METRO TRANSIT CASH COLLECTION AND RECONCILIATION AUDIT

PROGRAM EVALUATION AND AUDIT

February 2018

INTRODUCTION

Background

Each weekday, Metro Transit provides more than 250,000 rides across 131 routes. This includes urban local and suburban local bus routes, express buses, two light rail lines and NorthStar commuter rail. In 2016, Metro Transit provided 58.9 million bus rides and 23.7 million rail rides, a total of 82.6 million rides.

Customers can pay for their ride in a variety of ways depending on the type of service:

- Pay through a bus farebox that accepts dollar bills, coins, tokens, coupons, and transfers;
- Pay at a card validator using a Go-To card, MetroPass, U-Pass, College Pass, and Student Pass;
- Purchase a light rail, NorthStar or BRT ticket at a ticket vending machine;
- Purchase a bus, light rail, NorthStar, or BRT ticket through the Metro Transit Mobile App.

Fares across the bus and rail system range from $0.50 for bus or Light Rail in a downtown zone to $6.25 for a ride between Big Lake and Downtown Minneapolis on the NorthStar commuter rail. According to the 2016 Metro Transit Facts, about 25-percent of Metro Transit's total revenue in 2016 came from passenger fares. The variety of fare payment options create several challenges in establishing controls for accounting and reconciling passenger fares. With a significant portion of revenue coming directly from passenger fares, it is important that fare processing prioritizes accuracy and efficiency.

The fare collection process involves four separate departments within Metro Transit: Fare Collection, Revenue Processing, Central Counting, and Financial Reporting. The Fare Collection employees are responsible for removing the cashboxes from the buses and emptying the fares into a vault. Revenue Processing is responsible for the equipment and processing the fares for all of Metro Transit. Central Counting employees are responsible for counting and processing fares. Financial Reporting is responsible for reconciling the fares counted by Central Counting with the GFI Farebox estimate. Central Counting processed approximately 45,000 bills per day in 2016. Total cash revenue collected is ultimately used to calculate total revenue and revenue per rider, which impacts the funding Metro Transit receives from the Federal Transit Administration, State of Minnesota, and other local funding partners.

Purpose

The purpose of this audit was to evaluate the methods and controls used for collecting passenger revenue, counting and processing revenue, and reconciling and accounting for the revenue across the bus and rail systems. Audit considered the Thrive MSP 2040 outcomes of Stewardship and Prosperity, as well as the Thrive MSP 2040 principles of Integration, Collaboration, and Accountability, while reviewing Metro Transit's cash collection and reconciliation process.

Scope

This audit covered activities related to the vaulting, counting, and reconciliation of Metro Transit cash revenue. This audit did not include any review of online ticket purchasing, ticket vending machines, or the Metro Transit Mobile App.

Methodology

To understand the cash revenue processing and reconciliation procedures, the following methods were used:

- Review of Central Counting Policies and Procedures
- Review of Cash Handling Best Practices across the industry and comparison with Metro Transit practices.
- Monitoring of Cash Room Video to determine compliance with written policies and procedures.
- Observations of the vaulting process.
- Assessment of the cash reconciliation processes, tools and reports.
- Review of a sample of GoTo Transactions and use of Farebox Keys.
- Interview with Metro Transit Fare Collection, Revenue Processing, Central Counting, and Financial Reporting and Finance management.
- Audits of fareboxes.

Assurances

This audit was conducted in accordance with the Institute of Internal Auditors' International Standards for the Professional Practice of Internal Auditing and the U.S. Government Accountability Office's Government Auditing Standards.

OBSERVATIONS

Central Counting

Policies and Procedures

Audit formed a checklist of best practices based on industry standards and assessed Central Counting's policies and procedures accordingly. These standards included practices related to access, standard operating procedures, handling practices, and security practices and procedures. Audit found that many of Central Counting's counting policies and procedures are consistent with industry standards. For example, Central Counting maintains segregation of duties at multiple stages across the counting and recording process. However, upon review of Central Counting's current policies and procedures, several pieces of information were found in need of updating or clarification. Since many of the policies were last updated between 1997 and 2007, positions and titles have changed and should be updated in the policies; the policies must reflect what is in practice and serve as a reference for employee guidelines.

