



MEMORANDUM

To: Alameda CTC Staff and Committees
From: Bonnie Nelson
Date: August 9, 2011
Subject: Student Transit Pass Research Case Studies Summary

Student bus pass programs have been discussed during the development of the Alameda County CWTP & TEP and an application has been submitted by the Alameda County Office of Education for a free student pass for grades 6 – 12. To more fully understand student bus pass programs, this memorandum presents an analysis of existing conditions as well as past experience and peer examples to provide some “lessons learned” that could help shape an Alameda County student transit pass program. This memorandum includes current conditions, review of eight peer youth programs, eleven university programs, and one Alameda County employer-based program, the City of Berkeley’s EcoPass.

Current Conditions

School students in Alameda County are served by a combination of “yellow bus” and public transit service. In Alameda County, very few students have access to yellow school buses, resulting in more demand for school transportation from public transit operators. Students ride all of the transit operators in the County, including BART, AC Transit, Union City Transit and LAVTA, with most school trips for middle and high school public school students occurring by bus rather than by BART, which typically carries longer trips.

Of the three major bus operators in the County, Union City Transit and AC Transit currently offer significant discounts for youth riders. AC Transit offers a 50% discount off the cash fare and a 75% discount off of the full 31-day pass fare, charging students \$20 per month as of August, 2011 (passes increased in August from \$15 to \$20). Union City Transit offers a \$1 single ride for students and a \$30 monthly pass. Students aged 13 to 18 who are enrolled in middle or high school are eligible to purchase BARTT tickets at a 50% discount (colored orange). These “orange tickets” only come with a \$32 value and are sold for \$16. Children 5-12 years old may purchase BART tickets (colored red) at a 62.5% discount. These “red tickets” only come with a \$24 ticket and are sold for \$9.

Figure 1 shows the current conditions for youth riders throughout the Bay Area, and at transit properties nationally. The figure shows that even with the increase in pass price that occurred in August, AC Transit’s youth pass is among the lowest cost pass throughout the Bay Area and nationally. This does not suggest that further discounts would not bring additional benefits, but does show that Alameda County student travel costs (as a percentage of full transit fare) are already less than many of their peers.

Peer Case Studies

To gain insight into the benefits, costs and lessons learned from other deep discount or free pass programs, eight peer systems were identified and contacted to better understand their program and the outcomes they have experienced. In addition to looking beyond the Bay Area, we have included summary information from an AC Transit pilot program providing free bus passes to low-income youth from 2002-2004. That pilot program differed from the proposed program in a number of ways, most importantly in that it targeted *only* low-income youth. However, it does offer some important lessons that could help shape a future program.



Figure 1 Transit Agency Single and Multi-Fare Prices

Metro Area	Youth Discount - Single Ride?	Youth Discount - Weekly, Monthly, Value?	Cost of Fares						Ages Eligible	Other Eligibility Requirements?	Where to obtain youth pass?	Any restrictions on use?					
			Single Fare			Multi-fare											
			Type	Regular \$	Youth \$	Youth %	Type	Regular					Youth	Youth %			
Bay Area Transit Operators Examples																	
Livermore/Dublin/Pleasanton - LAVTA	No	No	Regular	\$2.00	\$2.00	100%	100%	East Bay Value Pass	\$60.00	\$60.00	100%	N/A	N/A	N/A			
			Fare Buster 10-ride	\$1.60	\$1.60	100%	100%										
Oakland - AC Transit*	Yes	Yes - 31 day monthly (w/ Clipper only)	Local	\$2.10	\$1.05	50%	50%	31-day pass (Local)	\$80.00	\$20.00	25%	None	None	Two methods: 1) Attend card sign-up event w/ proof of age; 2) Visit AC Transit ticket office at 1600 Franklin St., M-F (8 AM - 6 PM) w/ proof of age			
			Transbay	\$4.20	\$2.10	50%	50%	31-day pass (Transbay)	\$151.20	N/A	N/A						
			Transfer (Bus to Bus)	\$0.25	\$0.25	100%	100%	N/A	N/A	N/A	N/A						
			Transfer (BART to Bus)	\$1.85	\$0.80	43%	43%	N/A	N/A	N/A	N/A						
Union City Transit	Yes	Yes	Transfer (Transbay to Local)	Free	Free	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	None			
			Local	\$1.75	\$1.00	57%	57%	Monthly	\$46.00	\$29.00	63%	6 to 17	Mail, fax, email, or sold at City Hall				
SF Bay Area - BART	No	Yes	N/A	N/A	N/A	N/A	N/A	BART Orange	\$32.00	\$16.00	50%	Enrolled in middle/secondary school; Only at participating schools	None	Orange tickets are sold by schools only. Schools collect payment in advance from students and place ticket orders directly with BART.	Only for school trips (M-F)		
Marin County - Golden Gate Transit	Yes	Yes	Regular	-	-	50%	50%	1-day pass	\$5.00	\$2.50	50%	May also use Youth Clipper Card. ID may be required upon bus entry.	None	For GGT Youth passes, either online, phone, by mail, or at selected local vendors.	None		
San Francisco -	Yes	Yes	Local	\$2.00	\$0.75	38%	38%	Monthly	\$72.00	\$21.00	29%	Monthly pass requires special Youth	None	Effective August 2011,	None		

Metro Area	Youth Discount - Single Ride?	Youth Discount - Weekly, Monthly, Value?	Cost of Fares						Ages Eligible	Other Eligibility Requirements?	Where to obtain youth pass?	Any restrictions on use?	
			Single Fare			Multi-fare							
			Type	Regular \$	Youth \$	Youth %	Type	Regular					Youth
MTA			Special Event (round trip)	\$12.00	\$10.00	83%	Monthly (Lifeline)	\$31.00	TBD	TBD	Clipper Card and valid ID; Lifeline youth pass (pilot) requires enrollment in SFUSD school, and priority given for those who qualify for a free lunch under federal guidelines and who attend middle or high school	Youth Clipper cards bought either in person at SFMTA sales kiosks or online (and shipped by mail). Lifeline Youth passes distributed through school sites.	
	Yes	Yes	Local	\$2.00	\$1.75	88%	Day Pass	\$6.00	\$5.00	83%	Prepaid fares must be bought in person and are available at various sales locations. Recently launched Clipper Card, which only allow for VTA monthly passes. For Clipper, must apply in person at one of two locations in San Jose w/ proof of age.		
			Community Bus	\$1.25	\$0.75	60%	8-hour Light Rail Pass	\$4.00	\$3.50	88%	None		
							Day Pass Token	\$5.40	\$4.50	83%			
							Monthly Flash Pass	\$70.00	\$45.00	64%			
							Annual Pass	\$770.00	\$495.00	64%			

