# FARE EVASION ON PROOF-OF-PAYMENT TRANSIT SYSTEMS, 2019

PROGRAM EVALUATION AND AUDIT



# **INTRODUCTION**

# Background

### **Metro Transit Fare Payment System on Proof-of-Payment Lines**

Metro Transit operates five proof-of-payment transit lines, including one commuter rail line, two light rail lines (LRT) and two bus rapid transit (BRT) lines. Proof-of-payment lines require riders to pay before boarding and do not include barriers. This system contrasts with the fixed route bus system that allows passengers to pay fares using fare boxes or Go-to readers on each bus.

The METRO Blue Line, which opened in June 2004, offers light-rail service to 19 stations between downtown Minneapolis and Mall of America. The METRO Green Line, which opened in June 2014, offers light-rail service to 23 stations between downtown Minneapolis and the Union Depot in St. Paul. The METRO light rail system has barrier-free stations; however, passengers are required to have proof-of-payment within valid fare zones, either at the stations or on the vehicles. Metro Transit also uses a proof-of-payment system for NorthStar Commuter Rail, which provides rail service between Big Lake and Target Field.

The METRO A Line, which opened in June 2016, provides bus service to 21 stations between Rosedale Transit Center and 46<sup>th</sup> Street in Minneapolis. The METRO C Line, which opened in June 2019, provides BRT service to 19 stations between the Brooklyn Center Transit Center and Downtown Minneapolis. Both the A and C lines are forms of bus rapid transit (BRT). BRT is designed to offer faster service than traditional local bus routes by limiting stops and requiring people to pay off board, allowing them to expedite board through all doors. Passengers are required to have a valid proof-of-payment while on BRT vehicles.<sup>1</sup>

Metro Transit is also planning several expansions to both LRT and BRT service which will utilize proof-of-payment methods. This includes the Southwest LRT expansion of the Green Line which will add 16 new stations and extend the line from Target Field in downtown Minneapolis to the Southwest Station in Eden Prairie. Construction on the Southwest expansion began in 2019 and is expected to begin passenger service in 2023. There are several planned BRT lines including the B, D, E, Orange and Gold lines.

Passengers can provide proof of valid fare<sup>2</sup> in a number of ways. Each platform at LRT stations has at least two ticket vending machines where tickets can be purchased directly using cash, credit, or stored value cards. Each stop on BRT lines has at least one ticket vending machine for this purpose. Passengers transferring from another Metro Transit line can use their transfer ticket, as long as they

<sup>1</sup> The Red Line, which operates between the Mall of America and the Apple Valley Transit station, is also a proof of payment line, but it is operated by Minnesota Valley Transit Authority.

<sup>&</sup>lt;sup>2</sup> Fares for all proof-of-payment lines mirror those for non-express buses. The regular fare is \$2.00. During AM and PM Peak times, the fare is \$2.50. There are reduced rates during off-peak hours for certain populations, including seniors, children, Medicare cardholders, and people with disabilities. Disabled veterans, peace officers, fire fighters, and Metropolitan Council employees ride free at all times. The fare within Downtown Zones is \$0.50.

are within the 2.5-hour window. Passengers can also "tag" Go-To Cards, Metro passes, U-passes, and other electronic fare media at validating machines on each platform.

Fare evasion occurs when a passenger intentionally rides the public transit system without purchasing a valid fare. Someone may also be charged with fare evasion if they unintentionally rode the transit system without a valid fare. Unlawfully obtaining service is considered a misdemeanor under Minnesota Statute 609.855.1.<sup>3</sup> Fare evasion is different from noncompliance. Noncompliance occurs when a person does have a valid fare but did not go through the proper payment process. For example, fare noncompliance occurs when someone has a pre-paid such as a Metro pass or U-pass card but does not scan the card prior to boarding the vehicle.

Metro Transit Police officers are charged with ensuring fare compliance by inspecting proof-of-payment as part of their regularly scheduled duties. This includes performing regular rides on all proof-of-payment lines where they perform fare enforcement checks. They utilize a mobile phone validator (MPV), also known as Handheld Unit (HHU) to check for valid fare on electronic fare media. They also visually check for other valid forms of fare such as a transfer pass. Passengers without valid proof of payment can receive a warning or a citation with a fine of \$180.

