



REVISED
FINANCE COMMITTEE
January 14, 2009
OPERATIONS COMMITTEE
January 15, 2009

SUBJECT: PAPER DAY PASS TRANSITION TO TAP

ACTION: RECEIVE AND FILE

RECOMMENDATION

Receive and file report on paper day pass transition to Transit Access Pass (TAP).

ISSUE

As a result of recent articles involving the embezzlement of paper day passes by certain bus operators since the introduction of day passes in January 2004, the Board requested a report on the findings and recommendations of any audits, difficulties in securing this fare media, potential controls to protect paper day passes and to provide a transition plan to TAP (Director John Fasana Motion, October 2008). This report addresses the paper day pass transition to TAP

DISCUSSION

Management Audit Services Department, "MASD," completed an audit of Day Pass Internal Controls in October 2008. This audit was directed by the Chief Executive Officer and conducted as a follow up to a 2006 Fare Media Audit.

The findings of this audit and enforcement of existing storage and interim access procedures to improve internal controls of these paper day passes are addressed in a report submitted by the Chief Financial Services Officer this month to the Finance and Operations Committees.

MASD further recommended that, "the Transit Access Pass (TAP) program expedites the implementation of the day pass on TAP with the elimination of paper day passes as the permanent resolution to the problems noted in the audit." The following describes the implementation plan to achieve this permanent resolution:

IMPLEMENTATION PLAN & SCHEDULE

Objective:

The objective of paper day passes transitioning to TAP is to reduce the operating divisions' risk of handling and reconciling fare media which created the opportunities for embezzlement. Seven days a week, bus operators are dispensed paper tickets to be sold on board their buses. Bus riders purchasing paper day passes are cash paying customers who receive paper tickets issued by bus operators. Opportunities for fraud exist from the point

of pass distribution and dispersion to operators through the point at which tickets are placed into the hands of customers. The absence of control data from the point of centralized delivery of paper tickets at headquarters to the decentralized distribution to 11 operating divisions plus three contracted operators, and further into 2,300+ buses through, coupled with unsold paper passes returned each day from over 3,000 individual bus operators makes physical, manual controls a difficult process at divisions already constrained for resources. Moreover, there are inaccuracies in associating manual classification of sales and usage data that are dependent on bus operator “button pushing” against the revenue collected in each fare box, albeit the new UFS validating fare box with driver control unit has hugely improved cash data previously unobtainable from the old registering fare boxes that had no operator control unit to classify any fare payments on board buses. Even so, we experience \$3 million dollars of unclassified fares each month; a statistic that can be improved if dependencies on operators’ manual button pushing to classify paper tickets is reduced via transition to automated transactions captured from TAP cards carried by customers.

The MASD audit recommendation to transition cash paying paper day pass riders to TAP targets this bus environment. It will eliminate the distribution and reconciliation of paper day pass assets as a manual, human resource driven activity at operating divisions. Removing fare media, including TAP cards, from the bus divisions and, instead, relying on electronic day pass sales transaction data available from the UFS fare box and point of sales devices automates and reduces dependencies on manual processes at bus divisions and on board buses. It further removes the bus operator from the requirement to physically handle paper tickets or TAP cards each day. All fare media, after the initial introductory period, will be eliminated from the bus divisions and buses, and will instead be available at more than 400 sales outlets and from over 300 ticket vending machines, or by calling 1.866.TAPTOGO or on line at www.TAPTOGO.net Customers will always have the option to pay cash base fare on board buses.

Described below are the processes to put free, introductory TAP cards into the hands of cash paying day pass customers with the purchase of their day pass.

1. Implementation Schedule:

The CEO directed TAP Operation to develop an early day pass transition plan in order to expedite the elimination of paper day passes on board buses. Transit Operations concurred with this recommendation. The agreed upon date is March 15, 2009. After that date, paper day passes will no longer be used. Rider outreach plans were finalized in November and early customer notifications are scheduled to begin in January 2009 in order to inform, educate and prepare all cash customers currently purchasing day passes on board Metro buses that paper day passes will be replaced with TAP cards beginning March 15, 2009.

