

**Smart Card
Alliance**

Serving Unbanked Consumers in the Transit Industry with Prepaid Cards

A Smart Card Alliance Transportation Council White Paper

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About the Smart Card Alliance

The Smart Card Alliance is a not-for-profit, multi-industry association working to stimulate the understanding, adoption, use and widespread application of smart card technology. Through specific projects such as education programs, market research, advocacy, industry relations and open forums, the Alliance keeps its members connected to industry leaders and innovative thought. The Alliance is the single industry voice for smart cards, leading industry discussion on the impact and value of smart cards in the U.S. and Latin America. For more information please visit <http://www.smartcardalliance.org>.

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Executive Summary

It is estimated that close to 20% of all American households—40 million households, representing 80 million people—do not have basic bank accounts. An additional segment of the U.S. population is composed of individuals who are considered to be underbanked. These underbanked individuals may have a basic savings account with a financial institution but do not use more advanced financial services, such as checking accounts, loans, or retirement savings accounts. A number of different factors play a role in why many individuals are unbanked or underbanked. In addition to economic status, several studies have pointed out that there are issues of language, trust, privacy, availability of appropriate financial products, and the cost of services that play an important role.

These large segments of the population create challenges for transit agencies who are implementing smart card-based automatic fare collection (AFC) systems. How do transit agencies provide the same easy access for transit services to unbanked and underbanked riders, while also maintaining the benefits of reduced operating costs and improved efficiencies that AFC systems deliver in reducing the use of cash for fare product purchases?

Serving unbanked transit riders involves issues both when the transit fare payment card is initially sold and during the life of the card, when additional fare value is sold. To date, many transit agencies are continuing to depend on traditional approaches for vending fare media to serve both banked and unbanked riders. While programs attempt to maximize the advantages of smart card technology through features like autoloading and online sale of cards and fare value, transit agencies still invest heavily in more traditional fare media sales channels, such as in-station vending machines and retail sales outlets.

Transit agencies incur significant challenges and expense in establishing and operating fare product sales through retail outlets. Transit agencies must promote programs to retailers and persuade stores to participate. Financial agreements must be executed that specify commission rates paid to sales outlets and settlement timing. Point-of-sale (POS) terminals capable of loading value on transit fare media must be installed at participating retailers. Retailer staff must be trained on the use of the POS equipment in addition to fare product sale and reload terms.

Some transit agencies have been cautious in implementing or expanding smart card-based AFC systems because of specific concerns about the availability of smart cards to consumers without bank accounts and the difficulty of establishing broad retail sales distribution. Others (e.g., Boston CharlieCard, Washington Metropolitan Area Transit Authority (WMATA) SmarTrip[®], Los Angeles TAP and San Francisco Bay Area TransLink[®]), however, have moved forward with aggressive plans to establish retail networks for transit fare payment card sale and reload. For agencies interested in eliminating legacy fare payment systems and creating a smart card payment infrastructure, the success of the retail sales network has been essential to creating public acceptance of the smart card and comfort among policy boards.

In parallel with the transit industry's move to smart card-based AFC systems, the financial payments industry has moved forward with new products that could offer an alternative to the traditional transit approach for serving the unbanked and underbanked consumers. Network-branded prepaid cards are now available that serve the unbanked segment of the population. Retail stores now offer many different prepaid card types and are devoting considerable shelf space to these products. Combined with the increasing use of prepaid cards to distribute federal and state benefits, these products can reach many segments of the unbanked market.

In addition, the financial industry now offers standards-based contactless credit and debit payment cards, which are a better match to transit's requirements for fast, reliable movement of riders through the system.

Transit agencies could partner with a prepaid card program manager to provide prepaid cards to the agency's unbanked ridership. Agencies could also become "program managers" and issue private label cards in conjunction with a bank and a processor. While prepaid cards can support agencies immediately by allowing patrons to purchase transit fare media through ticket vending locations, it is likely to take some time for prepaid card issuers to accept the cost of adding a contactless chip to the card. This migration is likely to parallel the introduction of contactless credit/debit cards. Agencies can encourage

this migration by working with banks and state agencies in their area to gain support for conversion at the time they implement programs to accept bank cards.

The simultaneous development of these three types of payment products – smart card-based fare media, network-branded prepaid cards, and contactless credit/debit cards – offers opportunities for convergence and for transit agencies to benefit from programs being implemented in the financial industry. With appropriate thought and planning, agencies can tap into the new channels for prepaid cards to reach the unbanked and lower costs for fare collection systems.

About this White Paper

This white paper was developed by the Smart Card Alliance Transportation Council to provide the transit and financial industries with an educational overview of the various methods available for providing and re-loading fare media to individuals who do not have credit or debit cards, nor checking or savings accounts, and generally lack relationships with traditional banking institutions. The white paper answers the following questions:

- What is the size of the unbanked market and what tools are available for transit agencies to determine the number of unbanked and underbanked consumers in their geographic region?
- How do transit agencies serve the unbanked rider now? What have transit agencies learned from implementing retail sales networks to support transit product sale and reload for unbanked riders?
- What are network-branded prepaid cards and how are programs implemented? How do prepaid cards differ from credit and debit cards?
- What approaches could a transit agency use to work with the financial industry to offer prepaid cards to unbanked riders?

The white paper includes case study data from the San Francisco Bay Area TransLink and the WMATA SmarTrip programs and details of the business structure and economics of prepaid card programs.

1 Introduction

Transit agencies around the world have been implementing smart card-based automated fare collection (AFC) systems to reduce operating costs, facilitate boarding, and make public transit more convenient to use. To date, the fare collection systems have mostly used a stored value model with a single-purpose transit payment card or device. Increasingly, however, transit agencies are recognizing the benefits of coupling transit payment with a bank account payment device, such as a credit or debit card.

Linking AFC systems to bank products has many benefits for the agency, but it raises concerns that those patrons who lack bank relationships will be disadvantaged by this transition. Agencies have always supported a variety of payment forms to enable those who are “unbanked” to ride as easily as any other user. For example, virtually all agencies accept cash, and it is unlikely that this will ever change. Whether it be cash sales of rail tickets from vending machines or station ticket booths or coins dropped in a farebox on buses and trams, cash payment is available to all riders.

While there may be other methods employed by agencies to serve their unbanked customers, this paper is focused on two approaches to extending AFC payment media to consumers who do not have a traditional relationship with a bank or financial institution (unbanked consumers). This group constitutes a significant portion of transit riders. The paper is intended mainly for transit agencies but is also relevant for financial institutions, prepaid card providers, local and state government officials, and vendors supplying systems and services to the industry.

Typically, agencies make sure fare media is widely available, because providing easy access to the transit system is a major objective. Public officials would look askance at any system that was not as available to the poor or underprivileged as it was to other groups, especially if this were due to a requirement that riders have credit cards or traditional bank accounts with a financial institution. Some transit agencies have even slowed the implementation or expansion of smart card-based AFC systems because of specific concerns about the availability of smart cards to consumers without bank accounts.

At the same time, agencies seek to reduce operational costs and increase convenience by establishing programs that provide a reloadable smart card to patrons, who can then register to have funds added automatically whenever a minimum threshold is reached. These so-called autoload programs are very popular with riders, due to the convenience of always having the correct fare and never having to stop to find a machine or visit a point of sale (POS) location to add value to the card. However, autoload requires linking the transit card to a funding source, which is almost always a bank account or credit card. Providing a similar level of service to people without an account or card is therefore a challenge.

Section 2, “The Unbanked Market in the United States,” describes the size of the unbanked population and includes research conducted by the San Francisco Bay Area’s TransLink program and Southwest Ohio Regional Transit Authority (SORTA) on the unbanked population in their markets. Also included are references to organizations that have conducted research on unbanked consumers.

Section 3 describes examples of government-supported prepaid card programs.

Section 4 describes how current smart card-based automatic fare collection programs work to serve unbanked transit riders, with case study information from the San Francisco Bay Area TransLink program, the Washington, DC, area SmarTrip[®] program, Atlanta Breeze program, Boston CharlieCard program, Chicago Chicago Card program, and Los Angeles TAP program.

