period with the highest ticket sales and analyzed the sales data for the three months as follows:

Station	Average Number of Tickets Sold Per Month	Average Number of Tickets Sold	
		Per Hour First 4 Hours of Shift	Per Hour Second 4 Hours of Shift
Tuckahoe	5,139	44	14
Ossining	5,511	46	19
Hastings	5,524	47	19
Peekskill	5,788	51	17
Crestwood	7,330	57	27
Harrison	8,216	65	29
Chappaqua	8,828	77	23
Mamaroneck	8,839	73	30
Mt. Vernon West	8,906	85	24
Mt. Kisco	8,965	75	29
Dobbs Ferry	9,064	71	35
No. White Plains	9,990	74	24
Fleetwood	9,941	86	30
Hartsdale	10,532	81	38
Pelham	10,532	90	35
Brewster*	11,106	55	35
Tarrytown*	13,650	65	45
Bronxville*	15,438	74	57
Mt. Vernon East*	15,800	87	38
Fordham*	29,432	160	74

* Station has regularly scheduled weekend hours in addition to standard Monday through Friday hours.

When we compared this data to the Station Department's informal assignment standard, we found that four stations (Tuckahoe, Ossining, Hastings and Peekskill) sold fewer than 6,600 tickets a month. Moreover, when we analyzed ticket sales at these four stations in greater detail, we noted that they usually sold fewer than 300 tickets each day. For example, for the three months ended June 30, 1994, the Ossining and Hastings stations each sold fewer than 300 tickets on 91 percent of the days they were open.

We also noted that, at all 20 stations, the number of tickets sold per hour declined significantly during the second four hours of the work shift. As shown in the preceding table, during the second half of the work shift, 15 of the 20 stations failed to meet the Station Department's informal assignment standard of at least 37.5 tickets sold per hour. During our visits to the train stations, we observed that ticket sellers sometimes sold few tickets during the last four hours of their work shifts, which come after the peak morning commuting hours.

Our analysis also confirmed our conclusion that a ticket seller working efficiently can sell more than 100 tickets an hour. During the three-month periods we reviewed, the ten stations with the lowest monthly ticket sales each sold more than 100 tickets an hour during the first half of at least one work shift. The number of tickets sold per hour by these ten stations during these shifts ranged from 118 to 262.

Because of the low level of ticket sales that we identified at some stations, especially during the second four hours of the work shifts, we question whether ticket sellers are needed for full eight-hour shifts at all 20 stations. At some stations, we question whether any ticket sellers are needed at all. If, for example, the ticket offices were closed at the four stations with the lowest sales volumes, we estimate that the Railroad could save about \$235,000 annually in salaries and fringe benefits. Also, by closing such ticket offices, the Railroad could derive other savings through the elimination of certain non-personal service costs associated with the ticket selling function. Based on our observations and data analysis, we believe that the workloads of the stations with the smaller sales volumes could be absorbed by other stations, onboard conductors, and the Railroad's mail-in ticket process. In addition, as is discussed later in this report, TVMs could replace ticket sellers at some stations. We, therefore, believe that ticket selling hours could be reduced without a significant reduction in service to Railroad passengers.

Recommendations

1. Establish formal criteria for deploying ticket sellers.
2. Consider closing ticket offices or curtailing ticket selling hours at the stations that have relatively low ticket sales.

(Railroad officials agreed with the recommendation pending adaptation of the final ticket sales strategy. In addition, officials indicated that curtailing sales would not reduce costs unless full-time sellers were replaced by part-time sellers, which would be subject to labor negotiations. They also indicated that the use of on-board crews and the mail-in operation to handle additional ticket sales would require careful study.)



Standby Ticket Sellers

Standby ticket sellers (who are said by Railroad officials to be on the guaranteed extra list) fill in when staff shortages occur because of vacation, sick leave or other absences. Standby ticket sellers are guaranteed five workdays or 40 hours of pay in the work week. Standby ticket sellers are considered full-time employees and receive all fringe benefits, including sick leave, holidays, and vacation.

At the time of our review, the Railroad had six standby ticket sellers for the Harlem and Hudson lines, and seven standby ticket sellers for the New Haven line. There were five standby ticket sellers at Grand Central Terminal. The specific assignment locations of standby ticket sellers for the Harlem, Hudson, and New Haven lines frequently change from day to day. Railroad officials told us that standby ticket sellers provide them with increased scheduling flexibility and reduce overtime costs.

Standby ticket sellers assigned to the Harlem, Hudson, and New Haven lines must be contacted for work assignments two hours before the normal starting time of a workshift. If there are not enough vacant locations on a particular day, standby ticket sellers are assigned to assist regular ticket sellers. Under normal circumstances, many of the regularly scheduled ticket sellers on the Harlem, Hudson, and New Haven lines can handle their workloads without assistance from another ticket seller.

