

**AC TRANSIT DISTRICT
Board of Directors
Executive Summary**

GM Memo No. 04-221

Meeting Date: July 7, 2004

Committees:

- | | | | |
|-------------------------------|--------------------------|------------------------------|-------------------------------------|
| Planning Committee | <input type="checkbox"/> | Finance Committee | <input type="checkbox"/> |
| External Affairs Committee | <input type="checkbox"/> | Operations Committee | <input checked="" type="checkbox"/> |
| <i>Student Pass Committee</i> | <input type="checkbox"/> | <i>Paratransit Committee</i> | <input type="checkbox"/> |
| Board of Directors | <input type="checkbox"/> | Financing Corporation | <input type="checkbox"/> |

SUBJECT:

San Pablo Corridor Analysis – Phase 2 of Nelson\Nygaard Evaluation

RECOMMENDED ACTION:

- Information Only Briefing Item Recommended Motion

Receive Nelson\Nygaard Report of Impact of Rapid Service on the San Pablo Corridor

Fiscal Impact:

None.

Background/Discussion:

Nelson\Nygaard was retained to conduct a three-phase evaluation of the impact of Rapid service on the San Pablo corridor. Phase One consisted of ridechecks on Lines 72, 72L and 73 in May 2003, one month before introducing Rapid service. Phase Two, submitted herewith, evaluated ridership, running time and public perception in March

BOARD ACTION:

- | | | | |
|--------------------------------------|-------------------------------------|--------------|--------------------------|
| Approved as Recommended | <input checked="" type="checkbox"/> | Other | <input type="checkbox"/> |
| Approved with Modification(s) | <input type="checkbox"/> | | |

MOTION: BISCHOFBERGER/JAQUEZ to receive report as presented (5-0-0-1).

- Ayes:** Directors Bischofberger, Jaquez, Peoples, Vice President Harper, President Wallace – 5
- Noes:** None – 0
- Abstain:** None – 0
- Absent:** Director Kaplan - 1

The above order was passed and adopted on July 21, 2004.

Rose Martinez, District Secretary

By _____

GM Memo No. 04-221

Subject: San Pablo Corridor Analysis – Phase 2 of Nelson\Nygaard Evaluation

Date: July 7, 2004

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2004, ten months after implementation of Line 72R. Phase Three will evaluate the corridor in October 2004 when the new service has been tested and refined.

In brief, the success of the Rapid service is evidenced by an overall increase in ridership on the corridor, and by the numbers of riders switching from Lines 72 and 73 to Line 72R. Ridership on the Rapid has increased 66% over Line 72L, the former limited-stop service. In regard to running time, the goal was to decrease overall running time by 20%, and the study shows a reduction of 17% over the limited and 25%-30% over the local service.

Prior Relevant Board Actions/Policies:

N/A

Attachments:

Attachment A: San Pablo Corridor Analysis – Phase 2

Attachment B: Line 72R Performance Survey

Attachment C: AC Transit Presentation to the Congestion Management Agency

Approved by: Rick Fernandez, General Manager
Nancy Skowbo, Acting Deputy General Manager, Service Development

Prepared by: Jon Twichell, Manager of Capital Project Implementation
Cesar Pujol, Traffic Engineer

Date Prepared: June 24, 2004

MEMORANDUM

To: Jon Twichell

From: Richard Weiner, Andrew Ittigson

Date: June 7, 2004

Subject: San Pablo Corridor Analysis – Phase 2

AC Transit enlisted the services of Nelson\Nygaard Consulting Associates (NN) to complete a three-phase data collection effort and system performance overview for the three routes serving the San Pablo Avenue Corridor. The NN team completed Phase One by conducting a ridecheck in May 2003 and submitting a summary analysis report of the corridor before Rapid Bus service began. Phase Two evaluates the ridership impacts and the public's perception of the 72R (Rapid Bus) after ten months in operation. This will be followed by a third surveying effort in the Fall of 2004 to determine the continued impacts of the new Rapid Bus service.

This memorandum summarizes the results of the second phase of the San Pablo Avenue Corridor data collection. An overview and direct comparison of the corridor before the introduction of Rapid Bus and after, focusing specifically on the impacts of the 72R on ridership and travel times, immediately follows this introduction. This memo will also provide a ridership profile and graphic illustrations of ridership trends on each of the three routes. The final section summarizes and analyzes the results of the Rapid Bus on-board survey. A more detailed analysis will be included in the Final Report at the conclusion of this study.

Methodology

From March 9th to 11th and on March 23rd 2004, temporary surveyors under Nelson\Nygaard supervision rode almost every single weekday run on Routes 72, 72M and 72R.¹ On every trip, they counted every passenger who got on and off the bus at each stop, as well as the continuing load. In addition, an on-board passenger survey was conducted on all 72R trips during the ridecheck. These data form the basis of the ridership and survey information presented below.

¹ A small amount of data was collected by AC Transit staff.

