



ALAMEDA
County Transportation
Commission

AFFORDABLE STUDENT TRANSIT PASS PILOT PROGRAM

2018-19 School Year



YEAR THREE EVALUATION REPORT November 2019



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Executive Summary

The cost of transportation to school is often cited as a barrier to school attendance and participation in after-school activities by middle and high school students. In recognition of this issue, the 2014 Measure BB Alameda County Transportation Expenditure Plan (TEP) included \$15 million dedicated to the implementation of an affordable transit pass pilot program for students. The purpose of this program is to test and evaluate different approaches to a transit pass program for public middle and high school students in Alameda County over three years to identify a successful long-term approach.

The goals of the Affordable Student Transit Pass Pilot (STPP) are:

- Reduce barriers to transportation access to and from schools
- Improve transportation options for Alameda County's middle and high school students
- Build support for transit in Alameda County
- Develop effective three-year pilot programs
- Create a basis for a countywide student transit pass program (funding permitting)

Early History of the Student Transit Pass Program

The development of the STPP has a long history that began many years before the formal start of the program in 2016 -17. Community members have long been advocating for improved school transportation options in Alameda County.

Based on the widespread support that had developed for the program, Alameda CTC included a \$15 million funding allocation for the Affordable Student Transit Pass Program as a line item in its 2012 Transportation Expenditure Plan (TEP), which went before voters as Measure B1 in the November 2012 election. The 2012 measure did not secure the necessary two-thirds majority to pass. Two years later, Alameda CTC re-approved the TEP and placed it on the ballot as Measure BB; it was approved by over 71% of voters in November 2014.

Once the TEP passed in 2014, Alameda CTC worked with stakeholders to create a public process around the development and implementation of a Student Transit Pass Program Pilot (STPP) as defined in the TEP.

In 2015, working with community groups and regional stakeholders, Alameda CTC began the design and development of the three-year pilot to test and evaluate various program models. This document is the evaluation of the third and final year of the pilot program, covering the 2018-19 school year.

Year Three continued to test the same two program models (Free/Universal and Means-Based/Free) that were used during Year Two, allowing for year-over-year

comparisons at the continuing schools. Participating students received a Clipper card with an unrestricted bus transit pass for the operator(s) in their community, and high school students within the BART service area were offered a free BART ticket loaded with \$50 of value.

A total of twenty-one schools in seven school districts participated in the program this year and participation in the STPP continued to grow in Year Three. About 58 percent of all eligible students requested a free bus pass. By the end of the school year, more than 11,100 students signed up for the program.

Year Three takeaways varied between individual schools. There were no definitive trends observed at the school-level (high school versus middle school) or by program model (Free/Universal versus Means-Based/Free). Summary statistics for all schools and districts in Year Three are listed in Figure 1.

Figure 1 Summary of Year Three Program Models and Participation (2018-19 Year-End)

School District	Participating Schools	Program Model	Number of Eligible Students	Number of Participants	Year-End Participation Rate
Oakland Unified School District (OUSD)	<ul style="list-style-type: none"> Castlemont HS Fremont HS McClymonds HS Oakland HS Frick MS Westlake MS Roosevelt MS 	Free/Universal	5,216	4,502	86%
San Leandro Unified School District (SLUSD)	<ul style="list-style-type: none"> San Leandro HS John Muir MS 	Free/Universal	3,655	2,456	67%
Hayward Unified School District (HUSD)	<ul style="list-style-type: none"> Hayward HS Bret Harte MS 	Means-Based/Free	1,564	776	50%
New Haven Unified School District (NHUSD)	<ul style="list-style-type: none"> James Logan HS Cesar Chavez MS 	Means-Based/Free	2,422	1,351	56%
Fremont Unified School District (FUSD)	<ul style="list-style-type: none"> American HS Hopkins MS 	Means-Based/Free	485	174	36%

School District	Participating Schools	Program Model	Number of Eligible Students	Number of Participants	Year-End Participation Rate
Newark Unified School District (NUSD)	<ul style="list-style-type: none"> Newark Memorial HS Newark MS 	Free/ Universal	2,604	628	24%
Livermore Valley Joint Unified School District (LVJUSD)	<ul style="list-style-type: none"> East Avenue MS Christensen MS Livermore HS Del Valle HS 	Free/ Universal	3,282	1,252	38%
7 Districts	21 schools	2 models	19,228	11,139	58%

During Year Three, STPP participants took over 1.2 million combined bus trips on AC Transit, LAVTA and Union City Transit and more than 19,000 trips on BART with passes provided by the program. While participation rates have increased, average monthly trips per participant have fallen. This suggests that the program is now reaching students who use transit less frequently compared to early adopters who joined in the first two years of the pilot.

As in past years, there is some evidence that the STPP continues to help support and grow overall ridership levels for the participating transit operators. In particular, youth ridership levels were bolstered by the STPP during Year Three on both Union City Transit (measured on a system-wide basis) and LAVTA (for routes serving STPP schools). Youth ridership data available from AC Transit is more limited at this time and thus less conclusive. In future years, Alameda CTC will continue to work with all of the transit operator partners to ensure the STPP is supportive of the transit system as a whole.

Year Three of the pilot had a very similar cost structure as Year Two, with expenses in three different categories: transit pass products, other direct costs such as printing and shipping, and staff labor. The total program cost for this year was \$4.3 million. This is an increase compared to Year Two due to planned expansion of the program. Administrative expenses continued to decline as a share of overall program costs, due in large part to increased efficiencies applied by the program team.

Effective implementation and evaluation of the STPP to date led the Commission to approve an expansion of the program beyond the pilot. Phase I of this expansion begins in the 2019-20 school year, expanding to 38 new schools and three new school districts.



1 Introduction

Background and Timeline

The cost of transportation to school is often cited as a barrier to school attendance and participation in after-school activities by middle and high school students. In recognition of this issue, the 2014 Measure BB Alameda County Transportation Expenditure Plan (TEP) included \$15 million dedicated to the implementation of an affordable transit pass pilot program for students. The purpose of this program is to test and evaluate different approaches to a transit pass program for public middle and high school students in Alameda County over three years to identify a successful long-term approach.

The goals of the Affordable Student Transit Pass Pilot (STPP) are:

- Reduce barriers to transportation access to and from schools
- Improve transportation options for Alameda County's middle and high school students
- Build support for transit in Alameda County
- Develop effective three-year pilot programs
- Create a basis for a countywide student transit pass program (funding permitting)

The program accounts for the geographic diversity of Alameda County and includes passes that can be used with various transit operators that serve schools, after-school activities, and job locations throughout Alameda County.

Early History of the Student Transit Pass Program

The development of the STPP has a long history that began many years before the formal start of the program in 2016-17. Community members have long been advocating for improved school transportation options in Alameda County. Yellow school bus service is limited to special needs students in most of the county, so many parents and guardians either drive or have their children take public transit to school. Although discounted youth bus passes can reduce the cost of transit, the cost is a burden for many families. Driving children to school creates congestion and safety issues, impacts air quality, and can be difficult for working parents to accommodate into their own schedules. Many felt that a better solution was needed to help young people access educational opportunities.

In 2010, Alameda CTC began the formal development process for the County's long-range transportation plan and development of a 30-year 2014 Transportation Expenditure Plan (TEP) with the formation of the Community

Advisory Working Group (CAWG) and the Technical Advisory Working Group (TAWG). CAWG members represented a broad array of perspectives and stakeholders throughout Alameda County. The TAWG was comprised of staff from Alameda County, cities, transit, and regional agencies. In the development of these two plans, community members in the CAWG advocated to include funding to pay for a countywide Student Transit Pass Program (STPP) through the TEP.

Alameda CTC staff sought input directly from schools on the design of a STPP through the distribution of surveys at school sites in Alameda County to understand student demand for the STPP. Staff worked with students at four different focus group meetings during the spring of 2012. Following each focus group, students completed a two-page survey questionnaire about their ideas for the program. This feedback contributed to key program design decisions during development of the pilot program.

Based on the widespread support that had developed for the program, Alameda CTC included a \$15 million funding allocation for the Affordable Student Transit Pass Program as a line item in its 2012 Transportation Expenditure Plan (TEP), which went before voters as Measure B1 in the November 2012 election. The 2012 measure did not secure the necessary two-thirds majority to pass. Two years later, Alameda CTC re-approved the TEP and placed it on the ballot as Measure BB; it was approved by over 71% of voters in November 2014.

Once the TEP passed in 2014, Alameda CTC worked with stakeholders to create a public process around the development and implementation of a Student Transit Pass Program Pilot (STPP) as defined in the TEP.

In 2015, working with community groups and regional stakeholders, Alameda CTC began the design and development of the three-year pilot to test and evaluate different program models. In the spring of 2016, the Commission approved a framework for selecting schools and program models and passed the design for the first year of the program. In Year One (2016-2017 academic year), Alameda CTC implemented four program models at nine middle and high schools in four school districts.

Following the successful implementation of Year One, the Commission approved the design for Year Two (2017-2018 academic year). The program expanded to 15 schools in five school districts, carrying over only two of the program models from Year One. In Year Three (2018-2019 academic year), the final year of the pilot, the STPP grew to 21 schools across seven school districts and continued to implement the two models from Year Two – Free/Universal and Means-Based/Free.