To maximize efficiency, the Railroad should maintain a pool of standby ticket sellers that is no larger than what is generally needed to provide coverage to the stations where the permanently assigned ticket sellers are absent. If the pool of standby ticket sellers is too large, the Railroad will frequently deploy standby ticket sellers at stations where they are not actually needed. However, the Railroad has not performed any formal analysis to determine the most efficient size of the standby pools for each train line. We note that the sizes of the pools have remained basically unchanged since the Railroad's inception.

In order to determine the extent to which standby ticket sellers are assigned to stations where they are not actually needed, we analyzed the assignments of standby ticket sellers during two three-month periods: January through March 1994 and June through August 1994. We found that, on the Harlem and Hudson lines, the Railroad assigned standby ticket sellers to stations that were already fully staffed on 133 (20.5 percent) of the 648 days they worked. On the New Haven line, the Railroad assigned standby ticket sellers to fully staffed ticket offices on 147 (18.3 percent) of the 802 days they worked. Overall, we determined that at least one standby ticket seller was assigned to a fully staffed station on 77 (42.3 percent) of the 182 days for the Harlem and Hudson lines, and 81 (44.5 percent) of the 182 days for the New Haven line.

The first three-month period we analyzed included the winter months, when comparatively fewer regular ticket sellers take vacation and standby ticket sellers are used for normal daily vacancies. During this period, the Railroad assigned standby ticket sellers to stations that were already fully staffed 34 percent of the time on the Harlem and Hudson lines, and 28 percent of the time on the New Haven line. For certain months during this period, three standby ticket sellers on the Hudson and Harlem lines were assigned to fully staffed stations 57 percent of the time or more. On three instances during this period, a standby ticket seller was assigned to a fully staffed ticket office with only one ticket window. In these instances, tickets could be sold by only one ticket seller at a time.

The second three-month period we analyzed included the summer months, when many regular ticket sellers take vacation leave, and more regular job slots are available to standby ticket sellers. For this period, the standby ticket sellers were assigned to stations that were already fully staffed only 8 percent of the time.

Our analysis indicates that the pool of standby ticket sellers may be larger than necessary. We believe that the Railroad could make the pool more efficient by adjusting its size according to seasonal needs. Furthermore, if the Railroad reduced the pool by two ticket sellers (about 15 percent), it could save about \$100,000 a year.

In responding to the draft report, officials indicated that they believe that the current size of the standby pool is reasonable because the Railroad must maintain separate extra lists for the Grand Central Terminal, the Hudson/Harlem lines and the New Haven line. They also indicated that reduction of the extra list would require additional overtime to cover vacant ticket windows.

The Railroad's analysis suggests, however, that all ticket windows should remain open during all scheduled hours. We do not believe that this is the case. As noted previously, certain stations sold less than 300 tickets daily (the Railroad's informal minimum standard) 91 percent of the time, and ticket sales at most stations decreased significantly during the second half of the day. When these factors are considered, along with the number of days that extra list sellers were assigned to stations that were already staffed, we conclude that the Railroad could reduce the number of standby sellers without causing excessive inconvenience to customers.

Recommendation	
3.	Perform formal analysis to determine the optimal size of the pool of standby ticket sellers. Minimize the extent to which standby ticket sellers are assigned to stations that are already fully staffed.



Ticket Vending Machines

The Railroad has ten TVMs. Seven TVMs are located in Grand Central Terminal. The remaining three are located at the White Plains, Stamford, and New Haven stations. The TVMs accept cash and debit cards. Ticket sellers restock the TVMs with tickets and collect the cash. Ticket sellers are also assigned to these three stations, as well as to the Grand Central Terminal. The Railroad purchased all ten machines in the 1980s, when the Long Island Railroad purchased 74 similar machines. At the time the TVMs were purchased, the Railroad made an agreement with the ticket sellers that the Railroad would not operate more than ten TVMs.

The Railroad has a contract with a private firm to service and perform preventive maintenance on the ten TVMs. According to information provided to us by Railroad officials, the average annual cost to service and maintain one TVM was about \$4,230 for the period January 1, 1990 through June 30, 1994. When normal daily operating costs and depreciation are included, we estimate the total annual cost of a TVM to be about \$17,600.

In order to determine how many tickets could be sold per hour by a TVM, we observed 30 customers buying tickets from TVMs at Grand Central Terminal.