2. Public Outreach

Our Communications - Marketing department is preparing outreach materials that include on-board “take ones”, bus card cards, and brochures, plus on-board TV broadcasts. The purpose of the outreach is to prepare riders two months in advance of this transition to inform them of the introductory period for the transition period during which TAP cards will be given to cash riders for free with the purchase of a day pass. Additional trilingual (English, Spanish, Korean) information in local newspapers and broadcast on radio is also to be utilized to maximize the outreach during this two month notification period so that

notice of the paper day pass transition to TAP is widely circulated in advance and comes as no surprise to our regular customers. Encouraging reuse and reloading of TAP cards will be an important public message, since these cards are not disposed of each day as is now the case with paper tickets.

For this roll-out period from March 15 – ~~28~~ April 11, customers will be given TAP cards at no extra charge with the purchase of their day pass. Another important goal of this campaign is to inform current cash customers of the value of the TAP card in protecting their card balance if the card is lost or stolen. However, anonymity is a guaranteed option for riders who choose to waive card registration and balance protection.

With the retail outlets fully equipped to sell TAP cards and prepaid-products, another feature that benefits both riders and bus operations is the ability to pre-purchase day passes off-board the vehicles in advance of a trip. This should also be advertised to the community as an incentive to new and existing cash customers. Currently, day pass riders must not only have cash, but carry exact change on first boarding in order to buy a paper day pass. In the TAP environment, customers can go to outlets and buy up to 8 day passes that are each individually activated on “first tap”. This makes boarding faster and much more convenient for both customers and bus operators. It also gives customers options to plan for trips that do not require serialized use with set expirations. Customers can “bank” their TAP day passes on their cards, ready for use whenever they chose to travel. Advance marketing of these benefits will aid in customer acceptance and deepen penetration of TAP among current cash paying customers.

For customers boarding buses after the introductory period who do not have, or wish to use, a TAP card, cash will always be accepted for payment of base fare.

3. Operational Impacts of Transition Plan

From March 15 to ~~March 28~~ April 11, 2009 bus operators will have blank (no value) TAP cards to issue to cash customers purchasing day passes on board all Metro buses. Bus operators will hand the TAP card to the customer in lieu of the paper day pass. Operators will be trained to load the day pass onto the smart card; instead of performing the manual classification required for the sale or use of the current paper tickets. By March 15, when this campaign launches, all bus operators will have completed basic training to load a day pass from a cash paying customer onto a TAP card. Operators are already trained on proper use and verification of prepaid TAP cards such as the Monthly, Weekly, and Annual/Business TAP cards that are seen in service everyday.

In order to control inventory and monitor sales volume, “zero value” TAP cards will be drop shipped to operating divisions much like parts shipments, and will be further dispensed to each bus operator daily. In the current paper environment, bus operators are given paper day passes that have resale value, therefore exposing the operating division to potential embezzlement. Whereas paper day passes cannot be monitored for legitimate sales, TAP cards can be reconciled to actual sales by fare box against inventory controls, based on the serial numbers of cards issued to each division. Additionally, TAP day pass loads can be reconciled against the sales data recorded on each fare box.

Our new fare boxes are configured to prevent fraudulent loading of day passes or stored value onto TAP smart cards. Payment must precede loading smart cards. Random

amounts of cash cannot be loaded from fare boxes. Each day, un-sold TAP cards will be returned to the bus divisions by operators. However, unlike unused paper tickets that must be disposed of, unused TAP cards will be re-cycled at locations outside of the bus division for later re-distribution.

After the initial roll-out between March 15 and ~~March 28~~ April 11, staff will evaluate the need to extend the informational campaign based upon live field experience and evaluation of the volume of day passes sold on board buses. The ultimate goal of the campaign is to take the burden of controlling revenue assets outside of the operating environment. This will fulfill the requirement of MASD's audit, removing fare media, including TAP cards, from operating divisions. At the conclusion of this campaign, regular riders currently buying paper day passes will receive complimentary TAP cards with the purchase of the day pass on board buses. As referenced above in section 2, "Public Outreach", an advance marketing campaign to inform and educate customers must support this transition. Beyond the campaign period, storage, distribution, retrieval, reconciliation, and disposal of paper day pass fare media will be eliminated from the operating divisions. TAP cards can be purchased at all vendor outlets, at Metro Customer Centers, and by calling 1.866.TAPTOGO or on line at www.TAPTOGO.net The cost of the TAP cards at vendor outlets will range from \$2.00 as an initial charge, up to potentially \$5.00 which is the current industry standard across the country at other transit agencies who have implemented contactless smart card fare payment systems.

