

RESULTS OF

SOLANO TRANSPORTATION AUTHORITY 2018 ON-BOARD TRANSIT SURVEY

Submitted to

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Submitted by

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EXECUTIVE SUMMARY

This report presents the results of an on-board survey of 2,598 riders on the 5 consolidated routes in the Solano Transportation Authority system. Results were weighted according to the weekly ridership of each route as estimated from on-off counts summarized below.

Figure ES-1. Ridership by Route and Survey Weights

	Α	В	С	5A+B+C=	Number	
	Weekday	Saturday	Sunday	Weekly	of Surveys	Survey
Route	Count	Count	Count	Riders	Completed	Weights
Blue Line B	411	150		2,205	407	0.099
Green Express	887			4,435	391	0.200
Yellow Line Y	451	121	79	2,455	316	0.111
80 Route	1,974	836	481	11,187	1,250	0.504
85 Route	337	213		1,898	234	0.086
TOTALS	4,148	1,320	580	22,180	2,598	1.000

Overall, the survey results indicate that these routes are an important transportation resource, both for Solano County residents and others, and serve a valuable function in providing an alternative to the automobile for commuters. Findings include:

- Surveyed riders depend on the bus for transportation; 23.4% of respondents said they would not have made the trip if their bus had not been available indicating both that most riders have alternative ways of making this trip and that the trip must be made (e.g., for getting to work). About 20% of respondents have no cars in their household, and 31.9% have just a single vehicle, meaning that over half of riders have limited access to an automobile as an alternative to their bus service. In addition, 28% of respondents do not have a driver's license.
- More than 50% of riders say they ride at least 5 days a week and more than 85% ride at least weekly. Most are also long-term users: almost two-thirds have been using their current route for at least a year, with 23.5% having been riders for 6 years or more. These bus lines buses also continue to attract new riders, however: 26% of respondents said they had been riding for less than 6 months, including 5% who were riding for the first time
- Riders travel primarily between home and work, but also to and from a variety of other destinations. More than 90% of respondents either began or planned to end their current trip at home, while almost 75% were coming from or going to work, about 12% to or from sports/social/recreational activities and 9% to or from school or college.

- Riders use the buses as one of several links in their commute or other travel, with roughly half using other public transportation methods (BART, other buses) both to get to their bus stop and to reach their final destination. Cars and walking were primarily used by the other half of riders.
- Demographically, these bus lines serve a diverse ridership, with almost 40% of riders African-American, 22.7% white/Caucasian and 19.1% Asian. More than 17% of riders described themselves as Hispanic or Latino. In addition, 31.5% of respondents speak a language other than English at home, mostly Spanish (30%) or Tagalog/Filipino (27%), but also more than a dozen other languages.
- More than 88% of surveyed riders are within the age range of working adults (18 to 64), with only 3.5% under 18 and 8.4% age 65 and older. Similarly, more than 81% of riders are employed full time or part time.
- Surveyed riders gave good ratings to most service elements, with an overall service rating of 3.03, where 3.0 represents a "good" rating on a 1-to-4 scale. About half of service elements received ratings of 3.0 or higher, while the average rating for fares was lowest at 2.75. Green Express riders had the lowest satisfaction with overall service (2.84), with almost one-third rating it poor or fair.
- There is very strong interest in earlier and later service across the routes surveyed. When asked whether they would use earlier or later buses on their route if those were available, more than 90% of respondents said they would always or sometimes use earlier (36.6% always, 56.2% sometimes) or later buses (33.8% always, 56.4% sometimes.) Comments offered by riders also confirm the desire for earlier and later operation.
- When asked how they currently receive transit information, the Transit website and Transit Center together were mentioned by more than 58% of riders, followed by three websites/apps (511.org, NextBus, myStop) that together were cited by almost 40% of respondents. (Multiple responses were accepted.) About 20% of respondents cited more traditional non-digital information sources: information at stops (10.8%), printed schedules (7.8%) and asking a friend or bus driver (1.8%). Taken together, some form of online information was cited by 88% of riders.
- This interest in online tools is confirmed by a relatively high interest in a mobile payment app. Just over half of respondents indicated they would use such an app, and only 21.2% said they would not, with 28% replying they were not sure. In addition, 17 riders offered comments saying an app would be very helpful.
- While these results consistently show a ridership that relies on buses on a regular basis to commute between home and work as well as reach other destinations, there are differences among individual routes in terms of the age, employment status, income, ethnic background and access to alternative methods of transportation of their riders.

INTRODUCTION

This report presents the results of an on-board survey of riders on the 5 consolidated routes in the Solano Transportation Authority system. A total of 2,598 passengers on the following routes were surveyed:

- Fairfield Suisun Transit (FAST), surveyed between October 11 and November 10
 - Blue Line B 407 riders surveyed
 - Green Express 391 riders surveyed
- Solano County Transit (SolTrans), surveyed between October 9 and November 9
 - Yellow Line Y 316 riders surveyed
 - Route 80 1,250 riders surveyed
 - Route 85 234 riders surveyed

Results presented in this report are weighted to accurately represent the overall rider population; that is, results from each route are weighted according to the estimated number of riders per week, based on the weekday and weekend on-off counts conducted as part of this study. The results of these counts and the resulting estimates of weekly ridership that were used to develop weights are presented below.

В C 5A+B+C= Α Number Weekday Saturday Sunday Weekly of Surveys Survey Count Count Count Riders Route Completed Weights Blue Line B 411 150 2,205 407 0.099 Green Express 887 4,435 391 0.200 Yellow Line Y 79 451 121 2.455 316 0.111 80 Route 1.974 836 481 11,187 1,250 0.504 85 Route 337 1,898 213 234 0.086 **TOTALS** 4.148 1,320 580 22,180 2,598 1.000

Figure 1. Ridership by Route and Survey Weights

The remainder of this report presents results for all riders. For each set of findings, results are presented in graphic form for the overall population of riders. For most questions, results are also presented for individual routes. First, characteristics of trips being taken by surveyed riders are assessed, followed by an analysis of rider demographics. Rider perception of the quality of service and use of transit information sources are then discussed. Finally, brief conclusions are drawn regarding the characteristics of riders and their use of the Solano Transportation Authority routes.

TRIP CHARACTERISTICS

The following section is about how riders were using the bus at the time they were surveyed. Riders were asked to describe how often they rode and for what purpose, where

they were traveling to and from, how they got to and from stops, how they paid their fare and how they would have made this trip if the bus had not been available.

Frequency of Ridership

Most riders use their bus frequently, with more than 50% reporting that they ride at least 5 days a week and more than 85% riding at least weekly. As shown by the individual route results, the Green Express has the highest share of riders using the bus 5-7 times a week, while Route 85 has the lowest share. These results indicate that riders make these bus routes an integral part of their transportation strategy.

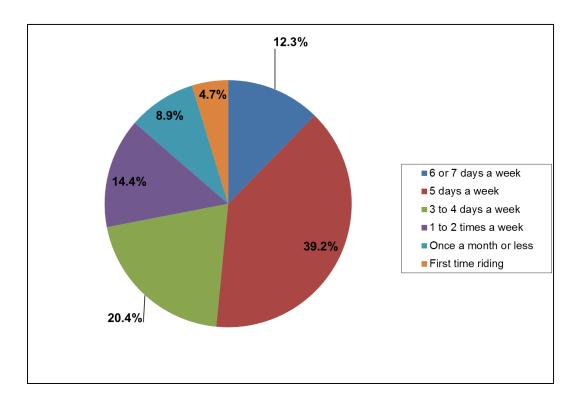


Figure 2. Ridership Frequency - All Routes

Figure 3. Ridership Frequency – Individual Routes

Route		Blue B	Green GX	Yellow Y	80 Route	85 Route
Frequency	All	n=407	n=391	n=316	n=1250	n=234
6 or 7 days a week	12.3%	7.2%	4.8%	15.8%	15.4%	13.4%
5 days a week	39.2%	39.7%	65.6%	33.7%	33.1%	20.1%
3 to 4 days a week	20.4%	21.1%	20.5%	21.1%	19.5%	23.7%
1 to 2 times a week	14.4%	12.1%	6.7%	14.9%	16.9%	19.6%
Once a month or less	8.9%	11.3%	1.9%	9.9%	9.8%	15.6%
First time riding	4.7%	8.5%	0.5%	4.6%	5.2%	7.6%

Length of Ridership

Survey results indicate that more than 63% of riders have been using their current route for at least a year, with 23.5% having been riders for 6 years or more. At the other extreme, 26% of respondents said they had been riding for less than 6 months, including

5% who were riding for the first time¹. The Green Express had the highest percentage of respondents who had been riding for at least 6 years, including 20% who had been riding for 10 years or more, while Blue Line B had almost 60% riding less than one year.

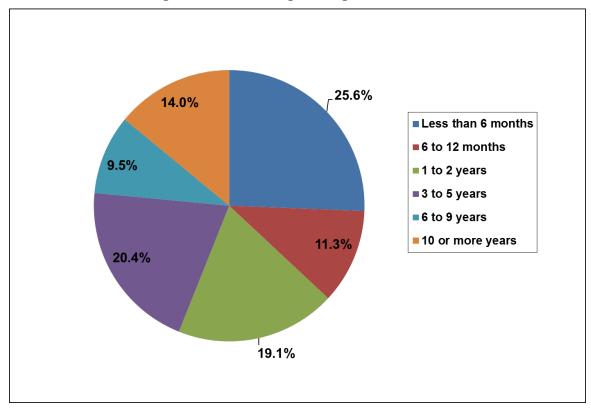


Figure 4. How Long Riding - All Routes

Figure 5. How Long Riding - Individual Routes

Rou	te	Blue B	Green GX	Yellow Y	80 Route	85 Route
How long riding	All	n=407	n=391	n=316	n=1250	n=234
Less than 6 months	25.6%	46.2%	13.0%	28.5%	23.5%	40.1%
6 to 12 months	11.3%	12.1%	9.0%	13.2%	11.9%	9.9%
1 to 2 years	19.1%	14.9%	20.2%	20.5%	20.0%	14.9%
3 to 5 years	20.4%	12.3%	21.8%	22.2%	22.2%	14.0%
6 to 9 years	9.5%	5.6%	16.2%	7.0%	8.6%	6.3%
10 or more years	14.0%	9.0%	19.9%	8.6%	13.8%	14.9%

Round/One Way Trip

Approximately 70% of respondents said their ride on the bus was part of a round-trip, while 26% said they did not intend to make a round trip on the bus and fewer than 4% did

¹ It should be noted that consolidated service changes that went into effect July 1, 2018 introduced the Blue Line (previous Routes 20, 30, 40), the Yellow Line (previous Route 78), and the Green Express Line (previous Route 90). It is possible that some respondents answered their length of time riding relative to this transition date, which could have affected results.

not yet know whether they would be making a return trip on the same route. More than two-thirds of Blue, Green, Yellow and Route 80 riders expected to make round trips. The high percentage of riders on round trips supports the hypothesis that many riders on these buses are on a regular commute.