A proposal before the Minnesota Legislature would—if enacted—change penalty for violation of the fare compliance stature from the current misdemeanor to a petty misdemeanor an allow the Metropolitan Council to designate employees who are not police officers to inspect fares and issue administrative citations and this also allows police officers to devote their time to responding to more serious incidents.

The COVID-19 pandemic has had significant impact on both policing and ridership. In the first week of May 2020, ridership declined nearly 70% system wide compared to the year before, and nearly 80 percent on rail lines. On BRT lines ridership has declined by about 50% compared to the previous year.

In 2016, Audit hired a consultant to use a probability sampling method that estimated an overall LRT fare evasion rate of between 8.3% and 10.4%. The estimated fare evasion rate on the Blue Line was between 7.6% and 11.8% and on the Green Line between 8.4% and 10.8%. Audit has not estimated fare evasion on NorthStar or any of the BRT Lines in the METRO network.<sup>4</sup> Audit planned to perform a similar fare evasion audit in 2020 but abandoned those plans in light of the COVID-19 situation.

# **Purpose**

The objective of this audit was to evaluate the goals and process of fare enforcement currently conducted by the Metro Transit Police Department (MTPD). This includes reviewing the effects of fare enforcement activities, examining fare evasion data, evaluating the costs associated with fare evasion, and MTPD policies on fare enforcement activities. Audit considered the idea of performing a fare evasion analysis in 2019, but ultimately decided to first evaluate the state of the fare enforcement processes and controls.

<sup>&</sup>lt;sup>3</sup> Unlawfully obtaining services includes occupying or riding any public transit vehicle without paying the full applicable fare, presenting a falsified fare medium as proof of payment, and selling, copying, reproducing fare medium without the consent of the transit provider (609.855.1).

<sup>&</sup>lt;sup>4</sup>Light Rail Fare Evasion, Metropolitan Council, Program Evaluation and Audit, October 26, 2016.

# Scope

The scope of this audit includes the review of MTPD's internal policies around fare enforcement, fare enforcement data collected by MTPD between January of 2017 through December 2019 and data related to fare enforcement costs.

# Methodology

During the audit process, Audit interviewed officers and administrative staff at MTPD. Audit also interviewed staff from Metro Transit – Revenue Operations and Strategic Initiatives (SI).

Fare enforcement data was requested from MTPD including information on the number of fare enforcement checks, warnings, and citations. Data was analyzed and evaluated for accuracy and trends. Audit also requested ridership data from Revenue and Ridership, which was analyzed and compared to MTPD data. Audit sampled two years-worth of citation data to analyze disposition information.

Finally, audit shadowed MTPD officers on the Green Line, Blue Line, A Line, and C Line to observe fare enforcement activities and procedures. Audit also shadowed enforcement officers at the Target Field Station for the Blue and Green Line during a Minnesota Twins game to observe fare check procedures during an event.

# **OBSERVATIONS**

# Metrics and Indicators Could Help Metro Transit Focus Enforcement Activities to Improve Outcomes

Metro Transit has set fare check and on-board targets for its proof-of-payment lines, but it does not have performance information that could be used to show a link between fare enforcement activities such as fare checks and fare evasion. Further, Metro Transit does not regularly measure fare evasion and does not have a stated target for fare evasion rate. Although, studies have shown that there is no correlation between evasion rates and inspection rates; 5 without an effective performance management system and data to support the activities being carried out, it is not clear how effective fare enforcement activities are, how many officers or other transit personnel are needed to carry out enforcement activities, or where to focus efforts. The Committee of Sponsoring Organizations of the Treadway Commission (COSO)<sup>6</sup> suggests developing metrics or indicators to help better monitor potential future shifts in risk conditions or new emerging risks so that management and boards are able to more proactively identify potential impacts on the organizations portfolio of risks. The selection and design of effective key risk indicators or KRIs starts with a firm grasp of organizational objectives and risk-related events that might affect the achievement of those objectives.8 For example, by only measuring fare checks, officers may be incentivized to check as many people as possible, such as doing fare checks at events, without an outcome in mind. As the number of proof-of-payment lines increases it is important that Metro Transit develop metrics or indicators to help monitor risks associated with off board payment systems to best allocate resources.