San Pablo Avenue Corridor - Before and After

The Rapid Bus was introduced to improve operating speeds and running times, and to provide an overall better quality of service on the corridor.

With the Rapid Bus, AC Transit has taken a more aggressive approach to initiating better quality service and attempting to attract new riders to the system.

Key features of the Rapid Bus include:

- Headway based schedule (12 minute headways)
- Bus stops one-half to two-thirds of a mile apart
- Far side stops
- Traffic signal coordination, transit signal priority, and queue jump lanes
- Bus branding (new recognizable shelters, low floor vehicles and bus stop signs)
- ITS features (real-time bus arrival information at some bus stops)

After about one year of operation, the Rapid has not only provided an impressive increase in ridership over the 72L (Limited-stop service), but it has also managed to slightly increase ridership along the corridor at a time when AC Transit's overall ridership has declined.

Corridor Ridership

The on-board ridecheck results from May 2003 (before Rapid) and March 2004 (after Rapid) show increases for the 72R and the overall corridor. However, the local routes show substantial declines (a loss of 3,031 riders). Passenger survey data indicate that the loss of local riders is not as sharp as it appears in the ridecheck results. The on-board passenger surveys show 39.9% of the Rapid riders transferred from routes 72 and 73. Thus the net loss of riders on the local routes is 1,821, or 14% of the corridor boardings.

The 14% ridership loss represents the decline the corridor would have experienced without the introduction of Rapid Bus service. However, the comparison of the ridecheck results over the past year show that the San Pablo Corridor actually had a 7.2% increase in ridership due to the large gains of the 72R. When taking into account the projected loss in ridership that would have occurred without the 72R, the overall positive ridership impact in the corridor would be 21.2% (14% + 7.2%)².

² A more detailed corridor ridership analysis, taking into account system-wide trends for 2003/04, will be included in the final report.

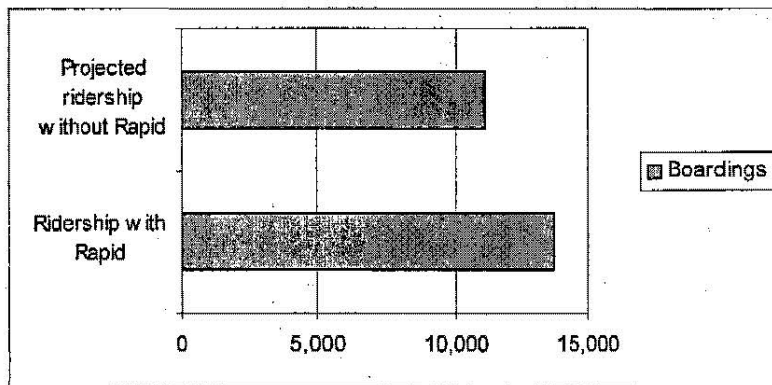
Ridership Before and After Rapid Bus

2003 Ridecheck Results

2004 Ridecheck Results

Route #	Daily Boardings			Route #	Daily Boardings			% Change
	Outbound	Inbound	Total		Outbound	Inbound	Total	
72	2,876	2,765	5,641	72	1,943	1,806	3,749	-33.5%
72L	991	948	1,939	72R	2,985	2,914	5,899	204.2%
73	2,742	2,564	5,306	72M	2,144	2,023	4,167	-21.5%
Total	6,609	6,277	12,886	Total	7,072	6,743	13,815	7.2%

Ridership Impact with Rapid Bus



Comparison of Results from the 72L and 72R

The Rapid Bus was developed to provide a higher level of service for passengers traveling on the San Pablo Corridor. Last summer, the 72R replaced the "limited-stop" peak only service (the 72L), which operated much like a regular local bus with fewer stops along the route. When compared to the local routes in the corridor, the ridecheck data from May 2003 showed boarding totals on the 72L were considerably lower during the same vehicle service hours.

Ridership

The 72R has generated dramatic ridership increases. After less than a year of service, the Rapid Bus has shown a very impressive 204.2% increase in boardings over the 72L. However, the ridership comparison is based on two different spans of service; the 72L operated weekdays from

AC Transit

6:00 AM – 9:00 AM and 3:00 PM – 7:00 PM, a total of seven daily service hours, and the 72R operates continuously from 6:00 AM – 7:00 PM, a total of 13 daily service hours. Of particular

significance is that when the two routes are compared using the exact same spans of service, the 72R still shows nearly a 66% increase in ridership. These substantial gains far exceeded AC Transit's early projections of 25% ridership increase.

It is important to keep in mind that the data was collected less than a year after the introduction of the 72R and that new service concepts tend to take time to mature and become established within the bus system. It can often take well over a year for the transit agency to make all of the necessary adjustments to best sustain ridership growth. To that end, Nelson\Nygaard plans to administer a third on-board ridecheck on the San Pablo Corridor in October 2004.