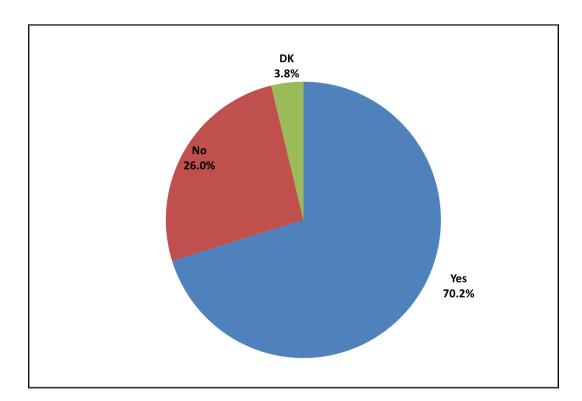


Figure 6. This Trip is Part of a Round Trip on the Bus – All

Figure 7. This Trip is Part of a Round Trip on the Bus – Individual Routes

Route		Blue B	Green GX	Yellow Y	80 Route	85 Route
Round trip?	All	n=407	n=391	n=316	n=1250	n=234
Yes	70.2%	70.9%	83.2%	68.1%	67.8%	55.8%
No	26.0%	24.9%	15.2%	28.8%	28.5%	34.6%
Don't know	3.8%	4.3%	1.5%	3.2%	3.7%	9.5%

Trip Purpose—Where Are You Coming from and Where Are You Going?

Passengers were asked where they were coming from and where they were going on this trip. The results show that riders are traveling primarily between home and work, with far fewer going to and from a variety of other destinations. More than 90% of respondents either began or planned to end their current trip at home, while almost 75% were coming from or going to work, about 12% to or from sports/social/recreational activities and 9% to or from school. No other origin or destination accounted for as much as 5%.

More than 80% of riders said they were coming from either home (50.7%) or work (34.7%) on their current trip, while 4.6% said they were returning from sports, social or

recreational activities and 4.4% were returning from school or college. All but 1.8% of Green Express riders were coming from home or work, compared to 75% of those on Route 85 buses.

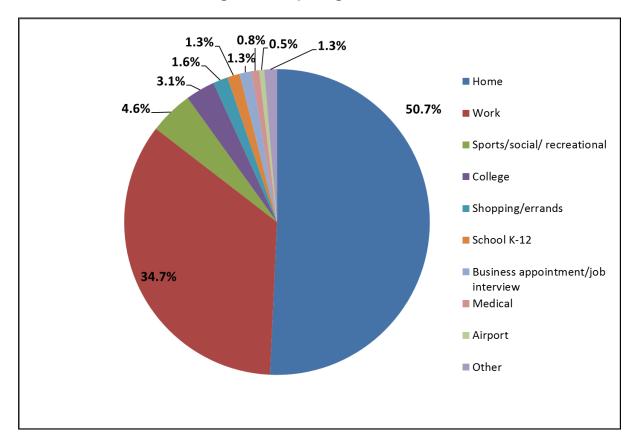


Figure 8. Trip Origins - All

Figure 9. Trip Origins – Individual Routes

Route Number		Blue B	Green GX	Yellow Y	80 Route	85 Route
Coming from	All	n=407	n=391	n=316	n=1250	n=234
Home	50.7%	52.0%	59.2%	32.1%	50.9%	52.4%
Work	34.7%	26.5%	39.0%	50.6%	33.2%	22.7%
Sports/social/ recreational	4.6%	7.3%	0.3%	4.2%	6.0%	4.0%
College	3.1%	6.1%	0.5%	5.8%	2.1%	8.4%
Shopping/errands	1.6%	2.8%	0.3%	1.6%	1.7%	2.2%
School K-12	1.3%	2.5%	0.5%	1.6%	1.4%	0.9%
Business appointment/job interview	1.3%	0.8%		1.0%	1.4%	4.4%
Medical	0.8%	0.5%	0.3%	1.0%	0.8%	2.2%
Airport	0.5%	0.5%		0.6%	0.7%	0.4%
Other	1.3%	1.0%		1.6%	1.7%	2.2%

Home was the most often mentioned destination (40.3%), followed by work (39.7%), sports, social or recreational (7.9%), school (4.7% for K-12 and college combined) and shopping/errands (3.1%). Various other destinations each accounted for less than 2% of responses. The Green Express had 94% of riders heading for work or home. Both routes

80 and 85 had more than 10% of riders with sports/social/recreational destinations – all other destinations accounted for less than 10% each. The origins and destinations emphasize the primary role of the system in serving commuters and, to a lesser extent, providing access to other activities.

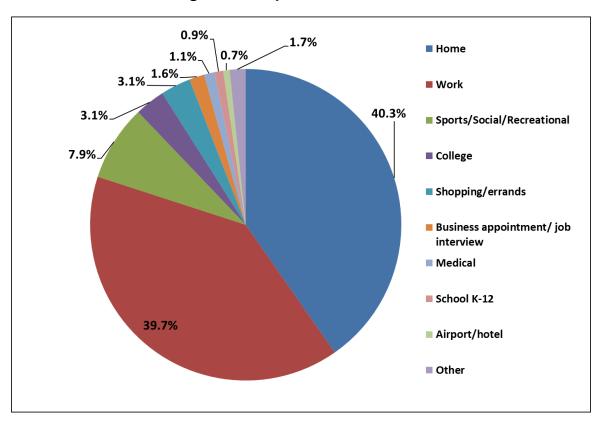


Figure 10. Trip Destinations - All

Figure 11. Trip Destinations – Individual Routes

Route Number		Blue B	Green GX	Yellow Y	80 Route	85 Route
Going to	All	n=407	n=391	n=316	n=1250	n=234
Home	40.3%	39.6%	36.6%	44.4%	41.7%	36.4%
Work	39.7%	32.8%	57.4%	34.6%	37.9%	23.1%
Sports/Social/Recreational	7.9%	7.1%	1.3%	5.2%	10.4%	12.9%
College	3.1%	7.3%	2.4%	4.2%	1.6%	7.6%
Shopping/errands	3.1%	4.5%	0.8%	6.2%	2.2%	8.4%
Business appointment/ job interview	1.6%	2.3%		1.6%	1.9%	2.2%
Medical	1.1%	2.5%	0.3%	0.3%	0.9%	3.1%
School K-12	0.9%	1.3%	0.5%	1.3%	0.8%	1.8%
Airport/hotel	0.7%	0.8%	0.5%	0.7%	0.7%	0.9%
Other	1.7%	1.8%	0.3%	1.3%	1.9%	3.6%

Places of Origin and Destination

Respondents were also asked in which city they had started their current trip and where they planned to end it. Overall, more than 60% of riders started their trip in Vallejo, San Francisco or Fairfield, and over half (52.6%) planned to end their trip at one of those three destinations. Oakland was the only other city accounting for more than 10% of destinations, although it only accounted for 5.9% of origins. Vacaville accounted for about 5% of both origins or destinations, and no other cities accounted for more than 4.5% of either origins or destinations.

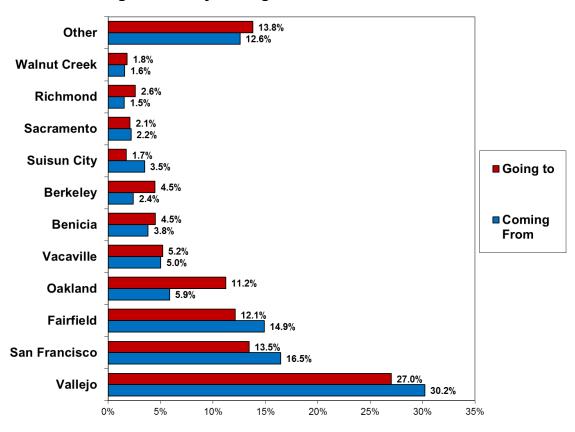


Figure 12. City of Origin and Destination - All

Among individual routes, Route 80 had almost 50% of riders coming from Vallejo and more than 42% going there, while Route 85 had almost 40% coming from (37.6%) or going to (39.6%) Vallejo. Fairfield was a major origin or destination for riders on the Blue Line, Green Express and Route 85. The Blue Line B also had a significant percentage of riders from and to Vacaville (24.1% coming from, 27.4% going to) and Sacramento (10.8% coming from, 11.5% going to.) The high ridership on Route 80 meant that the relatively large percentage of respondents on that route coming from (22.7%) or going to (16.5%) San Francisco contributed to the large overall share of origins and destinations accounted for by that city. A similar percentage of Green Express riders started (19.7%) or planned to end (19.0%) their trip In San Francisco.

