

Impacts of Transit Benefits Programs on Transit Agency Ridership, Revenues, and Costs

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Abstract

The federal tax code allows employers to provide tax-free transit benefits to employees. Although transit benefits programs are commonly promoted as having advantages for transit agencies, such as increasing transit ridership and transit agency revenues, their effects and effectiveness are not well understood and need to be better assessed. This research is designed to help transit agencies, policy-makers, and organizations that promote transit benefits better understand what effects they might expect from a transit benefits program and how to quantify these effects. Overall, the research found that transit benefits programs can be effective for transit agencies attempting to meet various goals, in terms of increasing ridership and revenues, and decreasing costs. However, it is critical to set realistic expectations and conduct valid evaluations to assess these effects.

Introduction

U.S. tax law allows employers to offer employees tax-free transit benefits (U.S. Department of the Treasury 2004). Regardless of how the benefits are offered (employer-paid, employee-paid, or a combination of the two), both the employer and the employee enjoy tax advantages since neither pays federal payroll or income taxes on the benefit. Although the cost savings from the benefits are relatively

straightforward, their impacts on transit ridership are not as well understood, and little rigorous research has been conducted on the topic at a national scale. While it makes intuitive sense that transit benefits programs should increase transit use, it is possible that these programs primarily support existing transit riders.

To induce employers to offer transit benefits, many transit agencies have established programs that allow employers to purchase various pass types and vouchers at a discount, in bulk, or using other types of incentives. These programs make it easy for employers to offer transit benefits, as well as provide the transit or other sponsoring agency an opportunity to “brand” their program and increase their name recognition. In addition, tax law allows employers to purchase fare media on a cash reimbursement basis if no pass or voucher is available in the region, giving the agency another incentive to create a transit benefits program.

This research focuses on how transit benefits programs affect transit agencies in terms of ridership, revenues, and costs. The following questions provide a rough outline of the topics covered in the article:

- How much systemwide ridership and revenues come from transit benefits programs? The share of overall ridership and revenues that come from employer programs affects the extent to which these programs can help retain and attract riders and yield cost savings to the transit agency.
- Do transit benefits programs increase transit ridership and revenues? Research on the impacts of transit benefits programs on employee travel behavior suggests that such efforts can increase transit ridership. This article explores the extent to which transit ridership and revenues increase, and how program design affects revenues per rider.
- How much do transit benefits programs cost to administer? These costs include staff time for employer outreach as well as marketing and other fees.
- Are there differences in revenue, ridership, or cost characteristics between different program types? If different types of programs (e.g., universal passes, monthly passes) generate different levels of revenues per rider and have different costs, it is useful for transit agencies to understand these effects so that they can offer the program options that best meet their goals.

Data Sources and Approach

The results summarized in this section are drawn from interviews that the research team conducted in 2003 with representatives from the following seven transit agencies. These agencies were selected to participate because they provide a range of mode options and program types, cover various geographic areas,¹ and have differing ridership levels:

- Washington Metropolitan Area Transit Authority (WMATA), Washington, D.C.
- Metropolitan Atlanta Rapid Transit Authority (MARTA), Atlanta, Georgia
- King County Metro, Seattle, Washington
- Regional Transportation District (RTD), Denver, Colorado
- Metro Transit, Minneapolis/St. Paul, Minnesota
- Santa Clara Valley Transportation Authority (VTA), San Jose, California
- Valley Metro, Phoenix, Arizona

As the focus of the research was ridership, revenues, and costs to transit agencies, and the differences between different types of pass programs, we studied only agencies that operate their own program pass or voucher programs. A subset of voucher programs are operated by private third-party providers, sometimes as the sole program, sometimes in conjunction with public agency programs. However, the research team chose not to include regions where these were the only programs, as they represent only voucher and not pass programs.

The research team conducted the interviews using an interview guide, asking follow-up or clarifying questions when necessary. In some cases, the persons interviewed sent additional information following the interview. Table 1 provides background information on the seven transit agencies. As part of the project, the research team also collected ridership surveys and surveys pertaining to commuter benefits where available.