Central Counting Observations

Audit visited Central Counting in July 2017 and watched six days of Central Counting surveillance video to gather observations on current Central Counting practices and assess employee adherence to policies and procedures, as well as industry practices. Audit observed that employees generally adhere to written cash handling practices. However, Audit identified several areas for potential improvement. For example, Central Counting employees were observed to be arriving early for their shift. Employees arrived 30 to 60 minutes before their shift began and are many times alone in Central Counting during that time until other employees arrive. In addition, Audit observed employees carrying personal belongings into the cash room rather than using the lockers outside of Central Counting. Audit also observed consistent cell phone use at the sorting table outside of breaks, as well as the consumption of food other than a small snack.

Reconciliation Process

Audit identified several weaknesses with the bus revenue reconciliation process that slow down the process and inhibit its effectiveness and clarity. First, the reconciliation process begins with Central Counting's count and deposit which is verified with the bank upon receipt of deposit within a day. Financial Reporting uses Central Counting's count and deposit to reconcile with the GFI Farebox probe estimate. The farebox estimate is adjusted by Financial Reporting before reconciling with the cash count to account for limitations with the data. Some additional processing of revenue, such as counting and sorting free rider coupons and other paper that infiltrates the fareboxes, is completed by Financial Reporting staff. Central Counting delivers the coupons to Finance to sort by coupon type and then count. Financial Reporting then passes the coupons to Marketing, who counts again to verify the number counted by Financial Reporting. According to Financial Reporting staff, counting coupons consumes about 30-percent of the Revenue Balancing Clerk's time. This process is a key limitation in producing a daily variance report in a timely manner.

Audit found Finance's reconciliation process is typically done within three weeks of the end of the month, which is also when any variance reports are issued. This can mean variances are not identified for up to seven weeks. This timeline makes it difficult for both Financial Reporting and Central Counting staff to research where any variances may have come from through farebox data, buses being probed at different garages and Central Counting video. Further, many of the notes within the variance spreadsheets are vague and do not clearly identify the exact day and garage where a negative variance may be off set.

Due to the technology involved in reconciliation, cash estimates are known to have some margin of error. A statistical adjustment factor was previously used in the reconciliation process to account for any error in the farebox estimate, but was removed from the monthly reconciliation spreadsheet in February 2017. It is important to consider using the adjustment factor in reconciliation, because without it any error in the farebox estimate is left unaccounted. Audit conducted farebox audits to validate the accuracy of the estimate and to establish an expected rate of accuracy of the estimates. This was conducted as a separate audit in both 2016 and 2017, but provides insightful data for this audit. 298 buses were sampled across the five bus garages and Audit found that the GFI Farebox undercounted bills by -1.85%. The GFI Farebox was found to be overcounting tickets by 34.71% and since it is likely that the farebox counts some bills as tickets, these are combined for a total ticket and bill variance of -1.04%. Audit's analysis found that the GFI Farebox undercounted coins by 0.57% and overcounted tokens by 1.17%.

Financial Reporting identifies and addresses significant variances in two different ways. First, a monthly variance report is distributed to key stakeholders following the end of each calendar month. Each garage has a spreadsheet that identifies daily variances. On each spreadsheet, Financial Reporting staff address some negative variances that can be theoretically accounted for through positive variances on another day or at another garage. Second, if unexplained (offset) variances greater than $100 exist, Financial Reporting is supposed to issue a separate report. To identify potential causes of variance, Finance reviews:

- Electronic farebox reports, which include probing, vaulting, cashbox and security reports
- Bad order farebox reports
- Potential folded bills counted as coupons
- Shortages offset by overage at another garage

Audit observed that the notes on the spreadsheets are sometimes vague and inconsistent in terms of content and specificity. Improved monitoring could help Finance staff better research and diagnose potential revenue losses in a more timely manner.

Finally, Audit found that no reconciliation process map exists. There are limitations in the information available from the current farebox technology. This requires a number of assumptions and calculations to be made in an attempt to most accurately estimate the variance. Additionally, this calculation requires data from several information sources and groups within Metro Transit Finance. A process map would better help stakeholders understand the estimates and identify future changes and efficiencies as technologies change.

Downloadable Passes

Audit reviewed the process used by Marketing to create free ride passes with partners. For smaller events, there is a general agreement that the passes need to be mutually beneficial for both parties involved. Metro Transit has set a 400-500 ride minimum in order for the process to be worthwhile. In exchange for the passes, the partner must provide equal value of free rides in media or promotional value for Metro Transit. The estimate of total free rides from an agreement, and therefore value of media or promotional content, is derived from the estimated attendance. Ten-percent of the estimated attendance is assumed to download a free pass, which is then multiplied by two for the number of rides someone will take on the pass (to and from the event) and then that is multiplied by a standard fare. This equals the value in media and promotion Metro Transit should receive from the partner.