Figure 13. City of Origin – Individual Routes

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
What city are you coming from?	n=2598	n=407	n=391	n=316	n=1250	n=234
Vallejo	31.4%	0.5%		30.1%	49.1%	37.6%
San Francisco	17.5%	7.1%	19.7%	9.6%	22.7%	4.4%
Fairfield	14.7%	29.1%	38.3%	1.0%	1.3%	39.5%
Oakland	6.2%	3.4%	8.2%	5.1%	7.1%	0.5%
Vacaville	3.8%	24.1%	6.0%		0.2%	1.0%
Benicia	3.2%	0.5%	0.3%	23.3%	0.9%	0.5%
Suisun City	3.8%	4.0%	13.4%		0.4%	6.3%
Berkeley	2.5%	0.8%	2.5%	2.1%	3.5%	
Sacramento	1.6%	10.8%	1.4%		0.2%	1.5%
Walnut Creek	1.3%	3.4%		7.9%		0.5%
Richmond	1.7%	0.3%	2.5%	0.7%	1.9%	1.5%
Pleasant Hill	0.9%	0.8%		7.2%		
American Canyon	1.0%				1.7%	1.0%
Dixon	0.6%	3.2%	1.4%		0.1%	
Concord	0.6%	1.3%		3.8%	0.2%	
El Cerrito	0.9%		0.8%		1.4%	
San Leandro	0.7%	0.3%	0.8%		1.0%	0.5%
Napa	0.5%	0.5%			0.8%	0.5%
Davis	0.5%	3.4%	0.5%			0.5%
Other	6.8%	6.3%	4.4%	9.2%	7.7%	4.4%

Figure 14. City of Destination – Individual Routes

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
What city are you going to?	n=2598	n=407	n=391	n=316	n=1250	n=234
Vallejo	27.9%	1.1%		27.4%	42.3%	39.6%
San Francisco	14.1%	9.1%	19.0%	6.9%	16.5%	3.7%
Fairfield	12.0%	24.4%	27.7%	1.7%	2.0%	33.7%
Oakland	12.0%	6.4%	19.0%	3.1%	13.9%	2.1%
Vacaville	4.0%	24.7%	6.1%		0.2%	2.1%
Benicia	4.1%	0.8%		26.7%	2.1%	0.5%
Berkeley	5.0%	1.3%	10.9%	0.7%	5.2%	
Richmond	2.9%	0.3%	4.7%	0.3%	3.7%	
Sacramento	1.4%	11.5%	0.6%	0.7%		0.5%
Walnut Creek	1.5%	2.4%		11.1%		0.5%
Suisun City	1.9%	2.4%	6.1%		0.2%	3.7%
El Cerrito	1.3%		1.4%		2.0%	
Concord	0.9%	2.4%		5.6%		
Pleasant Hill	0.8%	1.1%		5.9%	0.1%	
Napa	0.8%	0.3%		0.7%	1.2%	1.6%
American Canyon	0.7%				1.4%	
San Leandro	0.7%	0.5%	0.8%		0.9%	
Davis	0.4%	3.5%				0.5%
Other	7.7%	7.8%	3.6%	9.0%	8.4%	11.2%

Where Did You Board and Will You Leave the Bus?

When asked where they had boarded the bus, almost two-thirds riders said they had boarded either in Vallejo or El Cerrito and nearly 70% planned to leave in these cities, in part reflecting the high volume of passengers connecting to BART. While 18% of passengers boarded their bus in Fairfield, only 13.8% planned to get off there. No other city accounted for as much as 5% of either boarding or departing riders.

Figure 15. Where Did You Board/Will You Leave? - All

	Where Did	Where Will
City	You Board	You Leave
El Cerrito	32.8%	39.1%
Vallejo	33.5%	30.6%
Fairfield	18.0%	13.8%
Walnut Creek	4.1%	2.9%
Pleasant Hill	2.5%	4.3%
Benicia	3.3%	3.1%
Vacaville	2.3%	2.5%
Sacramento	1.1%	1.4%
Suisun City	0.8%	1.1%
Concord	0.6%	0.6%
Davis	0.4%	0.4%
Dixon	0.3%	0.3%

Among individual routes, Route 80 had over 99% of riders boarding in Vallejo or El Cerrito, while Route 85 had 94% boarding in Vallejo or Fairfield and the Green Express had more than 95% getting on in El Cerrito or Fairfield. Both the Blue and Yellow Lines had riders boarding in a wider variety of cities, as would be expected based on their routes.

Figure 16. Where Did You Board? - Individual Routes

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
Where did you board?	n=2598	n=407	n=391	n=316	n=1250	n=234
Vallejo	33.5%		0.3%	28.9%	51.4%	51.2%
El Cerrito	32.8%		39.8%		48.4%	4.7%
Fairfield	18.0%	33.0%	55.4%			42.8%
Walnut Creek	4.1%			36.7%		
Pleasant Hill	2.5%	23.5%		1.6%		
Benicia	3.4%	2.0%		27.3%	0.2%	0.9%
Vacaville	2.3%	23.5%				
Sacramento	1.1%	10.3%	0.5%			
Davis	0.5%	4.3%				0.5%
Concord	0.6%			5.5%		
Suisun City	0.8%		4.0%			
Dixon	0.3%	3.5%				

More than 99% of Route 80 riders said they planned to leave the bus in Vallejo or El Cerrito, all but 1.1% of Green Express riders planned to leave in El Cerrito or Fairfield and more than 95% of Route 85 respondents said they would leave the bus in Vallejo or Fairfield. The Blue and Yellow Lines did not have more than 30% of riders getting off in any single city,

Figure 17. Where Will You Leave the Bus? - Individual Routes

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
Where will you leave?	n=2598	n=407	n=391	n=316	n=1250	n=234
El Cerrito	39.1%		61.9%	0.3%	52.6%	1.8%
Vallejo	30.6%			27.2%	46.9%	46.1%
Fairfield	13.8%	22.0%	37.0%	1.0%	0.2%	47.5%
Pleasant Hill	4.3%	28.9%		12.6%		
Vacaville	2.5%	24.8%				
Benicia	3.1%	1.3%		26.8%		
Walnut Creek	2.9%			26.5%		
Sacramento	1.4%	11.5%	0.3%		0.3%	
Suisun City	1.1%	5.1%	0.8%			4.6%
Concord	0.6%			5.6%		
Davis	0.4%	3.8%				
Dixon	0.3%	2.6%				

Access to Bus Stop

More than half of riders reached the bus stop using BART, another bus or train, or the ferry, with 51.3% responding that they used one of these forms of public transportation to get to their stop. Another 32.8% reached their stop by car, either as driver (18.6%) or as passenger/unspecified (13.8%), while 15.4% said they walked at least part of the way to their stop (note that some riders provided more than one response).

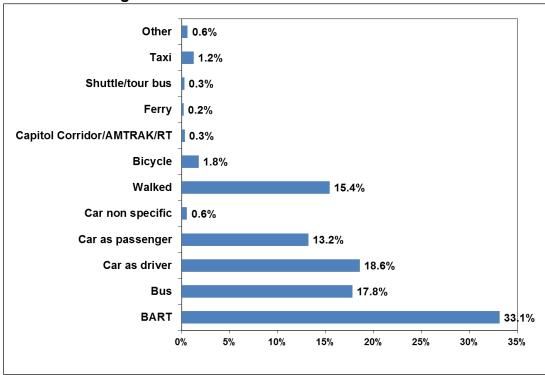


Figure 18. How Did You Get to the Bus? - All

Figure 19. How Did You Get to the Bus? - Individual Routes

Route Number		Blue B	Green GX	Yellow Y	80 Route	85 Route
Mode to bus stop	All	n=407	n=391	n=316	n=1250	n=234
BART	33.1%	18.7%	34.2%	26.2%	41.8%	5.0%
Bus	17.8%	27.1%	9.2%	16.8%	16.0%	38.9%
Car as driver	18.6%	20.8%	41.8%	4.9%	14.7%	2.3%
Car as passenger	13.2%	16.7%	10.0%	14.2%	13.2%	14.9%
Car non specific	0.6%	0.3%	0.8%	0.6%	0.6%	
Walked	15.4%	21.8%	3.2%	31.4%	12.4%	33.9%
Bicycle	1.8%	4.3%	0.5%	2.3%	1.5%	2.7%
Capitol Corridor/AMTRAK/RT	0.3%	1.0%	0.5%		0.1%	0.9%
Ferry	0.2%			0.6%	0.3%	
Shuttle/tour bus	0.3%		0.8%		0.2%	0.5%
Taxi	1.2%		0.3%	1.0%	1.9%	1.4%
Other	0.6%		0.3%	2.9%	0.3%	0.9%

^{*} More than one mode may have been used

^{*} Totals exceed 100% because more than one response was accepted.

Riders who walked to reach their bus stop were asked approximately how long the walk took. Mid-points of ranges (e.g., 8 minutes for 6-10 minutes) were used to calculate an average time of about 12 minutes for the 352 riders who walked to their bus stop and reported the length of their walk. Green Express riders averaged the shortest walk (7 minutes), while Route 85 riders had the longest average walk (about 15 minutes).

Using the same approach, the average distance driven by the 353 respondents who drove themselves to the bus stop was calculated as about 7 miles, while the 202 who got a ride reported an average distance of 5.6 miles. The 44 riders who used bicycles to reach the station averaged about 3 miles.

Most riders who reached their stop by bus used other STA operators, with SolTrans and FAST accounting for more than 70% of the total. In addition to AC Transit (5.2%), buses from several of other transit systems were used to reach bus stops, including Vacaville City Coach (3.7%), Napa Vine (2.6%) and Contra Costa County Connection (1%).

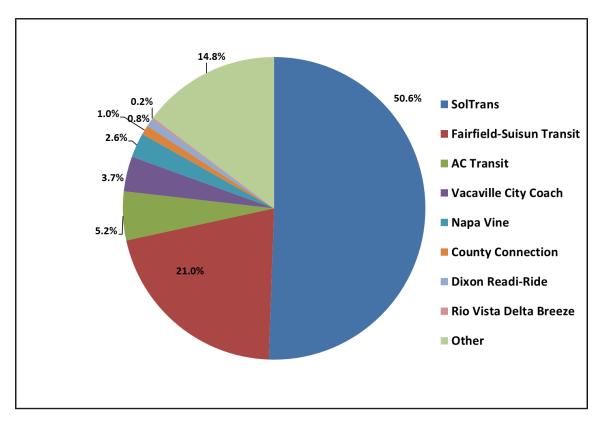


Figure 20. If by Bus, What Transit Operator? – All

Access to Final Destination

Riders were also asked how they planned to reach their final destination. More than half planned to rely on public transportation, primarily BART (36.4%) and other buses (18.5%). About 20% included walking in their plans and almost one-fourth would use cars (13.6% as driver; 11% as passenger or unspecified). Green Express riders were most

likely to rely on BART (51.6%) and Route 85 respondents had the highest percentage indicating they would use another bus (37.2%).