Types of Transit Benefits Programs

Of the seven transit agencies interviewed, four had multiple programs. Types of employer programs offered included monthly passes, stored value cards, universal passes, and vouchers (which can be traded in for transit fare media or used on van-pools). Generally these situations have evolved in response to employer demands and available technology. As Table 1 shows, three of the seven agencies have only one employer program, and King County Metro has seven.

Table 1. Summary Characteristics of Transit Agencies and their Program Types (2003)

<i>Transit Agency Name</i>	<i>Location</i>	<i>Modes</i>	<i>Service Area Population</i>	<i>Average Weekday Ridership</i>	<i>Annual Fare Revenues</i>	<i>Program Name</i>	<i>Program Type</i>	<i>Year Began</i>
WMATA	Washington, DC	Heavy rail, bus	1,300,000	1,350,000	\$384,000,000	Metrochek	Stored value card/Voucher	1993
						Smart Benefits	Stored value card/Electronic voucher	2000
MARTA	Atlanta, GA	Heavy rail, bus	1,300,000	460,000	\$93,000,000	MARTA Partnership Program	Monthly pass with volume discount	1992
						Flex Pass	Universal pass	1993
King County Metro	Seattle, WA	Bus only	1,800,000	330,000	\$76,000,000	UPass	Universal pass	1990
						GoPass	Universal pass	1997
						Consignment Retail Pass	Monthly pass	1977
						Phone/Mail Program	Monthly pass	N/A
						Commuter Bonus Voucher	Voucher	1995
RTD	Denver, CO	Light rail, bus	2,400,000	270,000	\$51,000,000	Bonus Plus Vouchers	Rewards program	1996
						Eco Pass	Universal pass	1991
Metro Transit	Minneapolis/St. Paul, MN	Bus only	1,800,000	220,000	\$60,000,000	Metro Pass	Modified universal pass	1998
						TransitWorks!	Discounted pass	N/A
VTA	San Jose, CA	Light rail, bus	1,700,000	150,000	\$33,000,000	Eco Pass	Universal pass	N/A
						Bus Card Plus	"Credit card" for bus	1991
Valley Metro	Phoenix, AZ	Bus only	2,000,000	140,000	\$27,000,000	Private Outlet	Monthly pass	N/A

Note: All figures for service area population, average weekday ridership, and annual farebox revenues are from the National Transit Database, 2003. Population rounded to nearest 100,000; ridership rounded to nearest 10,000; revenues rounded to nearest \$1 million. The service area is reported by the transit agency based on their service provision; this may be substantially less than the urbanized area.

Ridership Impacts

Among the agencies interviewed, employer programs contributed between 5 and 25 percent of total transit riders, and agencies with trend data available have shown increases in employee participation over time. However, it is difficult to determine if the increases in employee participation have led to increased ridership systemwide; in two cases the answer is a qualified yes, while in two others the effects are unclear.

Employee Participation

Employees participating in transit benefits programs make up a substantial portion of total transit ridership for many transit agencies. The agencies interviewed estimated that the percentage of all riders using employer transit benefits programs was between 5 and 25 percent. The highest percentages of transit riders who participate in employer-sponsored transit benefits programs were at WMATA, Valley Metro, and King County Metro. WMATA attracts a large number of federal employees who receive full employer-paid benefits. Valley Metro is the smallest of the seven agencies in terms of total systemwide ridership, but has the largest number of staff working in employer outreach (including rideshare programs), so the program's success may stem in part from this intensive effort.

Table 2 provides ridership figures for each program and the percent of total system riders using transit benefits.

Employee Participation Trends

Employee participation in transit benefits programs has been increasing for nearly all of the agencies that provided historical participation trends. Even where *employer* participation has declined or remained relatively unchanged, *employee* participation has consistently increased. Five agencies had trend information on the number of employees participating in transit benefits programs, which is graphed in Figure 1.² Three of these are universal pass programs, which track the number of employees at participating employers. While generally not all universal pass recipients ride transit, the figures assume that all of King County's UPass program employee participants ride transit, since students, faculty, and staff are allowed to opt out of the program.