Other Major Metropolitan Transit Operators Examples

Los Angeles - Metro	No	Monthly	Regular	\$1.50	\$1.50	100%	Monthly TAP Card	\$75.00	\$24.00	32%	Must be enrolled in accredited elementary, junior high or high school in LA County. Applicants must include with application either: a) current report card, b) current school ID, c) printout showing in-class schedule, d) letter on school letterhead showing signature of school official	Submit application in person or by mail: submit to one of four Metro Customer Centers or mail to TAP Service Center (addresses on application form)	Students in grades 9-12 must present valid ID along with TAP card	
			0 - 1 mile from School (Grades 7 - 12)	\$ 2.25	\$ 2.25	100%	7-day pass	\$ 29.00	N/A	N/A	Students who receive a full-fare MetroCards must live: K-2: 0.5+ miles away	Schools distribute Student Metrocards to eligible students (without photos); varying benefits are dependent on students' distance from school,	Passes are valid from 5:30 AM to 8:30 PM on schooldays. Half-fare cards are only good on buses	
			1 - 1.5 miles from School (Grades 7 - 12)	\$ 2.25	\$ 1.13	50%	30-day pass	\$ 104.00	N/A	N/A	Grades 3-6: 1 - 1.5 miles away Grades 7-12: 1.5+ miles away Students who receive a half-fare MetroCards must live: K-2: Less than 0.5 miles away Grades 3-6: 0.5 - 1 mile away Grades 7-12: 1 - 1.5 miles away			
New York			1.5+ miles from School (Grades 7 - 12)	\$ 2.25	Free	N/A								
			1-Ride	\$1.75	\$0.85	49%	All day pass	\$3.50	\$1.75	50%	Tempe Youth Program: 1) A parent or guardian must accompany the youth	You can get the pass at the Tempe Transit Store	None	
Tempe/Phoenix - Valley METRO	Yes	Yes					3-day pass	\$10.50	\$5.25	50%				

Metro Area	Youth Discount - Single Ride?	Youth Discount - Weekly, Monthly, Value?	Cost of Fares									Ages Eligible	Other Eligibility Requirements?	Where to obtain youth pass?	Any restrictions on use?	
			Single Fare			Multi-fare			Type	Youth %	Youth \$					Youth %
			Type	Regular \$	Youth \$	Regular	Youth	Youth %								
Portland - TriMet	Yes	Yes		7-day pass	\$17.50	\$8.75	\$17.50	\$8.75	50%	when registering for the program; 2) Your most recent utility bill (dated within the last 60 days) with a Tempe address. 3) Youth's birth certificate; 4) Valid driver's license/photo ID of parent/guardian; 5) If legal guardian, must also bring a copy of your marriage license or state guardianship papers.	located at 200 E. Fifth Street Monday through Friday from 8 a.m. to 5 p.m.					
				31-day pass	\$55.00	\$27.50	\$55.00	\$27.50	50%							
				Tempe Youth Transit Pass	N/A	Free	N/A	Free	N/A							
				1-Day Pass	\$4.75	\$4.75	\$4.75	\$4.75	100%							
				7-Day Pass	\$23.00	N/A	\$23.00	N/A	N/A							
Sacramento - Sacramento RT	Yes	Yes	Local	14-Day Pass	\$44.50	\$13.50	\$44.50	\$13.50	30%	Must be pursuing a HS diploma. Must purchase RT monthly stickers with an RT Student photo ID card. Stickers must be affixed to an RT Student ID card, not a school ID. Students are eligible to purchase single fares and daily passes with their school ID.	Bus, Neighborhood Ticket Outlets, vending Machines, TriMet office, online, work or school	None				
				1-Month Pass	\$88.00	\$26.00	\$88.00	\$26.00	30%							
				1-Year Pass	\$968.00	N/A	\$968.00	N/A	N/A							
				Daily	\$6.00	\$3.00	\$6.00	\$3.00	50%							
				Monthly	\$100.00	\$50.00	\$100.00	\$50.00	50%							
San Diego - MTS	No	Yes	Local Bus	Semi-Monthly	\$50.00	\$25.00	\$50.00	\$25.00	50%							
				Regional Local/Express Monthly	\$72.00	\$36.00	\$72.00	\$36.00	50%							
				Regional Premium Monthly	\$100.00	\$50.00	\$100.00	\$50.00	50%							
				Premium Bus Service	\$5.00	\$5.00	\$5.00	\$5.00	100%							
Washington DC - WMATA	No	Yes	N/A	DC Student Tokens - 10 rides on MetroBus	\$1.50	\$0.75	\$1.50	\$0.75	50%	Must be students who live and go to school in DC; Only applicable to certain schools; Must be certified by DDOT and fill out application materials.	Student fares are sold at Metro sales offices and selected schools in the District of Columbia. Students must obtain a DLT Application from their school or Office of Mass Transit to be certified to purchase student fares.	SmartStude nt pass is unrestricted				
				DC Student Farecards - MetroRail	N/A	\$9.50	N/A	\$9.50	N/A							
				SmartStudent Pass	N/A	\$30.00	N/A	\$30.00	N/A							

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AC Transit Free Low-Income Student Bus Pass Pilot Project

Introduction

In 2002, AC Transit began a two-year demonstration project to provide free bus passes to low-income middle and high school students. The initiative was designed to, in part, “improve social equity by lessening the financial burden on low-income families and increasing opportunities for low-income students, improve school attendance rates, and increase participation in after-school and weekend enrichment programs.” Concurrent with this program, AC Transit also reduced the cost of its monthly student pass from \$27 to \$15.