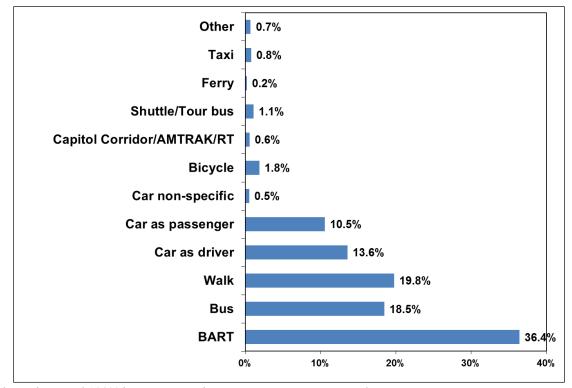


Figure 21. How Will You Get to Your Final Destination? - All

Figure 22. How Will You Get to Your Final Destination? - Individual Routes

Route Number		Blue B	Green GX	Yellow Y	80 Route	85 Route
Mode to destination*	All	n=407	n=391	n=316	n=1250	n=234
BART	36.4%	24.8%	51.6%	19.2%	41.7%	6.0%
Bus	18.5%	23.3%	7.5%	20.5%	18.2%	37.2%
Walk	19.8%	28.4%	8.1%	39.1%	15.0%	40.4%
Car as driver	13.6%	13.3%	25.3%	7.4%	12.4%	1.8%
Car as passenger	10.5%	10.0%	6.5%	8.8%	13.4%	6.4%
Car non-specific	0.5%	0.3%	1.1%	0.7%	0.3%	0.5%
Bicycle	1.8%	3.8%	0.3%	2.0%	1.1%	7.3%
Capitol Corridor/AMTRAK/RT	0.6%	1.8%	0.3%	0.3%	0.4%	0.9%
Shuttle/Tour bus	1.1%		2.7%		1.0%	0.5%
Ferry	0.2%	0.3%		0.3%	0.2%	0.5%
Taxi	0.8%	0.8%		1.0%	0.9%	1.4%
Other	0.7%	0.3%	0.5%	1.0%	0.4%	2.8%

^{*} More than one mode may have been mentioned

The 425 riders who provided an estimate of how long they would take to walk to their destination reported that they would take an average of 11.6 minutes, while the 240 who planned to drive themselves estimated an average distance of 7 miles and the 154 getting

^{*} Totals exceed 100% because more than one response was accepted.

a ride expected to average 5.4 miles. The 33 respondents riding a bicycle to their destination expected to cover an average of 3.8 miles.

Among riders who planned to reach their final destination by bus, 54.2% said they would travel on SolTrans or FAST, while 11.8% planned to use AC Transit. No other operator was mentioned by more than 3% of respondents.

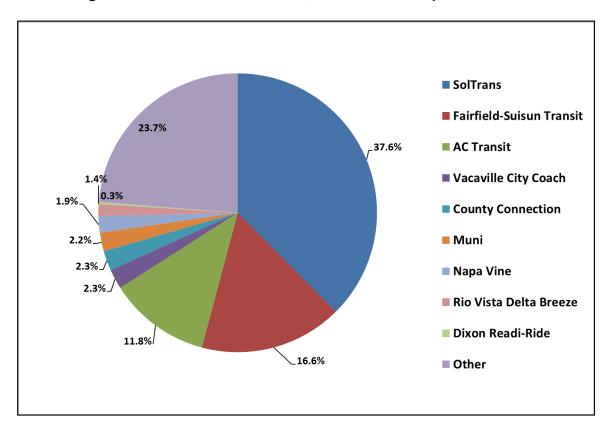


Figure 23. If Bus to Destination, What Transit Operator? – All

How Trip Would Have Been Made Without the Bus

Slightly less than one-fourth (23.4%) of respondents said they would not have made the trip if their bus had not been available – indicating both that most riders have alternative ways of making this trip and that the trip must be made (e.g., for getting to work). Automobiles were by far the most often mentioned alternative, either by driving alone (33.5%), getting a ride (20.5%), through a planned or casual carpool (17.5%) or by using a taxi or ride sharing service (7.5%). These results indicate both how dependent riders are on the STA system and how effective it is in reducing automobile usage and the associated emissions. No individual non-automotive source of transportation accounted for as much as 4% of responses.

Route 85 had more than one-third of riders reporting that they would not have made the trip without this bus available, while the Green Express had fewer than 10% who would not have made the trip, with more than half (59%) of these riders saying they would have driven alone. In contrast, fewer than 10% Route 85 respondents would have driven alone.

Other 1.8% **BART** 0.4% **Bike** 0.9% Other bus 1.4% Walk 2.8% **Ferry** 3.3% **Train** 3.8% Carpool/vanpool 6.5% Taxi/Uber/Lyft 7.5% Casual carpool 11.0% Get a ride 20.5%

33.5%

40%

23.4%

30%

20%

Figure 24. How Trip Made if Bus Not Available? - All

Drive alone

Would not have made this trip

Figure 25. How Trip Made if Bus Not Available? – Individual Routes

10%

Route Number		Blue B	Green GX	Yellow Y	80 Route	85 Route
If no bus available	All	n=407	n=391	n=316	n=1250	n=234
Would not have made this trip	23.4%	22.5%	9.8%	27.9%	25.8%	35.6%
Drive alone	33.5%	37.2%	59.0%	24.9%	28.9%	8.4%
Get a ride	20.5%	20.5%	9.0%	26.9%	21.5%	33.3%
Casual carpool	11.0%	4.1%	13.8%	6.1%	13.8%	3.1%
Taxi/Uber/Lyft	7.5%	5.6%	2.1%	9.8%	8.7%	12.4%
Carpool/vanpool	6.5%	5.6%	9.0%	7.7%	5.8%	4.0%
Train	3.8%	13.2%	7.9%	3.4%	0.6%	3.1%
Ferry	3.3%		0.5%	0.7%	6.1%	0.4%
Walk	2.8%	3.0%	0.8%	2.4%	3.0%	6.7%
Other bus	1.4%	2.5%	1.3%	2.0%	1.0%	2.2%
Bike	0.9%	1.8%	0.3%	1.7%	0.6%	1.8%
BART	0.4%	0.8%	0.5%	0.7%	0.2%	0.4%
Other	1.8%	2.0%	1.6%	3.0%	1.4%	3.1%

How Fare Paid

Riders were also asked how they had paid their fare, and whether they had paid an adult, senior/disabled, or student fare. Almost 45% of riders said they paid via Clipper, while 31.4% paid cash and 21.5% with a monthly pass. Fewer than 3% said they used multi-

^{*} Totals exceed 100% because more than one response was accepted.

ride/punch passes or transfers. Among individual routes, more than 90% of Green Express riders used a Clipper or monthly pass and fewer than 10% paid cash, while Route 85 had 63.8% who paid cash and only 30% who used a Clipper or monthly pass.

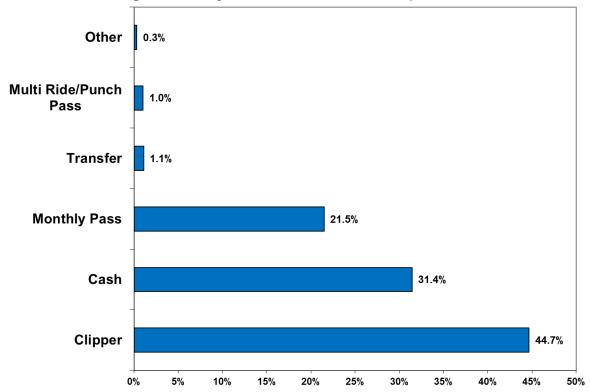


Figure 26. Payment Method for this Trip? - All

Figure 27. Payment Method for this Trip? – Individual Routes

Route Number	Blue B	Green GX	Yellow Y	80 Route	85 Route	
How did you pay to use this bus?	All	n=407	n=391	n=316	n=1250	n=234
Clipper	44.7%	31.5%	53.6%	46.0%	48.5%	14.8%
Cash	31.4%	33.4%	7.3%	30.0%	35.4%	63.8%
Monthly Pass	21.5%	32.3%	38.0%	20.3%	14.1%	15.3%
Transfer	1.1%	2.2%	0.3%	1.3%	0.7%	3.6%
Multi Ride/Punch Pass	1.0%	0.5%	0.3%	1.7%	1.1%	1.5%
Other	0.3%		0.5%	0.7%	0.1%	1.0%

Type of Fare

Adult fares accounted for over two thirds of those paid by surveyed riders, while 22.6% paid senior or disabled fares and 8.9% paid student fares. The Green Express had more than 75% of respondents who said they paid adult fares, but less than 1% who paid student fares, while Route 85 had more than 26% of riders paying student fares.

Other 0.8%

Disabled 8.9%

Student/Youth 8.9%

Adult 68.1%

Figure 28. Fare Type for this Trip - All

Figure 29. Fare Type for this Trip – Individual Routes

70%

80%

10%

0%

20%

Route Number		Blue B	Green GX	Yellow Y	80 Route	85 Route
What fare type did you pay?	All	n=407	n=391	n=316	n=1250	n=234
Adult	68.1%	66.1%	77.4%	67.7%	68.3%	48.6%
Senior	13.7%	10.7%	15.1%	16.9%	13.7%	10.5%
Student/Youth	8.9%	13.6%	0.7%	9.2%	8.1%	26.7%
Disabled	8.9%	9.6%	6.8%	6.2%	9.3%	14.3%
Other	0.8%	1.7%		1.5%	0.7%	1.0%

Willingness to Use Mobile App

As a follow-up to the request for input on payment methods, riders were asked if they would use a mobile payment app if one were available. Just over half said they would use such an app, and only 21.2% said they would not, with 28% saying they were not sure.

Willingness to use a mobile payment app was relatively high across routes, ranging from 44.6% for the Blue Line B to 52.2% for Route 80. The percentage of riders who stated that they would not use such an app ranged from a low of 18.3% for the Green Express to a high of 27.8% for Route 85.

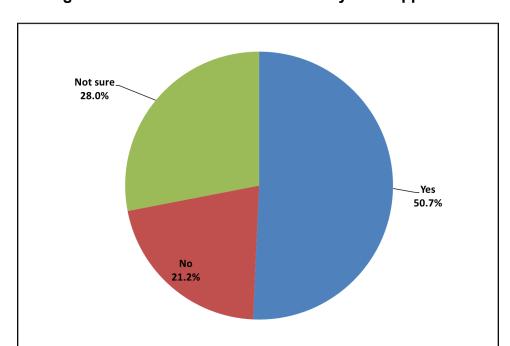


Figure 30. Would You Use a Mobile Payment App? -- All

Figure 31. Would You Use a Mobile Payment App? - Individual Routes

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
Would you use mobile payment app?	n=2598	n=407	n=391	n=316	n=1250	n=234
Yes	50.7%	44.6%	51.6%	50.7%	52.2%	46.9%
No	21.2%	24.1%	18.3%	22.6%	20.4%	27.8%
Not sure	28.0%	31.2%	30.1%	26.7%	27.4%	25.4%

RIDER DEMOGRAPHICS

The following section examines the demographics, or basic characteristics, of surveyed riders. These include gender, ethnicity, age, employment status, and household income, and help to determine the characteristics of riders on these routes.

Gender

Riders of these five routes are predominantly female, with males accounting for 44.8% of ridership. No individual line had more than 60% female or fewer than 40% male riders; Route 85 had the highest percentage of males (46.9%); Green Express had the highest percentage females (59.6%).