Table 2. Employee Participation in Transit Benefits Programs (as of 2003)

<i>Transit Agency</i>	<i>Program Name</i>	<i>Number of Participating Employees</i>	<i>% All Riders Using Employer Passes^a</i>
WMATA	Metrochek	189,067	N/A
	Smart Benefits	18,933	N/A
	Total	208,000	25%
MARTA	Partnership Program	30,700	<10%
King County Metro	Flex Pass	38,000 to 40,000 (est.)	6% to 8%
	UPass and GoPass	48,600 ^b	>10%
	Retail programs	10,000 to 14,000 (est.)	3% ^c
	Voucher programs	N/A	N/A
	Total	95,000 to 103,000	20% to 22%
RTD	Eco Pass	52,700 (est.) ^d	12 to 21% ^e
Metro Transit	Metropass	15,000	7%
	TransitWorks!	12,000	5% (est.)
	Total	27,000	12% (est.)
VTA	Eco Pass	42,800 (est.) ^f	5%
Valley Metro	Bus Card Plus	12,189	11%
	Private Outlet	12,000 (est.)	11%
	Total	Over 24,000	22%

a. Estimated by transit agency staff, unless otherwise noted.

b. UPass ridership is lower during summer quarter; approximately 26,000.

c. Based on King County Metro staff estimates for other programs.

d. Estimated ridership based on survey figures showing that 67 percent of eligible employees participate (ICF et al. 2005, Appendix C).

e. 14 percent of bus riders, 12 percent of light rail riders, and 21 percent of skyRide riders. No numbers were given, so an overall total could not be estimated.

f. Estimated ridership based on survey figures showing that 36.4 percent of eligible employees participate (ICF et al. 2005, Appendix C).

N/A = not available.