Overall Comparison of 72L and 72R

72L Boardings	72R Boardings	% Change
1,939	5,899	204.20%

Direct Comparison (same span of service)

72L Boardings	72R Boardings	% Change
1,939	3,215	65.8%

Running Time

The core features of the Rapid Bus were established with the primary goal of improving operating speeds. The on-board data collection results from the 72L in 2003 and the 72R in 2004 indicate that the overall running time has been reduced by 17%, slightly lower than AC Transit's initial goal of 20%. Although the 17% does not meet the agency goal, it still represents a substantial time savings. Eighty-two percent of the riders surveyed reported a decrease in travel time over their previous mode of transport, while 34% stated that they saved 15 or more minutes per trip on the Rapid Bus in contrast to the actual overall of savings of 12 minutes. While these numbers suggest that riders' perceptions of time savings are greater than actual savings, a truly accurate analysis would require a comparison of these times for specific trips taken by specific individuals, rather than a comparison based on time savings for the full length of the run.

When compared to travel times on local routes, the 72R's time savings are even more dramatic. For example, traveling from Del Norte BART to San Pablo & 40th Street takes an average of 28 minutes on the 72R and 38 minutes on the 72, or a 26% difference in travel times. Another example shows that the 72R travels from Broadway & 14th Street in downtown Oakland to San Pablo & University Avenue five minutes faster than the 72, again a 26% difference in running times.

Running Time Comparison (in minutes)

72L	72R	Difference	% Change
70	58	12	-17.1%

Ridership Count and Running Time Analysis

This section presents the highlights of the ridership counts and running time analysis for each of the three lines in the San Pablo Avenue corridor, both inbound and outbound. We describe the trends in boarding activities at each stop and at different times of the day, and on-time performance for each run.

March 2004 Ridecheck Results

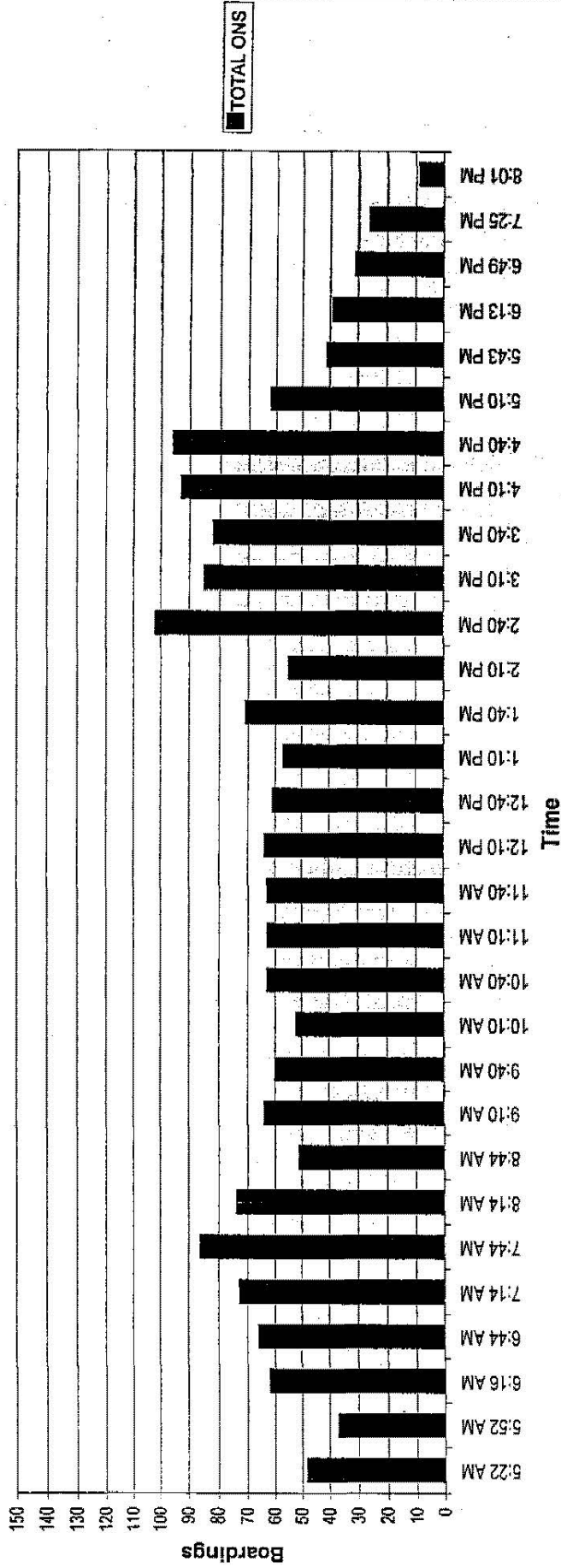
Route #	Daily Boardings		
	Outbound	Inbound	Total
72	1,943	1,806	3,749
72R	2,985	2,914	5,899
72M	2,144	2,023	4,167
Total	7,072	6,743	13,815