At the onset of the program, the University of California, Berkeley, was provided funding to conduct an evaluation of the program during its first operational year. These findings were published in a 2004 paper entitled “Free Transit for Low-Income Youth: Experience in San Francisco Bay Area, California.”¹

Background

According to the article, implementation of the demonstration project was the result of a combination of “grassroots community activism and growing political pressure to remove the burden of school transportation costs from low-income households.” In particular, the program was spurred by conditions in the West Contra Costa school district, located at the north end of AC Transit’s service area, where, “excessively high absenteeism rates in the schools led to a \$1 million penalty in state funding.” Noting “decreased attendance during the last week of the month,” observers theorized that “students’ inability to afford bus fare” was one of the primary causes of poor attendance rates. In response to the perceived need, grassroots campaigns sprung up at a few schools in the 1990s to supply the neediest students with free transit passes. The pilot program was intended to reduce absenteeism, increase the use of transit among youth riders, increase student safety and create a “transit habit” at an early age.

Methodology

The primary goal of the UC Berkeley evaluation was “to determine how free transit affects youth travel, school attendance, and participation in after-school activities.” In order to measure the effectiveness of AC Transit’s free pass program, the authors utilized “before and after surveys, interviews, focus groups, and ridership analyses.” Interviews were conducted with students and administrators alike, including truancy officers to gauge how well the new policy affected “students with the most severe attendance problems.”

It should be noted that the UC Berkeley researchers identified one major methodological challenge to the research: because the study covered only the first year of a new fare policy, the findings would not reflect any long-term effects of the new policy. Instead of changing the habits of someone who is accustomed to skipping school, the article suggested, “the program may be more effective at creating good habits among younger students so that they don’t develop

¹ *Transportation Research Record: Journal of the Transportation Research Board No. 1887*, TRB, National Research Council, Washington, D.C., 2004, pp.153-160

attendance problems.” Still, the paper argued that, “it is useful for transportation planners to study youth travel behavior and the immediate effects of fare changes on behavior.”

Analysis

From UC Berkeley’s analysis of the AC Transit low-income student free pass (and \$15 non-low-income student pass), the researchers determined the following:

General

- Findings after one year of implementation indicate that the free bus pass program increased student bus ridership and after-school participation, but did not increase overall attendance. Increases in bus use were greater among pass holders, in areas with high levels of bus service, and among high school students.
- Although overall bus-to-school mode shares did not vary significantly in the two survey years before and after implementation, students receiving the free bus pass did increase their use of the public bus, primarily for trips other than travel to school.

After-School Programs

- After-school participation did increase, suggesting a more direct relationship between the availability of a transit ride home and participation after school.
- Coordinators described significant bus ridership after school, but stressed that safety concerns and student age are major factors influencing mode choice.
- When asked about ridership after school hours, many after-school program site leaders—particularly those working with younger students—cited bus stop safety as a major issue, especially when a program ends after dark.

Truancy and Attendance

- Data analysis showed no significant change in overall attendance from spring 2002 to spring 2003. Attendance rates among bus pass holders also remained constant, even when analyzed across age, gender, and racial and ethnic groups.
- Truancy prevention coordinators emphasized that truancy and transportation are linked, but successful reduction of truancy demands on more than a transit policy. Nonetheless, officers report that truant students regularly ride the bus when they do attend school, and a bus pass program is an important component of a comprehensive policy.

Conclusions & Organizational Impact

As indicated by the analysis above, UC Berkeley researchers’ findings were somewhat inconclusive. The project was significantly altered after the first year of its two-year demonstration, eliminating the free pass for some students and creating a deeply discounted \$15 monthly pass available to all students.

BART Student Pass Program

Program Description: BART sells two types of tickets to youth based on age (red: 5 to 12, orange: 13 to 18). Red tickets have no use restrictions while orange tickets may only be used for school trips, Monday through Friday. However, BART fare gates do not deny orange ticket use during non-school hours. Red tickets are distributed through authorized vendors while orange tickets are made available only through participating schools.

Cost to Student: Red ticket: \$9/month. Orange ticket: \$16/month.

Source of Funding: Paid for out of BART’s operating fund. No special funding.

Level of Subsidy: Total annual program cost is \$195,562 in FY2011/12.

Types of Transit: Rail

Measures of Success: There are approximately 141,000 annual trips made by orange ticket student riders in Alameda County, but no studies are available reporting on the ticket's effectiveness in increasing student ridership. However, there are also no significant reports of abuse reported to BART.

Pass Availability: Orange tickets are sold only by participating schools. Presently, 76 of Alameda County's 155 middle and high schools participate in the orange ticket program. Schools must apply to become a vendor of the orange ticket for their own students by filling out and submitting an application. Schools collect payment in advance from students and place ticket orders directly with BART. Some schools purchase an additional quantity to have as needed if students missed the school's cut-off date for order. A school check or money order is accepted along with the purchase request written on school letterhead. Schools can establish their own policies on eligibility to purchase tickets – ie. School attendance, maintenance of grade average etc. but these policies are not required or monitored by BART.

Other Case Studies

Tempe, AZ

Program Description: The Tempe Youth Transit Pass Program allows all eligible Tempe youth ages 6 to 18 to ride regional and local Valley Metro bus routes and the METRO light rail for free. The pass is a student-specific electronic pass (with photo), specific to Tempe.

Cost to Student: Free

Source of Funding: Paid for by the City of Tempe by a ½ cent dedicated sales tax (Tempe only).

Level of Subsidy: Completely funded by dedicated sales tax. Total annual program cost is \$423,416.

Types of Transit: Bus, Light Rail

Measures of Success: As of July 12, 2011 there are approximately 4,400 youth enrolled in the Tempe Youth Pass Transit Program. Begun in 2005, enrollment rates have doubled since the program's inception. While transit ridership has been increasing steadily over the life of this program, City staff is unable to tell if the increases are attributable to the Youth Pass Program, as many other service changes (new light rail, new bus routes, cuts to service frequency due to economy, etc.) have taken place over the same time period.