This report is an evaluation of Year Three outcomes, providing key data to summarize the performance of the mature pilot and set a baseline for future program

expansion. A separate Final Evaluation Report offers an overview of the lessons learned from the entire three-year pilot program.

Figure 2 provides an overview of the STPP timeline.

Figure 2 Timeline for STPP Development, Implementation, and Evaluation



Year Three Program Design

The program design for Year Three was based on lessons learned from the first two years of the pilot, program evaluation needs, available budget, as well as the level of student need. As mentioned, Year Three tested the same two program models (Free/Universal and Means-Based/Free) that were introduced previously, which allowed for year-over-year comparisons.

As in Year Two, participants received a Clipper card with a pre-loaded bus pass for either AC Transit, LAVTA, or Union City Transit. Paper BART tickets (\$50 value) were made available again this year to high school participants adjacent to the BART service area.

In Year Three, six new schools and two new school districts joined the program, bringing the total to 21 schools in seven school districts. Refer to Figure 3 for a list of the schools, districts, and program models tested in Year Three.

Figure 3 Program Models Tested in Year Three

Year Three Program Model	School District	Participating Schools
Free / Universal	OUSD	Castlemont High (HS) *
		Fremont High (HS) *
		McClymonds High (HS) *
		Oakland High (HS) *
		Frick Impact Academy (MS)
		Westlake Middle (MS)
		Roosevelt Middle (MS)
	SLUSD	San Leandro High (HS) *
		John Muir Middle (MS)
	LVJUSD	Livermore High (HS)
		Del Valle High (HS)
		East Avenue Middle (MS)
		Christensen Middle (MS)
	Means-Based / Free	HUSD
Bret Harte Middle (MS)		
NHUSD		James Logan High (HS) *
		Cesar Chavez Middle (MS)
FUSD		American High (HS) *
		Hopkins Junior High (MS)
NUSD		Newark Memorial High (HS)
		Newark Junior High (MS)

* Indicates high schools within BART service area. Year Three Participants at these schools were eligible to receive a BART ticket in addition to their bus pass.

Evaluation and Data Sources

At the outset of the STPP, the Commission approved an evaluation framework with a total of 18 qualitative and quantitative metrics to illustrate pilot outcomes in three areas:

- Program participation and transit ridership
- Outcomes for students and families
- Administration, cost, and program management.

These metrics are thoroughly discussed in the full STPP Final Evaluation Report, which covers key findings from all three years of the pilot.

In December 2018, the Commission approved the expansion and continuation of the STPP into a five year countywide program. At this time, they also approved a streamlined list of four evaluation criteria with associated quantitative metrics that will be used moving forward. To provide a baseline for comparison in future years of the program, this report is based on the four evaluation criteria and metrics.

Each evaluation criterion is covered in a separate chapter of this report. See Figure 4 for a description of the criteria, metrics and data sources used in this evaluation.

Figure 4 Evaluation Framework for Expanded Program

Evaluation Criteria	Rationale	Metric	Data Source	Primary Goals Met
Participation Rate	To determine the level of uptake of the passes by students	Percent of eligible students who opt to participate	California Department of Education; Participation master list	Remove barriers Increase options
Pass Usage	To determine how often students use their passes	Total number of rides taken; Number of rides divided by number of participants (by month, annual)	Clipper data; Participation master list	Increase options Build support for transit
Transit Ridership and Capacity	To determine the pass program impact on transit agency ridership and capacity	Total trips taken using student passes compared to overall ridership and total youth ridership (by year and trends); Changes in boardings at stops by schools; route capacity before/after program implementation	Transit agency ridership and capacity data; Clipper data	Build support for transit
Program Costs	To understand the overall cost/benefit ratio of the pass program and the efficiency of program administration	Overall program costs; Costs on a per participant basis; Administrative costs as percentage of overall program costs	Financial information collected through invoices submitted to Alameda CTC; Alameda CTC staff costs	Implement Cost Effective Program

This Year Three Evaluation Report utilizes data from multiple sources, including the following:

- Program participation rates and pass quantities from Alameda CTC and transit agency tracking databases
- Transit ridership data from Clipper transactions and BART fare gates from transit agencies
- Systemwide transit ridership data and capacity analyses provided by transit agency partners
- Cost data from program invoices and Alameda CTC accounting systems



2 Participation Rate

Participation in the STPP grew in Year Three. About 58 percent of all eligible students applied for a free bus pass; more than 11,100 students signed up for the program by the end of the school year. Year Three results varied by school, with no definitive trends observed between middle school versus high school or by program model (Free/Universal versus Means-Based/Free).

Percent of Eligible Students Who Choose to Participate

Between Year Two and Year Three, the program saw a 68 percent increase in the total number of participants. The Year Three participation rate increased by ten percentage points compared to Year Two.

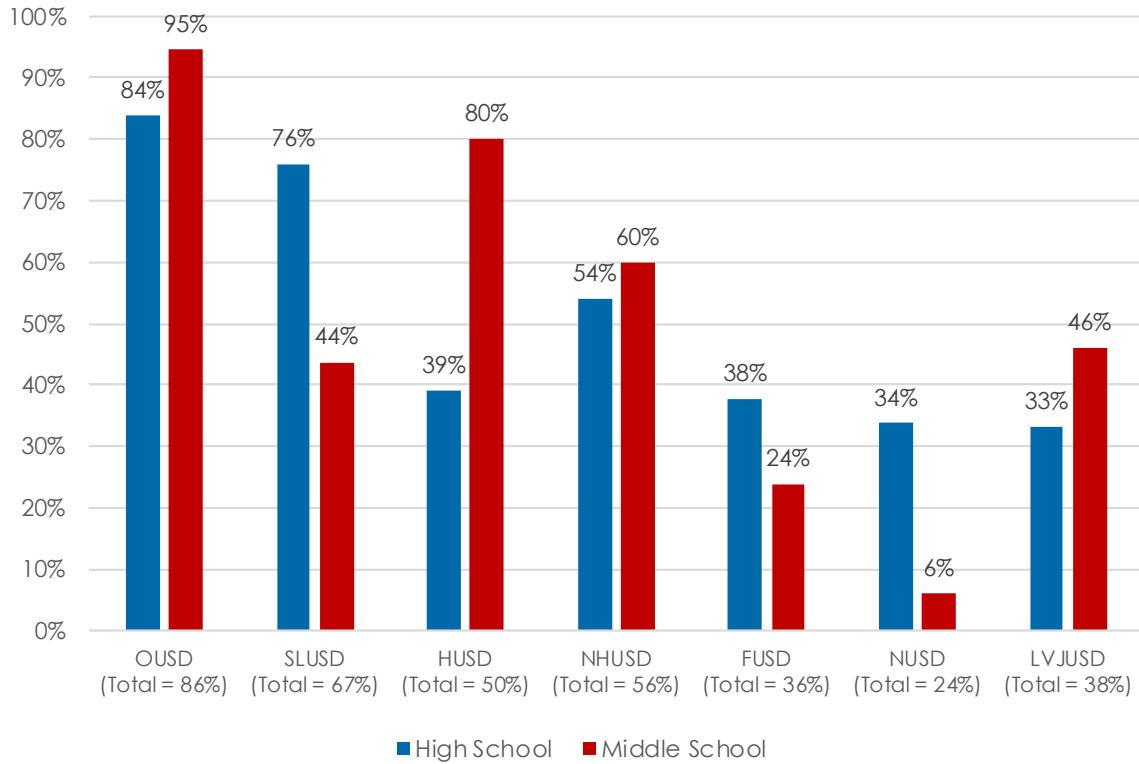
Year Three participation rates varied between school districts from about 24 percent to about 86 percent. This variation across school districts is likely due to multiple factors, including differences in transit service coverage and quality, demographics, land use, and urban form throughout the county.

As in the first two years of the program, program participation was the highest in Oakland USD, with 86 percent of Oakland USD students participating in Year Three. San Leandro USD had the second-highest participation at 67 percent. The lowest participation rates were seen in the two school districts that were new to the program this year: Fremont USD had 36 percent of its eligible students participate, and Newark USD had 24 percent participation.

Figure 5 shows Year Three participation rates at the school district level, with middle school and high school students portrayed separately for each district. Consistent with Year Two findings, there was no overall trend in high school versus middle school participation rates. However, the majority of those that are eligible and those that choose to participate are high school students. As such, their behavior and opinions tend to outweigh middle school students in aggregated results. Disaggregated results are presented where appropriate to understand differences between these two populations.¹

¹ Due to differing participation rates at each school, participation is not evenly divided among planning areas and program models. Approximately 40% of all participants are in North County (Oakland USD), about 29% are in the two school districts located in Central County (San Leandro USD, Hayward USD), about 19% are in the three school districts in South County (New Haven USD, Fremont USD, and Newark USD), and only about 11% are located in East County (Livermore Valley JUSD). Almost 80% of participants are in the Free/Universal programs, while about 20% are in Means-Based/Free programs.