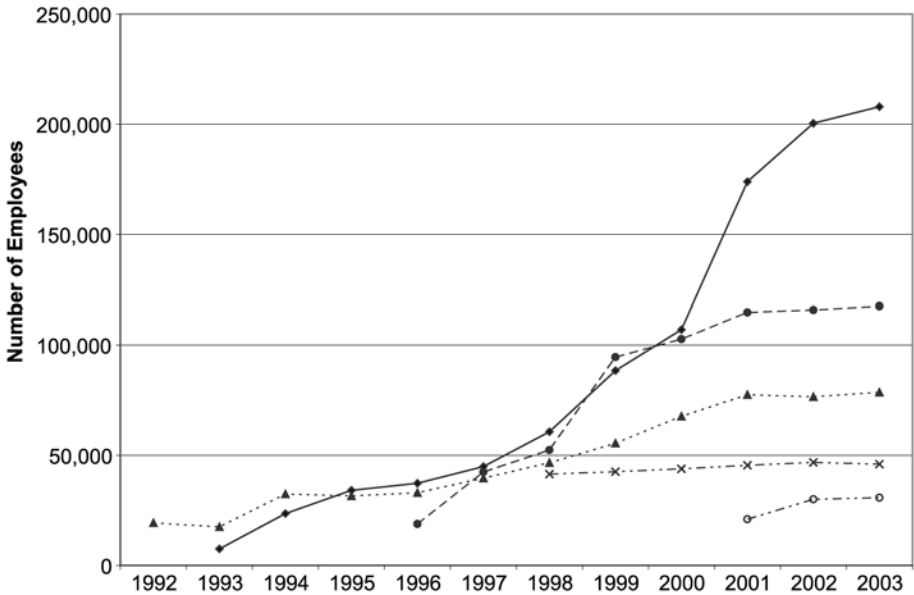


Figure 1. Trends in Employee Participation at Five Transit Benefits Programs

Most striking is the large jump in participation in WMATA’s transit benefits program from 2000 to 2001. Two factors contributing to this increase were the increase in the tax-free limit from \$65 to \$100 and implementation of an Executive Order that requires federal government agencies to fully pay for transit benefits up to the tax-free limit for all interested executive branch employees in the Washington, D.C. region. VTA, MARTA, and RTD have shown much steadier increases in employee participation over time. VTA and MARTA reported being affected by economic downturns, and all three had fare increases (or in the case of MARTA, a reduction in the employer discount that made employers’ costs higher). The strong employee participation figures seem to indicate that the programs are fairly resilient in the face of financial obstacles for employers. Participation in King County’s UPass has been steady, but the program only serves the University of Washington, and so it may have reached its saturation point among potential recipients.

Contributions of Transit Benefit Riders to Overall Ridership Growth

It is difficult to develop quantitative estimates of the extent to which the transit benefits programs have affected overall transit ridership at agencies over time

because it is impossible to state what ridership trends would have been if such programs were not in place. However, based on data on total transit system ridership from the National Transit Database (NTD) and available survey data on the share of transit benefits recipients who are new to transit or who increased their transit use, the research team developed estimates of the contribution of the transit benefits program to total system ridership. Estimates for these agencies suggest that the transit benefits programs may have been responsible for a substantial—perhaps 30 or 40 percent—portion of ridership growth between 1997 and 2001 (the most recent year for NTD data on ridership at the time this research was conducted) at two agencies. At the other two agencies, the results were mixed. Limitations in survey data (i.e., small sample sizes, low employee response rates, surveys that were conducted many years in the past), however, create a high degree of uncertainty in these estimates.

For WMATA, a noticeable increase in overall transit ridership—118 percent—occurred in 2001, which corresponds with the steep increase in the number of employees participating in the transit benefits program. From 1997 to 2001, the number of weekday rides on WMATA services increased by nearly 187,000, while the number of transit benefits participants increased by 127,100.³ Assuming that approximately one-quarter of transit benefits recipients in the Washington, D.C. area are new riders (General Accounting Office 1993), and that the average recipient might take two transit trips per day, this suggests that perhaps *up to* about 60,000 new transit riders over this period were due to the transit benefits program. If this were the case, the transit benefits program may have accounted for approximately 34 percent of the ridership growth. However, the survey data may not reflect the actual ridership patterns of transit benefits recipients during the 1997 to 2001 period. A more recent State of the Commute survey (LDA Consulting et al. 2002) covering the Washington, D.C. region found that approximately 48 percent of people who use Metrochek say that they “were influenced by” it, which could mean a number of things, from riding transit more often to continuing to stay on transit (not switching to driving alone); this survey also includes non-WMATA riders (e.g., riders on suburban bus services). It *may* indicate that with more than \$100 per month available now, an even higher portion of Metrochek users are new riders or more frequent riders.

At RTD, the number of employees participating in the Eco Pass program increased from 1997 to 2001 by approximately 25,400, while overall ridership during that period increased by 29,600 rides per day. An ongoing RTD survey of employees

at employers participating in the Eco Pass program (ICF et al. 2005, Appendix C) suggests that 24 percent of all recipients are new transit riders. As a result, the employer program may have accounted for about 6,000 new riders per day, or assuming two transit trips per day, *up to* nearly 42 percent of the overall growth.

The gains at VTA *may* have contributed to an increase in ridership. Between 1997 and 2001, the number of weekday rides on VTA services increased by approximately 13,000 trips, while the number of Eco Pass participants increased by approximately 26,400.⁴ A VTA survey of employees at six participating employers (ICF et al. 2005, Appendix C) found that about 61 percent of Eco Pass recipients are new transit riders. As a result, the employer program *may* have accounted for approximately 16,000 new riders. However, several factors lend some uncertainty to this estimate: the small sample size of the 1997 survey (only six employers), the expansion of both light rail and bus service from 1997 to 2001, and the strong employment rate during that period. So while the Eco Pass program may be one of several factors responsible for the overall growth in VTA ridership, it is difficult to say which factors were most important.