One recent development that addresses the financial services needs of unbanked and underserved populations is the reloadable prepaid card. A reloadable prepaid card is a payment card to which funds can be added by the cardholder at load stations, typically located at retail locations that participate in a retail load network. The explosion of prepaid cards in the past few years has proven the popularity of these products. Today, a wide selection of prepaid product offerings can be found in almost every city, often in dedicated displays in grocery stores, check-cashing outlets, and convenience store locations. Because a significant proportion of these cards offer consumers the ability to reload funds, this industry, like the transit industry, needs to offer reload service distribution points. In response, Visa and MasterCard have created the ability for any merchant that accepts these brands to support the reload

function. Moreover, a number of prepaid card providers and processors have built their own reload networks. These are discussed in Section 5.

Increasingly, credit, debit, and prepaid card providers are adding contactless chips on their cards. In response, transit agencies are implementing systems to accept these cards directly at fare gates and on buses.¹ Section 6 discusses how these new capabilities, along with a prepaid co-branded/affinity card program, could be used to provide services to the unbanked in transit.

¹ Smart Card Alliance, *Transit and Contactless Financial Payments: New Opportunities for Collaboration and Convergence*, Transportation Council white paper, October, 2006

2 The Unbanked Market in the United States

It is estimated that close to 20% of all American households—40 million households, representing 80 million people²—do not have basic bank accounts. It is also estimated that these unbanked consumers spend close to \$1 trillion annually. An additional segment of the U.S. population is composed of individuals who are considered to be underbanked. These underbanked individuals may have a basic savings account with a financial institution but do not use more advanced financial services, such as checking accounts, loans, or retirement savings accounts.

According to a survey conducted in 2006 by Synergistics Research Corporation, the unbanked individual is likely to earn less than \$25,000 per year and live in a household for which total household income is less than \$40,000 per year.³ A large percentage of the unbanked population is Hispanic or African-American and is more likely to be female than male. According to a study published by Scarborough Research in March 2006, unbanked individuals are far more likely to rent than own a home, use prepaid cellular cards, and purchase a used vehicle from a dealer based on financing options.⁴ The reasons for avoiding financial institutions include:

- The belief that they do not have enough money to need services or justify fees
- The wish for privacy (“I don’t want anyone to know my business”)
- A language barrier
- A cash-based culture

2.1 The Unbanked in Transit Programs: San Francisco Metropolitan Transportation Commission

In 2003, the Metropolitan Transportation Commission (MTC), which is the transportation planning, financing, and coordinating agency for the San Francisco Bay Area, performed an analysis to identify the number and location of households without bank accounts in low and middle-income neighborhoods of the Bay Area. As one of the agencies overseeing implementation of the Bay Area’s TransLink fare payment system, MTC’s interests were to determine whether ownership of a bank account would interfere with adoption of a new smart card by local transit riders and to recommend approaches for ensuring access to TransLink for unbanked transit riders.

MTC’s analysis indicated that lower income households are more likely to use public transit and less likely to maintain a bank account. MTC estimated that more than 60% of Bay Area residents who ride public transit and live in households with annual incomes below \$15,000 do not have a bank account. For residents who ride public transit and live in households with incomes between \$15,000 and \$30,000, the estimated percentage without a bank account is 40%. Not surprisingly, the percentage of transit riders without bank accounts decreases in households with higher incomes. The implication for smart card-based AFC systems is clear: for such systems to effectively serve low-income transit riders (many of whom depend on public transit), the system’s card and value distribution strategy cannot require ownership of a bank account. MTC’s analysis also found that households without bank accounts are concentrated in specific geographic areas, which means that the strategies to link these households to the new smart card fare payment system should also be concentrated in certain areas.⁵

² Center for Financial Services Innovation, *The Power of Experience in Understanding the Underbanked Market*, June 2007

³ Diebold, *Banking on the Unbanked*, white paper, 2006

⁴ Ibid.

⁵ Metropolitan Transportation Commission, *TransLink®: Establishment and Utilization of Distribution Channels in Phase II*, December 2003

2.2 The Unbanked in Transit Programs: Cincinnati Southwest Ohio Regional Transit Agency

In the summer of 2007, the Southwest Ohio Regional Transit Authority (SORTA), which operates Cincinnati's Metro, commissioned the Institute for Policy Research at the University of Cincinnati to conduct a survey of its ridership. One objective was to understand better the banking relationships for their customers. The survey results, summarized in Table 1, provide some evidence to suggest that a well-planned card distribution strategy can reach a majority of riders at little or no cost to the transit agency.

Table 1. Summary of Cincinnati Metro Ridership

Rider Group	Percent of Riders	Percent of Unbanked
Have debit cards	62%	0%
Employed with no debit card	19%	50%
Students and housekeepers with no debit card	11%	29%
Unemployed, disabled, retired with no debit card	9%	24%

Almost 62% of Metro riders carry a debit card, meaning that the majority of riders can participate in fare collection systems that require riders to have a card. The debit cards could be used to load value onto a transit smart card or could be converted by the issuing bank to a contactless card to be used directly at points of entry.

Of the approximately 39% of Metro riders without a debit card, 50% of this group are employed (transit riders are typically workers), which means that employer-based electronic payment card (EPC) programs could provide them with card-based financial services, perhaps in combination with a federal benefit program.

A further 29% are students or housekeepers. Transit agencies frequently support school-based programs in which student IDs are used as flash passes to board a bus or train. If the agency has implemented a smart card system, it could negotiate with the school to require students to use a smart card instead. These programs are typically settled by direct payment from the school to the agency. There is no financial settlement at the time of the transaction. Therefore, this group may not need a bank relationship, because the requirement would be simple: count the number of rides provided to students accurately. A retail distribution strategy that includes grocery stores as well as the transit system itself would be likely to reach the majority of the riders who are housekeepers.

The remaining 24% are unemployed, disabled, or retired. Transit agencies offer special services for disabled riders that require a registration process. This process typically includes distributing a fare payment medium such as a transit smart card or prepaid card.

For unemployed and retired riders, prepaid cards could be sold at retail locations and transit facilities in sufficient numbers to provide coverage. In addition, lower income individuals may qualify for state assistance, which is increasingly distributed through prepaid cards.

In summary, channels exist to reach 90% of ridership with a bank product—a credit, debit, or prepaid card. A channel-oriented card distribution strategy may help agencies reach all of the ridership groups in the most cost-effective manner.

2.3 Tools to Help Define the Target Consumer

Several non-profit organizations and associations have conducted research that yields information about unbanked consumers. This section lists a few key resources.

2.3.1 Center for Financial Services Innovation

The Center for Financial Services Innovation (CFSI), an initiative of ShoreBank Advisory Services with support from the Ford Foundation, was founded in 2004 to encourage the financial services industry to serve unbanked and underbanked consumers. CFSI identifies, develops, and distributes information on how to respond to the needs of the underbanked profitably and responsibly.

Contact information for CFSI is:

Center for Financial Services Innovation
2230 South Michigan Avenue, Suite 200
Chicago, IL 60616
(312) 881-5856 (Telephone)
(312) 881-5801 (Fax)
<http://www.cfsinnovation.com>

2.3.2 Brookings Institution

The Brookings Institution is a non-profit public policy organization based in Washington, DC, that conducts independent research and, based on that research, provides reports.

Contact information for the Brookings Institution is:

The Brookings Institution
1775 Massachusetts Avenue, NW
Washington, D.C. 20036-2188
(202) 797-6000 (Telephone)
(202) 797-6004 (Fax)
<http://www.brookings.edu>

2.3.3 Center on Budget and Policy Priorities

The Center on Budget and Policy Priorities is a policy organization working at the federal and state levels on fiscal policy and public programs that affect low- and moderate-income families and individuals.

Contact information for the Center is:

Center on Budget and Policy Priorities
820 First Street, N.E., Suite 510
Washington, DC 20002
(202) 408-1080 (Telephone)
center@cbpp.org (E-mail address)
<http://www.cbpp.org>

2.3.4 Federal Reserve Bank of Philadelphia

Economists in the Research Department of the Federal Reserve Bank of Philadelphia conduct research in a number of areas. They disseminate the results through a variety of publications that cover topics on banking and financial markets, forecasting, and the regional economy.

Contact information for the bank is:

Federal Reserve Bank of Philadelphia
10 Independence Mall
Philadelphia, PA 19106-1574
(215) 574-6000 (Telephone)
<http://www.philadelphiafed.org/econ>

2.3.5 Network Branded Prepaid Card Association

The Network Branded Prepaid Card Association (NBPCA) is an inter-industry trade association open to all parties interested in the advancement of network-branded (open-loop) prepaid cards. Its goal is to represent the common interests of the many participants in this new and rapidly growing business.