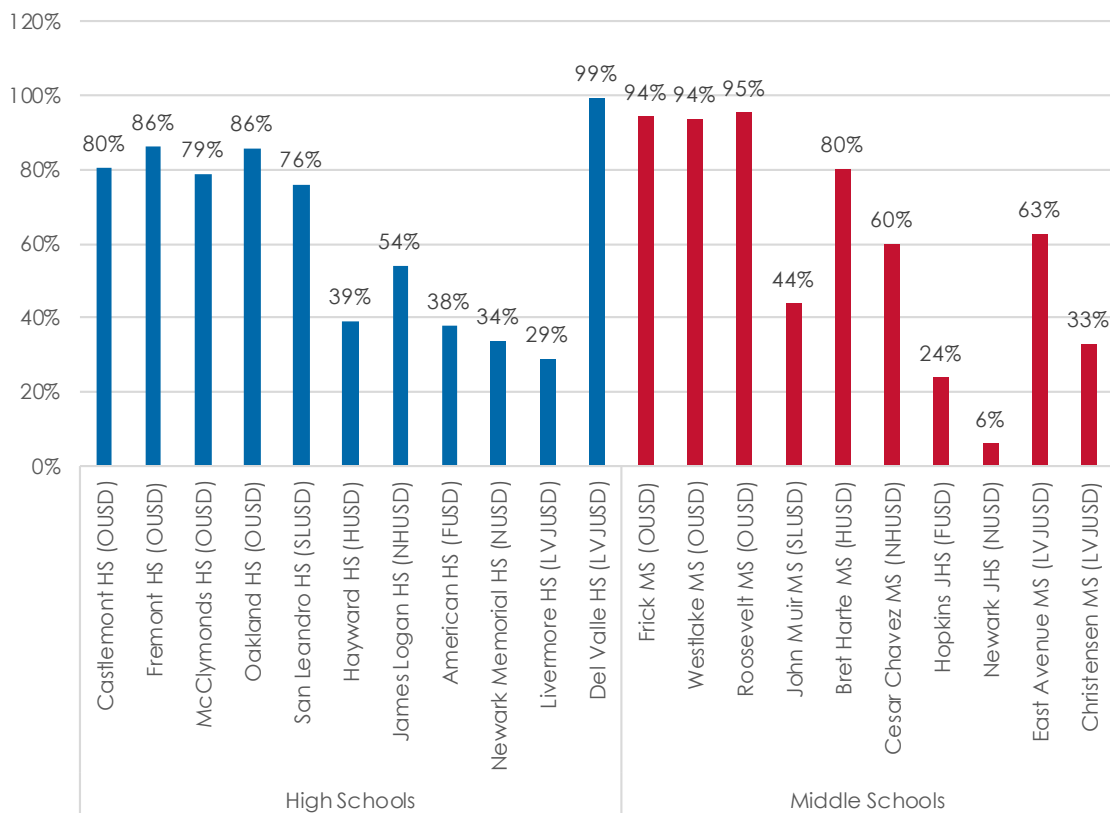
**Figure 5 Year Three Participation Rate by School District
(Participants as Share of Eligible Students, 2018-19 Year-End)**



Comparison Across Schools

When looking at the participation rates by individual school, the values range from 6 percent to 99 percent. About half of the schools had participation rates above 75%. The highest participation rate this year was at Del Valle High School (99 percent participation) and the lowest rate was at Newark Junior High School (6 percent participation). Results for each school are presented in Figure 6, with schools grouped together by school level (high school versus middle school).

Figure 6 Year Three Participation Rates at Middle Schools and High Schools (Participants as Share of Eligible Students, 2018-19 Year-End)



When considering the program model in effect at each school, the results within each program model were more varied in Year Three as compared to past years, calling into question the earlier finding that Means-Based/Free programs tend to have lower participation than Free/Universal programs. During Year Two, the participation rates at the four Means-Based/Free schools were all between 30 percent and 40 percent, which was noticeably lower than the participation rates at many of the Free/Universal schools that year. As shown in Figure 7, the Year Three participation rates vary widely in both program models, and multiple Means-Based/Free schools had more than half of their eligible students participate. The range in participation rates is quite broad for both program models with examples of

high and low participation in each group. This suggests that the program model itself is not a meaningful driver of participation rates. As noted earlier, participation rates have been generally increasing over time, so one possible explanation for the change in outcomes between Year Two and Year Three could be the fact that the low participation rates in the Means-Based/Free programs in Year Two might have been due to the newness of the program at those schools, while the Free/Universal schools benefitted from continuation of an existing and familiar model. However, this hypothesis is not borne out in the data. Figure 8 presents the Year Three participation rate at each school, but with the schools grouped together by the year in which they joined the program. Each cohort of schools has a mix of high and low participation rates, suggesting that participation is not driven by familiarity with the program over time. For example, the highest participation rate is at a school that joined in Year Two (Del Valle High School) while a Year One school, Livermore High School, has one of the lowest participation rates this year; both of these schools are in the same district: Livermore Valley JUSD. A detailed table of participation rates by school and school district is shown in Figure 9.

Figure 7 Year Three Participation Rates by Program Model (Participants as Share of Eligible Students, 2018-19 Year-End)

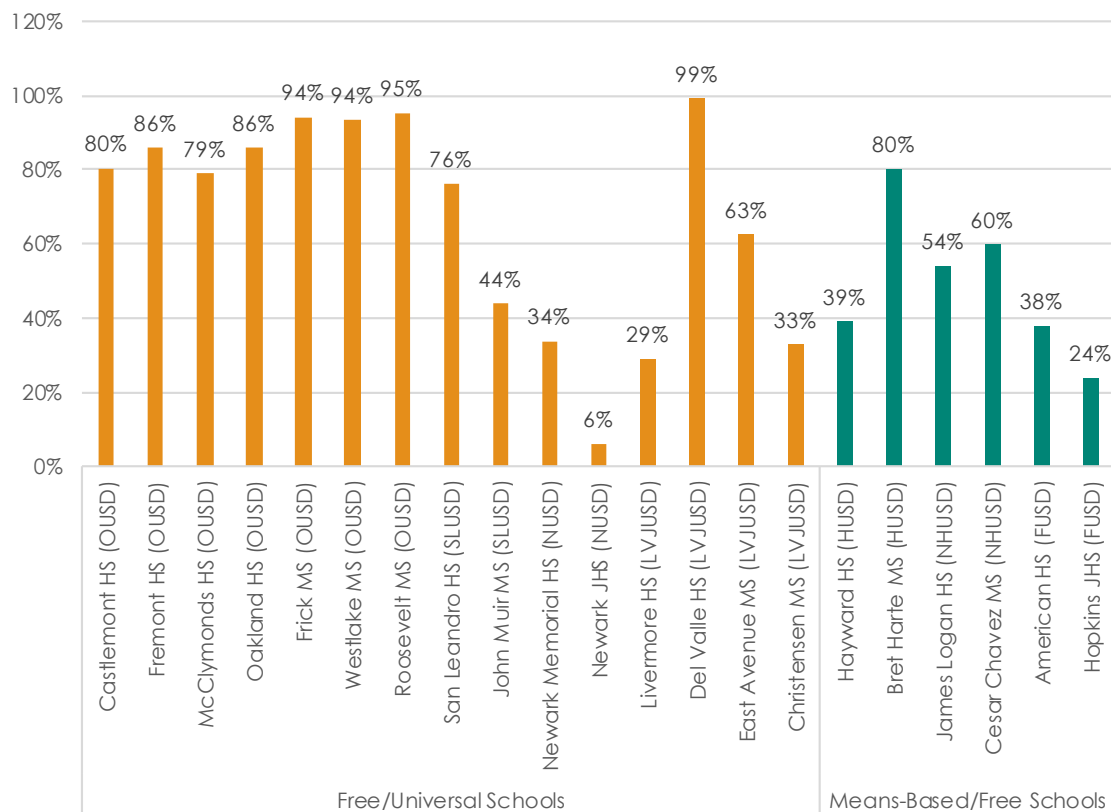


Figure 8 Year Three Participation Rates Grouped by Longevity in STPP (Participants as Share of Eligible Students, 2018-19 Year-End)