### Recommendation:

1. (Essential) Metro Transit should develop metrics or indicators for fare enforcement including establishing baselines, setting targets and developing measures for outputs and outcomes that can help proactively identify risks and link to Metro Transit's goals and objectives.

Management Response: Metro Transit has relied on the Audit and Program Evaluation Department to independently estimate fare evasion. Currently, the MTPD's Key Performance Indicators (KPI) measure the percent of fares inspected, as well as the percent of inspections that result in a warning or a citation. The MTPD is working with Strategic Initiatives to determine a measure that fairly sets goals for inspections, warnings, and citations as they apply to the unique ridership and structure of Metro Transit's proof-of-payment system.

Staff Responsible: Dana Jabs, Business Technology Unit; Chief Eddie Frizell

*Timetable:* Tentatively slated for December 2020

<sup>&</sup>lt;sup>5</sup> Transportation Research Board. Off-Board Fare Payment Using Proof-of-Payment Verification. A Synthesis of Transit Practice. 2012

<sup>&</sup>lt;sup>6</sup> COSO is dedicated to providing thought leadership through the development of comprehensive frameworks and guidance on enterprise risk management, internal control, and fraud deterrence designed to improve organizational performance and governance and to reduce the extent of fraud in organizations.

<sup>&</sup>lt;sup>7</sup> COSO. How Key Risk Indicators Can Sharpen Focus on Emerging Risks. 2010

<sup>&</sup>lt;sup>8</sup> COSO. How Key Risk Indicators Can Sharpen Focus on Emerging Risks. 2010

Thrive 2040 Principle and Outcome: Accountability and equity.

# Best Practices in Data Management Could Help Improve Evaluation and Targeting of Fare Enforcement Activities

MTPD logs fare enforcement activities through a spreadsheet that tracks the number of checks, warnings, arrests, citations, and rides performed on all proof-of-payment lines. During their regular duties, officers perform other activities outside of fare enforcement which can relate to public safety, security, and community engagement. This dataset includes all interactions and not just those associated with fare enforcement. Officers are required to record this information by hand during their shifts and an administrative staff member then manually enters the officer's notes into a database. This creates risks of human error in counting. Officers also informed Audit they sometimes estimate the number of checks based on the number of people in the vehicle.

MTPD also tracks fare enforcement activities through the Field Based Reporting (FBR) system, which tracks all warnings and citations issued by MTPD officers, including those issued for fare evasion. Before June of 2017, this information was kept in the Law Enforcement Tech Group (LETG). The FBR/LETG data is not maintained in a way which is easily accessible for the purposes of analyzing fare enforcement data or making policy decisions.

While the information MTPD tracks is useful, improvements in internal control and accessibility could make the data more reliable and useful for reporting and evaluation the effectiveness of fare enforcement activities. The United States Department of Justice's *Community Oriented Policy Law Enforcement Best Practices* provides specific data systems practices that could help address the issues with data accessibility and accuracy and what data can be used for including the following:

- **Data Systems Practice 4**: Emphasize data quality through "defining an organizational philosophy and organizational responsibilities of quality data collection and supporting quality assurance practices through policy and training."
- Data Systems Practice 6: Use data to inform decision-making processes.
- **Data Systems Practice 11**: Foster openness and transparency with community members and stakeholders, such as through regularly reporting statistics and policies on an agency website.<sup>9</sup>

### Recommendation:

2. (Essential) MTPD should incorporate best practices and improve internal controls to ensure that data collected on fare enforcement and other related activities is reliable and accessible for the purposes of evaluating fare enforcement activities.

**Management Response:** This recommendation is consistent with the MTPD's own observations regarding the method and quality of data collected. Due to the field-based nature of the work, the data is manually entered into a Citrix-based application to create an activity log.