Route 72

72 Inbound

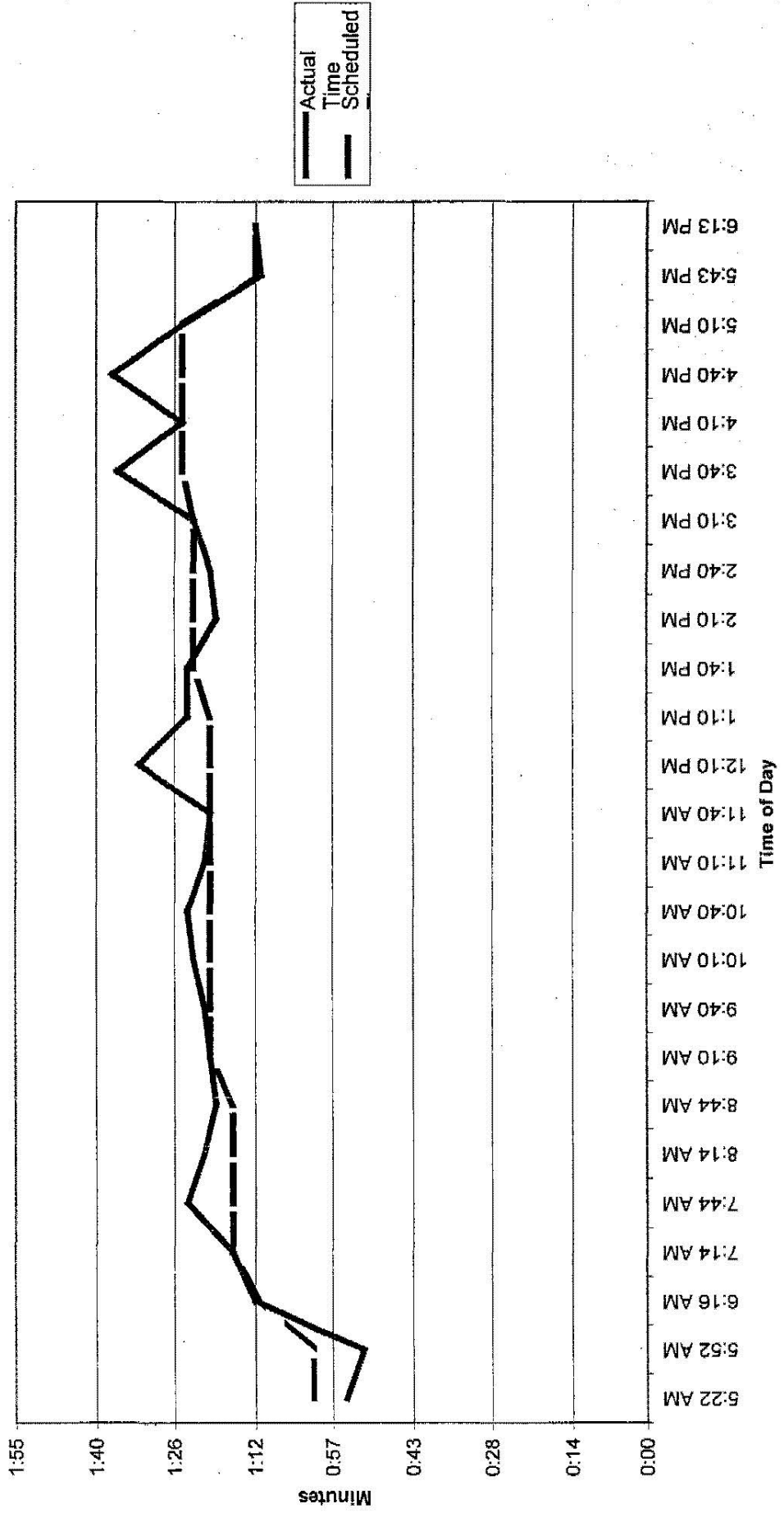
- Boarding activity tends to follow traditional commuter trends (AM and PM peaks) with the most boardings occurring between 2:40pm and 4:40pm.
- Heaviest daily boarding totals are at Hilltop Mall (213 passengers), Del Norte BART (95), and at San Pablo at 40th Street (82)
- Heaviest alighting totals are at Broadway & 14th Street (194), Del Norte BART (172), and El Cerrito BART (89)
- Heavy passenger loads (about 34 passengers) are found between San Pablo Avenue & Market and 20th & Telegraph.
- Overall run times were on-time or slightly over schedule with a few trips running 10 minutes or more over schedule (12:10pm, 3:40pm and 4:40pm).