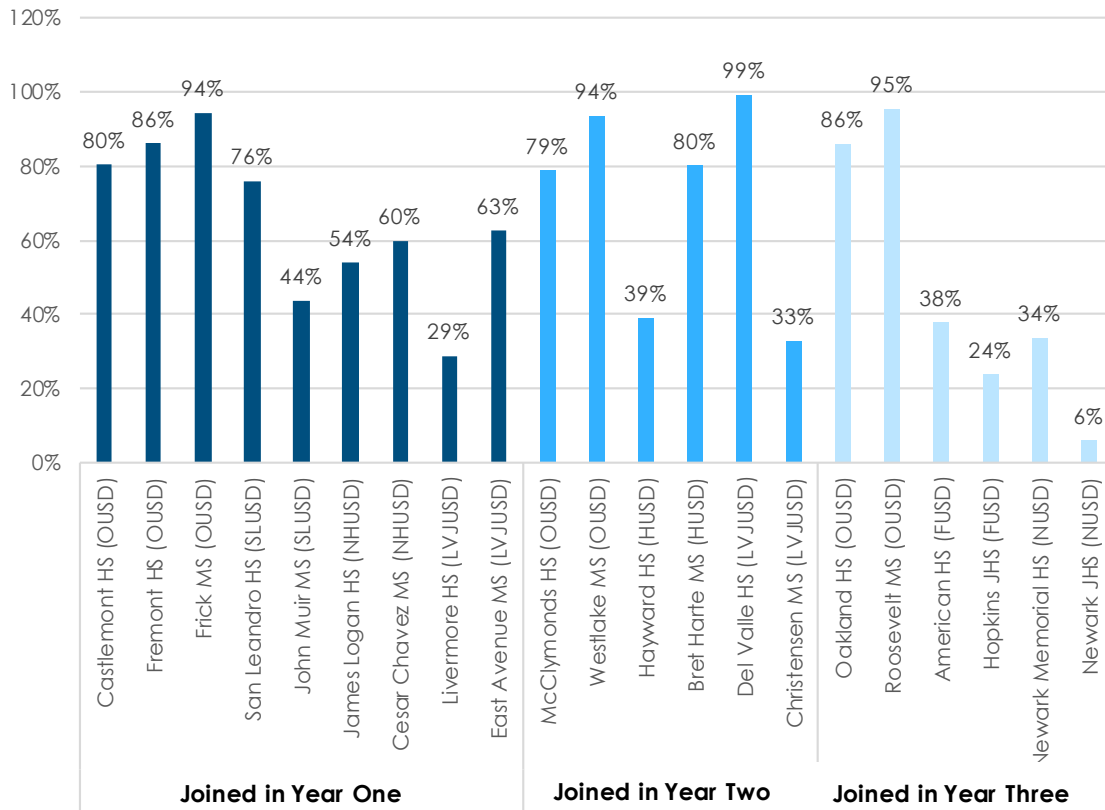


Figure 9 Summary of Bus Pass Participation in Year Three

School District	Participating Schools	Year Three Program Model	Students Eligible in Year Three	Year Three Participation (as of July 2019)		Year Two Participation Rate for Comparison (July 2018)
				Number of Participants	Share of Eligible Students	
OUSD	Castlemont High	Free / Universal	1,012	814	80%	98%
	Fremont High		835	718	86%	93%
	McClymonds High		430	339	79%	83%
	Oakland High		1,705	1,464	86%	n/a
	Frick Middle		244	230	94%	100%
	Westlake Middle		371	347	94%	96%
	Roosevelt Middle		619	590	95%	n/a
	Oakland USD Total		5,216	4,502	86%	94%
SLUSD	San Leandro High	Free / Universal	2,652	2,017	76%	56%
	John Muir Middle		1,003	439	44%	34%
	San Leandro USD Total		3,655	2,456	67%	50%
HUSD	Hayward High	Means-Based / Free	1,162	454	39%	31%
	Bret Harte Middle		402	322	80%	31%
	Hayward USD Total		1,564	776	50%	31%
NHUSD	James Logan High	Means-Based / Free	1,672	902	54%	31%
	Cesar Chavez Middle		750	449	60%	37%
	New Haven USD Total		2,422	1,351	56%	33%
FUSD	American High	Means-Based / Free	418	158	38%	n/a
	Hopkins Middle		67	16	24%	n/a
	Fremont USD Total		485	174	36%	n/a
NUSD	Newark Memorial High	Free / Universal	1,703	574	34%	n/a
	Newark Middle		901	54	6%	n/a
	Newark USD Total		2,604	628	24%	n/a
LVJUSD	Livermore High	Free / Universal	1,878	542	29%	22%
	Del Valle High		121	120	99%	71%
	East Avenue Middle		568	355	63%	38%
	Christensen Middle		715	235	33%	29%
	Livermore Valley JUSD Total		3,282	1,252	38%	28%
Countywide			19,228	11,139	58%	48%

3 Pass Usage

During Year Three, STPP participants took over 1.2 million bus trips and more than 19,000 trips on BART with passes provided by the program. As participation rates have increased, average monthly trips per participant have fallen. This suggests that the program is reaching students who do not use transit as frequently versus early adopters who joined in the first two years of the pilot.

Total Number of Rides Taken

Total bus trips were up by 44 percent compared to the number of trips taken in Year Two. In fact, the total number of bus trips in Year Three nearly matched the sum of all trips taken in the first two years of the program combined.

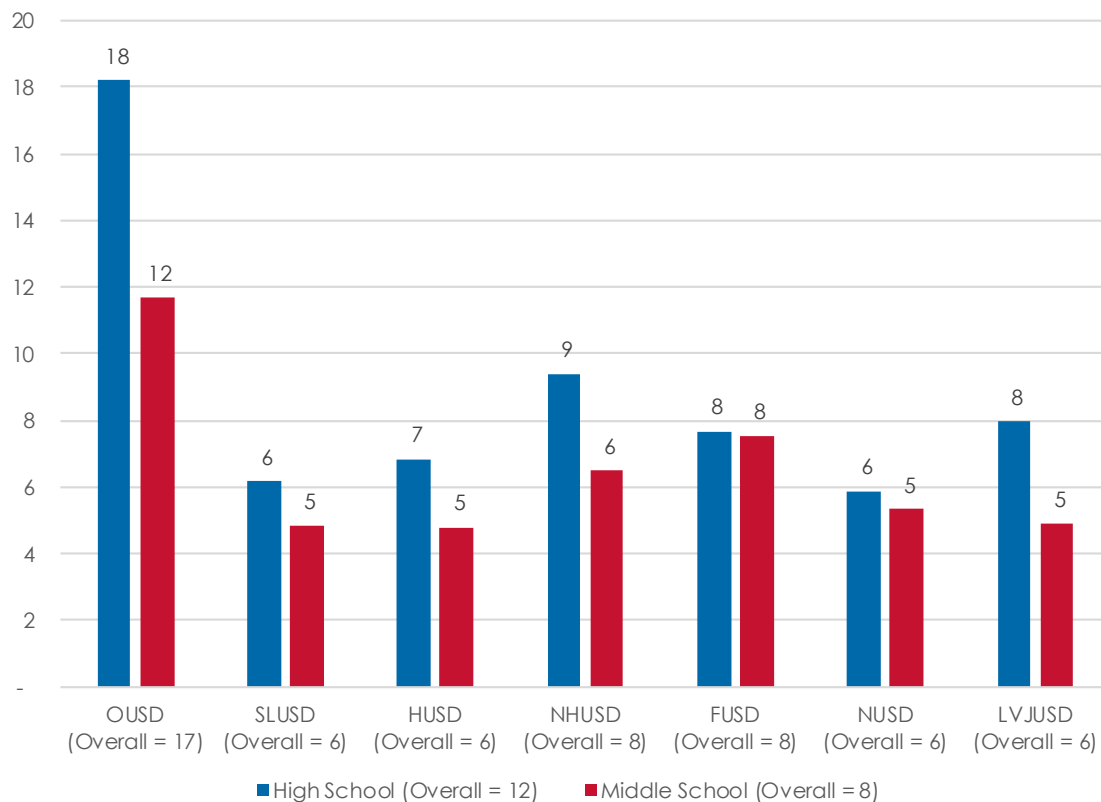
As in past years, most of the bus boardings were on AC Transit (over 1.1 million or 91 percent) due to AC Transit's large service area. Approximately 41,000 boardings (about 3 percent) were on Union City Transit, and over 74,000 boardings (about 6 percent) were on LAVTA/Wheels.²

Usage Rate

During the core months of the school year (September-May), Year Three participants took an average of 10 bus trips per month. However, it is important to note that this average varies by school, school district, and transit operator. Across all districts, high school students rode the bus as much or more often than middle school students. At the school district level, Oakland USD shows the most usage by far, with an average of 17 boardings per participant each month. The other school districts range from 6 to 8 boardings per participant per month. Figure 10 shows school district average values, with high school and middle school students portrayed separately in each district.

² It should be noted that LAVTA/Wheels offers a two-week promotion every August called "Try Transit to School" where students are invited to ride school-serving bus routes without paying a fare in order to build transit ridership across their system. As a result, existing STPP participants would not have to tag their Clipper card to board a bus for about half the month of August, and their trips would not be recorded. Thus, the actual number of LAVTA boardings by participants in Year Three is slightly higher than the value available within the Clipper reporting system.

Figure 10 Average Monthly Bus Boardings Per Participant, by School District, 2018-19 School Year (Sep-May)



At a school level, the most active school was Oakland High School (Oakland USD) where students took about 20 trips per month, on average. At the low end, students at Christensen Middle School (Livermore Valley JUSD) took four trips per month on average. These results are portrayed in Figure 11.

As mentioned in the previous chapter, some of the variations are attributable to external factors such as the quality of transit service, land use patterns, and underlying demographic characteristics in each part of the county. This hypothesis is reinforced by reviewing the Year Three average monthly boardings per participant for each school in relation to when the schools joined the pilot.

As shown in Figure 12, the group of schools that have joined each year have varying usage rates that are not correlated with how long the school has been in the program. Schools in the North planning area (especially Oakland USD) have the highest average monthly boardings, and schools in the South and East planning areas consistently have lower average monthly boardings. Oakland High School joined in Year Three and had the highest average monthly boardings per participant of any Year Three school.