The MTPD will develop a standard operating procedure for all sworn personnel for fare enforcement which will include the importance of data accuracy.

<sup>&</sup>lt;sup>9</sup> U.S. Department of Justice. 2019. Law Enforcement Best Practices: Lessons Learned from the Field. Washington, DC: Office of Community Oriented Policing Services.

To address Audit's concerns regarding the length of time to compile data, this was an unusual scenario that has been resolved.

- Audit's request was for data that spanned five years. Due to a change in record management software, the data scientist had to access both systems and then organize the information in a way that made them comparable.
- As is the case with any new software system, there were growing pains and internal procedure for processing citations was creating inaccurate information. A new standard operating procedure was developed and has resulted in the collection of accurate data.
- The MTPD worked with the new software developer to correct an error in how data is retrieved from the database; however, the correction does not apply to data prior to 2019.

**Staff Responsible:** These items fall within the scope of the Business Technology Unit at the direction of Dana Jabs. An SOP will be developed by the business analyst.

### Timetable:

SOP drafted for approval: 11/15/2020

Personnel acquisition: 1/1/2021

Thrive 2040 Principle and Outcome: Accountability and equity.

**3. (Consideration)** MTPD should consider taking steps to make fare enforcement data more internally accessible for decision-making and program evaluation processes.

**Management Response:** The MTPD is currently evaluating the possibility of creating a dashboard feature that would include data on fare inspections (checks, warnings, citations, and arrests).

**Staff Responsible:** These items fall within the scope of the Business Technology Unit at the direction of Dana Jabs.

*Timetable:* In development progress; projected date for completion in summer 2021.

Thrive 2040 Principle and Outcome: Collaboration Integration

### **Cost-Benefit Analysis Could Help Better Target Fare Enforcement Activities**

The MTPD has grown for the past several years from 113 full-time and 70 part-time officers in 2017 to 141 full-time and 51 part-time officers in 2019. This is partly a response to an increased need for fare checking on proof-of-payment lines. For the opening of the METRO C Line, MTPD hired 14 new officers. MTPD Managers told us that new proof of payment lines including Southwest Light Rail extension and other BRT routes will require more officers to ensure fare enforcement coverage.

As discussed earlier, MTPD officers monitor fare evasion as a portion of their regular police duties, however MTPD does not track or estimate what percentage of the budget is spent on fare enforcement and related activities and what is spent on other activities. While police duties related to fare enforcement tend to overlap with other policing objectives, estimating costs of fare enforcement activities would help evaluate whether fare enforcement-related spending is resulting in cost effective improvements in defined outcomes.

### Recommendation:

**4.** (Significant) Metro Transit and MTPD should work to develop a process for measuring or estimating the cost of fare enforcement activities. In addition, these costs should be evaluated against the metrics discussed in recommendation 1 to determine the cost effectiveness of these activities.

Management Response: Fare enforcement is done within the total context of an officer's work, not as a stand-alone or sole task. Under the current model of using police officers as fare inspectors who are enforcing a misdemeanor-level offense, action taken on what seems to be a simple fare evasion always carries the chance of becoming a larger incident due to the potential for uncovering other crimes such as warrants. In addition, when crimes of any level are committed in the officer's presence, the officer has a duty to act and may therefore get diverted from the fare enforcement work. For these reasons, it would be extremely difficult to reliably evaluate cost effectiveness.

Additionally, Metro Transit believes there are outcomes from fare enforcement that extend beyond addressing fare evasion, including meeting customers' expectations of fairness (e.g. we hear from some customers who pay their fare that believe it's unfair when they perceive other riders riding without paying) and providing routine police presence that may deter destructive behaviors and crime. These co-benefits to fare enforcement are difficult to quantify and further complicate a reliable, robust cost effectiveness measure.

Metro Transit continues to seek legislative authority for administrative citations. This would allow Metro Transit to have non-sworn personnel work as fare inspectors with fewer duties than police officers. Legislative action this session could significant change the model for fare enforcement and would change how we would evaluate the overall effectiveness of fare enforcement, including cost considerations.

**Staff Responsible:** To be determined based on legislative session outcomes.

*Timetable:* Will re-evaluate post-legislative session.