Figure 32. Gender – All

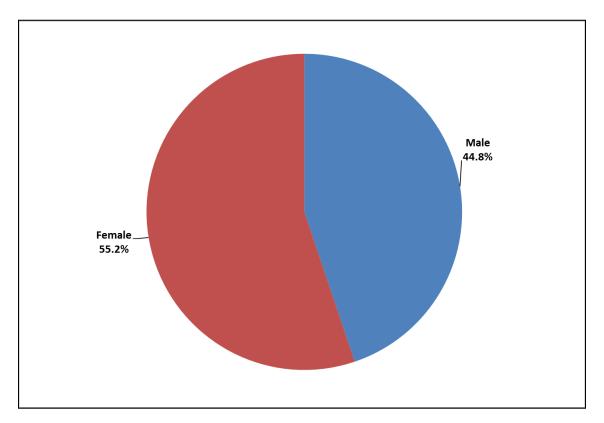


Figure 33. Gender - Individual Routes

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
Gender	n=2598	n=407	n=391	n=316	n=1250	n=234
Male	44.8%	46.6%	40.4%	44.1%	46.0%	46.9%
Female	55.2%	53.4%	59.6%	55.9%	54.0%	53.1%

Age

More than 88% of surveyed riders are within the age range of working adults (18 to 64), with only 3.5% under 18 and 8.4% age 65 and older. The highest percentage of working age adults was found on the Green Express (90.5%) and Blue Line B (89.5%.) The Blue Line B had the lowest percentage over 64 (6.2%), while Green Express had only 2.4% of respondents under 18. (It should be noted that minors appearing to be under the age of 13 were not asked to complete a questionnaire.)

Figure 34. Age - All

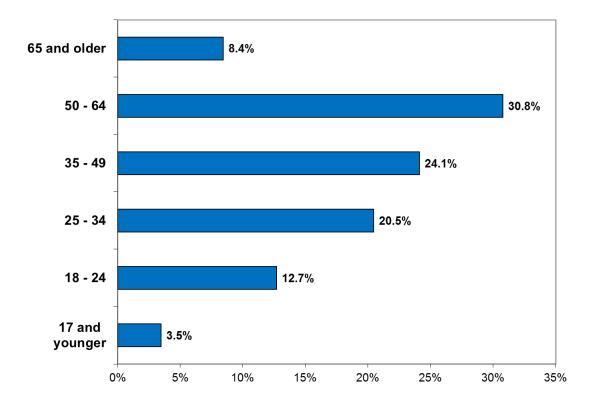


Figure 35. Age - Individual Routes

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
Age	n=2598	n=407	n=391	n=316	n=1250	n=234
17 and younger	3.5%	3.9%	1.4%	4.1%	3.7%	6.0%
18 - 24	12.7%	19.0%	4.8%	18.8%	12.3%	18.4%
25 - 34	20.5%	18.2%	16.0%	17.1%	23.4%	20.7%
35 - 49	24.1%	24.2%	27.0%	20.9%	24.5%	19.4%
50 - 64	30.8%	28.6%	42.7%	27.1%	28.2%	25.8%
65 and older	8.4%	6.2%	8.1%	12.0%	8.0%	9.7%

Employment Status

More than 81% of riders are employed full time (68.4%) or part time (13.1%), while 6.6% are students and 3.6% are unemployed. The remaining 6.4% of riders comprised retirees and homemakers. The Green Express route had the highest percentage of riders who were employed fulltime (87.5%); Route 85 had the lowest (41%).

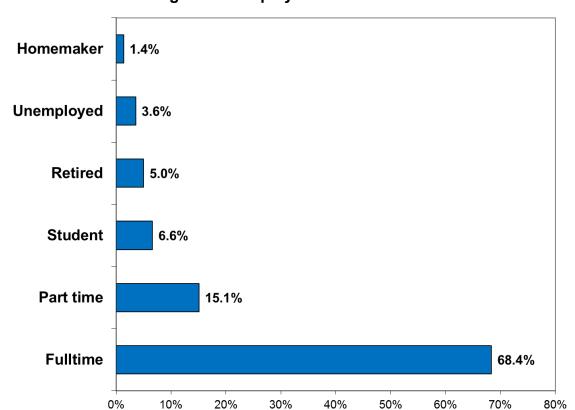


Figure 36. Employment Status - All

Figure 37. Employment Status – Individual Routes

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
Employment Status	n=2598	n=407	n=391	n=316	n=1250	n=234
Fulltime	68.4%	61.4%	87.5%	61.3%	68.3%	41.0%
Part time	15.1%	16.0%	7.2%	17.3%	15.3%	28.3%
Student	6.6%	10.8%	3.9%	9.3%	6.0%	8.5%
Retired	5.0%	5.2%	1.1%	6.7%	5.5%	9.0%
Unemployed	3.6%	5.5%	0.3%	3.7%	3.2%	10.8%
Homemaker	1.4%	1.0%		1.7%	1.7%	2.4%

Race and Ethnicity

The surveyed routes have a diverse ridership, with almost 40% of riders African-American, 22.7% white/Caucasian and 19.1% Asian. Route 85 had the highest percentage of African-American respondents (51.3%), while the Yellow Line had the highest percentage white/Caucasian (40.8%) and the Blue, Green and Yellow Lines all had more than 20% Asian riders.

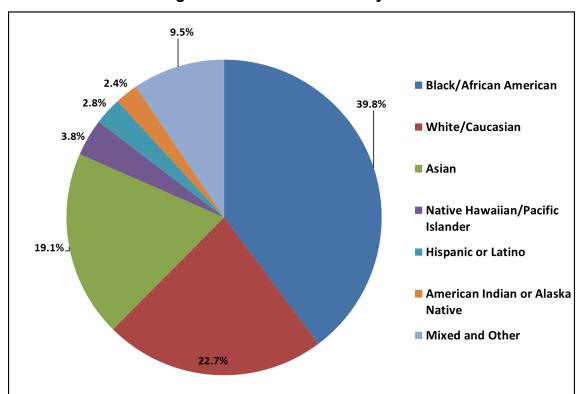


Figure 38. Race and Ethnicity - All

Figure 30. Race and Ethnicity - Individual Routes

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
Race/ethnicity	n=2598	n=407	n=391	n=316	n=1250	n=234
Black/African American	39.8%	27.0%	44.1%	18.0%	43.5%	51.3%
White/Caucasian	22.7%	34.7%	23.5%	40.8%	16.5%	19.8%
Asian	19.1%	20.2%	20.6%	21.3%	19.0%	12.2%
Native Hawaiian/Pacific Islander	3.8%	2.8%	3.2%	3.4%	4.8%	1.0%
Hispanic or Latino	2.8%	4.6%	1.6%	3.0%	2.9%	2.5%
American Indian or Alaska Native	2.4%	2.1%	1.3%	3.4%	2.6%	2.0%
Mixed and Other	9.5%	8.6%	5.8%	10.1%	10.7%	11.2%

Respondents were asked several other questions about their cultural background. When asked if they considered themselves Spanish, Hispanic or Latino, 17.3% of riders surveyed responded in the affirmative. The survey also asked if the respondent spoke a language other than English at home: 31.5% of riders said they did so, with the percentage ranging from 23.3% for Route 85 to 35.2% for Route 80.

Among those who specified what language they spoke at home, about 40% mentioned Spanish and 30% said Filipino/Tagalog (27.3%), with the remainder comprising a variety of other languages, including French, Chinese (both Mandarin and Cantonese), Russian, Arabic, American Sign Language and multiple other languages. (Surveys were available in English, Spanish, Tagalog, Chinese and Vietnamese, so results regarding languages spoken at home, as well as race, should be reviewed with that in mind.)

Household Size

About 38% of survey respondents live in one- or two-person households, and about 80% live in households with 4 people or fewer. The percentage of riders in 5-person households (18.4%) is about the same as the combined total of the percentage of households with 6, 7 and 8 or more.

Route 85 had the highest percentage of one-person households (19.3%), as well as the highest percentage of household with 6 or more (15.4%.). Blue Line B and Green Express both had fewer than 8% of riders in households with 6 or more people.

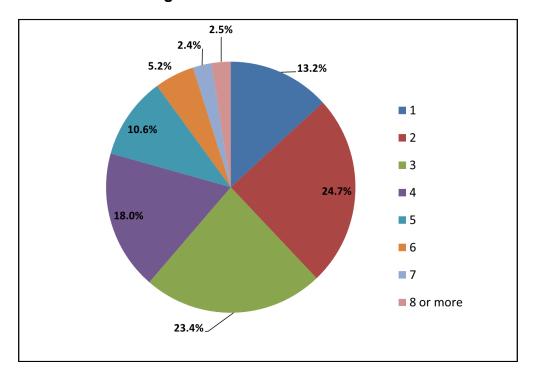


Figure 40. Household Size - All

Figure 31. Household Size – Individual Routes

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
Household size	n=2598	n=407	n=391	n=316	n=1250	n=234
1	13.2%	14.2%	10.1%	11.8%	13.5%	19.3%
2	24.7%	22.2%	24.9%	27.8%	26.0%	15.5%
3	23.4%	24.7%	22.3%	25.0%	23.4%	22.7%
4	18.0%	18.8%	22.9%	15.3%	16.9%	15.9%
5	10.6%	12.8%	11.9%	11.8%	9.3%	11.1%
6	5.2%	4.5%	4.9%	4.2%	5.2%	7.2%
7	2.4%	2.0%	2.0%	2.1%	2.5%	3.9%
8 or more	2.5%	0.9%	0.9%	2.1%	3.2%	4.3%

23

Household Income

Among those respondents reporting their income (about 70% of the total), more than 60% had household incomes greater than \$50,000, while 19% had incomes less than \$25,000.

Green Express had the highest income riders, with about half those respondents reporting incomes over \$100,000 and fewer than 5% with incomes below \$25,000. While most other routes had about 20% of riders with incomes less than \$25,000, Route 85 had 43.2% of its riders in that income category.