Pass Availability: Passes must be obtained at the Tempe Transit Store. In order to receive a youth pass, the following conditions apply: 1) A parent or guardian must accompany the youth when registering for the program; 2) The most recent utility bill (dated within the last 60 days) with a Tempe address. 3) Youth's birth certificate; 4) Valid driver's license/photo ID of parent/guardian; 5) If legal guardian, must also bring a copy of your marriage license or state guardianship papers.

New York, NY

Program Description: Transit passes given to K-12 students, either at no cost or at half price, depending on the home address distance from school. Passes are valid from 5:30 AM to 8:30 PM on schooldays.

Cost to Student: No cost or 50% based on location

Source of Funding: Equal funding amounts by State of New York and City of New York. Total annual program cost is \$161,500,000.

Level of Subsidy: Varies. Until the 1990s the program was entirely paid for by state and local governments, at which time the State of New York and City of New York limited their contributions to \$45 million each, annually. Currently, MTA must partially fund the program at an amount that depends on the level of funding provided by City and State budgets (fluctuates from year to year). A major lesson learned was the unpredictability of funding for the program given the current political and economic climates.

Types of Transit: Bus, Rail

Measures of Success: Approximately 417,243 students now receive free Metrocards and another 167,912 get half-fare cards.

Pass Availability: Schools distribute Student Metrocards to eligible students (without photos); varying benefits are dependent on students' distance from school, as shown in the table below:

		DISTANCE FROM RESIDENCE TO SCHOOL			
		Less than ½ mile A*	½ mile or more, but less than 1 mile B*	1 mile or more but less than 1½ miles C*	1½ miles or more D*
GRADE LEVEL	K-2	Not Eligible**	Eligible for Full Fare Transportation		
	3-6	Transportation Not Provided	Eligible for Full Fare Transportation		
	7-12	Transportation Not Provided	Not Eligible**		Eligible for Full Fare Transportation

Source: <http://schools.nyc.gov/Offices/Transportation/ServicesandEligibility/BusTransportation/default.htm>

Portland, OR

Program Description: Free all-zone Tri-Met pass for all high school and alternative students at Portland Public Schools (the second largest school district in the Portland area). The pass is simply the student's identification card.

Cost to Student: Free

Source of Funding: In Portland, the program is funded by \$2.55 million a year from TriMet, all of which is indirectly funded by the state in the form of a Business Energy Tax Credit,² combined with \$800,000 from the school district. Total annual program cost is \$3.5 million.

Level of Subsidy: Complete (at no cost to transit agency), passes provided to students in lieu of school bus service.

Types of Transit: Bus, Light Rail

Measures of Success: Increases in ridership as a result of Youth Pass program are as follows.

- Prior to Youth Pass program, 44% of students used TriMet to get to school.
- Since program implementation, 80% of students use TriMet frequently or every day.

² See: http://portlandafoot.org/w/Business_Energy_Tax_Credit

- Ridership is highest in schools serving the most low-income students of color where transit options are fewest.³

Pass Availability: Students may obtain passes at a host of locations, including on the bus, at light rail and commuter rail stations, online, at neighborhood ticket outlets, or at school. Those in grades 9-12 or ages 15-17 must provide proof of age or student status upon fare inspector or transit operator request, and a TriMet-issued ID card is required to prove GED student status.

Washington DC

Program Description: Youth who live and attend school (18 years or younger) within the District of Columbia are eligible to receive transit passes at half-price. Currently there are no use restrictions and students may use the pass during all hours of operation.

Source of Funding: District of Columbia (passes provided in lieu of school bus service).

Cost to Student: \$30/month

Level of Subsidy: Paid for by City (\$5 to \$6 million per year).

Types of Transit: Bus, Rail

Measures of Success: About 16,000 D.C. students receive subsidized rides on Metro during the school year. Metro board members have discussed limiting the passes to certain days and hours in response to a crime report showing that juveniles made up one-fourth of all arrests by the transit agency last year. Crime spiked on the transit system in 2010, with assaults and robberies of smartphones on the rise.

Pass Availability: SmartStudent Passes have the following set of eligibility requirements:

1. Students must be under 19, except for students with disabilities, who remain eligible until they turn 22.
2. Students must reside in the District of Columbia and attend a District public, charter, parochial, or private school.
3. Students must use Metrobus and Metrorail for travel to and from school and related educational activities.
4. Students are certified as eligible by the District Department of Transportation (DDOT).
5. Students must possess a valid Student Travel Card issued by the District Department of Transportation/Mass Transit Division. Students can obtain this card by completing a Student Metro Travel Card Application, having it signed and dated by the school principal or administrator, and submitting it to DDOT.
6. Students must present a Student Travel Cards when purchasing a SmartStudent Pass.
7. The SmartStudent pass is good for unlimited travel within the District for a period of one month at a cost of \$30 or as otherwise provided by DDOT.

Fort Collins, CO

Program Description: All citizens under the age of 17 living in Fort Collins are allowed to ride transit for free.

Cost to Student: Free

Source of Funding: Bohemian Foundation has provided the City of Fort Collins a grant to subsidize the Youth Fare Program.

³ http://www.oregonlive.com/opinion/index.ssf/2011/06/trimet_youth_pass_creating_our.html and <http://portlandafoot.org/w/YouthPass>

Level of Subsidy: Completely funded by private foundation. All citizens under the age of 17 are allowed to ride transit for free.

Types of Transit: Bus

Measures of Success: 15% of total 2010 ridership was by youth (17 or younger).⁴

Pass Availability: Not applicable (Youths up to the age of 17 ride for free).

Sacramento, CA

Program Description: Students between the ages of 5 and 18 are given a transit pass at a 50% discount.

Cost to Student: \$50/month

Source of Funding: Measure A (countywide sales tax).

Level of Subsidy: Unknown.