Thrive 2040 Principle and Outcome: Accountability and Stewardship

### MTPD Lacks Consistent Policy on How to Conduct Fare Enforcement

In 2017, a fare enforcement directive was approved by the MTPD's Deputy Chief that requires officers to issue documented warnings on the first offense whenever they encounter a missing fare; and then issue a citation on the second offense. The difference between the verbal warning and a documented warning, is that a documented warning requires calling into dispatch. However, MTPD policy documents provide inconsistent guidance to officers regarding fare enforcement practices. The MTPD Policy manual, which is intended to guide Transit Police officers in the performance of their law enforcement mission, allows officers to issue verbal warnings if they are satisfied the passenger did not intentionally evade the fare.

In practice, Audit observed that MTPD Officers employ a range of strategies when encountering riders without valid fare media. For example, there were cases during ride-a longs where officers issued informal 'verbal' warnings that were not documented. In another situation, Audit observed officers telling passengers without valid payment to get off the train and pay at the next stop but did not ask for their name. Audit also observed an officer provide a free transit pass to a homeless individual without

documenting this interaction. In multiple instances, officers explained to the customer how to pay and let them get off the train without recording their name or issuing a documented warning. The best practice guide produced by the International Association of Chiefs of Police on Developing A Police Department Policy-Procedure Manual provides that a manual should be reviewed on at least an annual basis.

Inconsistency in whether an officer gives a documented or non-documented warning can introduce the risk of disparate treatment, bias in policing or the perception of it. If people perceive certain groups are more likely to receive a documented warning, and subsequently a ticket, this may affect community relations or discourage certain groups from riding public transportation.

#### Recommendation:

**5. (Essential)** MTPD should review the Policy and Procedure Manual and clarify fare enforcement policy to include the language of the 'Warn First' directive or otherwise revise their fare enforcement policy to decrease risks associated with officer discretion. This guidance could include the range of tools available to police to help improve fare compliance overall.

**Management response:** The MTPD is currently in the process of reviewing the policy and standard operating procedure which will give more clarification to the officers regarding the process for issuing warnings and citations. The current policy and procedure manual are regularly reviewed and updated as law, best practices, and department needs dictate.

MTPD policy 405 (Bias-Based Policing) outlines the expectations for officers regarding people in protected classes.

Staff Responsible: Leah Palmer, Business Analyst, MTPD

Timetable: January 1, 2021

Thrive 2040 Principle and Outcome: Accountability and Equity

### **Fare Enforcement Activity Varies Across Modes**

Audit's analysis of fare enforcement activities highlights significant differences in fare checks, warnings issued, citations issued, and citations paid across modes. A number of factors influence all of these activities. For example:

- Agreements with County funding partners on NorthStar require a certain level of officer presence on NorthStar trains which in turn influences the numbers of fares checked.
- Officer involvement in other duties can suppress fare checks. For example, if an officer team encounters an individual with a felony warrant during a fare enforcement shift, that team will be pulled away from fare enforcement duties to process that individual.
- The rate of fare compliance by the public will influence the need to issue citations and warnings. Fare compliance may vary across modes, times of day or during significant events.

However, our analysis identifies several trends over a two-year period that raise questions about the equity of fare enforcement activity across the system. At a minimum, this range of activities could lead to perceptions from the public that enforcement of policy is inconsistent or inequitable.

• Fare check rates vary widely across modes. MTPD checked fares for more than 40 percent of fares on NorthStar, in part due to funding agreements with the counties in which NorthStar

- service operated. In contrast, fewer than 10% of riders experienced a fare check across other modes, and enforcement activity was minimal (21 warnings and 10 citations in 2 years) on the arterial BRT system.
- Rates of enforcement activities vary across the two light rail lines. About double the rate of passengers were fare checked on blue line (10%) than green line (5%). However, Green Line Riders were more likely to receive a either a warning or citation. Approximately 4 out of every 1,000 fare checks on the Green Line results in a documented warning and about 1 in 1,000 results in a Citation. In comparison, on Blue Line, less than 1 out of every 1,000 fare checks resulted in a documented warning and about 1 in 10,000 resulted in a Citation. This does not include the shared line (downtown Minneapolis) sections of the green and blue line.
- According to the data we reviewed from The Minnesota Court Web Payment System, about 2.6% of Citations issued by the MTPD resulted in Payment by Individual, as of February 2020.
   In most cases, the case was dismissed, the cited individual failed to appear in Court, the citation was referenced to a prosecutor and is still pending, or the fee was sent to a collection agency.