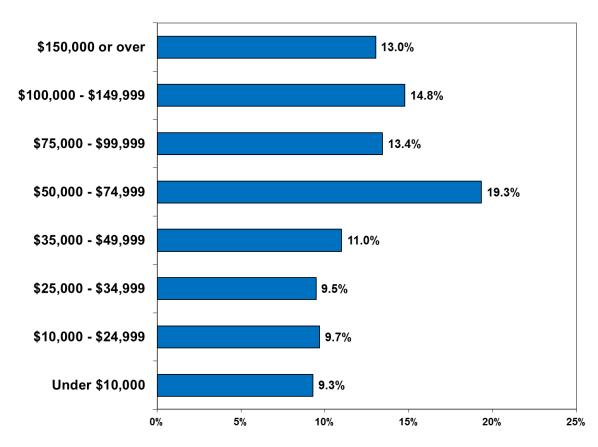


Figure 42. Household Income - All

Figure 43. Household Income – Individual Routes

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
Income	n=2598	n=407	n=391	n=316	n=1250	n=234
Under \$10,000	9.3%	8.7%	0.7%	7.9%	10.8%	23.2%
\$10,000 - \$24,999	9.7%	11.3%	4.0%	10.2%	9.7%	20.0%
\$25,000 - \$34,999	9.5%	9.5%	4.0%	12.6%	9.1%	20.6%
\$35,000 - \$49,999	11.0%	11.3%	6.7%	10.2%	13.3%	8.4%
\$50,000 - \$74,999	19.3%	14.5%	19.5%	21.4%	21.1%	11.6%
\$75,000 - \$99,999	13.4%	14.9%	15.2%	12.1%	13.9%	6.5%
\$100,000 - \$149,999	14.8%	15.3%	24.6%	14.0%	12.6%	5.2%
\$150,000 or over	13.0%	14.5%	25.3%	11.6%	9.6%	4.5%

City of Residence

Almost half of riders surveyed live in Vallejo (48.6%) – more than all other locations inside Solano and Napa Counties combined. The Blue and Green Express lines had very few Vallejo residents among survey respondents; both had Fairfield and Vacaville residents account for about two-thirds of their riders. The Green Express had the highest percentage of riders living in Suisun City (18.8%), while the Yellow Line had the highest percentage of Benicia residents (40.4%).

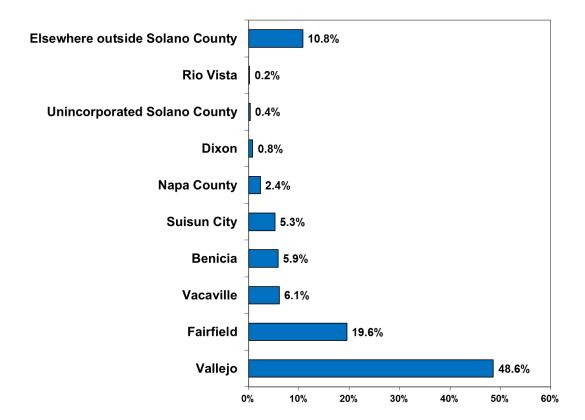


Figure 44. City of Residence - All

Figure 45. City of Residence - Individual Routes

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
City of Residence	n=2598	n=407	n=391	n=316	n=1250	n=234
Vallejo	48.6%	1.0%	0.3%	46.8%	77.2%	50.7%
Fairfield	19.6%	34.7%	59.8%	2.2%	2.4%	31.4%
Vacaville	6.1%	33.7%	11.6%	0.3%	0.4%	2.2%
Benicia	5.9%	0.7%		40.4%	2.5%	0.9%
Suisun City	5.3%	5.4%	18.8%		0.6%	7.9%
Napa County	2.4%	1.0%	0.3%	0.6%	4.0%	1.3%
Dixon	0.8%	5.4%	1.5%			
Unincorporated Solano County	0.4%	0.5%		0.3%	0.6%	
Rio Vista	0.2%	0.2%	1.0%			
Elsewhere outside Solano County	10.8%	17.2%	6.7%	9.3%	12.3%	5.7%

Cars in Household

About 20% of riders on surveyed buses have no cars in their household, and 31.9% have just a single vehicle, indicating that over half of riders have limited access to an automobile as an alternative to their bus service. Almost 32% of Route 85 riders have no cars in their household, compared to only 6.7% of Green Express respondents, over two-thirds of whom report owning 2 or more cars.

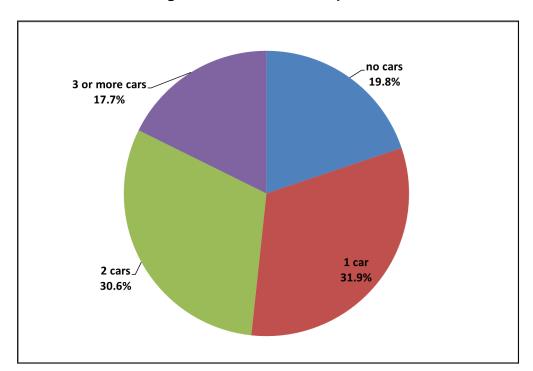


Figure 46. Car Ownership - All

Figure 47. Car Ownership - Individual Routes

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
No. of cars	n=2598	n=407	n=391	n=316	n=1250	n=234
no cars	19.8%	22.9%	6.7%	19.0%	22.6%	31.8%
1 car	31.9%	27.1%	26.2%	37.0%	33.0%	37.4%
2 cars	30.6%	31.1%	36.9%	30.0%	30.2%	18.7%
3 or more cars	17.7%	18.9%	30.2%	14.0%	14.2%	12.1%

Could Car Have Been Used for this Trip?

In addition to the previous question regarding automobile ownership, the extent to which riders have access to vehicles is reflected in the responses to a question regarding whether a car could have been used for this trip. About 43% of riders said yes, while 14% said that a car would have been available, but it would have inconvenienced others. The fact that 57.2% said no car was *readily* available indicates that many of the surveyed riders have limited alternatives to the bus to make their trip. However, the percentage with

access to a car varies widely by route, with more than 70% of Green Express and fewer than 18% of Route 85 riders saying they had access to a car without inconveniencing others. This is consistent with the results presented earlier (Figure 25) showing that more than 35% of Route 85% respondents would not have made their trip if the bus had not been available, compared to fewer than 10% of Green Express riders.

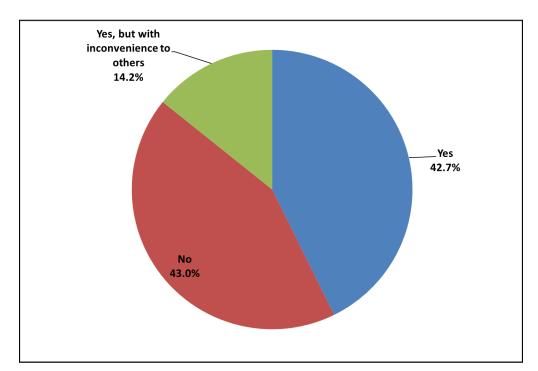


Figure 32. Did You Have a Car You Could Have Used? - All

Figure 49. Did You Have a Car You Could Have Used? – Individual Routes

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
Car available?	n=2598	n=407	n=391	n=316	n=1250	n=234
Yes	42.7%	42.9%	70.9%	31.5%	38.2%	17.8%
No	43.0%	44.7%	15.1%	53.2%	46.9%	70.6%
Yes, with inconvenience to others	14.2%	12.4%	14.0%	15.3%	14.9%	11.7%

Another factor influencing the extent to which riders are dependent on bus availability is whether they have a driver's license. When asked whether they have a driver's license, 72.1% of riders said yes, indicating that more than one-fourth of respondents cannot drive themselves as an alternative to using the bus. The percentage of respondents with a license ranged from almost 92% for Green Express to less than 50% for Route 85.

Figure 50. Do You Have a Driver's License?

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
Do you have a drivers license?	n=2598	n=407	n=391	n=316	n=1250	n=234
Yes	72.1%	70.6%	91.9%	63.7%	70.5%	47.9%
No	27.9%	29.4%	8.1%	36.3%	29.5%	52.1%

QUALITY OF SERVICE

Survey respondents were asked to rate a variety of service elements on their bus route as excellent, good, fair, or poor. Mean ratings for each question were calculated by assigning a value of 4 to excellent, 3 to good, 2 to fair, and 1 to poor and then averaging the results. As with other responses, results were weighted by the percentage of ridership accounted for by each bus line.

Overall, surveyed riders gave good ratings to most service elements, with an overall service rating of 3.03, where 3.0 represents a "good" rating. About half of service elements received ratings of 3.0 or higher, with driver courtesy receiving the highest rating of 3.31. Availability of intercity connections, frequency of service and rider information all received ratings slightly below 3.0; the average rating for fares was lowest at 2.75.

Blue Line B respondents had the highest satisfaction with overall service at 3.21, although the Yellow Line and Route B had only very slightly lower levels of satisfaction. Only Green Express riders had an average satisfaction below 3.0 for overall service, driven by their low satisfaction with frequency of service (2.35), availability of connections (2.69) and fares (2.62), all of which were lower than for any other route. Route 85 riders reported the highest average level of satisfaction for all the individual service attributes.