Contact information for the association is:

NBPCA
110 Chestnut Ridge Road, Suite 111
Montvale, NJ 07645-1706
(201) 746-0725 (Telephone)
<http://www.nbpca.com>

3 Examples of Government-Supported Prepaid Cards

3.1 Electronic Payment Card Services

Both state governments and the Federal government have recognized the benefits of distributing payments electronically on a prepaid card rather than by mailing a check. Electronic disbursement of cash payments and benefits uses a network-branded prepaid card that is issued to the recipient. These cards typically incur lower fees than retail-based prepaid cards.

Funds are transferred electronically to the card account each month (or at another interval as determined by the program). The recipient can use the card (up to the amount on deposit) wherever the card is accepted, including at merchant locations and ATMs. Transactions can be both signature and PIN based. Balance and transaction information is available 24 hours a day through customer service voice response units, ATMs, and secure websites.

Currently more than 40 states use these programs to distribute the following types of funds to residents:

- Child support
- Unemployment insurance
- State payroll
- TANF (Temporary Assistance to Needy Families)
- Vocational rehabilitation
- State supplemental security income payments

At the Federal level, the Social Security Administration has contracted to make payments to recipients using a prepaid card. This is important as the Department of the Treasury, Financial Management Service estimates that 27% of Social Security recipients are underbanked, and 68% of state supplemental insurance recipients do not have or use a bank account.⁶

Based on industry data, it is estimated that there are approximately ten million electronic payment cards in the United States today and, with the drive for costs savings, this number is likely to grow rapidly.

The primary benefit to governments from these programs is the reduction or elimination of the costs of check printing, postage, lost and stolen check replacement, and other operational expenses. At the same time, benefits recipients benefit from increased safety, improved convenience, and lower cost (as compared to cashing benefits checks at check-cashing locations).

Currently, these cards use magnetic stripe technology to complete point-of-sale transactions. While this technology would enable such cards to be used to load value to a transit smart card, they cannot be used directly at a smart card reader on a bus, ferry, or train platform.

In discussing the potential for converting these cards to contactless chip-based products, industry participants agree that the challenge is the cost of the chip-based technology. As the magnetic stripe technology provides all of the usage points these programs need, there is inadequate incentive to add a chip. However, as the use of contactless chips becomes more prominent in the credit/debit market, as the cost of the chip comes down, and as transit agencies adopt contactless bank cards, a chip may be necessary to meet the spending needs of these benefits recipients. In the meantime, agencies could discuss providing incentives to the states' program directors and their vendors to mitigate the additional costs.

3.2 Benefits Cards

In order to encourage the use of public transit, the Federal government and the Internal Revenue Service allow employers to provide tax-free transit benefits to their employees. Employers can provide this benefit as a direct benefit or allow individuals to deposit a portion of their pretax pay into an account to be

⁶ Bloom/Cogar Consulting, *Government Sector Prepaid Products Market Review*, March 2006

used to pay for public transportation. Funds deposited into such accounts cannot be used for any other purpose.

These benefit programs are growing in popularity with more employers offering this benefit each year. The expectation is that commuter benefits programs will grow to be a standard workplace benefit similar to the way 401k benefits have grown to be a standard retirement benefit.

This benefit has traditionally been distributed by providing the employee with local fare payment media (such as a paper pass) every month. Now the benefits can be distributed by issuing a dedicated prepaid card as well. The cost savings incurred by using card-based systems are substantial, leading to considerable corporate interest in converting to cards. Where the transit agency has the capability, it is possible to load the transit benefit to a transit smart card.

Industry participants predict that the ability to use such cards directly on buses and trains would substantially increase the appeal of the cards. Such use would require adding a contactless chip to the card. In either case, the expansion of commuter benefits programs and the movement to prepaid cards provide significant channels for reaching those who may not have bank accounts or other cards.

4 Adapting Traditional Approaches for Fare Media Sales to Support Smart Card-Based AFC Systems

Prior to the advent of smart card-based AFC systems, serving unbanked transit riders was simple: riders paid cash at a fare box or used cash to buy fare media at ticket vending machines and retail outlets. Ownership of a bank account was irrelevant as to whether or not a transit rider could pay a fare or otherwise have full access to the public transit system, since nearly every transit fare media sales channel accepted cash. (Exceptions included ticket-by-mail programs and, more recently, ticket vending machines that accept credit/debit cards only.) Transit agencies were concerned with providing access and availability, as required by Title VI, but they defined the requirement as guaranteeing access to persons of all races and persons of all incomes.⁷ Historically, meeting this requirement meant ensuring frequency and coverage of service throughout a region, establishing multiple retail outlets to sell prepaid fare media, and partnering with agencies serving low income persons to facilitate sales of subsidized fare media.

Over the past 10 years, the introduction of smart card-based AFC systems such as the Washington, D.C. area's SmarTrip, Chicago's Chicago Card, and the San Francisco Bay Area's TransLink, have made ownership of a bank account relevant to transit access and availability. In many cases, the smart card programs offer a feature that allows the transit rider to link the transit smart card to a credit card or checking account that automatically replenishes fare value when the card's balance falls below a certain value, on the first of the month, or when a pass expires. The Bay Area's transit agencies have identified this feature, known as autoloading, as the preferred method for vending value to transit riders. Autoloading maximizes the convenience of the smart card, minimizes the cost of vending fare value, and creates a predictable revenue stream for the agencies. In the Bay Area, the autoloading feature is proving to be popular among the initial group of TransLink cardholders. As of April 2008, about 50% of the approximately 20,000 cardholders who used their cards within the past year were registered for autoloading. However, neither TransLink's autoloading feature nor similar features offered by other programs are available unless a transit rider has a bank account or credit card.

Pilot programs underway in New York City and Salt Lake City further emphasize the importance of being banked. These programs accept bank-issued credit and debit cards for fare payment. Like closed-system smart card programs, these programs are intended to maximize customer convenience and lower the cost of vending and collecting fare value.

Establishing approaches for offering unbanked transit riders automated replenishment of fare value is in the best interests of both transit riders and the transit agencies. The ability of smart card programs to offer customer-friendly and cost-effective approaches to serving unbanked transit riders will partially determine whether such programs succeed. If the programs are unsuccessful in reaching the unbanked rider market segment, transit agencies will find it difficult to eliminate legacy fare collection systems. And if the cost of reaching this market segment is too high, transit agencies will not be able to reap the full benefits of new smart card-based AFC systems.

4.1 How Smart Card-Based AFC Programs Currently Work to Serve Unbanked Transit Riders

As transit agencies launch or plan to launch new smart card-based AFC systems, three questions are key to serving unbanked transit riders:

1. How big is this market segment?
2. Where is this market segment located?

⁷ Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving Federal financial assistance. Specifically, Title VI provides that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." (42 U.S.C. Section 2000d, http://www.fta.dot.gov/civilrights/civil_rights_5088.html, 2008).

3. Is this market segment large enough to necessitate specific solutions for distribution of smart cards and the value loaded onto the smart cards? This question has policy and political ramifications for public agencies.

Serving unbanked transit riders involves issues both when the card is initially sold and during the life of the card, when additional fare value is sold. In most cases, the smart cards are reloadable, which means the initial card sale presents a one-time challenge, but selling additional fare value is an ongoing challenge. To date, many transit agencies are continuing to depend on traditional approaches for vending fare media to serve both banked and unbanked riders. In other words, while the programs attempt to maximize the advantages of the smart card technology through features like autoloading and online sales of cards and fare value, they still invest heavily in more traditional fare media sales channels, such as in-station vending machines and retail sales outlets. Several of the programs also allow cardholders to add value at fare boxes. In nearly all cases, it is more expensive to establish and operate the traditional fare media sales channels than to establish and operate self-serve vending machines or the autoloading feature.

Card sales issues include both initial access to the cards and the \$5 fee that most agencies charge for the smart cards. To address these issues, some agencies have pursued aggressive sales tactics to ensure adoption of the cards by a broad audience of riders. For example, Boston's transit agency gave away more than one million free CharlieCards at transit stations as part of the program launch, and free distribution continues to date. In the San Francisco Bay Area, transit agencies are planning targeted card giveaway promotions in locales where unbanked transit riders are likely to be concentrated.