Table 1: Fare Enforcement Activity on Proof of Payment Lines (2018 and 2019)

					Rounded	Rounded			
	Ridership	Checks	% of Rides		Rate per 1,000 Fare Checks		Rate per 10,000 Fare Checks	Citations Paid	% of Citations Paid
				Warnings		Citations			
Light Rail Transit									
Green Line	28,050,405	1,347,168	5%	5,440	4/1,000	1,322	10/10,000	28	2%
Blue Line	22,205,445	2,113,237	10%	1,726	1/1,000	305	1/10,000	9	3%
Shared Line				1,447		299		11	
All Light Rail	50,255,850	3,460,405	7%	8,613	2/1,000	1,926	5/10,000	48	2%
Commuter Rail									
Northstar	1,555,117	656,618	42%	340	1/1,000	0	0%	0	N/A
All Commuter Rail	1,555,117	656,618	42%	340	1/1,000	0	0%	0	N/A
Arterial Bus Rapid Transit									
A Line	3,294,311	161,591	5%	13	< 1/1,000	8	1/10,000	1	13%
C Line (since August 2019)	925,258	9,780	1%	8	1/1,000	1	1/10,000	0	N/A
All ABRT	4,219,569	171,371	4%	21	< 1/1,000	9	1/10,000	1	11%
All Modes	56,030,536	4,288,394	8%	8,974	2/1,000	1,935	< 1/10,000	49	3%

Note: Ridership data obtained from Metro transit Ridership Trends and Forecast module http://mtapshiny1p/MT/SIDev/Mode\_Trends/. Checks data obtained from the MPTD's Fare Inspection spreadsheet for each line. Citation and Warning data were obtained from the FBR dataset and include only citations or warnings related to fare evasion. The FBR data separates out shared line statistics, so they are included separately and cannot be identified as either Blue or Green line. Citations paid were obtained by inserting citations from the FBR into the Minnesota Court Web Payment System. C Line data begins in June 2019. Citations paid sections includes citations that were partially paid.

### **Conclusions**

Metro Transit could benefit from an improved program-level performance management system to carry out its fare enforcement activities. Improved metrics or indicators for fare enforcement along with measures for outputs and outcomes that will help identify risks and will align with Metro Transit's goals and objectives. To support this program, Metro Transit should work towards developing a process to gather and report data which can be internally accessed for decision-making processes.

Additionally, tools such as cost-benefit analysis could help Metro Transit determine what percentage of their budget is spent on fare enforcement activities and what value is being gained toward organizational goals and objectives. An estimate of the costs involved with fare evasion would help to evaluate which of the MTPDs fare-enforcement activities are the most cost effective.

In addition, the Department could lower its risk of non-compliance with policies and procedures by removing inconsistencies in the Fare Enforcement Policy Manual. The MTPD should update their Fare Enforcement Policy Manual to include the language of the "Warn First" directive to decrease potential risks associated with officer discretion.

Development of these proposed elements of a fare enforcement program should help Metro Transit monitor compliance with fare policies on the growing proof of payment portion of the transit network. Data driven, goals-based decision-making can help ensure that Metro Transit and the MTPD are focusing limited resources in ways that best ensure the safety and reliability of the transit system in the most cost-effective way possible. Further, a developed and consistent program could help ensure that fare enforcement is equitable to all members of the public.

# **Appendix**

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

- 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.
- **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.
- 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.
- **Verbal Recommendation** An issue was found that bears mentioning but is insufficient 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.

390 Robert Street North Saint Paul, MN 55101-1805

651.602.1000 TTY 651.291.0904 public.info@metc.state.mn.us metrocouncil.org