Types of Transit: Bus, Light Rail

Measures of Success: As of 2002 (one year after program started), “research by RT staff shows a more than 30% increase in student ridership on regular RT routes serving middle and high schools, as well as an increase in student pass sales.”⁵ The program has since been scaled back (students aged 5 to 18 used to receive a 75% discount, now they receive a 50% discount—same as seniors/disabled).

Pass Availability: Student fares and passes may be purchased in person, by phone, by mail, or online. Additionally, Student Monthly Stickers are sold at most high schools and some middle schools. Eligible passengers must be pursuing a high school diploma, and RT Student stickers must be affixed to an RT Student photo ID card, not a photo ID. Finally, students are eligible to purchase single fares and daily passes with their school ID.

San Diego, CA

Program Description: Residents ages 6 through 18 are eligible for a Compass Regional Fare Card at a 50% discount. School or transit youth identification card is required.

Cost to Student: \$36/month

Source of Funding: Funded by *TransNet* funds (local half-cent sales tax).

Level of Subsidy: Completely funded by *TransNet* funds at no cost to transit agency (passes sold at 50% discount).

Types of Transit: Bus, Light Rail

Measures of Success: SANDAG has never looked at ridership trends specific to youth passes.

Pass Availability: Eligible students and youths may purchase discount passes either online, at neighborhood outlets, or in person at the downtown Transit Store. School or transit youth identification card is required.

⁴ http://www.larimer.org/compass/ridership_cd_transport.htm#Chart3

⁵ <http://portal.sacrt.com/WebApps/PressReleases/PressReleases.asp?ShowPressID=31>

University Programs

In addition to youth transit pass programs, a number of universities, including UC Berkeley, offer a “class pass” that provides free transit to students, and is generally funded through student fees. Presented below are eleven case studies from various academic institutions. Figure 2 and Figure 3 show the effects that transit pass programs have had on drive alone rates, transit rates, and ridership at other universities.

Figure 2 Effects of Universal Transit Pass Introduction, Trip to Work/School

Location	Drive to work or school			Transit to work or school		
	Before	After	Delta	Before	After	Delta
UC Berkeley (students)	16%	7%	-9%	14%	27%	13%
UCLA (faculty and staff)	46%	42%	-4%	8%	13%	5%
Univ. of Washington, Seattle	33%	24%	-9%	21%	36%	15%
Univ. of British Columbia	68%	57%	-11%	26%	38%	12%
Univ. of Wisconsin, Milwaukee	54%	41%	-13%	12%	26%	14%
Colorado Univ. Boulder (students)	43%	33%	-10%	4%	7%	3%

Figure 3 Transit Ridership Growth from U-Pass Programs

University	Year began	First year increase in student ridership			Subsequent growth rate (% per year)
		Before	After	Change	
CSU, Sacramento	1992	315,000	537,700	+ 71%	+ 2%
UC Davis	1990	587,000	1,054,000	+ 79%	+ 10%
University of Wisconsin, Madison	1996	812,000	1,653,000	+ 104%	*
University of Illinois, Urbana-Champaign	1989	1,058,000	3,102,000	+ 193%	+ 8%
University of Colorado, Boulder	1990	300,000	900,000	+ 200%	+ 8%

Subsequent growth rate is not available because the program started in 1996.

UC Berkeley Class Pass Program

Program Description: Passes given to all students at UC Berkeley.

Source of Funding: The Class Pass is funded by a \$69.50 portion of every student's registration fees each semester.

Level of Subsidy: Complete (at no cost to transit agency).

Measures of Success: Mode split changes observed as a result of the Class Pass Program:

- Overall student transit mode share has grown from 14% in 1997 to 27% in 2008.
- Student drive-alone share fell from 16% to 7% during the same period.
- 20% of UC Berkeley students now commute by AC Transit, according to the most recent survey of student commute patterns.

The class pass program also provides substantial benefits to many students who do not commute by AC Transit, but who use the pass for non-school trips: while 6,900 students commute by AC Transit, many more (about 33,000) pick up their Class Pass each year. Many students find that the program helps them meet their transportation needs without having to bring a car to campus.

Stanford "GO-Pass" Pilot Program:

Program Description: The Stanford Go-Pass Program allows free unlimited use of local transit (VTA buses and light rail) and Caltrain for all eligible university employees⁶. The program was recently expanded to include off-campus graduate students, who are now able to purchase a GO-Pass for \$99.50/year.

Source of Funding: Stanford must purchase passes for all eligible employees and enrolled off-campus graduate students at the cost of \$99.50/year per pass. This is a deep discount resulting from the bulk purchase, as the regular monthly pass price is \$60-259 per month.

Stanford also offers an "Eco Pass" program for university and Stanford Hospital employees, which is valid for unlimited rides on VTA buses, light rail, Dumbarton Express, Highway 17 Express, and Monterey-San Jose Express.

Level of Subsidy: Complete (at no cost to transit agency).

Measures of Success: Stanford has documented the following results from these pass programs:

- Drive alone mode share from 72% to 63%, a 12% decrease;
- Caltrain use from 4% to 10%, a 150% increase.

University of San Francisco

Program Description: All students at University of San Francisco pay a \$90 annual fee as part of their annual student fees to be able to ride Muni free. They must go to the Student Office at the start of every semester to get a new sticker on their ID to allow them to board Muni buses. The passes are valid when school is in session. Staff at the student office reported that there are very few students who do not take advantage of the program by getting their sticker.

University of Colorado

Program Description: The U-pass program allows each eligible permanent faculty or staff member to ride local or regional buses by showing their University identification card. This program has resulted in some employees taking transit instead of driving to campus, freeing up 350 parking spaces. It was 2.4 times more expensive to build a new parking space than to eliminate demand for one parking space through funding this transit pass program.

Measures of Success: The net annual savings to the University was \$566,000.⁷

Vancouver, B.C. U-Pass Program

Program Description: Passes given to students at the University of British Columbia, Simon Fraser University, Capilano University and Langara College.