We timed each customer's transaction from the time when the customer arrived at the machine to the time when the customer received the ticket. The longest amount of time it took a customer to buy a ticket was 2.7 minutes for a debit card purchase. A cash sale took the shortest amount of time: 35 seconds. Based on our observations, we determined that the average amount of time required to buy a ticket from a TVM is approximately one minute. Thus, we concluded that a TVM could average about 60 ticket sales per hour.

If TVMs are to be deployed in an efficient and effective manner, formal criteria are needed for identifying the stations where the best possible use can be made of TVMs. These criteria should relate the number of tickets that are sold at a station to (1) the number of tickets that can be sold by a TVM and (2) the ticket selling capacity of any ticket sellers who are also assigned to the station. However, the Railroad has developed no formal criteria for deploying TVMs and has conducted no formal analysis to identify the stations where TVMs can be used most efficiently. (Railroad officials told us they are awaiting the completion of a consultant's study before they develop such criteria.) In the absence of this criteria, we believe that TVM deployment is less likely to be efficient and effective.

To help evaluate the efficiency of the Railroad's TVM deployment, we reviewed Railroad records indicating the number of tickets sold by each TVM during 1993. As shown by the following table, none of the TVMs sold close to 60 tickets an hour, and three of the TVMs sold three or fewer tickets per hour of station operation.

Station Location	Number of Tickets Sold	Average Number of Tickets Sold Per Hour	Revenue
Grand Central Terminal (GCT)	82,256	11.0	\$1,122,047
GCT	83,616	11.2	1,229,608
GCT	79,002	10.6	1,119,155
GCT	65,737	8.8	929,623
GCT	49,607	6.7	775,555
GCT	24,775	3.3	451,883
GCT	4,924	0.7	171,175
New Haven	4,224	0.7	52,250
Stamford	16,987	2.8	234,421
White Plains	25,520	4.7	169,039
Total	436,648		\$6,254,756

Although several of the TVMs at Grand Central Terminal had comparatively low average hourly sales volumes, we observed lines of as many as 20 people using those TVMs during peak selling periods. Thus, the transfer of TVMs from Grand central terminal to other stations may not be appropriate at this time.

We believe, however, that the ticket sales of the TVMs at the White Plains, New Haven and Stamford stations could be handled effectively by the ticket sellers already assigned to these locations. Furthermore, as detailed on page 6 of this report, we identified several stations where fewer than 60 tickets were sold per hour, especially during the latter part of the day. The ticket selling hours at some of these stations could either be shortened or eliminated, and TVMs could be placed at the stations. We believe this would represent a more efficient use of the TVMs that have low sales activity.

We also believe it may be cost-effective for the Railroad to obtain additional TVMs. Our analysis of ticket sales on page 6 is based on the months with the highest sales. The sales volume is lower in other months. For example, during April 1994, 18 of the 20 stations included in our analysis sold fewer than 60 tickets an hour. Thirteen of those eighteen stations sold fewer than 50 tickets per hour.

We estimate that, for a ticket office that is staffed by a single ticket seller, about 1.15 full-time equivalent ticket sellers are needed to staff the station for

a full year (assuming that the regularly scheduled ticket seller is absent 40 days per year, on average, for vacation, holidays, personal and sick leave). The salary and fringe benefit cost of 1.15 full-time equivalent ticket sellers is about \$59,000. In contrast, the annual cost to operate, maintain and depreciate a TVM is about \$17,600. The Railroad could therefore save more than \$40,000 annually at such a station if tickets were sold by a TVM instead of a ticket seller.

In March 1994, we issued an audit report (93-S-34) on the ticket selling activities of the Long Island Railroad. In that report, we also noted that there was not a need for both a TVM and a ticket seller at stations with comparatively low ticket sales volumes.

In responding to the draft report, officials indicated that a single TVM would not be a suitable replacement for a ticket seller due to the potential for equipment failure and decreased customer satisfaction, among other reasons. We acknowledge that a TVM does not have all of the capabilities of a ticket seller. However, we maintain, based on our visual observations and data analysis, that a TVM could provide an adequate level of service at a station that has a comparatively low volume of ticket sales. Also, there are many stations that do not presently have any ticket sellers. Among other options, passengers boarding trains at these stations purchase their tickets either at Grand Central Terminal, from conductors on the train, or through the mail.

Recommendations

4. Establish formal criteria for deploying TVMs on the basis of sales volume and use this criteria to formally assess the placement of TVMs. Based on this assessment, relocate the TVMs, as necessary, to help ensure that they are used in the most productive manner.
5. Formally assess the potential long-term benefits of expanding the use of TVMs. As appropriate, develop a formal long-term plan for expanding the Railroad's TVM program.

Major Contributors to This Report

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