Figure 11 Average Monthly Boardings Per Participant, by School and Transit Operator, 2018-19 School Year (Sep-May)

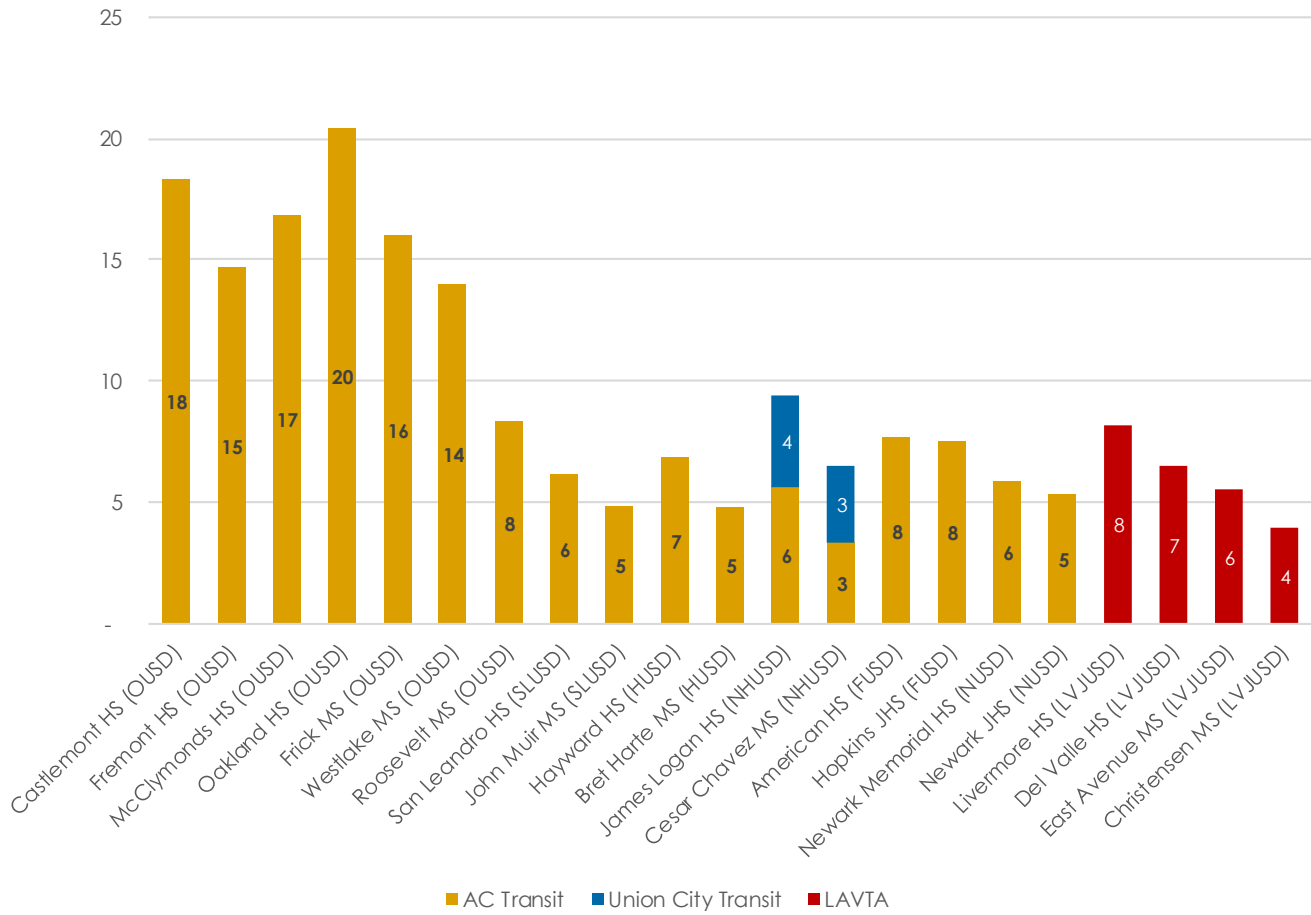
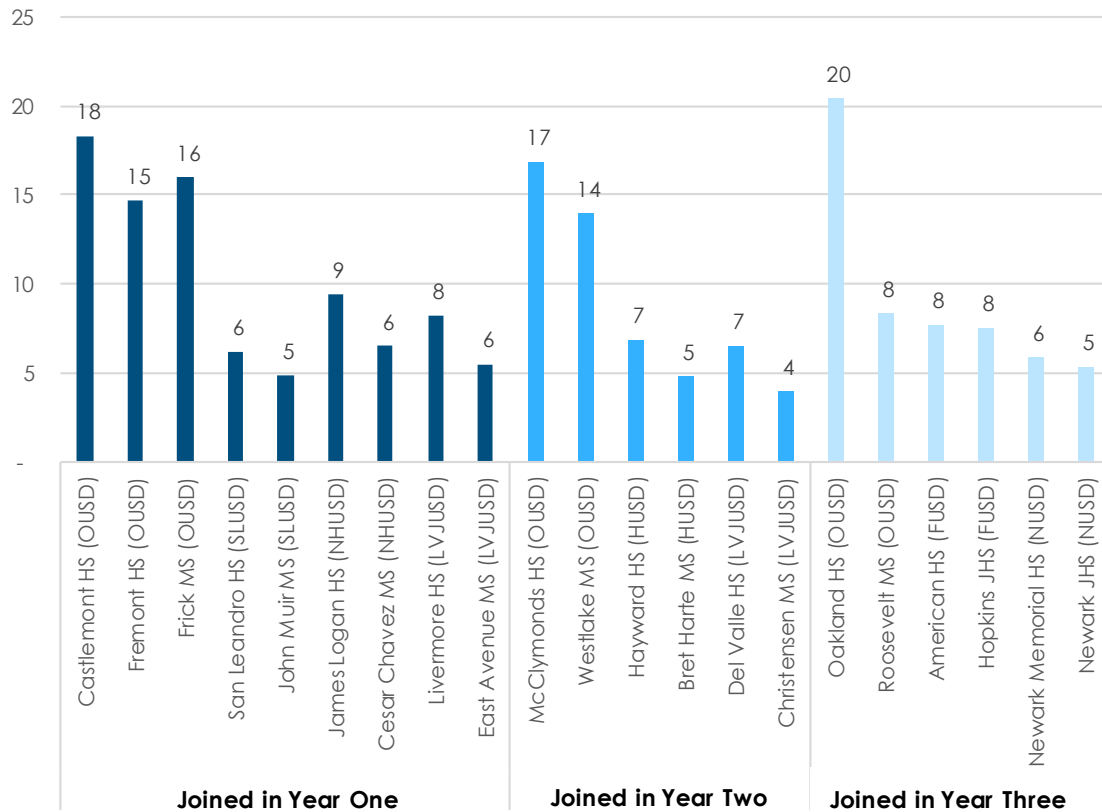


Figure 12 Average Monthly Boardings Per Participant, by School, 2018-19 School Year (Sep-May)



Average trips per month varied by transit operator. On average, there were ten boardings per participant on AC Transit, five boardings per participant on LAVTA, and three boardings per participant on Union City Transit. A summary of Year Three bus boardings at each school and school district is presented in Figure 13.

Figure 13 Summary of Bus Ridership in Year Three

School District	Participating Schools	Year Three Program Model	Average Monthly Boardings Per Participant*		Total Bus Boardings By Transit Operator (Aug-2018 through Jul-2019)		
			School Year (Sep-May)	Year Three Overall (Aug-Jul)	AC Transit	Union City Transit	LAVTA
OUSD	Castlemont High	Free/ Universal	18	17	170,150		
	Fremont High		15	14	126,368		
	McClymonds High		17	16	68,289		
	Oakland High		20	19	303,952		
	Frick Middle		16	15	44,291		
	Westlake Middle		14	13	59,320		
	Roosevelt Middle		18	7	50,443		
	Oakland USD Total		17	15	822,813		
SLUSD	San Leandro High	Free/ Universal	6	6	128,133		
	John Muir Middle		5	4	22,053		
	San Leandro USD Total		6	5	150,186		
HUSD	Hayward High	Means-Based/ Free	7	6	31,192		
	Bret Harte Middle		5	4	12,380		
	Hayward USD Total		6	5	43,572		
NHUSD	James Logan High	Means-Based/ Free	10	8	47,347	28,747	
	Cesar Chavez Middle		6	6	14,185	12,401	
	New Haven USD Total		9	7	61,532	41,148	
FUSD	American High	Means-Based/ Free	8	7	10,901		
	Hopkins Middle		8	6	869		
	Fremont USD Total		8	7	11,770		
NUSD	Newark Memorial High	Free/ Universal	6	5	28,538		
	Newark Middle		5	5	2,006		
	Hayward USD Total		6	5	30,544		
LVJUSD	Livermore High	Free/ Universal	8	7			40,813
	Del Valle High		7	6			7,010
	East Avenue Middle		6	4			17,681
	Christensen Middle		4	3			8,592
	Livermore Valley JUSD Total		6	5			74,096
Countywide			10	9	1,120,417	41,148	74,096
Overall average per participant by operator:					10	3	5

* Average boardings per participant is calculated separately by school, by school district, and by transit operator for each month of the year. The monthly values are then averaged across relevant time period for either the core of the school year (Sep-May) or Year Three overall (Aug-Jul). For New Haven USD, where there are two bus transit operators, the calculation is performed separately for each bus operator, and the results are summed together.

BART Participation & Usage

In Year Three, \$50 BART tickets were offered at high schools within the BART service area. Over the course of the year, a total of 2,878 BART tickets were requested, representing about 25 percent of eligible students. Interest in the BART tickets dropped by about 15 percentage points between Year Two and Year Three. In fact, the raw number of BART tickets that were requested in Year Three is lower than the number requested in Year Two, even though a much larger number of students were eligible to request a BART ticket this year. The relatively low number of BART tickets distributed could be partly due to the challenges of reporting and fulfilling ticket requests; administrative processes remained complex for the BART tickets this year, so this aspect of the program may have been a lower priority for school site administrators compared to ensuring timely access to the Clipper card bus passes.³

Similar to last year, the rate of BART tickets requested was consistently lower than the share of students who requested a student transit pass. In Year Two, four of the six BART-area schools had BART ticket request rates within 10 percentage points of their bus pass participation rates, while in Year Three, only one of the eight BART-area high schools saw comparable participation rates between the two types of transit.

