



***SOLANO TRANSPORTATION AUTHORITY***  
***COUNTYWIDE RIDERSHIP STUDY***  
***RIO VISTA DELTA BREEZE BUS LINES***

*Submitted to*

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## INTRODUCTION

This report presents the results of an on-board survey of riders on Rio Vista Delta Breeze Line 51. Attempts were also made to survey the two other Rio Vista Delta Breeze routes - Lines 50 and 52 -- but there were no passengers on board on days when surveys were attempted, and thus no survey results to compile. Passengers on Line 51 were surveyed on two separate days during the third week of October 2006. Because the first day of surveying saw low ridership and only 4 survey completes, an experienced supervisor was sent back to survey riders on a second day, but this only yielded 2 additional completes.

Since no statistically meaningful conclusions can be drawn from a sample of 6 riders, we do not attempt a detailed analysis of results. Results are presented for the reader's information, but all results include the number of responses as well as percentages to make it clear that any percentages are based on a very small sample size. A copy of the survey instrument is presented as Appendix 1. A copy of the schedules in effect for the lines discussed in this report at the time the survey was conducted is presented as Appendix 2.

The remainder of this report presents the results of the survey in table form. After a brief description of the lines covered by this report, the characteristics of trips being taken by surveyed riders are covered, followed by rider demographics. Rider perception of the quality of service and suggested improvement are then presented. Also included are comments offered by the Line 51 riders (a complete listing of verbatim comments and suggestions is provided in Appendix 3.) Other than the overall low ridership on this line, only limited conclusions can be drawn from these results.

## RIO VISTA DELTA BREEZE LINES

A summary of operating characteristics of the three Rio Vista Delta Breeze bus lines at the time of the survey is included below. All of these routes operated as deviated, fixed-route service, and had been operating since January 2006.

**Rt. 50 – State Route 12 Express:** Rt. 50 connected Rio Vista to Suisun City, Fairfield, and Isleton in Sacramento County. It operated weekdays only. There were two full round trips and two additional round trips between Rio Vista and Isleton. Daily service between Rio Vista and Fairfield/Suisun City on this route was discontinued in January 2007, prior to the publication of this report.

**Rt. 51 – Rio Vista City Circulator:** Rt. 51 was a local route traveling throughout Rio Vista including to the Trilogy development west of downtown. This route operated weekdays only from 7:00am to 5:00pm. There were nine round trips daily.

**Rt. 52 – State Route 160 Express:** Rt. 52 connected Rio Vista to Antioch in Contra Costa County. This route operated two round trips each weekday. Daily service on this route was discontinued in January 2007, prior to the publication of this report.

## TRIP CHARACTERISTICS

The following section is about how the six Rio Vista Delta Breeze riders were using the Line 51 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

All riders use their Rio Vista Line 51 at least weekly.

**Figure 1. Ridership Frequency – Rio Vista Line 51**

Frequency	Number	%
5 to 7 days a week	2	33.3%
3 to 4 days a week	3	50.0%
1 to 2 times a week	1	16.7%
Once a month or less		
First time riding		

### Length of Ridership

Two-thirds of the six surveyed Rio Vista Line 51 riders have been using the line for less than 6 months, and one rider has been using it for 3 to 5 years.

**Figure 2. How Long Riding – Rio Vista Line 51**

How long riding	Number	%
Less than 6 months	4	66.7%
6 to 12 months	1	16.7%
1 to 2 years		
3 to 5 years	1	16.7%
6 to 9 years		
10 or more years		

### Round/One Way Trip

Five of the six respondents said their ride on the bus was part of a round trip, while one did not yet know whether they would be making a return trip on the same line.

**Figure 3. This Trip is Part of a Round Trip on the Bus – Rio Vista Line 51**

Part of a round trip?	Number	%
Yes	5	83.3%
No		
Don't know	1	16.7%

### **Trip Purpose—Where Are You Coming From and Where Are You Going?**

All six surveyed passengers were either going home or coming from home.

Three of the six Rio Vista Delta Breeze Line 51 riders said they were coming from home, while one each was coming from work, school, or visiting friends or relatives.