For regions without an extensive rail network (and therefore without an extensive network of current transit agency-managed sales locations), retail sales networks are particularly important to ensuring wide availability of smart cards and fare value. Establishing a sales network that not only sells smart cards but also sells fare value typically involves deploying a stand-alone POS terminal that can add value to the smart card. But deployment of these terminals involves issues such as cost (hardware, training, and sales commission), maintenance, training, and the time to complete an individual transaction, which usually exceeds the amount of time it takes to vend a traditional transit pass because a clerk must use a terminal to select the amount to be added to the smart card.

Table 2 lists the POS networks that support currently operating transit smart card programs.

Table 2. POS Networks Currently Supporting Transit Smart Card Programs

Program Name	Service Area	Number of Current Sales Outlets	Number of Planned Sales Outlets	Card Sales at Retail Outlets	Reload Capability at Retail Outlets	Cost of Card to Consumer
Breeze	Atlanta	7 with 16 devices	7 with 16 devices	Yes	Yes	\$5
CharlieCard	Boston	170	500	Yes	Yes	Free
Chicago Card	Chicago	49	65	Yes	Yes	Free with registration, otherwise \$5
Q Card	Houston	450	52	Yes	Yes	Free
ORCA	Seattle	220*	140	TBD	Yes	Free during 'conversion' period; afterwards \$5 for full fare, \$3 for senior and disabled, or \$1 for disposable
SmarTrip	Washington, D.C.	0*	500	Yes	Yes	\$5
TAP	Los Angeles	600+	500+	Yes	Yes	Free
TransLink	San Francisco Bay Area	80	400	Yes	Yes	\$5

**None of these sales outlets currently have POS capabilities for any smart card-related activities. However, they do currently sell magnetic stripe fare media.*

Another approach to reaching this market is through partnerships with social services agencies that distribute transportation benefits to their program participants. Historically, these programs have given away passes and tickets or sold them for less than face value. Partnership opportunities are available with a smart card-based AFC system, but establishing and managing these relationships introduce issues that are similar to those involved in managing retail networks, such as recruitment, contract negotiation, billing, and inventory management. Having to address and manage each of these issues potentially diminishes the benefits of implementing a smart card-based AFC system.

4.2 Implementing a Point-of-Sale Network to Support a Smart Card-Based AFC Program

This section explores the major issues involved in implementing a POS network that supports a smart card-based AFC program for unbanked customers. The issues are examined through two case studies: the San Francisco Bay Area TransLink program, and the greater Washington, DC/Baltimore, MD SmarTrip program. As the case studies indicate, implementing and managing a POS network to support smart card systems is both critically important and fraught with challenges.

4.2.1 POS Network Deployment in the San Francisco Bay Area

The Metropolitan Transportation Commission (MTC) contract for the Bay Area's TransLink program requires the contractor to establish and manage a network of 400 sales outlets. The contractor's responsibilities include recruiting the sales outlets, collecting revenue, negotiating a sales commission, installing hardware, training personnel, tracking inventory, and performing technical support. (Historically, each local transit agency established relationships with sales outlets, and the transit agency negotiated commission rates, supplied inventory, and performed all similar functions.)

During the initial phase, TransLink is being implemented in two of the 24 agencies that will eventually accept the TransLink card. The participating transit agencies regard the presence of a conveniently accessible sales network as a critical factor that is key to ensuring broad access to the new smart card. Throughout this phase, the execution of the POS network requirement has posed a number of challenges:

- Convincing stores to participate in the new program, which currently has little brand recognition.
- Resolving the differences between the commission rates that Bay Area transit agencies currently pay sales outlets relative to the rate offered by the TransLink program.
- Requiring that participating stores install a TransLink-specific POS terminal. In the past, stores simply kept transit passes in a register or behind a customer service center.
- Convincing sales outlets to settle financial transactions daily, which is a cornerstone of the overall TransLink system.
- Training employees at participating stores to use the TransLink-specific POS terminal and having the employees remember the training information.

As the two agencies currently operating TransLink (AC Transit and Golden Gate Transit and Ferry) approached the TransLink revenue-ready milestone in late 2006, both agencies raised significant concerns about the sparse geographic coverage offered by participating sales outlets and the difficulty that the program was facing in recruiting a region-wide retailer (i.e., a retailer with more than 100 local locations) to serve as a TransLink sales outlet. Similar issues arose in late 2007 as the agencies shifted from the initial "soft launch," with little marketing to support TransLink, to a more aggressive marketing program. Both agencies expressed concern that transit riders would not be able to access the card and its benefits reliably without excellent geographic coverage and an immediately recognizable region-wide retailer.

At both points in the program's introduction (the revenue-ready milestone and the transition to more aggressive marketing), the participating transit agencies made the decision to move forward contingent upon the contractor's ability to address concerns about the POS network. Addressing the concerns of the transit agencies has required several concessions:

- Offering financial incentives to sales outlets in some geographic areas
- Allowing some sales outlets to settle transactions less frequently than daily

Since November 2006, when TransLink began operating on the two agencies, most cardholders have purchased cards directly from the TransLink customer service center using the TransLink website or the phone center. The second most common channel for card acquisition are through the ticket offices operated by the participating transit agencies. It is not yet clear whether this is due to the perceived ease of contacting the customer service center, the coverage offered by the sales network, or both.

4.2.2 POS Network Deployment and Operations in Washington, DC / Baltimore, MD

4.2.2.1 POS Network Deployment

The Washington Metropolitan Area Transit Authority (WMATA) program to deploy a POS network as part of the SmarTrip Regional Customer Service Center (RCSC) for the greater Washington, D.C./Baltimore, MD geographic area requires the contractor to design, develop, and deploy a network consisting of approximately 300 target locations with expansion capabilities to 500 possible locations. This network will use WMATA-provided POS devices developed by a different contractor. Once the network is deployed, the contract requires the contractor to operate and maintain the network, performing activities similar to those required by the Bay Area's TransLink project (e.g., recruit sales outlets, collect revenue, negotiate sales commissions, install hardware, train personnel, track inventory, and perform technical support).

The RCSC POS network has experienced deployment problems that are somewhat different than those experienced by the TransLink project. The WMATA challenges in deployment include:

- The POS device itself handles analog communications only. Several of the convenience or grocery store chains no longer have either the infrastructure or the equipment to support analog communications.
- WMATA currently does not allow existing sales outlets to charge commission rates or transaction fees. The contractor believes this will have a negative effect on the process of recruiting sales locations.
- Participating stores are required to install the POS device on a countertop at the merchant location using anti-theft hardware.
- Sales outlets must agree to routine financial settlement of transactions on a scheduled basis that has been established as a part of the Regional SmarTrip System.
- Employees at participating stores must be trained to use the WMATA-provided POS device. All devices in the POS network are attended devices.

In addition, a recent WMATA fare increase and "soft push" strategy to get SmarTrip cards into bus-only customers' hands have generated a need to deploy the POS network into some of the financially challenged areas within the District of Columbia. This is because the WMATA Regional SmarTrip System has not yet deployed the smart card autoloading capabilities. These are areas and customers with no readily available means of loading value to their SmarTrip cards. They therefore require POS devices. This shift in priorities for the deployment of the POS network has changed the established POS network installation schedule significantly.

4.2.2.2 POS Operations

As of January 2008, the WMATA POS network has performed only limited operations that involve value loads or other associated SmarTrip card activities. Only limited operations have been possible because the network has not been deployed on a regional basis.

WMATA is in the final stages of deploying a POS network pilot program that operates at an existing WMATA sales outlet located in a Metrorail station. The pilot will allow value loads of all available products using cash and credit or debit cards. The devices that will be a part of this POS network have

been designed since program inception to be attended devices, requiring sales outlet or merchant assistance, and will be deployed as designed, providing a limited amount of customer service at the device location.

The merchants and sales outlets have the option of hand-selling SmarTrip cards to the customers, but this is not a requirement. There have been discussions about providing preloaded SmarTrip cards, in various amounts, for merchants to use if they decide to hand-sell SmarTrip cards. No final decision has been made regarding the sale of preloaded SmarTrip cards at POS network locations.

The original design of the POS network did not take into account card replacement activities at merchant locations. Therefore, unless the customer decides to purchase a new SmarTrip card and then load value onto it, card replacement will not be possible within the POS network. This type of activity is to be done through the back-office system, where funds can be electronically transferred from one SmarTrip card to another.

The original design of the POS device did not include any autoloading capabilities or the capability to download transit benefits. However, if a customer's transit benefits are already loaded on the SmarTrip card in the form of stored value funds, then the stored value funds can be used to purchase any products or passes available at a POS device.