72 Inbound Daily Boardings (March 2004)



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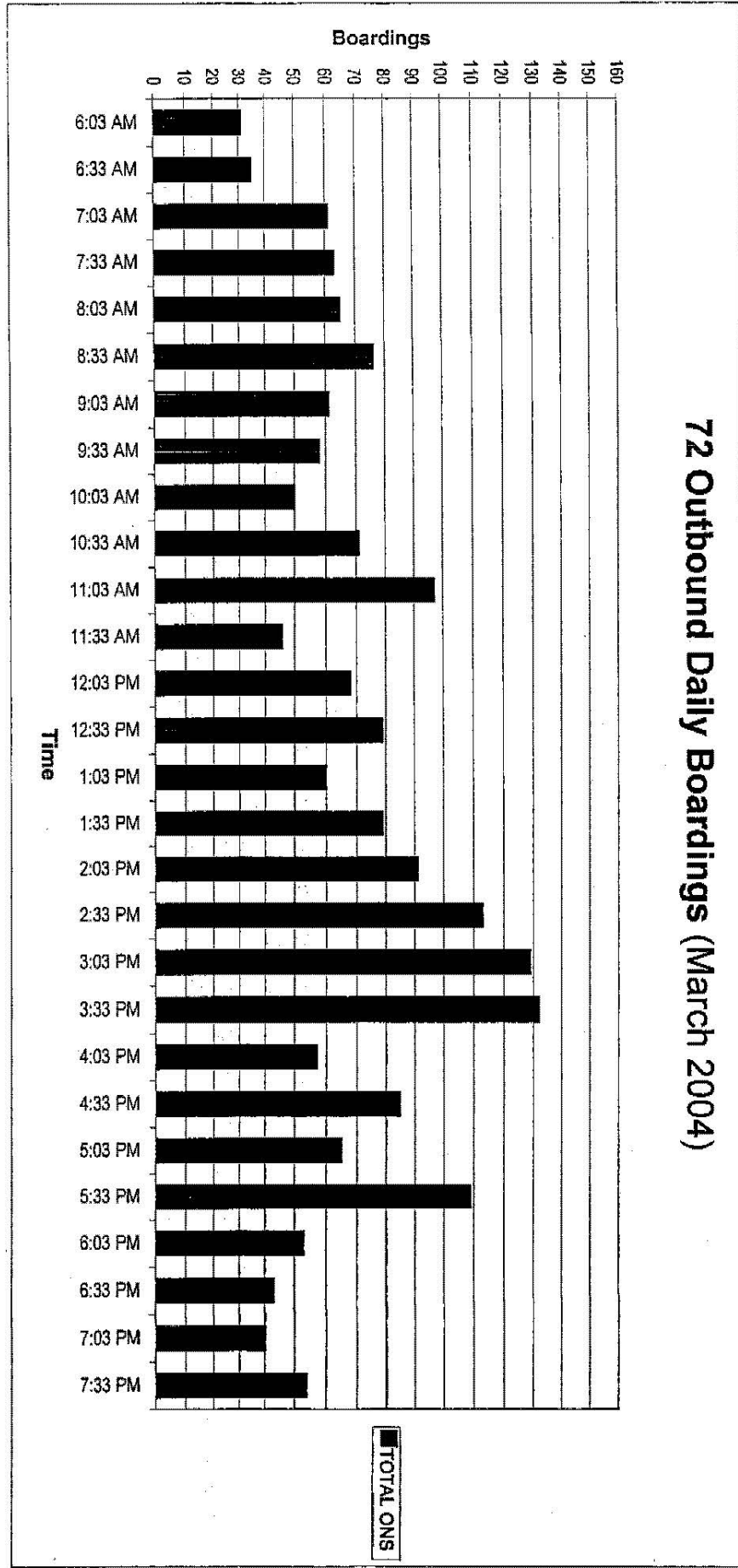
72 Inbound Actual Vs. Scheduled Run Time