**Figure 4. Trip Origins – Rio Vista Line 51**

Coming from?	Number	%
Home	3	50.0%
Work	1	16.7%
School	1	16.7%
Medical		
Shopping/errands		
Visiting friends or relatives	1	16.7%
Other		

Three surveyed Line 51 riders were going home on the bus, while two were going shopping or running errands.

**Figure 5. Trip Destinations – Rio Vista Line 51**

Going to?	Number	%
Home	3	50.0%
Work		
School		
Medical		
Shopping/errands	2	33.3%
Sports/social/ recreational		
Visiting friends or relatives		
Other	1	16.7%

### **Places of Origin and Destination**

Rio Vista was mentioned as the trip origin of five of the six surveyed riders and the destination for all four who provided this information.

**Figure 6. City of Origin and Destination – Rio Vista Line 51**

City coming from	Number	%
Rio Vista	5	83.3%
Other	1	16.7%

City going to	Number	%
Rio Vista	4	100.0%
Other		

**Where Did You Board and Will You Leave the Bus?**

All surveyed riders boarded and planned to leave the bus in Rio Vista.

**Figure 7. Where Did You Board/Will You Leave – Rio Vista Line 51**

City where boarded	Number	%
Rio Vista	4	100.0%
Other		

City where leaving	Number	%
Rio Vista	4	100.0%
Other		

**Access to Bus Stop**

Three of the six riders reached their Rio Vista Line 51 bus on another bus, while two walked and one said he/she had called the bus to be picked up.

**Figure 8. How Did You Get to the Bus/Ferry? – Rio Vista Line 51**

Mode to bus stop*	Number	%
Bus	3	50.0%
Walked	2	33.3%
Other	1	16.7%

\* More than one mode may have been used

Two of the three riders who rode the bus to their stop used another Rio Vista Delta Breeze bus, while one said they used a Benicia Breeze bus for at least part of the trip to the bus stop.

**Figure 9. If by Bus, What Transit Operator? – Rio Vista Line 51**

Operator	Number	%
Benicia Breeze	1	33.3%
Rio Vista Delta Breeze	2	66.7%
Other		

**Access to Final Destination**

Two riders said they would take another bus to their final destination, while one planned to walk and the fourth said he or she would “order the service” – presumably indicating that they would be dropped off at their destination.

**Figure 10. How Will You Get to Your Final Destination? – Rio Vista Line 51**

Mode to destination*	Number	%
Walk	1	25.0%
Bus	2	50.0%
Other	1	25.0%

For the two Rio Vista Line 51 riders who planned to use a bus to reach their final destination, one planned to use another Rio Vista bus and one said he or she planned to use a Benicia Breeze bus for part of the trip.

**Figure 11. If Bus to Destination, What Transit Operator? – Rio Vista Line 51**

Operator	Number	%
Benicia Breeze	1	50.0%
Rio Vista Delta Breeze	1	50.0%
Other		

**How Trip Would Have Been Made Without the Bus**

Two of the six respondents said they would not have made the trip if their Rio Vista Line 51 bus had not been available, while two said they would get a ride, one would drive, and one would take a taxi.

**Figure 12. How Trip Made if Bus Not Available? – Rio Vista Line 51**

Alternate mode*	Number	%
Would not have made this trip	2	33.3%
Drive alone	1	16.7%
Get a ride	2	33.3%
Casual carpool		
Carpool/vanpool		
Walk		
Taxi	1	16.7%
Train		
Bike		
Other		

\* More than one mode may have been mentioned

### 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 (or youth fare.) Four of the six Rio Vista Line 51 riders said they paid cash, while one used a monthly pass and one said they paid by check.

**Figure 13. How Did You Pay Your Fare for this Trip? – Rio Vista Line 51**

Payment method	Number	%
Transfer		
Cash	4	66.7%
Multi Ride/Punch Pass		
Monthly Pass	1	16.7%
Other	1	16.7%

### Type of Fare

Adult fares were paid by two of the five riders who answered this question, while another two paid a senior/disabled fare and one paid a student fare.