Metro currently charges \$2.00 for the processing of non-TAP personalized eligibility cards for disabled, LACTOA cards bearing a photo, and a \$5.00 card replacement fee for lost or stolen cards. Non-TAP senior cards bearing photos and student cards are currently issued at no charge. A \$5.00 fee for card replacement of lost or stolen TAP cards will be implemented to discourage misuse of reduced fare cards.

4. Implementation Cost:

The cost to transition paper day passes to TAP cards is included in the FY09 budget. The details are in the MASD Final Audit Findings, Attachment A, *Appendix D*. Approximately 157,000 individual plastic cards are needed annually, recognizing 25% turn over of customers, and replacement of lost or stolen cards, and adding those who may have more than one TAP card. In the MASD Audit, the low cost estimate for the re-loadable plastic smart card was priced at \$2.50, for a total annual cost of approximately \$392,000. Since this Audit was completed in October 2008, we issued a Request for Bid (RFB) for smart cards and the lowest responsive, responsible bidder's price proposal which we accepted through Board approval in December 2008 was just under \$1.00. Therefore, we will be well within the FY09 budget to support this transition plan, since the actual cost will be less than \$200,000. Even if we exceed the estimated number of 157,000 potential individual cards, such costs are included the FY09 budget. In other transit systems across the country, card sales have actually generated revenues. Examples include MARTA (Atlanta) with sales of limited use paper smart cards for occasional riders needing access into their gated rail system, and at WMARTA (Washington, D.C.) for drivers needing fare card access to parking lots associated to agency operated "park and ride" lots.

BACKGROUND

Conversion of cash customers to TAP is the final step in implementation of the Universal Fare System. As originally envisioned by policy makers to ensure “seamless travel” across the region, one electronic TAP fare payment card will accomplish this objective by permitting customers to ride on participating Municipal buses and Metro bus and rail service without the worry of carrying exact change or being required to know differing fare structures and tariffs. The conversion of cash paying day pass customers to TAP is the first step to launching a stored value TAP debit card to coincide with rail gate installation, scheduled to begin in June 2009. Today’s cash paying, day pass rider will be the first among cash customers to transition to TAP. To date, TAP cards have only been issued to non-cash paying, prepaid Metro pass riders.

TAP Operation has converted Metro prepaid paper fare media to TAP smart cards in phases, beginning in 2006, with the pilot of UCLA’s Institutional TAP, or I-TAP. Since that time, permanent products issued on TAP have grown to include Annual and Business TAP (A-TAP and B-TAP) products that number over 50,000, as well as regular fare, Metro Monthly and Weekly passes sold at over 400 outlets across Los Angeles County. By end of January 2009, all existing Metro retail outlets will sell TAP passes exclusively. Significant reloading of smart cards each week and each month has been occurring over the last 12 months. Weekly and Monthly sales will soon number over 250,000 loads to recurring and new TAP customers.

The conversion of Metro prepaid fare media will also include reduced fare riders, (seniors, disabled and students). They will all begin a phased conversion from paper passes and “stickers” to TAP starting January 2009. In total, all prepaid re-loadable TAP cards, including I-TAP, A-TAP, B-TAP, Regular, Senior, Disabled and Students, Metro and EZ Transit Passes will reach approximately 500,000 in number during the first half of 2009.

Each month, TAP Operation publishes a Monthly TAP report that provides a comprehensive analysis of the smart cards sold and used in Metro’s bus and rail system.