A number of regional agencies accept SmarTrip cards for fare payment. In order to participate in the POS network for the WMATA SmarTrip program, an agency must first decide whether to purchase the POS device or simply pay monthly contractual operating and maintenance fees. The advantage of purchasing the POS device is that the POS device owner is allowed to retain all fare payment funds collected at the device for their own use until month-end clearing and settlement. If an agency decides instead to pay operating and maintenance costs, the fare payment funds collected at the device immediately become funds collected by the central system for the rest of the POS network. The disadvantage of purchasing the device is that additional funds are required at the outset for each device that an agency purchases.

4.3 Marketing Experience in the San Francisco Bay Area

The agencies participating in the implementation of TransLink have developed plans to phase-in marketing initiatives as the program expands from the initial two participating agencies, which account for less than 20% of the region's total transit riders, to the two largest transit agencies in the region, San Francisco Muni and BART, which account for more than 60% of the region's transit ridership. For the initial marketing phase, the on-board signage, print, radio and television advertisements have emphasized the convenience, security, and speed of TransLink. Once the system is available on San Francisco Muni and BART, the advertisements will also focus on customers' ability to use TransLink with multiple transit agencies.

In terms of target audiences, the initial advertisements are aimed at market segments likely to be receptive to new technology and a new payment system; for the most part, this market segment includes transit riders with higher incomes. The underlying strategy is that higher income transit riders who are receptive to new technology and new payment systems are more likely to be early adopters, which are key to building an initial base of customers. To encourage use of TransLink's autoloading feature, the program waives the \$5 card acquisition fee for any customer who sets up autoloading at the same time that the customer acquires a card.

So, while access to the TransLink system by unbanked transit riders is a primary interest for the program's implementation, the initial phase of TransLink's marketing campaign has not attempted to specifically target this audience. Looking ahead, participating transit agencies are considering offering a \$5 rebate to customers who purchase TransLink cards at retailers. The purpose of such a rebate would be to remove one possible barrier for lower-income transit riders to use the card.

As mentioned in Section 4.2.1, the initial group of TransLink customers has embraced the autoloading feature. Before the program's introduction, MTC forecast that about 30% of all cardholders would use autoloading. MTC based that analysis on market research performed in 2001. As of April 2008, about 50% of customers with active cards (cards used at least once in the past year) were using the autoloading

feature. While this statistic is certainly noteworthy, the program has reached just a fraction of the number of cardholders who are expected to use TransLink at full market penetration. MTC has not collected information concerning why 50% of customers do not use autoloading.

4.4 Marketing Experience in Washington, DC / Baltimore, MD

No specific intentional marketing campaign was used since the SmarTrip card was first issued in 1999. The recent WMATA fare increase is the first step in a push strategy designed to get the SmarTrip card into more customer's hands. Bus rides cost 10 cents less than cash payment if the customer uses SmarTrip to pay for the fare. This soft push activity required that WMATA provide an immediately available inventory of SmarTrip cards for sale to customers through the back-end Regional Customer Service Center operations, as well as providing a specific quantity of free SmarTrip cards for distribution to lower income customers through the appropriate channels.

4.5 Merchant Technical Requirements in Washington, DC / Baltimore, MD

The retailers or merchant locations that will be a part of the WMATA SmarTrip POS network have a choice: they can use their own debit or credit processor or the processor that is a part of this program. This choice was provided to let them streamline the customer's buying experience if the customer is purchasing other goods at the merchant location and wants to process only a single debit or credit transaction.

The POS device to be deployed has a rather significant limitation: it requires a dedicated analog telephone line to communicate with the central system. This limitation has already resulted in resistance in some merchant locations because the merchants no longer support analog communications. As a result, WMATA is discussing a product improvement with the original equipment manufacturer that will include digital communication capabilities. However, this functionality will not be available for the initial deployment.

4.6 Cost Factors and Economic Case for Transit Agencies

The reasons driving transit agencies to implement smart card-based AFC systems include anticipated reductions in operating costs, lower maintenance costs for AFC equipment, increased convenience for customers, and faster boarding. The autoloading feature offered by most programs includes additional advantages:

- Autoloading requires no transit agency staff intervention once the autoloading feature on a card is enabled.
- Autoloading requires no special equipment such as vending machines or countertop POS terminals.
- The transaction occurs as a patron pays a fare, which means the patron never needs to separately add value.
- Autoloading minimizes the possibility that a patron will have an insufficient fare that slows the boarding process.

Managing a POS network is expensive, labor-intensive, and less convenient for patrons. While each smart card program has a different cost structure, managing a POS network typically includes some of the following cost factors:

- A sales commission paid to the retailer
- Installation and monthly servicing fees paid to the implementation contractor (if management of the location is outsourced by a transit agency) or staff costs for similar services (if the transit agency manages the POS network on its own)
- Costs associated with training the retailer's staff
- Procurement and maintenance of equipment

A POS network that can load virtually any type of transit product to a smart card at a POS device in return for cash paid to the merchant offers definite advantages for unbanked customers. Any transit agency considering deployment of a POS network should conduct a comprehensive return-on-investment analysis. The agency will need to understand the real costs of deploying, operating, and maintaining a POS network and identify whether using such a network represents savings over more standard means of serving unbanked transit customers, such as prepaid cards. The transit agency's costs, especially for some of the small to mid-size agencies, could make the cost of deploying a POS network prohibitive. The combination of this cost with the customer convenience inherent in being able to load value onto a smart card may make prepaid cards an appealing option.

4.7 Lessons Learned

As provisioners of public services, transit agencies are committed to serving transit riders regardless of whether the riders have bank accounts. Unbanked transit riders may comprise a significant portion of overall transit ridership. MTC's analysis of Bay Area transit riders in low and middle-income areas found that about 70,000 households in these areas include residents who both ride transit and do not have bank accounts. The Bay Area has about 1.5 million transit boardings per day.

Thus far, transit agencies have invested in POS networks as the primary means for ensuring access to smart cards and fare value for people who choose to use cash and for unbanked persons who cannot utilize autoload features. The implementation and management of the POS networks is challenging, from financial, political, technical and operational perspectives. However, until some alternatives are in place, transit agencies generally cannot operate a smart card-based AFC system without this type of a sales network.

As agencies strive to minimize cash payments by modernizing their legacy fare payment systems, the success of the POS network is essential to offering a modern alternative to cash using riders, for creating public acceptance of the smart card and providing comfort among policy boards.

5 Network-Branded Prepaid Cards

5.1 Prepaid Card Overview

Transit agencies face certain challenges in deploying distribution networks for automatic fare collection at merchant locations. However, they can also enjoy certain advantages, by either autoloading transit media using a credit or debit card as a funding source or charging for fares directly on a credit or debit card.

To extend these advantages further, agencies must reach unbanked customers and convert them from paying with cash. This is an effort in which prepaid card products can play an important role. Prepaid card products can be used just like traditional debit or credit cards, and they have always been an option for transit.

This section provides an overview of prepaid cards, explains the similarities and differences between traditional credit/debit cards and prepaid cards, and describes the prepaid card business model. This information can help transportation agencies understand how they can play an active role as a business partner in promoting an affinity-branded prepaid card program associated with the transportation agency.

5.1.1 Background

Network-branded prepaid card programs evolved to fill a void in serving unbanked individuals. The traditional banking infrastructure—brick and mortar branches and online account acquisition and management—does not work well with a demographic that prefers to conduct financial business with trusted and known parties. The co-branded prepaid card emerged as a way to reach this market.

Marketers or program managers partner with financial institutions to bring prepaid card programs to market and provide marketing expertise in reaching unbanked customers. In many cases, program managers partner with affinity co-branders, who attract the groups with which they are associated as potential cardholders.

Partnering with a program manager could be one way for a transportation agency to participate in a prepaid card program that is associated with the agency and designed to serve the agency's unbanked ridership. To determine how best to integrate prepaid cards into an automatic fare collection strategy, transit agencies must first understand the similarities and differences between traditional bank account cards and network-branded prepaid cards.

5.1.2 How Prepaid Cards Work

A network-branded affinity/co-branded prepaid card is essentially a debit card branded by one of the major payment brands, MasterCard or Visa. A reloadable prepaid card (one in which value can be replenished) is like a debit card tied to a traditional bank deposit account except that the funds used to replenish the card are held in an aggregate account. Funds are held in the aggregate account until the cardholder draws down the available balance. Traditionally, when a card is activated, funds move from the aggregate account into that cardholder's individual account. While regulations governing the issuance of prepaid cards are still evolving, prepaid cards are subject to many of the same bank regulations as traditional bank deposit accounts and electronic funds transfers.