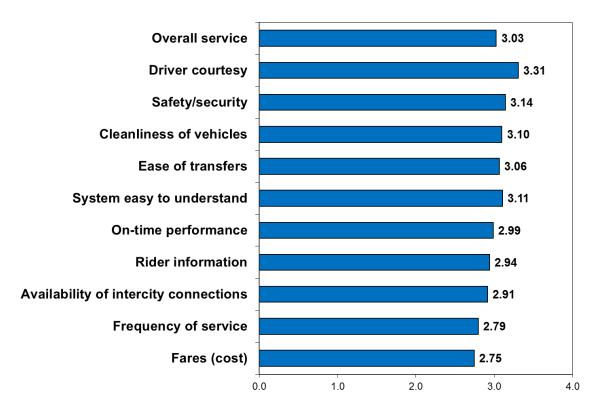


Figure 33. Ratings of Service - Overall

Figure 34. Ratings of Service - Individual Routes

Figure 34. Ratings of Service – Individual Routes								
	Route Number		Blue B	Green GX		80 Route	85 Route	
Service ratings		n=2598	n=407	n=391	n=316	n=1250	n=234	
On-time performan	ce	2000			0.0	200		
Excellent = 4		37%	45%	34%	43%	33%	51%	
Good = 3		35%	36%	40%	38%	32%	31%	
Fair = 2		20%	15%	19%	15%	23%	12%	
Poor = 1		9%	4%	7%	4%	13%	6%	
	AVERAGE	2.99	3.22	3.00	3.19	2.85	3.26	
Frequency of service				0.00				
Excellent = 4		29%	35%	17%	32%	29%	44%	
Good = 3		35%	40%	28%	37%	37%	35%	
Fair = 2		22%	19%	27%	23%	22%	14%	
Poor = 1		14%	7%	27%	8%	12%	7%	
	AVERAGE	2.79	3.03	2.35	2.93	2.83	3.16	
Driver courtesy								
Excellent = 4		49%	58%	46%	54%	45%	62%	
Good = 3		36%	33%	36%	35%	38%	29%	
Fair = 2		13%	7%	15%	9%	15%	8%	
Poor = 1		3%	2%	3%	2%	3%	2%	
	AVERAGE	3.31	3.47	3.25	3.41	3.24	3.51	
Rider information								
Excellent = 4		33%	35%	23%	40%	33%	45%	
Good = 3		37%	35%	39%	37%	37%	38%	
Fair = 2		21%	21%	27%	15%	21%	14%	
Poor = 1		9%	10%	11%	8%	9%	3%	
	AVERAGE	2.94	2.94	2.74	3.09	2.93	3.26	
Cleanliness of vehi	cles							
Excellent = 4		38%	38%	27%	46%	38%	53%	
Good = 3		39%	36%	41%	43%	38%	35%	
Fair = 2		19%	19%	24%	10%	20%	10%	
Poor = 1		5%	6%	7%	1%	5%	2%	
	AVERAGE	3.10	3.06	2.89	3.34	3.09	3.39	
Safety/security		/		/				
Excellent = 4		39%	41%	33%	49%	37%	52%	
Good = 3		40%	43%	43%	38%	39%	38%	
Fair = 2		17%	13%	19%	11%	20%	8%	
Poor = 1	41/ED40E	4%	3%	5%	2%	5%	2%	
F	AVERAGE	3.14	3.21	3.05	3.34	3.08	3.39	
Ease of transfers		200/	400/	200/	470/	260/	E00/	
Excellent = 4		38% 38%	40%	29% 43%	47% 33%	36% 39%	50% 32%	
Good = 3 Fair = 2		36% 17%	37% 15%	19%	33% 12%	19%	32% 14%	
Poor = 1		7%	8%	9%	8%	6%	4%	
P001 - 1	AVERAGE	3.06	3.09	2.92	3.19	3.05	3.28	
Availability of conn		3.00	3.09	2.92	3.19	3.03	3.20	
Excellent = 4	iccions	33%	36%	24%	40%	33%	43%	
Good = 3		36%	36%	38%	36%	36%	35%	
Fair = 2		20%	18%	23%	13%	21%	19%	
Poor = 1		11%	10%	16%	11%	10%	4%	
· · ·	AVERAGE	2.91	2.97	2.69	3.06	2.92	3.16	
System easy to und		<u> </u>						
Excellent = 4	-	37%	38%	29%	45%	36%	49%	
Good = 3		41%	40%	43%	39%	42%	36%	
Fair = 2		18%	17%	24%	13%	18%	13%	
Poor = 1		4%	6%	4%	3%	4%	3%	
	AVERAGE	3.11	3.10	2.95	3.26	3.10	3.30	
Fares (cost)								
Excellent = 4		26%	34%	19%	29%	24%	42%	
Good = 3		32%	37%	35%	37%	29%	34%	
Fair = 2		32%	24%	37%	24%	35%	20%	
Poor = 1		10%	6%	10%	10%	12%	4%	
	AVERAGE	2.75	2.98	2.62	2.84	2.66	3.15	
Overall service]		
Excellent = 4		32%	40%	22%	41%	31%	45%	
Good = 3		42%	43%	46%	39%	43%	37%	
Fair = 2		21%	15%	27%	19%	22%	10%	
Poor = 1	A)/EDAGE	4%	2%	6%	2%	5%	8%	
	AVERAGE	3.03	3.21	2.84	3.18	3.00	3.18	

Sources of Transit Information

Riders were also asked to identify how they currently receive transit information from a list of five sources: 511.org, NextBus, information at stops, Transit website or brochures (with more than one response possible.) Respondents also had the opportunity to check "other" and identify their information source or sources. The 2,334 riders who answered this question offered a total of more than 3,000 responses, including write-ins for the Transit Center, myStop app and Google maps.

The Transit website and Transit Center together were mentioned by more than 58% of riders, followed by three websites/apps (511.org, NextBus, myStop) that together were cited by almost 40% of respondents. About 20% cited more traditional non-digital information sources: information at stops (10.8%), printed schedules (7.8%) and asking a friend or bus driver (1.8%). Other online tools, including Google Maps, other smartphone apps and unspecific online sources together were mentioned by 9.5% of responses. Overall, about 88% of riders cited at least one online information source.

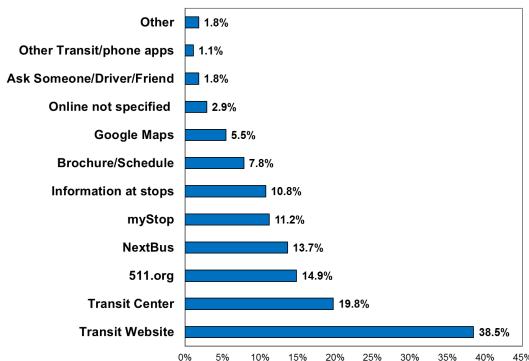


Figure 35. Where You Currently Get Transit Information – Overall

The percentage of respondents mentioning online information varied across bus lines: from a high of about 92% for the Blue B and Green Express routes to a low of 72% for Route 85. Conversely, Route 85 riders were more likely than other respondents to cite the Transit Center (26.4% compared to 19.8% overall) and information at stops (11.8% versus 10.8% overall). Overall, the two FAST lines averaged about 135 information sources per 100 respondents, compared to about 126 for the three SolTrans routes surveyed.

Figure 36. Where You Get Transit Information – Individual Routes

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
Current information sources	n=2598	n=407	n=391	n=316	n=1250	n=234
Transit Website	38.5%	39.5%	39.2%	45.3%	37.5%	33.0%
Transit Center	19.8%	16.4%	25.6%	15.5%	17.9%	26.4%
511.org	14.9%	10.8%	17.5%	8.1%	17.4%	7.5%
NextBus	13.7%	27.2%	20.0%	5.4%	10.7%	11.3%
myStop	11.2%	2.4%	3.7%	23.0%	12.8%	14.6%
Information at stops	10.8%	10.5%	11.0%	10.8%	10.6%	11.8%
Brochure/Schedule	7.8%	11.6%	9.6%	7.1%	6.4%	9.0%
Google Maps	5.5%	8.3%	2.3%	6.8%	6.6%	1.4%
Online not specified	2.9%	2.7%	3.7%	1.0%	3.1%	2.4%
Ask Someone/Driver/Friend	1.8%	2.4%	2.3%	1.0%	1.5%	3.3%
Other Transit/phone apps	1.1%	1.3%	0.6%	2.0%	1.0%	1.4%
Other	1.8%	2.7%	1.7%	1.4%	1.6%	2.8%

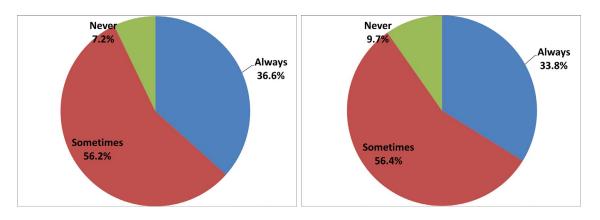
Interest in Earlier or Later buses

Surveyed riders were asked whether they would or would not use earlier or later buses on their route if those were available. Results indicate that there is strong interest in having earlier and later service available. If an earlier bus were available, more than 90% of respondents overall said they would always (36.6%) or sometimes (56.2%) use it, and only 7.2% said they would never use it. Similarly, 33.8% said they would always use a later bus, while 56.4% said they would sometimes use it. Slightly fewer than 10% said they would never use a later bus.

Figure 37. Would You Use an Earlier or Later Bus? – All Routes

Earlier Bus

Later Bus



Riders on Routes 80 and 85 included more than 40% who said they would always use an earlier bus, compared to fewer than 31% on the Blue B and Green Express lines. Blue Line B had the most respondents who said they would never us an earlier bus (10.6%), and Route 80 had the fewest (6.0%).

Figure 38. Would You Use an Earlier Bus? – Individual Routes

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
Would you use an earlier bus?	n=2598	n=407	n=391	n=316	n=1250	n=234
Always	36.6%	30.5%	30.7%	32.0%	40.6%	40.2%
Sometimes	56.2%	58.9%	62.6%	59.6%	53.5%	50.2%
Never	7.2%	10.6%	6.6%	8.4%	6.0%	9.6%

Route 80 had the highest percentage of users stating they would always use a later bus (37.4%) and Blue Line B had the lowest (28.1%). Only Route 85 had more than 10% of respondents who would never use a later bus (17.4%).

Figure 39. Would You Use a Later Bus? - Individual Routes

Route Number	All	Blue B	Green GX	Yellow Y	80 Route	85 Route
Would you use a later bus?	n=2598	n=407	n=391	n=316	n=1250	n=234
Always	33.8%	28.1%	30.9%	29.3%	37.4%	32.4%
Sometimes	56.4%	61.9%	59.5%	62.6%	53.8%	50.2%
Never	9.7%	10.0%	9.6%	8.1%	8.8%	17.4%

Final Comments

At the end of the survey form, riders were asked if there were any other comments they would like to add about the service on this bus route, and more than 1,000 did provide some handwritten feedback – a significant increase over the 850 comments received when this survey was previously conducted in 2014.

In addition to the written comments, the survey team received extensive, often passionate feedback from riders while in the field. This was particularly true for the Green Express, whose riders were dismayed by the longer time between buses, the early termination of later morning service (as reflected in comments below), and the inadequate, overcrowded buses for the return trip. The latter caused some riders to say they had to find an alternate means of transportation, such as Amtrak, for their trip home, while others simply said that the Green Express has failed to provide the service riders need.

Written comments were combined into broad categories as summarized below, where representative quotes are presented for several categories of responses to give the reader a sense of the kinds of comments offered, together with the number of comments in that category, with the route shown in parentheses after the comment.