NEXT STEPS

- Launch rider outreach of cash paying day pass customers to transition to TAP
- Implement TAP day passes and eliminate paper day passes effective March 15, 2009
- Complete the full implementation to TAP by phasing in remaining prepaid paper reduced fare media and EZ Transit Pass by Summer 2009
- Fully implement regional TAP with launch of stored value TAP debit purse by June 2009
- Periodically audit internal controls in the TAP environment

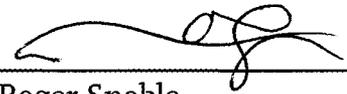
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Attachments:

Attachment A: Final Day Pass Audit Report, Appendix D



Roger Moliere
Chief Real Property Management & Development



Roger Snoble
Chief Executive Officer

Projected Annual Cost of Conversion of Day Pass Users to Plastic TAP Cards

Daily Behavior	Day Passes Per Day	Days Issued Per Year	Cards Per Year	% of Day Pass Riders	% Convert to TAP	Cards Needed	Day Passes Purchased Per Card Per... Year	Month	Week	Annual Day Passes
New Card for Every Person Each Day	35,507	365	12,960,189	1%	0%	0	1	0.1	0.0	12,960,189
New Card for Every Person Every 2 Days	35,507	182	6,462,341	1%	0%	0	2	0.2	0.0	12,960,189
New Card for Every Person Every 4 Days	35,507	91	3,231,170	1%	0%	0	4	0.3	0.1	12,960,189
New Card for Every Person Every 8 Days	35,507	46	1,633,339	1%	0%	0	8	0.7	0.2	12,960,189
New Card for Every Person Every 16 Days	35,507	23	816,669	2%	0%	0	16	1.3	0.3	12,960,189
New Card for Every Person Every 32 Days	35,507	12	426,088	3%	100%	12,783	30	2.5	0.6	12,960,189
New Card for Every Person Every 64 Days	35,507	6	213,044	14%	100%	28,761	61	5.1	1.2	12,960,189
	35,507	5	177,537	14%	100%	23,967	73	6.1	1.4	12,960,189
	35,507	4	142,029	14%	100%	19,174	91	7.6	1.8	12,960,189
	35,507	3	106,522	14%	100%	14,380	122	10.1	2.3	12,960,189
	35,507	2	71,015	37%	100%	26,275	183	15.2	3.5	12,960,189
	35,507	1	35,507	0%	0%	0	365	30.4	7.0	12,960,189
One Card Per Person and The Same People				100%						
125,341 Total Annual Cards Needed 156,676 Plus 25% Annual Turnover Factor \$626,705 Cost at \$4.00 per TAP Card \$391,691 Cost at \$2.50 per TAP Card*										

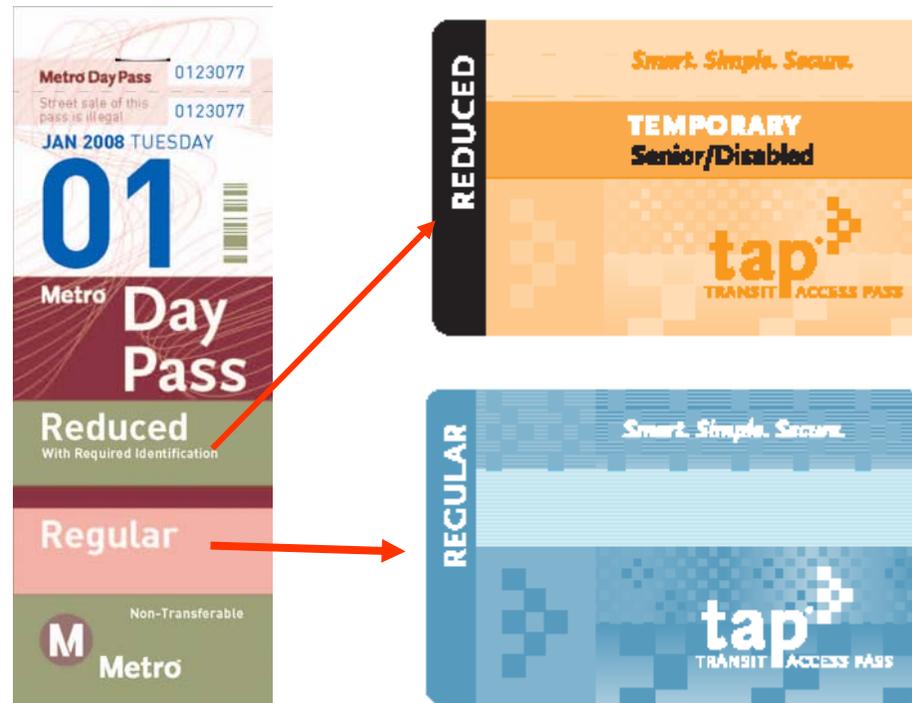
*ACTUAL cost will be lower, as recent procurement resulted in lowest responsible, responsive bidder rates at less than \$1.00/card, not \$2.50.