**Figure 14. Type of Fare – Rio Vista Line 51**

Fare Type	Number	%
Adult	2	40.0%
Senior/Disabled	2	40.0%
Student	1	20.0%

## **RIDER DEMOGRAPHICS**

The following presents results on the demographics, or basic characteristics, of Rio Vista Line 51 riders, including gender, ethnicity, age, employment status, access to automobiles and household income.

### **Gender**

Four Rio Vista Line 51 riders were female; two were male.

**Figure 15. Gender – Rio Vista Line 51**

Gender	Number	%
Male	2	33.3%
Female	4	66.7%

### **Age**

Four of the six respondents were over 50, including three 65 and older. One rider was 25-34 and one was under 18.

**Figure 16. Age – Rio Vista Line 51**

Age	Number	%
13 and younger		
14 - 17	1	16.7%
18 - 24		
25 - 34	1	16.7%
35 - 49		
50 - 64	1	16.7%
65 and older	3	50.0%

### **Employment Status**

Four of the six surveyed riders were retired, one was employed part time, and one was a student.

**Figure 17. Employment Status – Rio Vista Line 51**

Employment status	Number	%
Fulltime		
Part time	1	16.7%
Retired	4	66.7%
Student	1	16.7%
Homemaker		
Unemployed		

**Race and Ethnicity**

Rio Vista Line 51 respondents included three white/Caucasian and two African American riders, as well as one who classified him/herself as “other.”

**Figure 18. Race and Ethnicity – Rio Vista Line 51**

Race or ethnicity	Number	%
White/Caucasian	3	50.0%
Spanish/Hispanic/Latino		
Black/African American	2	33.3%
South Asian		
East Asian		
American Indian/Alaska Native		
Native Hawaiian/Pacific Islander		
Other	1	16.7%

**Household Size**

Three of the 5 Rio Vista Line 51 riders who responded to this question live in 1-person households, and one each live in 3- and 5-person households.

**Figure 19. Household Size – Rio Vista Line 51**

Household size	Number	%
1	3	60.0%
2		
3	1	20.0%
4		
5	1	20.0%
6		
7		
8 or more		
other		

### Household Income

Of the three respondents who reported their income, one had an income from \$15-24,999, one from \$25-34,999 and one from \$60-99,999.

**Figure 20. Income – Rio Vista Line 51**

Income	Number	%
Under \$15,000		
\$15,000 - \$24,999	1	33.3%
\$25,000 - \$34,999	1	33.3%
\$35,000 - \$44,999		
\$45,000 - \$59,999		
\$60,000 - \$99,999	1	33.3%
\$100,000 - \$150,000		
Over \$150,000		

### City of Residence

All six respondents said they live in Rio Vista.

**Figure 21. City of Residence – Rio Vista Line 51**

City of residence	Number	%
Rio Vista	6	100.0%
Other		

### Cars in Household

Two of the six riders have no cars, three have one car, and one has two cars.

**Figure 22. Car Ownership – Rio Vista Line 51**

No. of cars	Number	%
none	2	33.3%
1	3	50.0%
2	1	16.7%
3 or more		

### Could Car Have Been Used for this Trip?

Four of the six respondents said they did not have a car available for this trip.

**Figure 23. Was Car Available? – Rio Vista Line 51**

Car available?	Number	%
Yes	2	33.3%
No	4	66.7%
Yes, but inconveniences others		

## QUALITY OF SERVICE

Overall, three of the six surveyed Rio Vista Line 51 riders who responded to this question said there were no changes they would like to see to the line. Among the other three, two requested Sunday service and one each suggested more frequent service, more Saturday service, better on time performance, and earlier morning service.

**Figure 24. What Changes Would You Like to See? – Rio Vista Line 51**

Suggested changes*	Number	%
No changes	3	60.0%
(More) Sunday service	2	40.0%
More frequent service	1	20.0%
Later evening service		
More Saturday service	1	20.0%
Better on-time performance	1	20.0%
Earlier morning service	1	20.0%
Service extended to new stops		
Easier transfers between routes		
Lower fares		
Other		

\* More than one change may have been mentioned

### Rating of Service

Survey respondents were asked to rate a variety of service elements on their bus line 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.