While these partnerships provide Metro Transit with an opportunity to gain new riders, it is important to consider that these events are also opportunities for revenue. It is in Metro Transit's best interest to maximize the precision of the pass count, so riders and revenue can be appropriately accounted for.

In the review, Audit found that the actual number of downloaded passes was not used for anything other than future reference if the partner approached Metro Transit again. The actual number of downloads could serve as a better estimate of value for revenue and number of riders for the daily ridership count.

Audit also found that all downloaded passes must be printed, but do not have a reconciliation process. On days with several events or events with high attendance, the passes could cloud fare evasion numbers. These passes could be integrated into the Metro Transit Mobile App, which could increase accuracy of estimated value and ridership. Marketing also does not have written policies and procedures for providing coupons to partners. Writing policies and procedures would help in the disbursement and reconciliation of coupons.

Minnesota State Fair

In addition to normal routes, Metro Transit provides express bus service for the Fair that runs direct routes from 20 locations across the metropolitan area. Thirteen of the locations are directly operated by Metro Transit, three are operated by Minnesota Valley Transit Authority (MVTA) and four are operated by Southwest Transit. The roundtrip fare for this service is $5, which is collected at the boarding location to the Fair. At the Metro Transit locations, passengers can pay with cash, Bus Bargain Tickets purchased with their Fair ticket and special tickets on the Metro Transit Mobile App.

Fares are collected by Metro Transit employees assigned to the different locations. One or two employees are assigned to a shift at a specific location and are not provided with security on-site. These employees collect the fare before riders board the bus. The fare collected by the employees is then fed into the farebox on the bus throughout the day. According to Revenue Processing staff, there is not a set procedure for when cash should be fed into the fareboxes, but it is typically done during a bus's layover and done several bills at a time. Revenue staff told Audit that having employees collect cash expedites the boarding process for passengers.

Although the process may be expedited, there is no audit trail for Metro Transit to use in reconciling the cash counted in Central Counting. Fareboxes are regularly probed during the Fair, but employees

regularly insert multiple bills into the farebox at a time, which leads to inaccurate farebox count estimates.

New technologies now exist to better facilitate cashless fare collection. For the first time this year, the Metro Transit Mobile App was used to collect fares for State Fair Service. In addition, fairgoers were able to pay for fares online at Metro Transit's website. Currently, GoTo cards are not accepted at State Fair sites, but this could be an option. Metro Transit has never sold special GoTo cards for frequent Fair goers or sold an all-you-can-ride pass for the Fair which could be beneficial for Fair workers or frequent guests. Mobile credit card processing options are not ubiquitous at events that used to be cash only. Fareboxes are not used currently due to the large volume of cash present, however if a combination of methods are used as part of a long-term strategy to minimize cash transactions at Fair sites, fareboxes could be used for the few patrons that insist on paying with cash.

CONCLUSIONS

Revenue processing and reconciliation is in need of tighter controls and updated practices. This audit, as well as the 2016 consultation, found that while Central Counting's controls are generally in place and functioning, they are not always fully aligned with best practices. In a high-risk environment, any gaps in control can put the safety of employees and security of the revenue at great risk. This audit identified potential improvements that could enhance the efficiency and effectiveness of the existing control environment to help protect Metro Transit against the risks posed by cash reconciliation.

RECOMMENDATIONS

Program Evaluation and Audit recommendations are categorized according to the level of risk they pose for the Council. The categories are:

1. **Essential** – Steps must be taken to avoid the emergence of critical risks to the Council or to add great value to the Council and its programs. Essential recommendations are tracked through the Audit Database and status is reported twice annually to the Council's Audit Committee.
2. **Significant** – Adds value to programs or initiatives of the Council, but is not necessary to avoid major control risks or other critical risk exposures. Significant recommendations are also tracked with status reports to the Council's Audit Committee.
3. **Considerations** – Recommendation would be beneficial, but may be subject to being set aside in favor of higher priority activities for the Council, or may require collaboration with another program area or division. Considerations are not tracked or reported. Their implementation is solely at the hands of management.
4. **Verbal recommendation** – An issue was found that bears mentioning, but is not sufficient to constitute a control risk or other repercussions to warrant inclusion in the written report. Verbal recommendations are documented in the file, but are not tracked or reported regularly.