There are important distinctions between a prepaid card and a traditional bank card in three areas:

- Reloading cards
- Acquiring cards
- Card program features

5.1.2.1 Reloading Cards

The expression "reload the card" is often used to refer to the process of funding a card, but in reality, it is the bank account that is being funded. Although additional deposits can be made to a prepaid card's

funding account physically at a branch of the financial institution issuing the card, they generally are not. The unbanked, for various reasons, are reluctant to visit bank branches. Prepaid card accounts can also be funded by transferring funds from another bank account or a credit card, but these methods are rarely used when a card is “purchased” by an unbanked individual.

Because the unbanked are reluctant to do business at banks, reload networks have been developed that allow the cardholder to make cash deposits at retail outlets for a fee ranging from \$3 to \$5. One of the largest and best known of these networks is Green Dot, but there are others (for example, PayXone, EmpaSys, Blackhawk, and InComm). MasterCard has partnered with Green Dot and InComm to offer its proprietary reload product, rePower. Visa offers Ready Link. A fare media collection location could become a reload point for an affinity co-branded card as well as other prepaid cards. However, retail merchants that provide reload services are regulated as money services businesses and must have anti-money laundering (AML) programs and procedures in place.

5.1.2.2 Acquiring Cards

Prepaid cards are also most often “purchased” from cashiers or kiosks at retail locations. Prepaid cards are widely advertised with verbiage stating that no credit check is required and no one is turned down. While no credit check (usually CHEX) is performed on the prospective account holder, purchasers can be turned down. Customer Identification Program (CIP) investigations must be performed, and the person must be checked against the U.S. Treasury Specially Designated National (SDN) Office of Foreign Assets Control (OFAC) list.

5.1.2.3 Program Features

Many prepaid card programs offer cardholders non-traditional features such as long-distance prepaid calling card capability and credit builder features. Financial institutions also offer ancillary products associated with their debit cards. Transportation agencies could develop creative loyalty and rewards incentives on their own affinity/co-branded card programs, such as fare discounts.

One benefit that is commonly offered to prepaid cardholders is the ability to send money using a card-to-card transfer for less cost than what is generally charged by banks and other service providers, such as MoneyGram. This is a \$290-million market, and unbanked consumers often pay high fees to send money to relatives in other countries. Prepaid card programs offer a lower cost alternative, and this feature can be used as an added incentive to persuade consumers to buy the card. This type of feature enhances the marketability of a prepaid card to unbanked consumers.

5.2 The Costs of Being Unbanked

According to a report published in May 2005 by the Federal Reserve Bank of Philadelphia, an unbanked consumer who routinely uses non-bank services (such as check cashers) to cash checks and pay bills pays \$789.00 per year in financial services fees. Unbanked consumers not only pay check-cashing services to cash checks, they also purchase money orders to pay bills or visit a walk-in bill payment location. The cost of a money order varies from a low of 49 cents to as much as \$3. Walk-in bill payment fees range from \$1 to \$4. Often, the “hidden” cost to the unbanked is the time spent waiting in line to cash a check, going to another location to purchase a money order, and conducting all of these transactions when the person has the time and the funds.

In a recent article in the *Wall Street Journal*⁸, former President Bill Clinton and California Governor Arnold Schwarzenegger write of a public and private sector initiative to help the unbanked consumer. The article cites a number of statistics related to the cost of being unbanked, including “\$8 billion spent annually by unbanked consumers at check-cashing outlets, payday lenders and pawnshops for basic financial services.” The article states that “over a lifetime, the average full-time, unbanked worker will spend more than \$40,000 just to turn his or her salary into cash.” The cost of being unbanked includes the need for the unbanked consumer to have “access to the right products at the right terms, and the support they need to make good, responsible financial decisions.”

⁸ Wall Street Journal, *Beyond Payday Loans*, January 24, 2008

The fundamental attributes of prepaid cards make them good solutions for the unbanked consumer: no minimum balance requirement, no credit check or other minimum financial threshold, worldwide acceptance, and pay-as-you-go fees. Many of the more sophisticated cards on the market offer functionality such as direct deposit, card-to-card transfers, text message alerts, and savings accounts linked to the card.

One significant benefit of prepaid cards is that they allow an unbanked cardholder to avoid the costs incurred to cash a check. There are thousands of check-cashing outlets in the United States, used by more than 20 million Americans annually. A total of \$60 billion in checks are cashed each year at such locations. Consumers who acquire a prepaid card can have paychecks or other benefit checks deposited directly to the card and save the expense of using check cashers.

5.3 Economics of Prepaid Cards

The pricing model for a prepaid card is significantly different than the model for traditional debit and credit cards. Because the pricing model is so different, using prepaid cards can be a challenge to the transportation agency that wants to offer low- or no-cost alternatives to unbanked riders without having to subsidize the costs.

While pricing varies widely, prepaid card programs generally charge cardholders more fees than the traditional bank deposit account with a debit card. Table 3 lists the fee schedules for nine different popular prepaid cards. The fees listed were obtained through each card's website and are accurate as of February 14, 2008.

Table 3. Fee Schedules for Nine Prepaid Cards

Card Name	Card Enrollment and Maintenance Fees			Card Usage Fees - Purchases, Declines and Returns					Card Usage Fees - Loads		Card Account Services	
	Issuance	Monthly Maintenance	Annual	Balance Check	Transaction - Signature	Transaction - PIN	ATM Withdrawal	ATM Balance Inquiry	Cash Reload	Reload - Direct Deposit	Customer Service Call	Paper Statement
ReadyCARD	Free	\$4.95	\$0.00	Free	\$0.25	\$0.25	\$1.95	\$0.95	\$1.00	Free	Free	\$3.00
Green Dot Card	\$9.95	\$4.95	\$0.00	\$1.00	Free	Free	\$2.50	\$0.50	\$4.95	Free	Free	\$0-\$25
Netspend Card	\$7.95	\$9.95	\$0.00	\$0.50	\$1.00	\$2.00	\$2.00	\$0.50	\$3.50-\$4.95	Free	\$1.00	\$5.95
Rush Card	\$19.95	\$0.00	\$0.00	Free	\$1.00	\$1.00	\$1.95	\$0.50	\$3.95	Free	Free	\$1.00
Wal-Mart MoneyCard	\$8.94	\$4.94	\$0.00	\$0-\$2.00	Free	Free	\$1.95	\$0.75	\$4.94	Free	\$2.00	\$2.00
Western Union Card	\$9.95	\$4.95	\$0.00	Free	\$1.00	\$1.00	\$2.00	\$0-\$1.50	\$3.95	Free	\$2.00	\$2.00
Wired Plastic Card	\$9.95	\$3.95	\$39.95	Free	Free	\$0.95	\$1.95	\$0.95	\$4.00-\$5.00	Free	\$0.95	\$2.95
AccountNow	\$9.95	\$4.95	\$0.00	\$1.00	Free	\$1.00	\$2.00	\$1.00	\$3.50	\$3.99	\$2.00	\$2.95
H&R Block	Free	\$2.50	\$0.00	Free	Free	Free	\$1.85	\$1.00	\$0-\$4.95	Free	\$2.00	\$1.00

Banked consumers are often surprised by the fee structure of prepaid cards, which may charge not only a monthly maintenance fee, but also transaction fees for all transactions, including declined transaction attempts. The fees are set by the program manager and the affinity/co-brand partner (e.g., the transportation agency), but are subject to the approval of the sponsoring financial institution.

Although some card programs do take advantage of the consumer by charging excessive fees, the fee structure for network-branded prepaid cards is justified by several important distinctions between a prepaid deposit account and a traditional bank account:

- Prepaid cardholders generally maintain very small balances—typically a few hundred dollars at most. Therefore, the earnings on deposits (float), an important source of revenue, are extremely low. Prepaid cardholders spend almost all of the funds that they deposit each month.
- Prepaid cardholders do not exhibit a high degree of loyalty to the card program, and the abandonment rate can be quite high. This lack of loyalty can be mitigated somewhat by giving the customer a compelling reason to keep the card, such as use for another purpose (for example, transit) or an affinity relationship (for example, with a celebrity). Because there is a cost for manufacturing and issuing the card, it is important to try to keep the abandonment rate as low as possible.
- Fraud rates can be high, particularly on signature-based transactions. For example, stolen credit or debit cards or checking account numbers are used by criminals to purchase prepaid cards. Cards without sufficient balances are used to make purchases under floor limits without merchant authorization. Prepaid card programs must be monitored vigilantly to identify and control fraud.
- Prepaid card programs carry a risk for potential money-laundering activity. In addition to designing the program with transaction controls, the cards must be monitored closely.
- The prepaid card is generally the only product that the cardholders have. The issuer has limited opportunities to cross-sell opportunities to enhance revenues.