Later schedule needed (95)

- We need later routes. Those of us who work at night are having problems. (Yellow)
- Please run later on Sundays, at least until 10:00PM from El Cerrito Del Norte BART. We need you!!! (80)
- Running later at night would be awesome. (Blue)

- The last bus leaving Fairfield at 7:54 AM causes me to drive, putting a financial strain on my household. (Green)
- Add more bus services from El Cerrito to Fairfield and other buses. The last morning bus leaves before 8AM; the buses should be run throughout the day. (Green)

Earlier schedule needed (77)

- Please run this bus earlier & later as well as more frequently. I would take it more. (80)
- I work on Saturdays and it would be nice to be able to catch the bus a little earlier. A lot of people work on weekends and because it's a weekend the bus schedule is completely different from that for weekdays, which makes it harder to use public transportation. (85)
- Bus service is great; just need more buses to be available with earlier start time. (Green)
- I wish there were earlier times on the weekends and later times during the week. (Blue)

Buses are late/buses should arrive and leave at the right time (93)

- Sometimes the bus comes and leaves early, forcing me to wait another 30-60 min for the next bus...this is inconvenient. (Yellow)
- Some buses leave earlier than the expected time. (85)
- Please work on being on time. Punctuality on these buses is an issue. Buses are often late. (Green)
- Sometimes there's confusion about who's driving the route, one morning the driver made us late because he didn't know he was driving the route. No one told us anything. We just were left sitting. (Blue)

Route 80 accounted for about two-thirds of all the comments regarding on-time performance, including the following:

- Drivers should not leave stops early unless another bus is present!
- Thank you for the wonderful service! Drivers are so kind! However, sometimes the buses are not on time; please be on time.
- I really wish you all would be on time. I leave stupid early to get to work on time and still end up late because the buses never show up.
- Buses are always late in the morning, causing delays to connections and being late for work.
- Be on time. Have back up buses if too late.
- I understand your efforts to improve on-time performance. Keep moving forward, you are at 70%.

Schedule issues/old schedule was better (51)

- There should be more weekend and holiday service. (Yellow)
- I work on holidays; I wish the bus was available on holidays and ran more frequently on Sunday. (Yellow)

- New schedules have caused me to have to drive from Vacaville to Fairfield. (Green)
- Last bus from BART station traveling to Fairfield should hold 5 minutes past departure time for late passengers riding BART or other transit system! (Green)
- The 430PM and 530PM need to be adjusted a little. The BART train seems to arrive 2 to 5 minutes after the bus has pulled off. (Green)
- The new bus schedule sucks!!! It does not line up with the San Francisco BART; with all the new homes paying taxes, you have hurt our community the most!!! (Green)
- More service during the holidays to get to work. (80)
- Poor coordination of schedule in the AM from El Cerrito Del Norte to Transit Center. BART arrival to El Cerrito: 5:15, 5:30, 5:45. 80 departure: 5:15, 5:30, 5:45. No way to catch the 80, as it leaves immediately. Very poor schedules. (80)
- The new schedule with 20 mins intervals interferes with connectivity with other intercity routes and reduces flexibility for riders with school /children. (Green)
- Please go back to old schedule every15 minutes. (Green)
- The new schedule is bad, it's very inconvenient. (Blue)

Bus/equipment issues (36)

- Buses are generally pretty clean. Please make the effort to keep them that way...especially the seats!!! (Yellow)
- Solano Express buses often have no or little leg room, because of how the seats are arranged. (80)
- Fix the wheelchair seats to allow for more passengers. When no wheelchairs are on the bus, those seats are hardly ever available to use. (80)
- Stop sending the old bus with no WiFi. (Blue)
- The buses should be more carefully serviced. Some buses should not be on the road; the bus rattles and shakes when on the freeway. (Green)
- TVs on the bus should work. (Blue)
- Remove the TVs, they never work. (Green)
- The screens on the buses should give you info on transfers. (80)
- Upgrade that floor. (Green)
- A total of 8 respondents commented on the need for outlets/chargers.
- A total of 9 respondents had comments requesting better WiFi connections or complaining that the WiFi doesn't work

Extend service to new stops/cities (71)

- Nine requests from Route 80 riders for direct service to San Francisco.
- More bus stops needed in Vallejo Heights. (85)
- They should add more pick up stops throughout Vallejo. (85)
- It would be great if you guys made a bus line that went to cities like Hercules, Pinole, etc. other than just straight to Del Norte BART. (80)
- This line should be available also at Suisun Amtrak station all day, not limited to some hours only. (Green)
- I really wish it included Martinez; a 15-minute drive translates to a 2-hour commute right now. (Yellow)

- Continue the Blue line to Walnut Creek. (Blue)
- Could you include a stop near Diablo Valley College? (Blue)

Lower fares/more discounts (40)

- The very first time I took this bus 6 months ago, when I called to get fare info no one told me to have exact change for fare because no change is given. That cost me \$10.00. (Blue)
- What happened to transfers? I don't like to explore Vallejo anymore because I have to pay each way, and the bus connections are hard with kids. (80)
- The \$5 fare from BART to VTC is too high for a 20-minute trip with only 3 stops. And the card reader won't accept a balance of \$5! (80)
- I pay for myself and two kids so a group discount would be nice. (Green)

Nice/good drivers/Positive comments (40)

- I was on the 6:07 bus from Pleasant Hill and driver went above and beyond to ensure my safety to Vacaville because of incident on bus. (Blue)
- Thank you; I love SolTrans drivers. (85)
- Best bus drivers in the Bay Area. (80)
- The drivers are great. (Green)
- Drivers are excellent! (Yellow)

Need better, more courteous drivers (26)

- It would be nice if your drivers would be more courteous! And if someone can return my calls when I leave messages for the managers or supervisors! (80)
- Drivers should greet passengers more and smile. (Yellow)
- I noticed the bus drivers gets really upset and argue with the passengers because the request stop button doesn't work and the passenger get blamed...very unprofessional!!! (Yellow)
- I rode the bus home from work with my mom. The lady driver didn't acknowledge my mom when she said thank you. The driver ignored her and kept talking from her seat out the door to a passenger who got off before us; gossiping. I was upset and it was very rude. (Green)
- Make the effort to stop if you see a passenger running to catch the bus if starting to take off. Always look at rear view mirror for such potential passengers. (Blue)
- Bus drivers don't do anything with unruly disruptive passengers; unacceptable. (Green)
- All bus drivers need to stop at all stops and not pick and choose. For example some drivers stop at Sonoma and Winchester and some drivers says it's not a stop when the bus sign is there. The bus does not stop at all mandatory stops such as the stop on Sonoma. (80)

Overall Service – Positive

- I love this service and I wouldn't have a job without it. (Blue)
- Sincerely appreciate the changes made to the routes to enable them to be on time and dependable. (Blue)
- Awesome bus service; thanks for making my commute less stressful! (Blue)

- I like the 85; it really is beneficial to get to and from work. The passes being cheaper is awesome. (85)
- Happy to have this great option for traveling to Vallejo from El Cerrito. (80)
- If this bus line didn't exist, I wouldn't live in Benicia. Please don't stop it. Thanks. (Yellow)
- Great service! (Green)
- Keep up the good work. (Green)

Overall Service – Negative

- Service has gotten worse in the last several years. Though some drivers are good, some are rude. My experience with calling dispatch has not been generally pleasant. Lastly, buses are old, break down quite often, and are poorly maintained. (Green)
- Management never calls people back. The bus drivers are very rude and unhelpful. Your service is horrible. (80)

CONCLUSIONS

The survey results as well as the additional comments provided by riders indicate that the surveyed bus lines are an important transportation resource, both for Solano County residents and others, that serves a valuable function in providing access to jobs, education and other social activities. However, some riders feel that their bus line is providing inadequate service in terms of frequency of service and on-time performance. Specific findings include:

- Surveyed riders rely on the bus for transportation. Slightly less than one-fourth (23.4%) of respondents said they would not have made the trip if their bus had not been available indicating both that most riders have alternative ways of making this trip and that the trip must be made (e.g., for getting to work). About 20% of riders have no cars in their household, and 31.9% have just a single vehicle, indicating that over half of riders have limited access to a car as an alternative to their bus service. In addition, 28% of respondents do not have a driver's license.
- Most riders use their bus frequently, with more than 50% reporting that they ride at least 5 days a week and more than 85% riding at least weekly. Most riders are also long-term users: more than 63% of riders have been using their current route for at least a year, with 23.5% having been riders for 6 years or more. These lines also appear to be attracting new riders: 26% of respondents said they had been riding for less than 6 months, including 5% who were riding for the first time. It is possible, however, that some riders responded relative to the consolidated (Blue, Yellow or Green) line, which could have led to a higher percentage of new riders.
- Riders use these STA and SolTrans lines for travel primarily between home and work, but also to and from a variety of other destinations. More than 90% of respondents either began or planned to end their current trip at home, while almost 75% were coming from or going to work about 12% to or from sports/social/recreational activities and 9% to or from school or college.

- Riders also use the buses as one of several links in their commute or other travel, with roughly half using other public transportation methods (BART, other buses) both to get to their bus stop and to get to their final destination.
- Demographically, these routes serve a diverse ridership, with almost 40% of riders African-American, 22.7% white/Caucasian and 19.1% Asian. More than 17% of riders described themselves as Hispanic or Latino. In addition, 31.5% of respondents said they speak a language other than English at home, mostly Spanish (30%) or Tagalog/Filipino (27%), but also numerous other languages.
- More than 88% of surveyed riders are within the age range of working adults (18 to 64), with only 3.5% under 18 and 8.4% age 65 and older. Similarly, more than 81% of riders are employed full time or part time.
- Surveyed riders gave good ratings to most service elements, with an overall service rating of 3.03, where 3.0 represents a "good" rating on a 1-to-4 scale. About half of service elements received ratings of 3.0 or higher, while the average rating for fares was lowest at 2.75. Green Express riders had the lowest satisfaction with overall service (2.84), driven by their low satisfaction with frequency of service (2.35), availability of connections (2.69) and fares (2.62), all of which were lower than for any other route.
- There is very strong interest in earlier and later service across the routes surveyed. When asked whether they would or would not use earlier or later buses on their route if those were available, more than 90% said they would always or sometimes use both earlier buses (36.6% always, 56.2% sometimes) and later buses (33.8% always, 56.4% sometimes.) Comments offered by riders also confirm the desire for earlier and later operation.
- When asked how they currently receive transit information, the Transit website and Transit Center together were mentioned by more than 58% of riders, followed by three websites/apps (511.org, NextBus, myStop) that together were cited by almost 40% of respondents. (Multiple responses were accepted.) About 20% of respondents cited more traditional non-digital information sources: information at stops (10.8%), printed schedules (7.8%) and asking a friend or bus driver (1.8%). Overall, about 88% of riders cited at least one online information source.
- This interest in online tools is confirmed by a relatively high interest in a mobile payment app. Just over half of respondents indicated they would use such an app, and only 21.2% said they would not, with 28% replying they were not sure. In addition, 17 riders offered comments saying an app would be very helpful.
- While these results consistently show a ridership that relies on buses on a regular basis to commute between home and work as well as reach other destinations, there are differences among individual routes in terms of the age, employment status, income, ethnic background and access to alternative methods of transportation of their riders.