1. **(Essential) Central Counting policies and procedures should be updated, ensuring that language is specific and that policies meet industry standards.**

   Management Response: Central Counting policies and procedures are being updated to address the findings identified in the Metro Transit Cash Collection and Reconciliation *audit.*

   Staff Responsible: Dennis Dworshak (Manager, Revenue Processing), Abdul Ahmed (Supervisor, Revenue Processing)

   Timetable: Most procedures have already been updated. The remaining procedures will be updated by March 1st, 2018.

   Thrive 2040 Principles: Accountability

2. **(Essential) The reconciliation process should be reviewed for potential areas of increased accuracy and efficiency and shortened to allow for timely follow-up on significant variances.**

   Reports should be prepared and disseminated within days, not weeks, of counting. Central Counting and Revenue Processing should explore potential changes in roles and responsibilities to increase efficiency and engage IS and other stakeholders to determine whether there are tools that could automate some of the reconciliation functions. Large variances should be directly accounted for and unexplained variances should be accumulated and reported to stakeholders periodically.

   Management Response: The reconciliation process will be completed on a 10-day lag. It takes a few days for the cash to be collected and counted (depending upon staffing). After the cash is counted coupons are brought to the Revenue and Ridership Department which need to

be sorted and counted as they are part of the adjustments to tie out cash. It takes a couple of days to sort and count the coupons and then another few days to reconcile the cash.

Central Counting has begun periodically sorting coupons by type (depending on staff availability), therefore speeding up Revenue and Ridership's counting of coupons. This sorting significantly helps with the counting of coupons when it is completed.

Staff Responsible: Richard Moore (Supervisor, Ridership and Revenue Analysis)

Timetable: Implemented as of January 1st, 2018.

Thrive 2040 Principles: Collaboration and Accountability

3. **(Essential) Farebox and vault security should be reviewed as to minimize any potential security breaches.**

   Management Response: The Central Counting Money Room will incorporate all of the recommendations from this audit in order to minimize any potential security breaches.

   Staff Responsible: Nick Eull (Senior Manager, Metro Transit Finance), Dennis Dworshak (Manager, Revenue Processing), and Abdul Ahmed (Supervisor, Revenue Processing), Robert Casseday (Supervisor, Mechanical Revenue Equipment Repair)

   Timetable: First quarter 2018.

   Thrive 2040 Principles: Integration, Collaboration, and Accountability

4. **(Significant) Metro Transit Finance should conduct a review of State Fair revenue collection procedures to improve internal controls over cash collected at remote sites.**

   This analysis should explore the expanded use of available or new technologies to increase the percentage of cashless and documented transactions. In addition, assess improvements for control over remaining cash including the use of the fareboxes. Lessons learned through a review of the State Fair boarding process could help inform potential practices for other special events as well.

   Management Response: Management is discussing a number of potential changes for the 2018 State Fair collection process to increase safety, security and accountability in the fare collection process. Some of these changes are expected to be included in a proof-of-concept test at the 2018 State Fair to determine which new processes will balance the needs of safety, security, and customer convenience. The ideas being discussed include providing bus tickets for use when boarding buses at express locations, utilizing portable ticket vending machines for fare collection, and continuing to grow electronic fare payment penetration for express bus ticket purchases.

   Staff Responsible: Nick Eull (Senior Manager, Metro Transit Finance), Dennis Dworshak (Manager, Revenue Processing), and Abdul Ahmed (Supervisor, Revenue Processing)

Timetable: Development of new processes will take place in Q1 and Q2 2018, with the goal of implementing new processes at the 2018 State Fair express sites to determine feasibility for permanent implementation in 2019 based on successes.

Thrive 2040 Principles: Integration, Collaboration, and Accountability

5. **(Consideration) Downloadable pass policies and procedures should be updated to reflect how data is used in reconciliation of actual rides and value.**

   The reconciliation of downloadable passes should maximize precision, so riders and potential revenue are properly accounted for.

   Management Response: Metro Transit expects to incorporate downloadable passes into the mobile app later in 2018, which should help with ridership counts and providing better controls for group size. However, not all customers are expected to have a smartphone for using the promotional codes, so some printing of passes is expected to continue.

   Finance and Marketing Staff will work to tighten up measurements and policies while also considering how the transition of these products to the mobile app can help address the issues identified above.

   Staff Responsible: Bruce Howard (Director, Customer Services and Marketing), Richard Moore (Supervisor, Ridership and Revenue Analysis)

   Timetable: End of year, 2018.

   Thrive 2040 Principles: Integration and Accountability