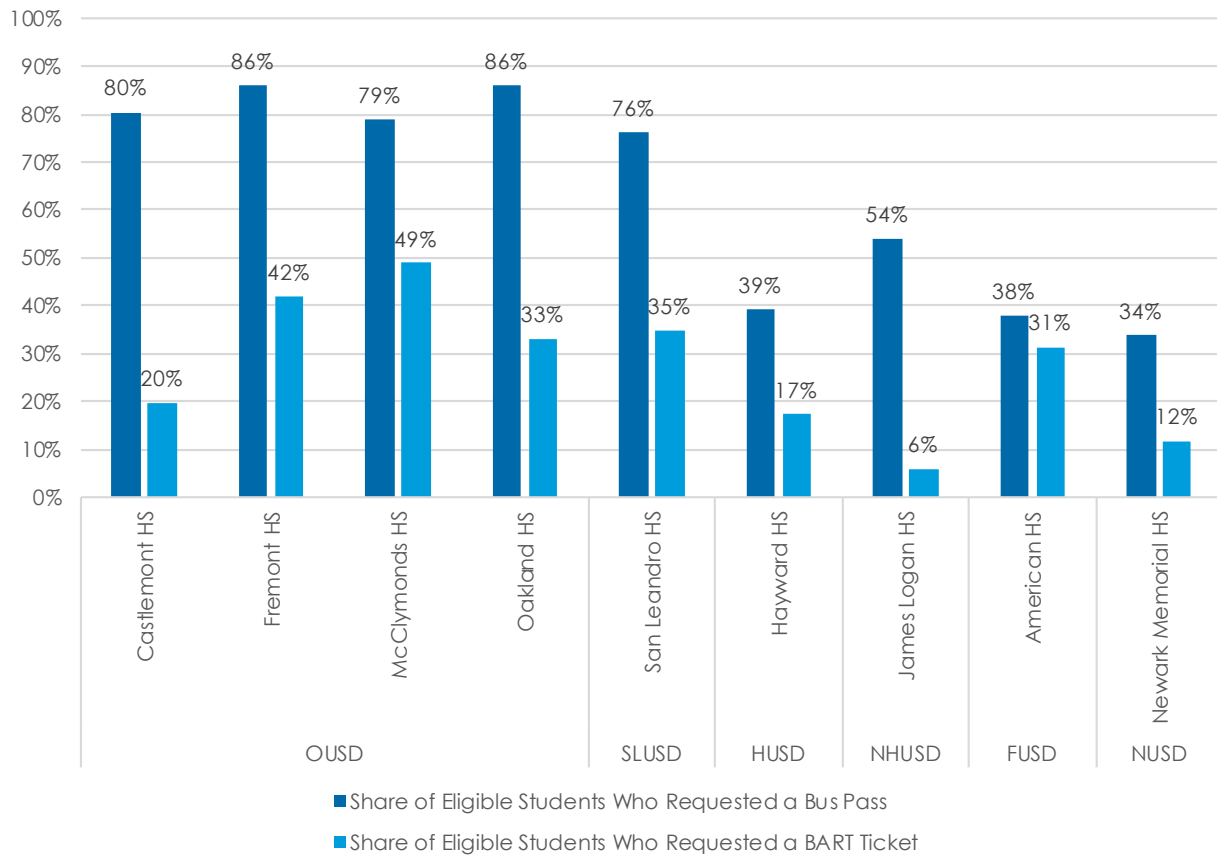
Distance between a school and the nearest BART station is not a driver of the BART participation rates. The lowest rate of BART ticket requests (6 percent) was at James Logan High School (New Haven USD), and the highest rate of BART ticket requests (49 percent) was at McClymonds High School (Oakland USD), even though these schools are almost the same distance away from the nearest BART station. BART ticket participation information for each school is presented in Figure 14 and Figure 15.

³ Alameda CTC did receive a reimbursement of funds from BART for all Orange Tickets that were not distributed to schools during the three-year pilot program.

Figure 14 Summary of BART Ticket Participation in Year Three

School District	Participating High Schools in BART Service Area	Students Eligible in Year Three	Number of STPP Participants (July 2019)	Year Three BART Participation (as of July 2019)		Distance to Nearest BART Station (miles)
				Number of BART Tickets Distributed to Students	Share of Eligible Students	
OUSD	Castlemont High	1,012	814	200	20%	2.5
	Fremont High	835	718	350	42%	1.0
	McClymonds High	430	339	210	49%	1.3
	Oakland High	1,705	1,464	564	33%	1.8
	Oakland USD Total	3,982	3,335	1,324	33%	
SLUSD	San Leandro High	2,652	2,017	923	35%	1.4
HUSD	Hayward High	1,162	454	200	17%	1.3
NHUSD	James Logan High	1,672	902	100	6%	1.2
FUSD	American High	418	158	131	31%	2.7
NUSD	Newark Memorial High	1,703	574	200	35%	3.5
Countywide		11,589	7,440	2,878	25%	

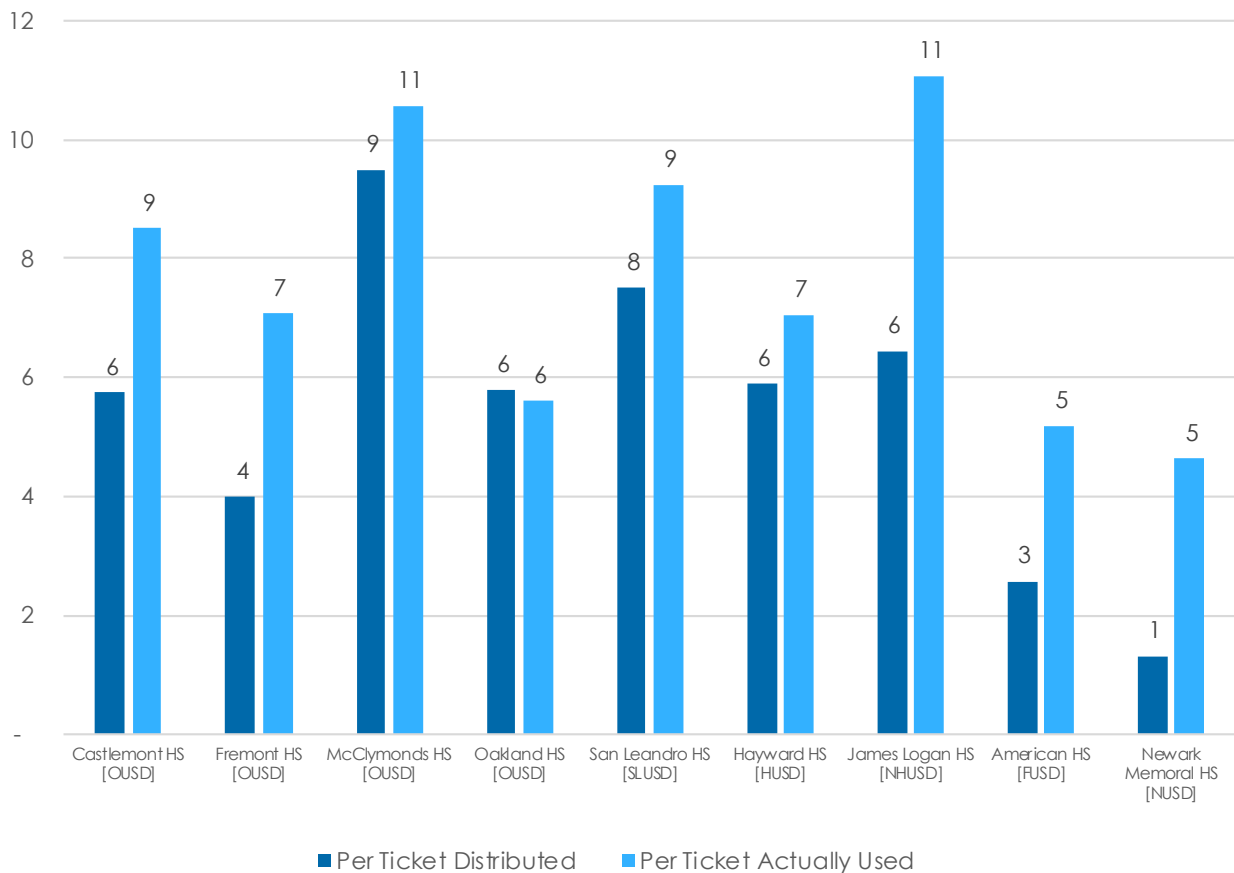
Figure 15 Comparison of Bus and BART Participation Rates in Year Three -- Year-End (Jul-2019)



During Year Three, STPP participants took approximately 19,500 one-way trips using BART tickets distributed through the program – about 100 more total trips than Year Two. Of note, about 2,900 (15 percent) of the BART trips in Year Three were taken using BART tickets that were distributed and used for travel during Year Two.