⁶ The GO Pass program offers FREE transit to university employees who work 50 percent or more, receive regular Stanford University benefits, and are on campus primarily for employment at the university. Individuals must live off Stanford property (Stanford West and Oak Creek Apartments are on Stanford property) to be eligible for the GO Pass. http://transportation.stanford.edu/alt_transportation/EcoPass.shtml

⁷ University of Colorado Environmental Center 2002, pp. 18-19, cited in "The Road Less Traveled: Sustainable Transportation for Campuses" by Will Toor. *Planning for Higher Education*, March-May 2003, p. 135.

Source of Funding: Paid for by Universities through student fees.

Level of Subsidy: No cost to transit agency, except for lost revenue as a result of illicit trade of U-Passes.

Measures of Success: Translink has implemented a U-Pass program with the University of British Columbia, Simon Fraser University, Capilano University and Langara College. Since 1997, the University of British Columbia has more than doubled transit ridership to campus, and now 12,000 fewer cars visit campus each day.⁸ The program is set to expand this fall to Douglas College, Kwantlen Polytechnic University and BCIT. However, the illicit use of U-Passes costs the agency about \$15 million per year, and has prompted the agency to threaten to discontinue the program.

City of Berkeley Employee Program

Program Description: The City of Berkeley purchases AC Transit passes for all City employees.

Source of Funding: The City pays \$67 per year per employee for 1,374 passes, or approximately \$92,000 per year for the entire program.

Level of Subsidy: No cost to transit agency.

Measures of Success: 240 employees use their EcoPass each month, taking almost 49,000 bus trips annually. 20% of former drive alone employees now use EcoPass/AC Transit. 59% of users have reported they would reduce or stop riding the bus without the EcoPass.

Program Considerations

The peer studies presented in this memorandum show a range of potential outcomes for a student pass program. However, there are a number of lessons learned which may be useful in considering a program in Alameda County.

Ridership

The study of the pilot program conducted by AC Transit provides the most detailed information regarding ridership impacts. Findings from the report and AC Transit indicate that although bus ridership did increase (by 25%), particularly among pass holders, the rise was primarily due to after-school programs and non-school related travel. By contrast, in the one year of the pilot program, bus-to-school mode shares remained stable. The increase in after-school bus use appeared to be mainly driven by the availability of transit.

Other case studies have found significant increases in transit ridership after the introduction of youth pass programs, but it is often unclear from available data precisely what students (middle or high school) and what hours (primary class times or non-school hours) experienced the most dramatic increases. The TriMet Youth Pass program in Portland increased use of transit to access schools from 44% to 80%, with high ridership in schools serving larger numbers of low-income students of color.⁹ This information shows that by increasing transit availability to low-income youth, ridership can dramatically increase. Similarly, research of the 2002 youth pass program in Sacramento showed a 30% increase in student ridership, but again the data did not distinguish between time of trips.

The time at which peak youth ridership is achieved is a very important element. For example, if a free transit pass program increases student ridership during the AM and PM peak commute hours

⁸ <http://trek.ubc.ca/>

⁹ http://www.oregonlive.com/opinion/index.ssf/2011/06/trimet_youth_pass_creating_our.html

when buses are already fully occupied, the transit provider will need to spend considerable funds increasing service. However, if student ridership primarily increases during off-peak weekday hours or weekend hours when buses have capacity, additional service may not be necessary and costs to the transit agency may be lower. As research of the AC Transit study shows, student ridership mainly increased during after school events and other non-peak times, such as weekends, whereas student ridership from home-to-school during regular class hours remained relatively constant. Any future youth transit pass program should examine the likely peak hours of students transit demand to establish accurate cost estimates.

Cost

The review of peer case studies revealed that the clear majority of transit providers offer some level of price reduction for youth transit passes, although providers each have different purchase rules and age restrictions. For example, AC Transit currently offers one of the deepest price reductions (75% discount) for youth passes compared to other agencies within and outside the Bay Area. BART offers 50% and 62.5% discounts on orange and red tickets, respectively. Other Bay Area agencies offer smaller scale discounts, with Union City Transit giving a 37% reduction and LAVTA offering none. In order to determine the cost of a potential free student pass program to the transit providers, it is necessary to examine several factors:

1. **The current revenue transit providers receive from student cash fares and monthly passes.** If students are provided with free passes, the transit operators will need to be compensated for fare revenue that will be lost from current riders.
2. **The revenues transit providers would have received from increased ridership.** Providing free transit to youth riders will likely result in significant additional ridership. Those riders would have paid fares, generating revenue to the agency. If new riders are filling empty seats on existing routes, an argument can be made that the marginal cost of carrying those riders is minimal. However, school peak times tend to overlap with peak service periods, requiring new service to cover a significant influx in new riders. Transit agencies will want to be compensated for the cost of carrying new riders including lost fare revenue.
3. **The funds necessary to finance new transit service due to increased ridership.** Assuming the program is successful, there would likely be considerable strain put on the existing transit systems. Bus routes during school hours are likely to be overloaded, as school peaks are already prime hours for transit use. To the extent that additional service is required, new revenue will be needed to cover service costs.

The first item assumes that if transit passes are free to students, the participating transit agencies would need to be compensated for their lost revenue. Estimates for potential lost revenue from existing riders were provided by representatives from the transit providers through FY 2025/26. For example, AC Transit estimated revenues of \$4,085,544 and \$5,071,577 for youth cash fares and monthly passes, respectively in FY 2014/15.

Lost revenue from increased riders and the required funds needed to provide new transit service are more difficult to calculate. The cost of servicing new riders during hours when there is excess capacity is minimal, but additional ridership during school peaks would require additional service that would be expensive to provide. Moreover, many schools in Alameda County are not currently served by public transit, and providing free passes to students would likely increase demand for new services. Representatives from AC Transit and LAVTA have predicted costs of supplemental transit service to meet increased ridership, but it is unclear whether those estimates assume all, or only a portion, of new student riders will travel during the peak commute period.