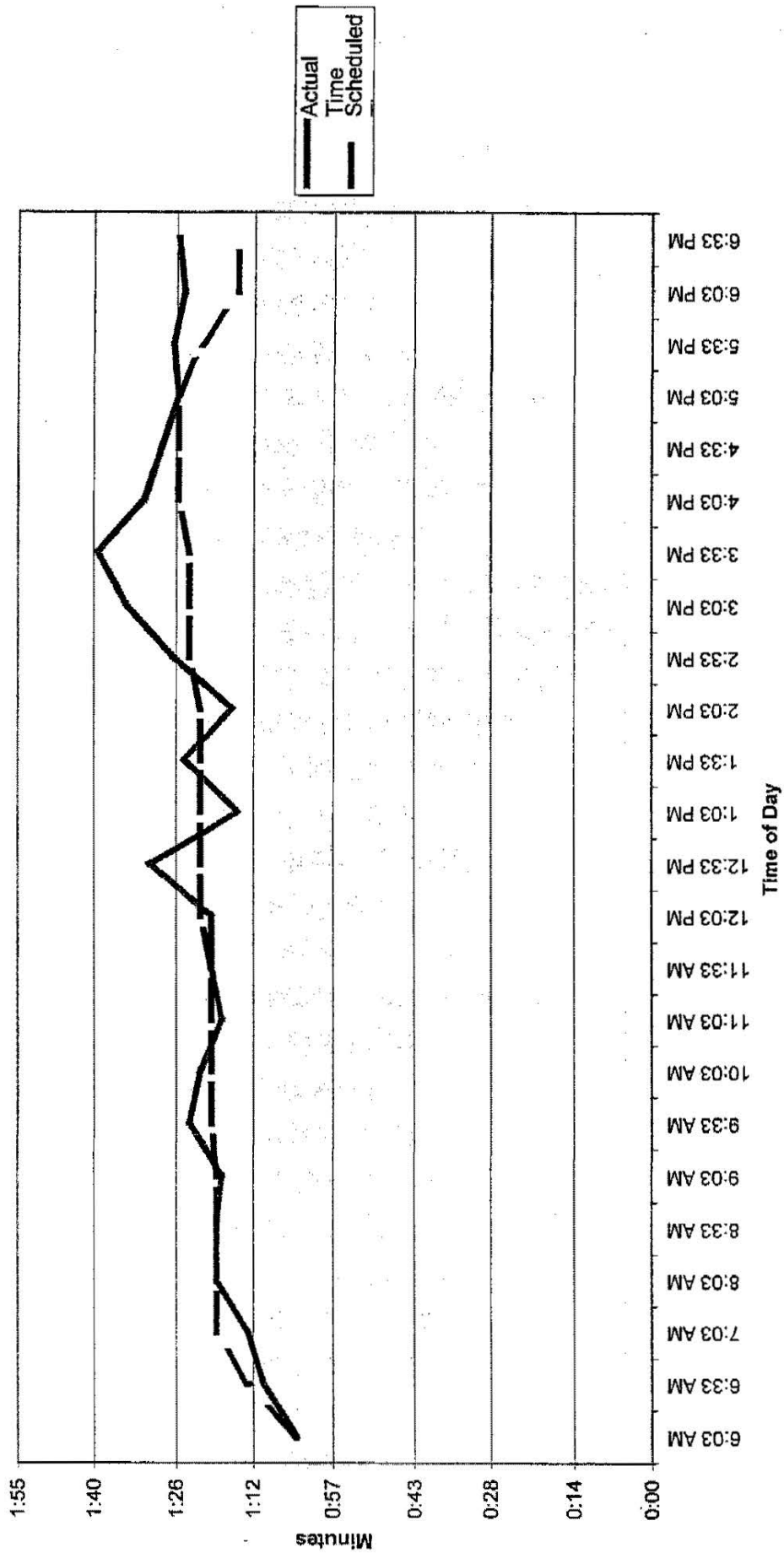
72 Outbound

- Boarding activity is fairly constant throughout the day with the most intense activity in the early afternoon hours.
- Heaviest daily boardings occur at Del Norte BART (216 passengers), Broadway & 14th Street (162), and El Cerrito BART (111).
- Heaviest alighting activity occurs at Hilltop Mall (225), Del Norte BART (133), and San Pablo & University Avenue (80).
- Heavy passenger loads occur between El Cerrito BART and Del Norte BART, peaking at 52 riders at Moeser Lane.
- Total run times are generally on schedule throughout the day, but schedule adherence becomes more difficult during the PM Peak.