For MARTA, program participation rose from 21,000 to 30,700 between 2001 and 2003, while total agency ridership declined during the same period, from 530,450 to 461,000 daily weekday riders. Survey data collected in 2003 (ICF et al. 2005, Appendix C) showed that 48 percent of program participants were new transit riders. Given that the number of participants increased by 9,700, this implies approximately 4,600 new riders in two years. However, clearly this increase did not overcome a larger decline in ridership.

Revenue Impacts

Total revenues associated with employer sales can be a significant portion of total transit agency revenues. As shown in Table 3, the percentage of total agency revenues associated with employer sales for the seven agencies ranges from 5 to about 40 percent of total agency revenues. Metro Transit and King County Metro report the highest shares of revenues from employer sales, followed by WMATA. These are significant shares of total revenues, which may have implications in terms of the efficiency of distributing fare media and reducing the costs of individual transactions. Overall, revenues tend to be related to the size of the transit agency and costs of fare media.

Table 3. Estimated Revenues Associated with Transit Benefits Programs (as of 2003)

<i>Transit Agency</i>	<i>Program Name</i>	<i>Annual Revenue in Smillion</i>	<i>% Revenue from Program</i>	<i>Agency's Perception of Impact on Revenues</i>
WMATA	Metrochek	\$177.0	30%	Increase
	Smart Benefits	\$13.8		
	Total	\$190.8	30%	
MARTA	Partnership Program	\$20.0	11% (est) ^b	Increase
King County Metro	Flex Pass	\$6 to \$7	8 to 10%	Increase
	UPass and GoPass	\$10.7	14%	
	Retail programs	\$9 to \$12	13 to 17%	
	Voucher programs	\$6.7 ^a	N/A	
	Total	\$25.7 to \$29.7 ^a	35 to 41%	
RTD	Eco Pass	\$8.1	17%	Unclear
Metro Transit	Metropass	\$15.1	25%	Neutral
	TransitWorks!	\$10.0	17% (est)	
	Total	\$25.1	42% (est)	
VTA	Eco Pass	\$1.7	5%	Neutral
Valley Metro ^b	Bus Card Plus	\$3.6	N/A	Increase

Notes:

- a. Commuter Bonus Voucher not included in total because they may be spent on other fare media, which could result in double counting.
 - b. Only the Bus Card Plus program is included here because information was not available for the Private Outlet program.
- N/A = not available.

Four of the seven transit agencies reported that they believe their transit benefits programs increase revenues, while three of the agencies felt that the programs have a neutral or unclear impact. The agencies reporting neutral or unclear impacts are all agencies with universal passes, where the cost of the passes are discounted to employers and often are designed so that the employer does not pay more than it would to cover existing transit riders. In contrast, to the extent that a monthly pass program increases the number of employees using transit, it should result in increased revenues. For stored value card programs, an increase in the number of employees using transit or an increase in the frequency of transit use by existing riders should result in increase revenues.

For all of the programs with data on revenues (either provided by the transit agency or developed by the research team based on data from the National Transit Database or the transit agencies), the estimated share of transit agency revenues from the transit benefits program equaled or exceeded the share of system ridership from the program. These figures suggest that employer programs are not losing potential revenue.

Cost Impacts

Cost implications of transit benefits programs for transit agencies are not well understood due to lack of data. Transit agencies were able to provide only general data on the costs of running their programs. Staff time tends to be the largest component of these costs, and staff needs vary from one full-time equivalent (FTE) to almost seven, largely depending on program type. Transit benefits programs may generate some cost savings for the transit agencies but these could not be quantified due to the lack of data collected by the transit agencies.

The costs associated with operating and marketing a transit benefits program for employers were estimated based on the transit agencies' projections of staff time and other resources, such as marketing and fulfillment budgets. Table 4 summarizes these figures for the seven transit agencies. It also estimates costs as a portion of revenues from the program, and annual costs per rider, which ideally could be used to assess how efficient these programs are in comparison to other marketing efforts. Given limited data, however, such comparisons could not be made. Each of the major components of agency costs associated with transit benefits program are described below.