Figure 4 shows the estimated costs of service through FY 2025/26 as provided by the transit operators. These costs are itemized by transit agency and by the cost components listed above. Figure 5 shows how those figures result in per student annual and monthly costs. Figure 6

estimates annual program costs (based on the per student monthly costs from Figure 5) if passes were only given to socioeconomically disadvantaged students.¹⁰

¹⁰ Public school student enrollments provided by California Department of Education. Future enrollments are assumed to be stable as grade 6-12 student enrollments have remained relatively flat since the 2003/2004 school year.

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Figure 4 Total Annual Cost Estimates by Transit Agency

Agency	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
AC Transit															
Replacement Revenue from Youth Cash															
Fares & Passes	\$7,727,443	\$7,727,443	\$9,157,121	\$9,157,121	\$9,157,121	\$10,873,870	\$10,873,870	\$13,254,776	\$13,254,776	\$13,254,776	\$13,784,967	\$13,784,967	\$14,315,158	\$14,315,158	\$14,315,158
Required Revenue from New Ridership (assuming a 25% increase)	\$1,931,861	\$1,931,861	\$2,289,280	\$2,289,280	\$2,289,280	\$2,718,467	\$2,718,467	\$3,313,694	\$3,313,694	\$3,313,694	\$3,446,242	\$3,446,242	\$3,578,789	\$3,578,789	\$3,578,789
Funds Necessary for New Transit Service	-	\$2,221,050	\$3,331,575	\$3,997,890	\$4,886,310	\$5,552,625	\$5,663,678	\$5,776,951	\$5,892,490	\$6,010,340	\$6,130,547	\$6,253,158	\$6,378,221	\$6,505,785	\$6,635,901
LAVTAMHEELS															
Replacement Revenue from Youth Cash															
Fares & Passes	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Required Revenue from New Ridership (assuming a 25% increase)	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Funds Necessary for New Transit Service	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000
Union City Transit															
Replacement Revenue from Youth Cash															
Fares & Passes	\$180,000	\$180,000	\$180,000	\$180,000	\$180,000	\$180,000	\$180,000	\$180,000	\$180,000	\$180,000	\$180,000	\$180,000	\$180,000	\$180,000	\$180,000
Required Revenue from New Ridership (assuming a 25% increase)	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000
Funds Necessary for New Transit Service	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BART															
Replacement Revenue from Youth Cash															
Fares & Passes	\$195,562	\$203,049	\$205,786	\$209,055	\$214,358	\$219,891	\$222,722	\$227,153	\$244,024	\$255,997	\$261,124	\$268,260	\$273,895	\$278,351	\$282,002
Required Revenue from New Ridership (assuming a 25% increase)	\$48,891	\$50,762	\$51,447	\$52,264	\$53,589	\$54,973	\$55,681	\$56,788	\$61,006	\$63,999	\$65,281	\$67,065	\$68,474	\$69,588	\$70,500
Funds Necessary for New Transit Service	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Totals	\$10,646,757	\$12,877,165	\$15,778,209	\$16,448,611	\$17,343,658	\$20,162,826	\$20,277,417	\$23,372,361	\$23,508,990	\$23,641,806	\$24,431,160	\$24,562,692	\$25,357,537	\$25,490,671	\$25,625,350

Figure 5 Per Student Cost Estimates

	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Estimated Number of Students	115,168	115,168	115,168	115,168	115,168	115,168	115,168	115,168	115,168	115,168	115,168	115,168	115,168	115,168	115,168
Annual Cost per Student	\$92.45	\$111.81	\$137.00	\$142.82	\$150.59	\$175.07	\$176.07	\$202.94	\$204.13	\$205.28	\$212.13	\$213.28	\$220.18	\$221.33	\$222.50
Monthly Cost per Student	\$9.24	\$11.18	\$13.70	\$14.28	\$15.06	\$17.51	\$17.61	\$20.29	\$20.41	\$20.53	\$21.21	\$21.33	\$22.02	\$22.13	\$22.25

Figure 6 Total Annual Cost Estimates for Socioeconomically Disadvantaged Students

	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Estimated Number of Students	48,321	48,321	48,321	48,321	48,321	48,321	48,321	48,321	48,321	48,321	48,321	48,321	48,321	48,321	48,321
Total Annual Cost	\$4,467,056	\$5,402,868	\$6,620,058	\$6,901,338	\$7,276,873	\$8,459,710	\$8,507,789	\$9,806,334	\$9,863,659	\$9,919,385	\$10,250,574	\$10,305,760	\$10,639,253	\$10,695,112	\$10,751,620



As a point of comparison, the costs of the potential Alameda County pass program have been compared to some of the case studies shown in this memo. Figure 7 shows that the estimated monthly cost of \$14 per student in FY 2014/15 is reasonable when measured against programs in other cities. It should be noted that the costs for the Tempe, AZ, program are relatively low given that the operator did not need to add any additional service following program implementation.

Figure 7 Cost Comparison to Case Studies

City	Total Cost of Program	Monthly Cost of Program	Number of Students/Youth Served	Monthly Cost per Student
Tempe, AZ	\$423,416	\$42,342	4,400	\$10
Alameda County (FY2014/15)	\$16,448,611	\$1,644,861	115,168	\$14
UC Berkeley	\$4,798,975	\$479,898	34,525	\$14
New York, NY	\$161,500,000	\$16,150,000	585,155	\$28
Portland, OR	\$4,300,000	\$430,000	13,000	\$33

School Attendance

Although available research indicates that a youth pass program can increase after-school and overall student ridership, data from the AC Transit pilot program demonstrated no significant change in attendance from providing free passes. Researchers noted that instead of changing truancy habits itself, the program may be more effective at promoting good attendance among younger students so future truancy problems do not arise. As part of that study, truancy prevention coordinators did note that the lack of transportation may be linked to increases in truancy, but stated that it must be part of a broader package to increase school attendance. Researchers agreed that student attendance is a complex subject that requires comprehensive measures to affect long-term change, but ultimately stated that, “No research was found that directly linked transit affordability and use to student attendance and participation...”