It is also important to compare prepaid card fees with the types and amounts of fees that an unbanked individual may be paying today. For example, as noted in Section 5.2, the unbanked individual is likely to be paying multiple check-cashing fees and money order fees each month. In many cases, when compared side-by-side, prepaid card fees will be much more attractive on a monthly basis for replacing these other fees.

5.4 The Partnership Business Model for Prepaid Cards

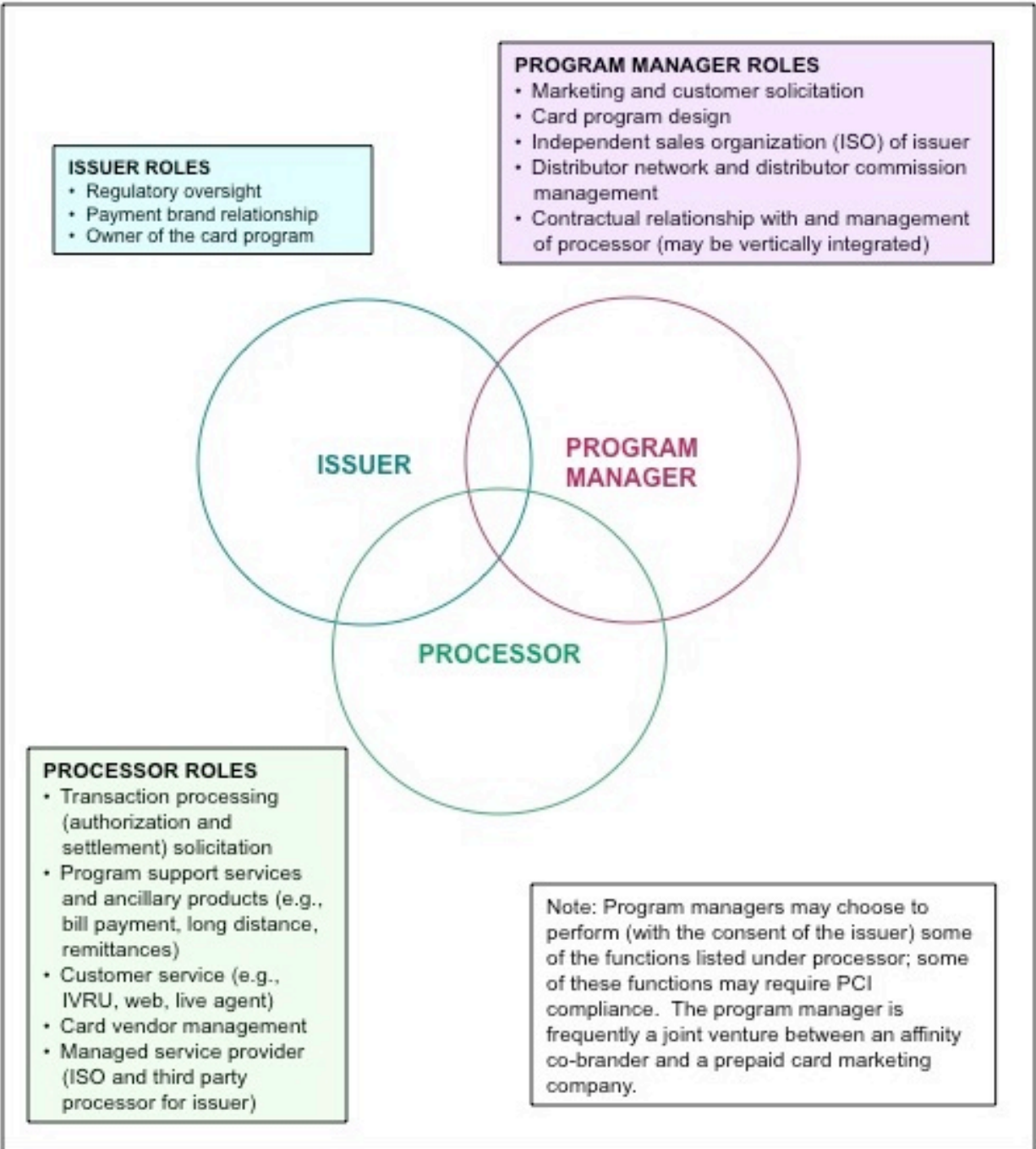
The business model that is most commonly used to capture the unbanked segment of the population is the program manager affinity/co-branded card model. This model can easily be adopted by transit agencies to market a prepaid card specifically associated with the agency.

For transit agencies, this model would involve multiple partners. First, an independent organization that is knowledgeable and experienced in marketing to this market would develop the card program and marketing strategy. Because of regulatory and payment brand restrictions, however, these organizations cannot actually issue the cards. A financial institution must therefore be involved as the issuer. Another partner might also be involved—an affinity co-brander, such as a transit agency, sports team, or celebrity. The roles of all of the partners may overlap.

Figure 1 illustrates the program manager model, which is the most common and has been the most successful model used to issue prepaid card programs to the unbanked.

Until recently, program managers have been third parties who enter into contractual arrangements with the issuer. This arrangement continues to be the case with mid-tier banks who have made a business of sponsoring one or more program managers. However, major banks have begun to recognize the value that program managers contribute and have begun acquiring established program manager companies. CapitalOne recently announced an equity investment in NetSpend, and Citibank has purchased eCount. These acquisitions demonstrate that the major banks recognize the enormous revenue potential of prepaid cards marketed to the unbanked.

Figure 1: The Program Manager Model



5.5 Program Manager Role

The organization that performs as a program manager provides expertise in marketing to the target market and is responsible for defining the product.

The program manager has the following responsibilities:

- Manages the prepaid card program
- Defines the features and develops the marketing and business strategy
- Develops and manages the distributor network

- Sets the pricing and cardholder fees for the product
- Creates the brand image
- Maintains the relationship with third-party service providers such as the processor/platform provider and, either directly or indirectly through the platform provider, the customer call center provider and card vendor

Program managers can also form alliances with strategic business partners who may act as affinity co-branders, distributor channels, or both. (One example of this model would be a joint venture arrangement in which a program manager joins with an Hispanic grocery store chain that wishes to have a card program with its brand image.) All partners in this type of arrangement must be approved by the issuing financial institution and registered with the institution as Member Service Providers.

5.6 Issuer Role

The program manager enters into a contractual relationship with an issuing financial institution. Because there are currently a relatively small number of issuers in comparison to the many program managers who need a bank sponsor, the issuer principally dictates the terms of the financial arrangement. It is not unusual for the issuer to hold the program manager responsible for all costs and risks (e.g., fraud losses) associated with the card program.

In return, the program manager receives all cardholder revenues. The issuer generally retains the earnings on deposits (float) and receives compensation from the program manager, usually a “per transaction” fee or an “account on file” fee. The financial arrangement between the issuer and the program manager is negotiated and varies among issuers.

The issuer is the owner of the prepaid card program. Regulators and consumers hold the issuer accountable for any issues or problems with the program. The issuer provides oversight of the program that ensures compliance with all banking regulations and payment brand rules. The issuer protects its reputation with consumers by reviewing and approving the cardholder fees, the marketing strategy, and the program materials. The issuer, as a member, liaises with the payment brands.

5.7 Third-Party Processors

Unless the program manager organization is vertically integrated and owns its own processor, the program manager contracts with a third-party processor and provider of prepaid platform support services. Many companies offer end-to-end prepaid card program support services: card fulfillment, financial transaction processing, customer web interface, and customer service. These providers are both certified by the issuing bank and registered with the payment brands. Processors must be compliant with Payment Card Industry (PCI) standards.

5.8 Compliance Environment for Reloadable Prepaid Cards

The compliance environment in which prepaid cards operate is evolving, and it can be difficult to identify definitively which of the regulations that govern traditional deposit accounts apply to prepaid cards. Some issuers take a very conservative approach and treat prepaid card accounts like deposit accounts, while others make a clear distinction between the two types of accounts. Guidance from the regulatory agencies may or may not explicitly single out prepaid products.