72 Outbound Daily Boardings (March 2004)



72 Outbound Actual Vs. Scheduled Run Time

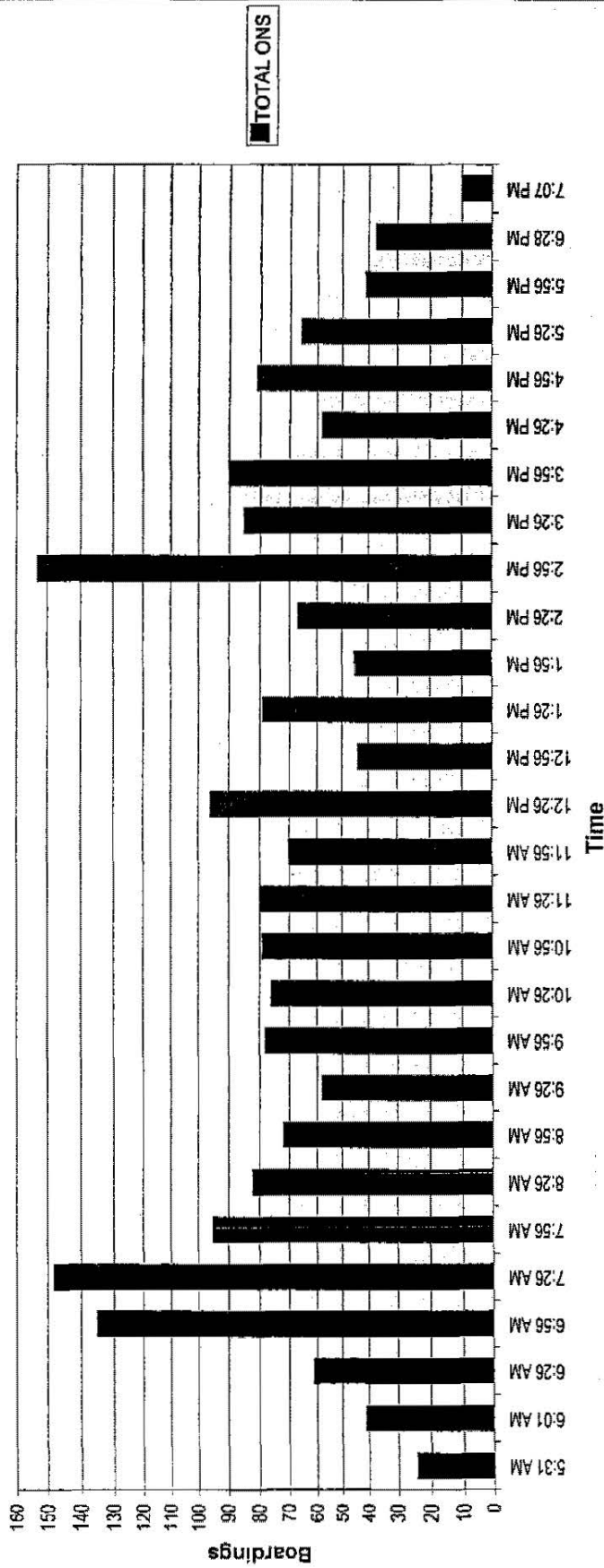


Route 72M

72M Inbound

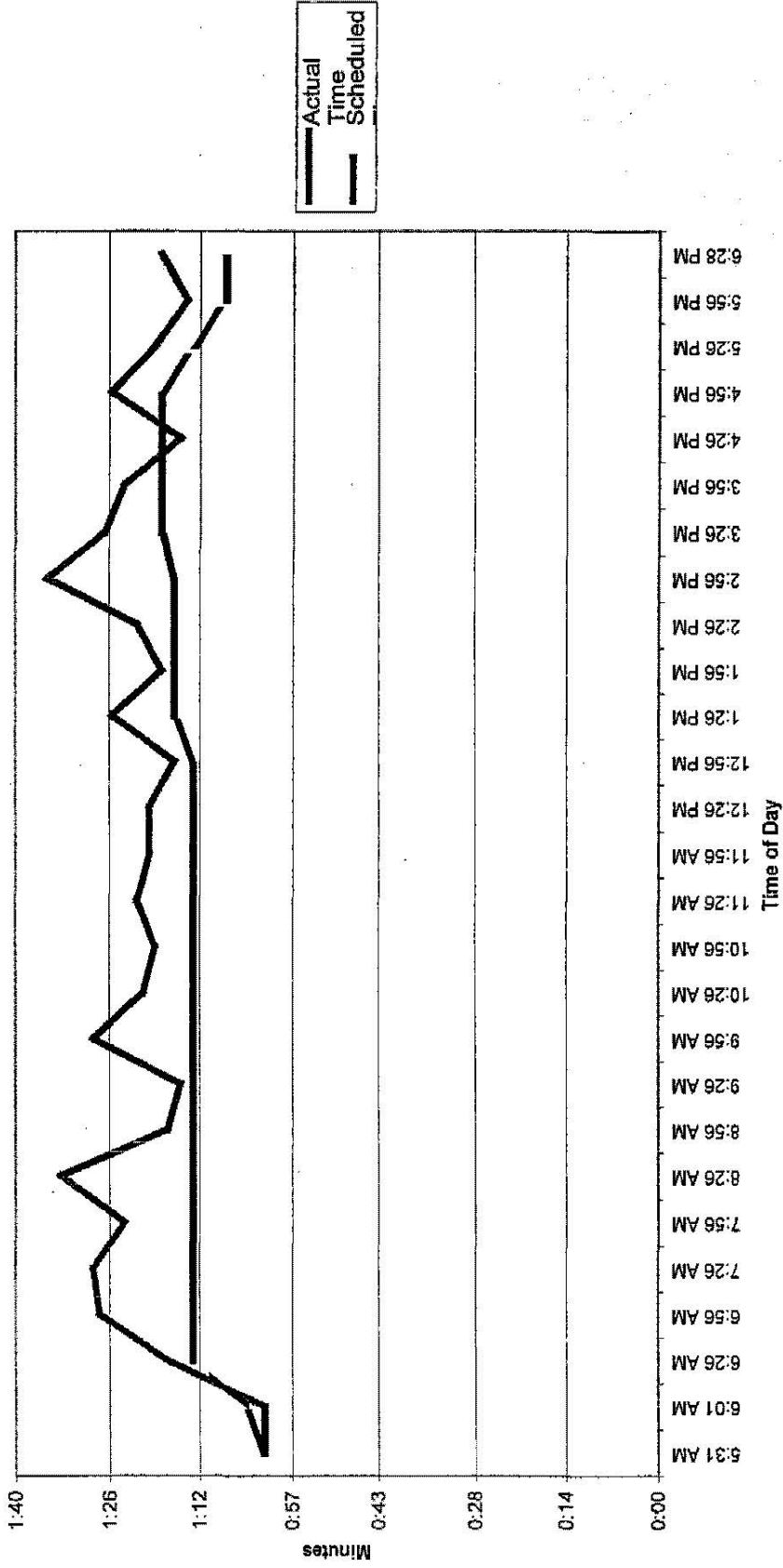
- Boardings tend to be consistent throughout the day, with peaks in the AM and early afternoon, possibly a result of increased student ridership.
- The most active stops throughout the day are Richmond BART (123), San Pablo & University (101), and Del Norte BART (83).
- Heaviest alighting totals occur at Broadway & 14th Street (171), Del Norte BART (141), and San Pablo & University (109).
- Passenger loads are fairly heavy along the route with peaking in the northern portion of the route between Richmond BART and El Cerrito BART (up to 56 passengers).
- Run times are generally behind schedule for most of the day, with the most adherence difficulty occurring between 6:26am and 8:26am.