Staff Time

Staff time differed greatly among programs, from 1 FTE at MARTA to 5.2 to 6.6 at King County Metro (staff requirements change throughout the year). The number of staff is not correlated with ridership or revenues; rather, the number of staff required to administer a single program appears to be tied most directly to program type. With one exception (the King County UPass program), regardless of ridership or revenues, universal pass programs seem to require a minimum of 2.5 staff. The RTD Eco Pass program has 3.6 FTEs, but handles far more employers (more than 1,000, while the other universal pass programs enroll several hundred employers). Presumably this is because the complexity of universal pass programs (compared with monthly pass programs) requires more time with employers, surveys, and more frequent repricing. Less complex programs seem to require fewer staff. With the exception of Valley Metro, monthly pass programs used 1 to 2 FTEs.

Marketing Budgets

Marketing budgets also covered a wide range, from no separate budget to \$300,000; some agencies did not have a marketing budget for transit benefits broken out separately from general transit marketing. The power of a transit agency's marketing budget can be stretched depending on other partners in the region. All

Table 4. Estimated Costs Associated with Transit Benefits Programs (as of 2003)

<i>Transit Agency</i>	<i>Program Name</i>	<i>Staff Time (FTE)</i>	<i>Marketing Budget</i>	<i>Other Costs</i>	<i>Total Estimated Costs^a</i>	<i>Costs as % of Revenue</i>	<i>Annual Cost per Rider</i>
WMATA	Metrochek	4	\$300,000	Not specified			
	Smart Benefits						
	Total	4	\$300,000		\$510,000	0.3%	\$3
MARTA	Partnership Program	1	\$0 ^b	Not specified	\$83,000	0.4%	\$3
King County Metro	Flex Pass	2 to 3	Under \$5,000	Not specified	\$142,000	2.4%	\$4
	UPass and GoPass	.2	\$0		\$14,000	0.1%	<\$1
	Retail programs	2	\$0		\$115,000	1.1%	\$10
	Voucher programs	1 to 1.4	\$0		\$81,000	1.4%	N/A
	Total	5.2 to 6.6	Under \$5,000		\$364,000	1.2 to 1.3%	\$3
RTD	Eco Pass	3.6	\$25,000	\$18,500 (fulfillment)	\$293,500	2.4%	\$6
Metro Transit	Metropass	2.25	\$87,500	\$225,000	\$312,500	2.1%	\$21
	TransitWorks!	2	\$0	\$150,000	\$150,000	1.5%	\$13
	Total	4.25	\$87,500	\$375,000 (salaries)	\$462,500		\$17
VTA	Eco Pass	2.5	\$26,550	\$240,000 (salaries)	\$266,550	11.1%	\$6
Valley Metro ^c	Bus Card Plus	4	\$0 ^d	Not specified	\$360,000	10.0%	\$30

a. Includes staff time, marketing, and fulfillment. Staff time was calculated based on figures of \$47,250 per staff FTE and \$67,250 per managerial FTE, which include salary and benefits and rounded up to the nearest thousand dollars. In all cases, we assumed one manager per separate program and the remainder staff.

b. Marketing for the Partnership Program is part of overall transit marketing budget; exact figures not available.

c. Only the Bus Card Plus program is included here because information was not available for the Private Outlet program.

d. General marketing budget of \$650,000, but not for these programs.

N/A = not available.

seven regions had other public or private sector entities helping market transit benefits to employers. Budget differences may be explained by targeted versus general marketing strategies, effectiveness of specific campaigns, and general awareness of transit benefits within a region. It may also be that agencies defined their budgets differently.

Fulfillment

When asked about a fulfillment budget, most transit agencies reported that they considered fulfillment part of the salaries paid to employees and did not have separate figures available. Only three agencies had separate budget items for fulfillment, ranging from \$18,500 to \$375,000. Of those three, two included salaries in their figures. Several agencies mentioned related costs such as printing and software, but could not provide specific figures.