When developing a prepaid card program, the following considerations must be taken into account with regards to compliance.

- “Purchasing” a reloadable card requires the establishment of an account that, for the purposes of the U.S. Patriot Act, is defined as “a formal banking relationship established to provide or engage in services, dealings, or other financial transactions, including a deposit account, a transaction or asset account, a credit account, or other extension of credit.” Compliance with the financial institution’s Customer Identification Program (CIP) policy and procedures is required.

- The name of the account owner must be checked against the OFAC SDN list within a reasonable period after account is opened and must be rechecked periodically.
- Reloadable cards are not gift cards. One individual cannot open an account or “purchase” a card in the name of another individual unless the purchasing individual is legally responsible for the other individual (for example, a parent/guardian relationship). In most cases, financial institutions do not open accounts for minors. The institution may choose to do so, but it gives up the right to legal recourse if it chooses to permit minors to open accounts. This can present a challenge for transit agencies in converting their younger riders from cash to a prepaid card for fare collection.
- Regulation E, Electronic Funds Transfer Act, establishes the basic rights, liabilities, and responsibilities of consumers who use electronic fund transfer services and of financial institutions that offer these services. The primary objective of the act is to protect individual consumers engaging in electronic fund transfers. The only type of prepaid card product that is explicitly addressed in Regulation E is the payroll card.

In addition to the considerations described above, issuers and program managers must consider other regulations that could possibly apply to prepaid cards in the same way as to other deposit accounts, such as Truth in Savings, funds availability, escheatment, disclosures, and privacy notices.

6 Approaches to Implementing the Prepaid Card Partnership Model for Transit

Transit agencies can choose from among several approaches to implement the prepaid card partnership model described in Section 5.4.

One approach would be for the transit agency (in partnership with the issuer) to implement a multi-application co-branded prepaid card with a chip which contains both the transportation application and the financial payment account. Such a card would be the prepaid equivalent of the Barclaycard OnePulse card which combines the Transport for London Oyster transit application with the Visa PayWave credit/debit application. This approach works well for transit agencies that have readers dedicated to fare collection, rather than contactless credit/debit card terminals at the point of entry. The cash reload for the transit application could be independent of the cash reload for the financial payment card and thus priced differently. Functionality could also be implemented to enable card-to-transit funds transfers. Issuing such a card is expensive, and a business case would have to be made that justifies the added costs of personalizing a card with two separate applications.

Another approach is for the transit agency to install terminals that deduct the fare from a bank account that includes bank-issued reloadable prepaid cards. In this case, the transit agency is acting as a merchant and follows the same rules as any retail merchant, including compliance with PCI standards. Unbanked consumers would use their own prepaid cards to pay for their fare. By promoting existing prepaid card programs, transit agencies have the opportunity to increase adoption and offer a convenient payment option. Transit agencies do need to consider, however, the prepaid card fees and the impact the fees may have on consumers' decisions to purchase cards.

One approach for the transit agencies to address the issue of cardholder fees would be to offer a competing transit agency co-branded prepaid card program, with the transit agency performing the program manager role. The transit agency could set the cardholder fees with the approval of the issuer. Transit agencies could establish their own retail load points on an established reload network and set their own reload fees for their card brand or simply not charge for reloads at all. It is very likely that in this scenario, the transit agency would subsidize the costs of issuing and maintaining the card. On the other hand, the agency would gain interchange revenues from transactions performed on the card. A business case would have to be developed to determine the appropriate level of subsidy.

7 Summary and Conclusions

The unbanked market can be defined in many ways, but for transit agencies, the focus should be on those riders who lack a payment instrument. One convenient way to understand this is by measuring the number and percent of riders who have a debit card. Using this definition, there remains a sizable group of riders who will need to use cash to pay for transit. Several agencies and sources exist to study the unbanked market. Even the casual observer quickly concludes that this is a varied market with considerable segmentation on socioeconomic groups. Transit agencies would be well served by using the sources indicated in this white paper to understand the unbanked in their markets.

Reaching the unbanked is important regardless of the type of smart card program being introduced. The costs of providing sufficient places to obtain, load and reload a transit smart card are significantly higher among the population of unbanked than for those with “plastic” cards. Programs to increase the number of card-carrying riders will certainly lower costs. Obviously, agencies that are seeking to accept bank cards directly need to be sure that riders, and particularly unbanked riders, can easily obtain contactless bank cards.

Fortunately, there are a number of channels that can be used to reach the unbanked consumer. The emergence of the prepaid card market has resulted in a number of companies that are focused on providing payment cards to the unbanked. These products meet the needs of consumers in this category as they provide significant benefits to their users. These cards offer lower costs for financial services when compared to alternatives, the convenience of being able to use cards at the point of sale or on the Internet, and the benefit of not having to use money orders or other forms of payment that carry the stigma of poverty.

Prepaid programs reach consumers through several channels: government programs, employer programs and retail programs. Transit agencies can work to develop strategies that utilize these channels to supplement other fare media sales programs to reach essentially all potential riders. Agencies can also become “program managers” in their own right and issue private label cards in conjunction with a bank and a processor. Much like issuing a transit smart card, these cards can fill any remaining gaps in ensuring all patrons have access to cards and reload networks, as these use the bank card system but not the brand.

When evaluating which approach works best to reach its unbanked ridership – whether by autoloading value to a transit smart card from a registered magnetic stripe prepaid card, by directly accepting contactless prepaid cards, or by accepting cash – the transit agency must consider multiple factors. Ultimately, it should adopt the approach that best meets the needs of the agency and its customers in terms of cost, ease of deployment, accessibility, and convenience.

As illustrated in the case studies in Section 4, the process of converting from cash and/or a legacy system to automated fare collection should include fare policy considerations. For example, riders using cash pay nothing for fare media, but they lose convenience as they must have enough cash and usually the exact change to buy a ride. Additionally, agency fare policies are often established with the goal of encouraging the rider to purchase period passes, which offer lower per-ride costs than a single ride fare. Cash may not be the best choice for a low income commuter.

Both autoloading of smart card fare media and direct acceptance of contactless payment cards address these points but also come with new costs and operational and policy considerations. These factors must be balanced when determining the best approach to a complete system of automated fare media distribution.

While prepaid cards can support agencies immediately by allowing patrons to purchase transit fare media through ticket vending locations, it is likely to take some time for issuers to accept the cost of adding a contactless chip to the card. This migration is likely to parallel the introduction of chips on credit/debit cards. Agencies can support this by working with banks and state agencies in their area to gain support for conversion at the time they implement programs to accept bank cards.

It is clear that with appropriate thought and planning, agencies can tap into the new channels for prepaid cards to help reach the unbanked and lower costs for fare collection systems accordingly.

8 Publication Acknowledgements

This report was developed by the Smart Card Alliance Transportation Council to provide an educational overview of the various methods available for providing and re-loading fare media to individuals who do not have credit or debit cards, nor checking or savings accounts, and generally lack relationships with traditional banking institutions. Publication of this document by the Smart Card Alliance does not imply the endorsement of any of the member organizations of the Alliance.

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About the Smart Card Alliance Transportation Council

The Transportation Council is one of several Smart Card Alliance Technology and Industry Councils, focused groups within the overall structure of the Alliance. These councils have been created to foster increased industry collaboration within a specified industry or market segment and produce tangible results, speeding smart card adoption and industry growth.

The Transportation Council is focused on promoting the adoption of interoperable contactless smart card payment systems for transit and other transportation services. Formed in association with the American Public Transportation Association (APTA), the Council is engaged in projects that support applications of smart card use. The overall goal of the Transportation Council is to help accelerate the deployment of standards-based smart card payment programs within the transportation industry.

The Transportation Council includes participants from across the smart card and transportation industry and is managed by a steering committee that includes a broad spectrum of industry leaders.

Transportation Council participation is open to any Smart Card Alliance member who wishes to contribute to the Council projects. Additional information about the Transportation Council can be found at http://www.smartcardalliance.org/about_alliance/councils_tc.cfm.

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9 *References and Resources*

Brookings Institute, <http://www.brookings.edu>

Center for Financial Services Innovation, <http://www.cfsinnovation.com>

Center on Budget and Policy Priorities, <http://www.cbpp.org>

Federal Reserve Bank of Philadelphia, <http://www.philadelphiafed.org/econ>

Network Branded Prepaid Card Association, <http://www.nbpca.com>

Smart Card Alliance Transportation Council Resources,
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