Taking Year Two and Year Three combined, more than 6,100 BART tickets were distributed to students, representing almost \$306,000 in fare value.⁴ Of these tickets, only about 4,600 tickets (75 percent) had been used on the BART system through the end of the pilot period. On average, students took nine one-way trips with a single BART ticket. Because BART fares are partly distance-based, students deplete their \$50 at different rates depending on where and how often they travel. For example, students in Newark USD averaged about five trips per ticket while students in New Haven USD averaged about 11 trips per ticket. Average values for each participating high school are shown in Figure 16.

Figure 16 Average BART Trips Per Ticket, by School (Year Two + Year Three combined)



⁴ Coordination with site administrators during Year Three revealed that some additional BART tickets had been distributed during Year Two that were not recorded correctly at the time of the preparation of the Year Two Evaluation Report. All Year Two values presented in this document reflect the updated information available as of the end of the pilot.

Nearly 60 percent of all Year Three travel on BART was within Alameda County. More than 30 percent of trips were between Alameda County and San Francisco, and the remaining 10 percent were trips between Alameda County and Contra Costa County, and elsewhere in the BART system. The average fare per trip was \$3.69. Tickets distributed to schools further south in Alameda County tended to have higher average fares than those in northern part of the county, likely because of the distance-based fares on the BART system.

Transaction records for Year Two and Year Three indicate that the total value of all travel taken on STPP-issued BART tickets is approximately \$140,000, or 46 percent the total fare value that was distributed to STPP participants. BART paper tickets do not have a formal expiration date, so the remaining \$166,000 in unused fare value could support future travel beyond the formal end of the pilot.

BART offered Alameda CTC a 50 percent discount on the Orange Tickets that were purchased for the STPP, so the expense for all the BART tickets (including those that have not been used) was approximately \$153,000. Unfortunately, less than half of the distributed fare value has been used, so the cost to Alameda CTC for the BART travel supported by the pilot was about \$4.00 per trip.

4 Transit Ridership and Capacity

In each of the three years of the pilot, the program team has coordinated with the three bus transit operators to monitor trends in youth ridership, operational changes, and capacity issues that could have a relationship to and impact on the transit pass program. This chapter describes the results of the associated analyses that were conducted during Year Three. Past years' evaluation reports provide additional information about interim findings in these topic areas.

Student Transit Pass Ridership in Context

As the pilot has continued to expand, more and more students in Alameda County are traveling on the bus using an STPP-provided pass. Some participants are new to transit, so their transit use represents incremental ridership for the transit operators. Other participants could have been riding transit prior to joining the program, and they are simply changing from one fare payment type to another, although participants self-reported that the unlimited transit pass has allowed them to ride transit more frequently, particularly at the high school level.

At this time, STPP boardings represent a relatively small portion of each transit operator's overall ridership, so it can be difficult to discern patterns that are specifically attributable to the pilot at the system-wide level. To try to isolate the effects of the pilot, trends in youth ridership as well as overall boardings on the specific bus routes that serve STPP schools were analyzed to explore potential changes that might be associated with the pilot. At this time, the data required to make these comparisons is not uniformly available from all three bus transit operators, so the analytical approach varies for each operator, as described below.

Data currently on hand suggests that the STPP may be helping to support recent ridership growth in some instances and stemmed recent declines in ridership in others. Alameda CTC will continue to work with operators to refine the data analysis presented below to determine the nature of ridership changes that can be attributed to the STPP.

AC Transit

The youth ridership data that is available from AC Transit at this time does not provide a complete picture of systemwide travel activity, so conclusions cannot be drawn about the impact of STPP-related boardings on overall trends. In future years, Alameda CTC will continue to work with all of the transit operator partners to ensure the STPP is supportive of the transit system as a whole.

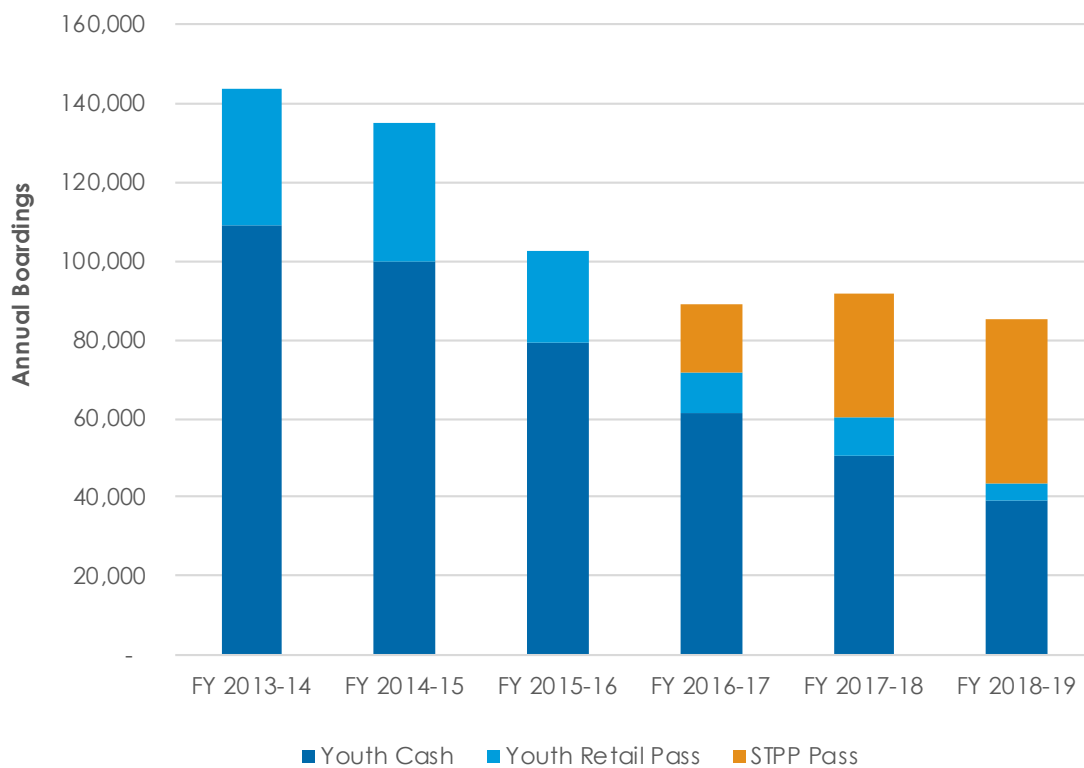
Union City Transit

STPP participants boarded Union City Transit 41,148 times during Year Three, an increase of 32 percent compared to the 31,140 boardings during Year Two. In those

same two years, the number of participants at the schools within the Union City Transit service area increased by 159 percent, from 841 to 1,351 participants. Systemwide data on youth ridership is currently only available on a fiscal year basis rather than the August through July academic year used for analysis elsewhere in this report. When adjusted to the July 1 – June 30 timeframe, STPP participants took 30,194 trips in 2017-18 and 41,611 trips in 2018-19.⁵

Annualized data provided by staff at Union City Transit show that, except for a brief plateau in 2017-18, overall systemwide ridership has decreased since 2013-14. Youth ridership across all fare products (cash fares, retail passes, and STPP passes) has followed a similar pattern with a steady decline between 2013-14 and 2016-17, a very modest gain in 2017-18 and another decline in 2018-19. The year-over-year increases in STPP boardings potentially stem the youth ridership declines experienced elsewhere in the system. Youth boardings by fare product are portrayed in Figure 17.

Figure 17 Youth Ridership on Union City Transit by Fare Product



⁵ Per monthly Clipper reports of STPP boardings provided by Union City Transit.

LAVTA/Wheels

STPP participants boarded LAVTA Wheels buses 76,313 times during Year Three, an increase of 39 percent compared to the 54,768 boardings in Year Two. The total number of STPP participants increased by 30 percent between Year Two and Year Three.⁶