As noted above, according to other case studies, student ridership increased substantially once a youth pass program was implemented, but available research does not address conclusively whether school attendance increased. Given the results from the AC Transit study, it is likely that the greatest increases in ridership occurred during non-primary school hours (after school & weekend).

Program Design Issues

In addition to the program considerations addressed above, there are other relevant issues that will need to be addressed prior to implementation of any youth pass program.

- **Funding:** The cost tables presented above show the very high costs associated with offering free youth transit passes. In order for the participating transit agencies to simply recoup the costs of offering passes and providing sufficient transit service, the amount will rise from \$16.4 million in FY 2014/15 to \$23.5 million in FY 2019/20 with monthly costs per student rising from \$14.28 to \$20.41.

Measure B currently provides funding to AC Transit for mass transit programs, which amounted to about \$15.6 million in FY 2009/10¹¹, excluding paratransit funding. If the proposed program were to be fully funded by Measure B, the initial amount of funding for AC Transit, as an example, would need to be roughly doubled. Additional funds would also need to be made available to other transit operators.

- **Pass Distribution:** In order for the youth pass program to be widely used and successful, it must reach a wide audience. Research has shown that students in low-income areas are generally less likely to obtain a transit agency's youth pass, especially if passes are only available at transit providers' offices, if obtaining a pass requires adult supervision or multiple forms of identification, or if there are limited distribution locations. Issues associated with distribution will need to be considered along with implementation.
- **Clipper Coordination:** In order to promote use of a youth pass program, it may be possible to combine the student IDs that are issued by all public schools with a Clipper card chip. By tying student IDs to the Clipper system, it would be possible to measure results and allow the program to be tailored in the longer term to maximize benefits. It must be recognized that the Clipper technology is not installed on all transit operators at this time, which presents a challenge to implementing a comprehensive countywide program. Therefore, crafting a program to meet the needs in each area of the County will be an important consideration.
- **Fraud and Abuse.** Any new youth pass program should have protections in place to prevent fraudulent use of transit passes. By instituting photo identification (as is currently done in Sacramento and Tempe, AZ) along with the Clipper chip on each pass, transit agencies would be able to limit the amount of abuse and track misuse of cards if it arises.
- **Ridership Restrictions:** Depending on the costs associated with a youth pass program, transit agencies may feel compelled to place limitations on student passes to avoid a surge of student riders during peak commute periods that could impact adult transit commuters. Student overcrowding during these periods may detract from a quality transit experience, which could lead current adult commuters to stop using transit.

In order to avoid this, transit agencies may place restrictions on youth pass hours of use, identification of specific routes for free passes, or other factors that would reduce the overcrowding of buses. In addition, restrictions may be put in place for security reasons, as the case study from Washington, DC, has shown a spike in juvenile arrests aboard transit vehicles due to increased ridership.

- **Fully Allocated Program Costs:** The program costs provided in this memorandum are based on estimates provided by the transit operators and do not account for the administration of a program that could cover approximately 115,000 students. In order to properly oversee the pass program, there will likely be additional expenses for administration at the transit agencies as well as coordination with local schools. Coordinating the program among multiple transit agencies could further impact program design and administration.

¹¹ Alameda County Transportation Commission, Compliance Report and Audit Summary for the Pass-through Fund Program, Fiscal Year 2009-2010.

- **Unintended Costs of Success:** Anyone who has ever ridden a bus that has just picked up a full load of junior high school students knows that riding a bus that is crowded with youth riders can be a challenge. The program needs to be designed in ways that ensure that full fare and other reduced fare riders will not be intimidated or encouraged to take other modes during school hours. Another unintended issue may be the apparent misuse of funds providing free services to some students whose families can either well afford for them have a \$20 monthly pass or prefer for their students to use other modes to travel to/from school . It is important that the program design meet the goals of the program to improve school attendance and remove barriers to transit use while creating a new generation of transit riders, while minimizing the unintended consequences that could result from a poorly designed program.
- **Availability of Service:** Providing students with a pass is not the same thing as providing students with a route to their school. Many junior high or high school trips in the County are currently not well served by transit. Simply providing free bus passes will not create new service, but may create the demand for a significant amount of costly peak hour service that cannot be fulfilled.

Conclusion

Done correctly, a youth pass program could improve school attendance particularly for economically disadvantaged students while creating a new generation of transit riders. A program pilot could be developed and funded over a three year period with built in evaluation and then amended as needed to maximize positive results. The pilot program should carefully consider:

- **Who should receive a pass?** Students in the more urban parts of the county are more likely to attend schools that are well served by transit. Should passes be universally distributed even though some schools have little or no transit service? Should passes be given to all students or only those identified as economically disadvantaged? Is there an option for parents who can afford passes to activate a Clipper card with their own funds, rather than using tax payer funding for their children? Will there be an “opt out” for parents who would prefer that their student not have a pass? Should different types of programs be implemented in different areas of the county?
- **What should the pass media be and can it be linked to Clipper?** The availability of Clipper allows for tracking of pass use in a way that was not possible in the past. It may be possible to link a Clipper card with a student ID card. Linking the clipper chip with the ID card would reduce the potential for fraud and abuse and could allow for a very flexible program design.
- **Should there be any requirements on students to receive a pass?** Considerations could include school attendance, GPA, potential to ride transit, etc.
- **Should transit agencies be compensated for the fare revenue for new riders?** How transit agencies are compensated is a critical consideration in designing the pass program.
- **Should there be funding for new service for overcrowded routes or for new routes serving schools that either don't have service or don't have adequate service.**

Giving students passes will no doubt create demand for new services. How much funding should be available for school related service? How would increasing school service be weighed against the need to restore other service cuts?

- **What about encouraging the use of other modes?** Many parents would prefer for their student to walk or bike to school and may not be interested in a bus pass. How would this program relate to Safe Routes to School and other initiatives?
- **Does there need to be a travel training or educational component?** The youth pass program assumes that the cost of a pass is a barrier to youth ridership. There may be other barriers including lack of service, but also including lack of information or travel training. Should the program include a travel training component that would teach students how to use schedules and route maps, how to navigate the system, and how to conduct themselves on transit?