Projected Annual Cost of Conversion of One-Way Rail Riders to Plastic TAP Cards

Daily Behavior	One-Way Tickets Per Day	Days Issued Per Year	Cards Per Year	% of One-Way Riders	% Convert to TAP	Annual Cards Needed	Annual Boardings on TAP	Year	Month	Week	Annual One-Way Boardings
New Card for Every Person Each Day	41,262	365	15,060,730	3.7%	0%	0	0	1	0.1	0.0	15,060,730
New Card for Every Person Every 2 Days	41,262	182	7,509,734	3.7%	0%	0	0	2	0.2	0.0	15,060,730
New Card for Every Person Every 4 Days	41,262	91	3,754,867	3.7%	0%	0	0	4	0.3	0.1	15,060,730
New Card for Every Person Every 8 Days	41,262	46	1,898,065	5.0%	10%	9,490	75,304	8	0.7	0.2	15,060,730
New Card for Every Person Every 16 Days	41,262	23	949,032	5.0%	10%	4,745	75,304	16	1.3	0.3	15,060,730
New Card for Every Person Every 32 Days	41,262	12	495,147	5.0%	10%	2,476	75,304	30	2.5	0.6	15,060,730
New Card for Every Person Every 64 Days	41,262	6	247,574	12%	25%	7,427	451,822	61	5.1	1.2	15,060,730
	41,262	5	206,311	12%	25%	6,189	451,822	73	6.1	1.4	15,060,730
	41,262	4	165,049	12%	25%	4,951	451,822	91	7.6	1.8	15,060,730
	41,262	3	123,787	19%	50%	11,760	1,430,769	122	10.1	2.3	15,060,730
	41,262	2	82,525	19%	50%	7,840	1,430,769	183	15.2	3.5	15,060,730
	41,262	1	41,262	0%	0%	0	0	365	30.4	7.0	15,060,730
One Card Per Person and The Same People				100%							
54,879 Plus 25% Annual Turnover Factor 68,599 Cost at \$4.00 per TAP Card \$274,394 Cost at \$2.50 per TAP Card \$171,496											
One-Way Tickets Remaining on LUs 10,617,815 (15,060,730 less 4,442,915) Cost at \$0.35 \$3,716,235 Cost at \$0.12 \$1,274,138 Cost at \$0.10 \$1,061,781											

REVISED
Finance & Budget Committee Item 20
January 14, 2009
Operations Committee Item 44
January 15, 2009

Paper Day Pass Transition to TAP



Background

- ▶ Metro's Management Audit Services department (MASD) determined that better internal controls of paper Day Passes at all bus divisions were needed to reduce embezzlement.
- ▶ In addition, the longer term solution recommended by MASD was to accelerate the implementation of TAP to reduce fraud and to remove revenue assets from the bus operating environment.
- ▶ In October 2008, the Board directed staff to address both issues and return with a recommended implementation plan in January 2009.

Description of Current Paper Day Pass Rider on Bus

- ▶ A cash paying customer who must purchase the fare media on a bus at the time of boarding
- ▶ Must present exact change (or lose the difference)
- ▶ Bus operator tears off paper ticket from stapled booklet and sells to customer with verification of senior or regular fare status
- ▶ Bus operator pushes the correct fare box button to classify Day Pass sold – either a senior or regular fare rider
- ▶ Customer carries it throughout the day and bus operators continue to visually inspect the ticket to manually classify each boarding
- ▶ Paper ticket is thrown away at the end of the day

Description of future TAP Day Pass Rider on Bus

- ▶ Customer receives first introductory TAP card for free with purchase of a Day Pass on board the bus during initial campaign March 15 – April 11, 2009.
- ▶ Customer inserts exact change, or will have “stored value” TAP debit card to eliminate cash handling to pay for Day Pass.
- ▶ Bus operator manually classifies first sale and customer “TAPs” card to load the Day Pass from the fare box
- ▶ All subsequent boardings with TAP are automatically validated on the fare box
- ▶ Bus operators no longer need to classify each boarding or visually inspect unless special circumstance
- ▶ Customers keep their TAP card to re-use it for next use.