Overall, the six Rio Vista Line 51 riders gave good ratings to almost all service elements, with an overall service rating of 3.5 and ratings greater than 3.0 for everything except the availability of intercity connections, which received a rating of “poor” from one ride – the only such rating given on this line.

**Figure 25. Ratings of Service – Rio Vista Line 51**

Service attribute	Number	%
<b>On-time performance</b>		
Excellent = 4	2	40.0%
Good = 3	3	60.0%
Fair = 2		
Poor = 1		
TOTAL NO./AVERAGE RATING	5	<b>3.40</b>
<b>Frequency of service</b>		
Excellent = 4	2	40.0%
Good = 3	3	60.0%
Fair = 2		
Poor = 1		
TOTAL NO./AVERAGE RATING	5	<b>3.40</b>
<b>Driver courtesy</b>		
Excellent = 4	4	66.7%
Good = 3	2	33.3%
Fair = 2		
Poor = 1		
TOTAL NO./AVERAGE RATING	6	<b>3.67</b>
<b>Rider information</b>		
Excellent = 4	2	40.0%
Good = 3	3	60.0%
Fair = 2		
Poor = 1		
TOTAL NO./AVERAGE RATING	5	<b>3.40</b>
<b>Cleanliness of vehicles</b>		
Excellent = 4	2	33.3%
Good = 3	4	66.7%
Fair = 2		
Poor = 1		
TOTAL NO./AVERAGE RATING	6	<b>3.33</b>
<b>Safety/security</b>		
Excellent = 4	2	33.3%
Good = 3	4	66.7%
Fair = 2		
Poor = 1		
TOTAL NO./AVERAGE RATING	6	<b>3.33</b>
<b>Ease of transfers</b>		
Excellent = 4	2	100.0%
Good = 3		
Fair = 2		
Poor = 1		
TOTAL NO./AVERAGE RATING	2	<b>4.00</b>
<b>Availability of intercity connection</b>		
Excellent = 4	1	33.3%
Good = 3	1	33.3%
Fair = 2		
Poor = 1	1	33.3%
TOTAL NO./AVERAGE RATING	3	<b>2.67</b>
<b>System easy to understand</b>		
Excellent = 4	2	50.0%
Good = 3	1	25.0%
Fair = 2	1	25.0%
Poor = 1		
TOTAL NO./AVERAGE RATING	4	<b>3.25</b>
<b>Fares (cost)</b>		
Excellent = 4	2	50.0%
Good = 3	1	25.0%
Fair = 2	1	25.0%
Poor = 1		
TOTAL NO./AVERAGE RATING	4	<b>3.25</b>
<b>Overall service</b>		
Excellent = 4	3	50.0%
Good = 3	3	50.0%
Fair = 2		
Poor = 1		
TOTAL NO./AVERAGE RATING	6	<b>3.50</b>

### Preferred Means of Receiving Information

Three of the riders surveyed say they like to receive information through the newspaper, while two prefer information at stops, two prefer mail, and one each prefer the transit website and email.

**Figure 26. Preferred Sources of Transit Information – Rio Vista Line 51**

Information source*	Number	%
Information at stops	2	33.3%
Notice on bus/ferry		
Mail	2	33.3%
Transit website	1	16.7%
Newsletter		
Brochure		
Email	1	16.7%
Newspaper	3	50.0%
Radio		
Don't need this information		
Other		

\* More than one source may have been mentioned

### FINAL COMMENTS

Among the four final comments offered by riders, three asked for the service to remain unchanged, with one saying “It’s already good enough,” one asking “Please don’t change the schedule,” and one asking “Please don’t stop this service.” The fourth comment was “It shouldn’t matter what my income is. The fare is too high. Most of us agree.”

### CONCLUSIONS

While no quantitative conclusions can be drawn from these results, it appears that six surveyed Rio Vista Line 51 riders are pleased with the service, which they use to travel between home and a variety of destinations within Rio Vista, using other buses or walking both to get to their stop and to reach their final destination. Demographically, all six riders live in Rio Vista, four of the six riders are over 50, four are retired, and three live in one-person households.