Cost Savings Not Quantified

When employer programs capture a large share of total transit agency revenues, these programs should reduce the costs associated with cash handling for individual fare transactions. Although the transit agencies generally felt that some cost savings might be achieved through their programs, none was able to quantify these savings or supply a per-transaction cost of accepting cash payments.

Two agencies said that specific programs reduced cash handling to a high degree. King County Metro made this comment in regard to their monthly pass programs, which sell approximately 46,000 passes per month to employers and to retail outlets who sell them to individuals. Most passes are distributed through retail outlets, and employers can participate on generally the same terms as grocery and drug stores that sell them to patrons. WMATA said the same about its Smart Benefits program, in which transit benefits can be downloaded directly by the employee onto a stored value card. Both of these programs reduce pass distribution costs. Several agencies commented that they believe annual pass programs could hold down costs because they reduce the number of passes to be printed and distributed per year. However, they did not have comparative data between annual and monthly passes.

Ridership, Revenue, and Cost Impacts Differ by Program Type

Universal and monthly pass programs, both of which are fairly common program types, have different impacts on ridership, revenues, and costs. Table 5 compares general indicators from the three conventional universal pass programs (King County Metro's Flex Pass, RTD's Eco Pass, and VTA's Eco Pass) to the three conventional monthly pass programs (MARTA's Partnership Program, King County's Consignment Retail Pass, and Metro Transit's TransitWorks!). It appears that, on the whole, universal pass programs are more effective at serving a greater number of employees by focusing on larger employers. However, the programs often require more staff to administer, are more complex, and generally are designed to be revenue neutral. In contrast, monthly pass programs are more effective at increasing revenues and reaching many employers, but tend to serve many small to moderate size employers.

Table 5. Comparison of Universal and Monthly Pass Programs

	<i>Universal Pass</i>	<i>Monthly Pass</i>
Pricing structure	More complex—price is negotiated or tiered based on location of employer	Generally simple and standardized, although may involve discounts for larger purchases of passes
Employer characteristics	Generally serve employers that are moderate to large in size (average of 50–490 employees per employer)	Typically serve employers that are relatively small to moderate in size, on average (average of 15–100 employees per employer)
Number of employers/employees	Generally cover fewer employers (80–1,000) ^a but more employees (40,000–50,000)	Generally serve more employers (200–500) but fewer employees (12,000–30,000)
Staffing	2.5 FTEs or more to administer	1–2 FTEs to administer
Ridership	Account for 5–15 percent of total ridership	Account for 3–10 percent of total ridership ^b
Impact on revenues	Generally designed to be revenue neutral	Generally designed to increase revenues when ridership increases

a. The Denver RTD program has more than 1,000 employers, but the other two have far fewer (80 and 200). Since the Denver program requires 3.6 FTEs to administer it, the number of FTEs required to serve employers works out about even.

b. The percentage of ridership for Atlanta was not available from MARTA staff; the research team estimates it at less than 10 percent.

These results reflect program design; universal pass programs appeal to larger employers, and achieve greater ridership gains by requiring that passes be given to all employees. The comparison confirms the effectiveness of this strategy and perhaps points to different approaches based on the types of employers to be served. Universal pass programs seem to make more sense for large employers and where there is existing transit capacity. Monthly pass programs favor smaller employers and are more effective in bringing in revenue per rider.⁵

These differences may indicate that agencies can combine universal pass and monthly pass programs to reach a wider variety of employers. Both King County Metro and Metro Transit offer universal passes and a monthly pass program, and they receive the highest proportion of revenues through employer programs (more than 40 percent). However, the proportion of their ridership that comes from transit benefits recipients is in the middle of the range for this group of agencies (18–22 percent and 12 percent, respectively). Given that neither transit agency operates a rail system, and that they are not among the dense and transit-rich East Coast cities, this may point to an effective strategy for transit agencies in similar circumstances.