TAP Day Pass Objectives

- ▶ Address removing Day Passes from divisions, per Audit directives
- ▶ Distribute TAP cards into the hands of cash paying Day Pass customers as quickly as possible
- ▶ Eliminate printing and distribution of paper day passes.
- ▶ Ensure the RE-USE of TAP cards by customers
- ▶ Ensure minimal impacts to Transit Operations, particularly to bus operators

TAP Day Pass Goals for Transition

1. Minimize the transition period to reduce bus division and operator impacts
2. Educate the public in advance
3. Promote the benefits of TAP Day Passes not available on paper

1. Minimize impacts to Transit Operations

▶ Training Bus Operators

- Operations Central Instruction has started training this month, January 2009, for a systemwide launch between March 15 – April 11, 2009

Purpose:

- Eliminate issuance of paper Day Pass “tickets” at divisions and on board buses
- Relieve bus operators from visual inspection and manual classification of day pass usage

1. Minimize impacts to Transit Operations - continued

- ▶ Remove “revenue assets”, or Day Passes from divisions
 - Once the four week campaign is completed, Day Passes will no longer be stored nor issued from bus divisions

Purpose:

- Eliminates the asset controls and reconciliation procedures that are difficult and impractical to maintain on a daily basis at bus divisions
- Eliminates revenue asset handling by division personnel and bus operators (embezzlement potential removed)

2. Educate the Public in Advance

- ▶ Marketing is developing campaign materials to support this initiative
- ▶ Visual aids to illustrate the elimination of paper “tickets” changing to plastic TAP cards
- ▶ Passenger “take ones” to inform and educate the customers on the re-use of TAP cards
- ▶ TAP cards will be issued for free during the March 15 – April 11 transition period with the purchase of a day pass on board buses
- ▶ Cash will always be accepted on board buses for payment of base fare for customers who choose not to use a TAP card

3. Promote the Benefits of TAP Day Passes

Market and Advertise the Benefits to Customers:

- ▶ TAP eliminates need to carry exact change to buy Day Passes
 - A stored value TAP card eliminates this inconvenience
 - Accelerate stored value implementation to accommodate 80% bus riders
- ▶ Customers can go to retail outlets to load and re-load Day Passes in advance
 - Current Day Passes can only be purchased on first boarding of buses
 - TAP day passes will be sold in advance at all retail outlets
 - Up to EIGHT day passes can be purchased in advance
- ▶ TAP cards can be protected if lost or stolen – paper Day Passes cannot

3. Promote the Benefits of TAP Day Passes - continued

Benefits to Bus Operators and to Metro at large:

- ▶ Bus operators can focus on driving without worry of selling multiple fare media on board their vehicles.
 - Municipal operator transfers and zone checks will continue to be sold as paper tickets
- ▶ With a stored value (debit) TAP card, boarding speed is improved.
- ▶ Bus operators must visually inspect each paper Day Pass, whereas TAP is automatically validated on the fare box
- ▶ TAP is “GREEN” – avoids throwing away millions of pieces of paper each day

TAP Transition Schedule

Responsible	Task	Schedule
Transit Operations OCI	Bus Operator Training	End of January – March 2009
TAP Operation	Order dispensers, TAP cards, coordinate with Transportation and Maintenance management at each divisions	On-going
Bus Divisions	<p>Maintenance – adhere dispensers to fare boxes</p> <p>Transportation – coordinate storage and issuance of pre-packaged “no value” blank TAP cards; re-cycle unused cards</p> <p>Bus Operators – hand out “take ones” with paper Day Passes to inform/alert patrons in advance</p> <p>Issue TAP cards to load day passes and “take ones”</p>	<p>March 1 – 15</p> <p>March 8 – 14; March 15 – April 11</p> <p>March 1 – April 11</p> <p>March 15 – April 11</p>
Communications - Marketing	Prepare and roll-out bus cards, “take ones”	February – April

Fare Boxes with Dispenser



**Dispenser is mounted to
Back of fare box facing
the bus operator**