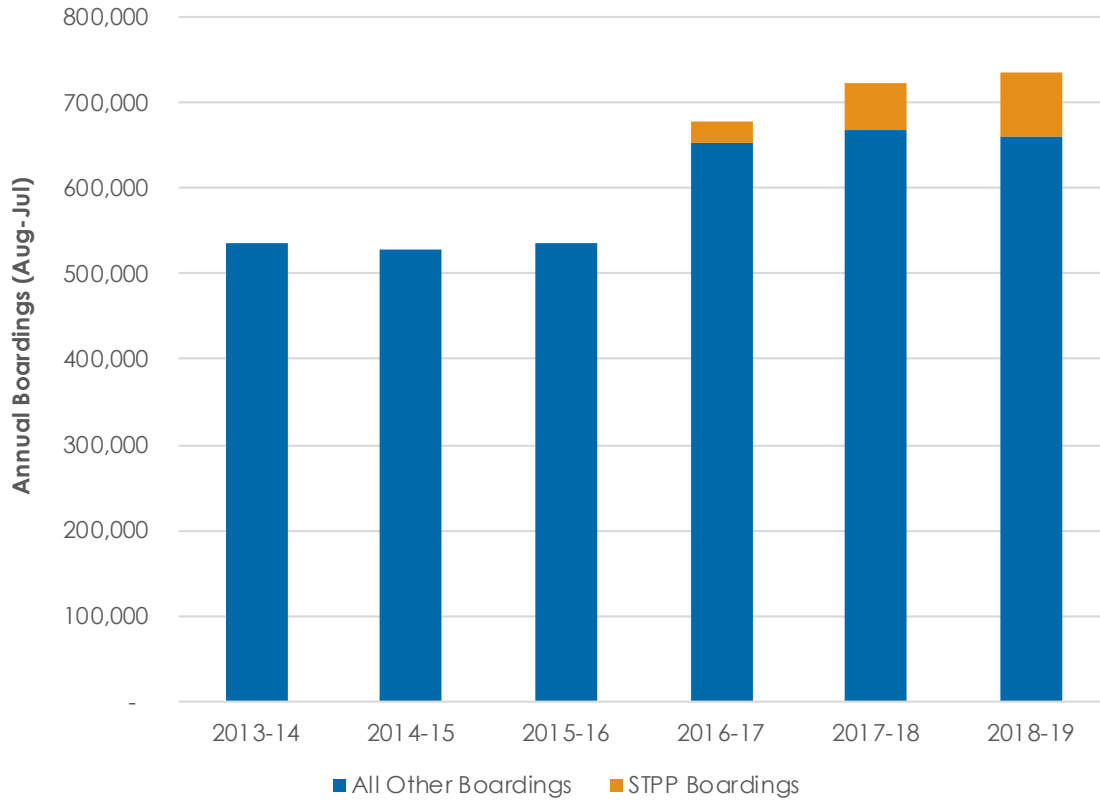
LAVTA systemwide boardings had been declining in each of the past five years until an increase in 2017-18 that continued into 2018-19. Measured on an academic calendar basis (August through July), there were about twenty thousand more boardings in 2018-19 compared to 2017-18, an increase of about one percent. At the same time, the STPP produced a net increase of 21,545 boardings, so the STPP may be helping mitigate ridership declines elsewhere in the LAVTA system.⁷

LAVTA does not have a separate youth pass product that would allow for comparison of ridership changes at a fare-product level. However, analyzing trends in the bus routes that specifically serve schools can provide some insights as to overall trends. The bus routes that served Year Three schools in Livermore Valley JUSD include routes 14, 15 and 30R. As shown in Figure 18, these three routes averaged about 534,000 boardings per year for the three-year period immediately preceding the STPP launch. The notable increase in 2016-17 is likely attributable to a systemwide route restructuring, though it coincides with the launch of the STPP. Thereafter, the system achieved modest increases in boardings on school-serving routes in both 2017-18 and 2018-19, but with STPP boardings representing an increasing share of the total on these routes.

⁶ Data on STPP boardings was not available in August 2017 due to the change in fare medium from paper passes to Clipper, so the net change from year to year includes the effect of comparing 11 months of Year Two to 12 full months in Year Three.

⁷ The annual statistics quoted in this section are expressed based on August to July ridership totals, in order to align with the reporting year used for the STPP. As such, the values will vary from LAVTA publications based on fiscal year reporting.

Figure 18 Ridership on LAVTA Routes Serving LVJUSD Schools



5 Program Costs

Year Three of the pilot used a very similar cost structure as Year Two, with expenses in three different categories: transit pass products, other direct costs such as printing and shipping, and staff labor. Total program costs increased compared to the prior year due to planned expansion of the STPP. Administrative expenses continued to decline as a share of overall program costs, due to increasing efficiencies in the processes used by the program team.

Per Participant Cost

Bus Transit Pass Costs

As in Year Two, the bus transit agency partners are reimbursed for the transportation they provide to STPP participants according to three different arrangements, based on the number of enrolled participants (AC Transit), the number of actual participant boardings (Union City Transit), or the number of eligible students (LAVTA). Based on these fee arrangements, the total invoice amounts and cost per bus trip for Year Three are shown in the table in Figure 19.

Figure 19 Bus Pass Cost for Year Three

Transit Agency	Bus Pass Cost	Year Three Total Boardings	Alameda CTC Cost Per Trip
AC Transit	\$3,731,378	1,120,417	\$3.33
Union City Transit	\$53,131	41,148	\$1.29
LAVTA	\$75,000	74,096	\$1.01
TOTAL	\$3,859,509	1,235,661	\$3.12 (overall)

BART Ticket Costs

BART tickets were also provided during Year Three of the pilot. BART tickets are paid for up front, based on the number of cards ordered and programmed. Each ticket has \$50 of fare value loaded on it but is sold to Alameda CTC at a 50 percent discount (i.e., \$25 each). A total of 4,760 tickets were sent to BART-eligible high schools to be distributed to Year Three STPP participants who requested them. The total stored value on these tickets was \$238,000 and the equivalent cost to Alameda CTC for the tickets was \$119,000. A total of 2,878 BART tickets were distributed to participants during Year Three.⁸

⁸ At the start of Year Three, Alameda CTC purchased 4,500 additional BART tickets to supplement the 1,760 tickets that were leftover at the end of Year Two. However, 1,500 of these new tickets were not needed during Year Three and were returned to BART for reimbursement.

Cost Per Participant

Program participants use their transit passes to varying degrees, and some students may use their bus pass and BART ticket very little over the course of the year, while others may use their bus pass every day. An average cost per participant can be developed by adding up all of the transportation costs and dividing by the number of participants in the program. This calculation is portrayed by school district in Figure 20.

Figure 20 Annual Cost Per Participant (transit pass costs)

School District	Bus Passes Distributed	BART Tickets Distributed	Annual Cost Per Participant
Oakland USD	4,502	1,324	\$385
San Leandro USD	2,456	923	\$387
Hayward USD	776	200	\$384
New Haven USD	1,351	100	\$418
Fremont USD	174	131	\$396
Newark USD	628	200	\$385
Livermore Valley JUSD	1,252	n/a	\$60
TOTAL, All Districts	11,139	2,878	\$353

Administrative Costs

In Year Three, approximately \$57,000 was spent on direct costs for program materials such as the physical adult Clipper cards, printing and shipping expenses. About \$375,000 was spent on administrative labor expenses, including billed time for project management by program staff at Alameda CTC, school liaison and pilot evaluation efforts handled by the Nelson\Nygaard consulting team, and compensation for AC Transit staff time spent on Clipper card processing. Together, these administrative expenses total \$432,000.

Summary of Year Three Costs

A summary of costs associated with Year Three of the pilot is shown in Figure 21. Including direct expenses, administrative and staffing costs as a share of total overall expenses for Year Three was ten percent.

Figure 21 Summary of Year Three Program Costs

	Cost	Share of Total
Transit pass purchase (bus and BART)	\$3,822,000	90%
Direct costs	\$57,000	1%
Staff/consultant costs	\$375,000	9%
TOTAL	\$4,254,000	100%



6 Road Ahead

As a result of the effective implementation and evaluation of the STPP to date, in December 2018 the Commission approved continuation and phased expansion of a five-year program beyond the pilot period, which ended July 31, 2019. The STPP plans to incorporate all qualifying middle and high schools with transit service in Alameda County within the next five years. At the end of the phased expansion, over 150 schools and approximately 85,000 students will have access to the program.

Implementation of Expanded Student Transit Pass Program

Based on lessons learned from the pilot program, staff recommended a largely Means-based/Free program except for school districts in which a very high percentage of students are eligible for free/reduced price meals (FRPM), which is determined based on household income. For initial phases, districts where 75 percent or more of students overall are eligible for FRPM qualify for a Free/Universal program, while all other districts qualify for a Means-Based/Free program. Exceptions can be made where significant transit service capacity exists, and budgetary impacts can be mitigated in consultation with the transit agency.

The STPP is transitioning all participating students from an adult Clipper card to a youth Clipper card. A youth Clipper card not only has the free bus pass loaded onto it, but also allows students to access youth discounted fares on other transit agencies, including a 50 percent discount on all BART fares if they add e-cash to the card.

Alameda CTC will continue to conduct a scaled down evaluation of the program through the expansion period, using a streamlined and focused set of evaluation criteria (participation rate, frequency of pass usage, transit ridership and capacity, and program costs) based on lessons learned during the pilot period. Evaluation will continue to occur annually for the first three years of the program and will include recommendations for program improvements as appropriate.

Phase I Expansion

For the 2019-20 school year, a total of 62 schools in 11 school districts are currently participating in the Phase I expansion of the STPP. The expansion has tripled the number of participating schools, and significantly increased the number of schools added in one year.⁹ During the three-year pilot, 6 schools were added per year, increasing from 9 schools in Year One to 15 schools in Year Two and to 21 schools in

⁹ Year One included nine schools. Year Two included 15 schools. Year Three included 21 schools.

Year Three. The first year of STPP Phase I expansion added 41 schools as of August 2019, for a total of 62 participating schools.

The STPP includes all middle and high schools in most districts, and a subset of schools in Alameda Unified School District (AUSD), Fremont Unified School District (FUSD), and Oakland Unified School District (OUSD). The STPP Phase I Expansion includes 11 school districts and over 31,000 students are eligible to participate in the program.

Out of the 11 school districts participating in the STPP, four are Free/Universal and seven are Means-Based/Free.

In most districts, the STPP follows the Means-Based/Free model where low-income students are eligible for a free bus pass. In a select few districts which have very high FRPM (>75%), the STPP follows a Free/Universal model where all students are eligible for a free pass (Oakland USD, Emeryville USD, and Alameda Co. Office of Education). In addition, Livermore Valley Joint USD is also under a Free/Universal model because it is the lowest income district in the Tri-Valley.