Further Data Needed

Many transit agencies had relatively sparse data on their employer programs in terms of effects on ridership, revenues, and costs. Additional data on the following topics should be collected so that individual agencies can better gauge success at meeting specific objectives.

Program Enrollment and Revenues

While every transit agency had good data on the number of employers enrolled, not every agency could identify the number of employee participants. For instance, the agency may only know the number of stored value cards or vouchers that are sold, but not how many employees are using them (e.g., an employee may receive one or more \$20 vouchers). Likewise, transit agencies should be able to track the amount of revenue received from these programs to make the comparison with program costs to determine the program's effectiveness.

Intensity of Transit Ridership

Not every transit agency had information available on the level of ridership associated with transit benefits users. For instance, in the case of universal pass programs, employees may not ride transit at all, even though the employer has purchased a pass. Even in programs where employees elect to receive transit benefits, they may choose to ride infrequently. If transit agencies find this to be the case, they may want to look at ways to boost not only the number of participants, but the frequency with which they ride transit. Surveys of pass recipients could help answer this question.

Trend Data

Trend data showing employer and employee enrollment over time would provide a better indication of factors that have affected enrollment (i.e., whether enrollment changed in response to economic conditions or transit agency changes such as service changes or fare increases). On the micro level, it would help determine how ridership changes at participating worksites; for instance, do most impacts occur immediately after implementation of a transit benefit, or does it take several years for information to reach all employees and travel patterns can be adjusted? Compiled over several agencies at the macro level, it could help give agencies without programs some idea what to expect over time as their programs mature.

Program Costs and Cost Savings

It would be helpful to transit agencies to be able to quantify the costs of their employer programs in terms of staff and marketing budgets, but few were able

to do so. These costs would enable agencies to determine whether the additional expenses of maintaining an employer benefits program are offset by the revenues brought in by the program. In addition, if agencies can demonstrate that the employer programs achieve cost savings by reaching riders more efficiently and cutting down on cash handling expenses, it would help justify the programs in case of potential cutbacks.

Conclusion and Future Research Needs

Where they exist, transit benefits programs are responsible for healthy percentages of ridership and revenues, and anecdotally they appear to have some cost advantages over individual fare media. Transit agencies should focus on better data collection, as well as conduct surveys, to optimize their existing programs and to plan new ones. Data collection could involve automated information on boardings and alightings from smart cards or other electronic fare media, or requesting that employers participating in pass or voucher programs provide more detailed information on employee enrollment, perhaps on an annual basis and by worksite. Having this data could allow transit agencies to determine more precisely what impact their programs have on ridership over time and perhaps target future marketing efforts to employers who fit the profile of employers with high participation. Surveys could help answer questions regarding employee motivations for changing (or not changing) modes, as well as to determine what proportion of employees receiving universal passes are using them to ride transit. Better data and more research could yield insights into what program types are most successful in which circumstances and to what extent transit agencies should focus on transit benefits as opposed to individual sales.

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Endnotes

¹ One metropolitan area, Seattle, is also covered by a commute trip reduction ordinance, providing yet another differentiation between transit systems. However, given the varying characteristics of the regions and the small sample size, it is impossible to say whether this played a role in the outcome of the transit agency's program.

² WMATA participation figures were estimated based on revenues; MARTA data estimated based on number of annual cards sold.

³ Between 2000 and 2001, overall weekday riders increased by approximately 130,000, while commuter benefits participants increased by about 65,000.

⁴ The number of VTA Eco Pass participants was estimated based on the total number of employees eligible for the program (based on employee population working for participating employers) multiplied by 0.364 since a VTA survey showed that 36.4 percent of eligible employees hold Eco Passes.

⁵ The exceptions to these tendencies are MARTA and Metropass. In the case of MARTA, the discount structure makes it more attractive to large employers, since there is no discount available until an employer purchases 1,000 passes. Metropass is unusual in that it does not require employers to purchase passes for all employees, so it probably achieves lower penetration into the potential employee market.

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