Route 72M Inbound Daily Boardings (March 2004)



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 AC Transit

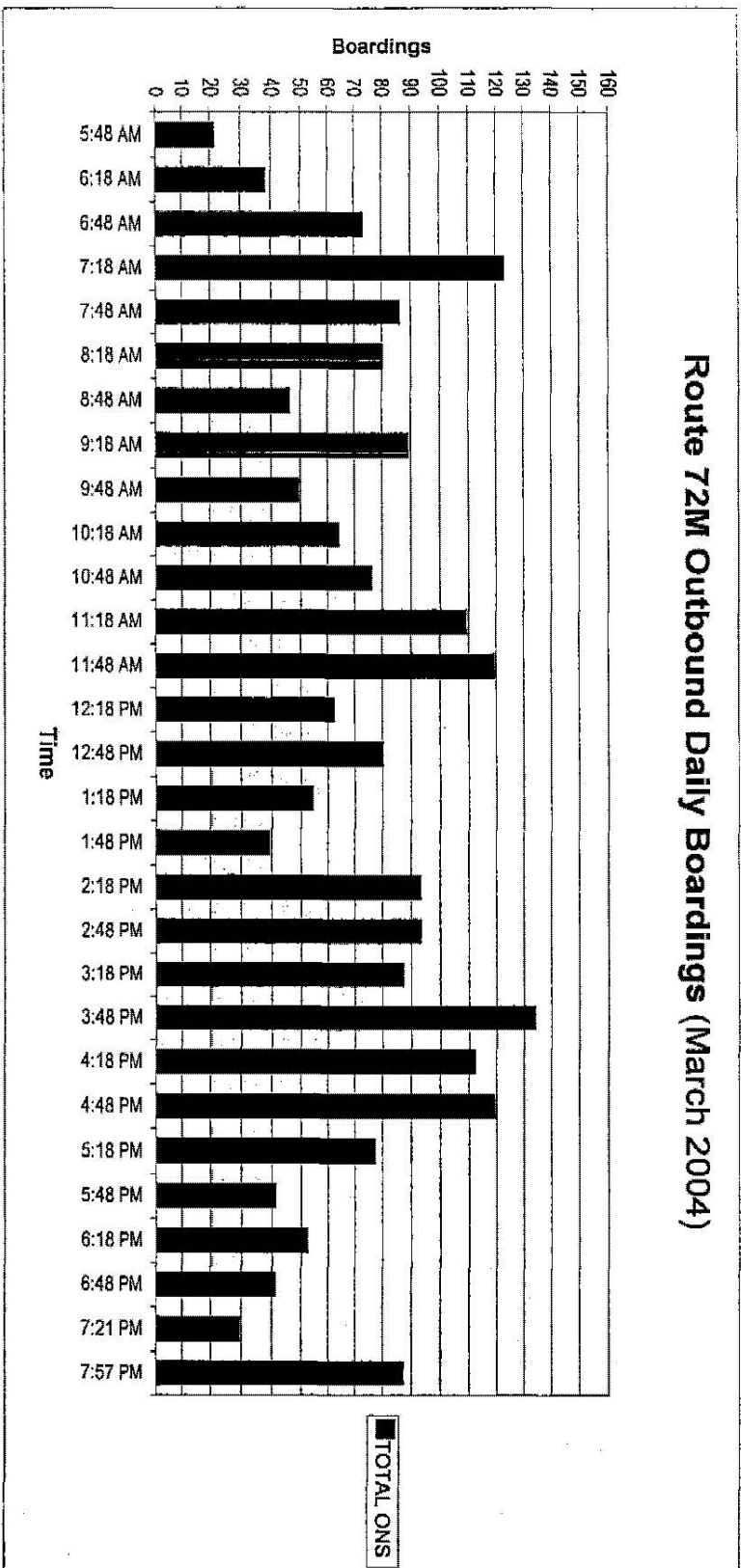
72M Inbound Actual Vs. Scheduled Run Time



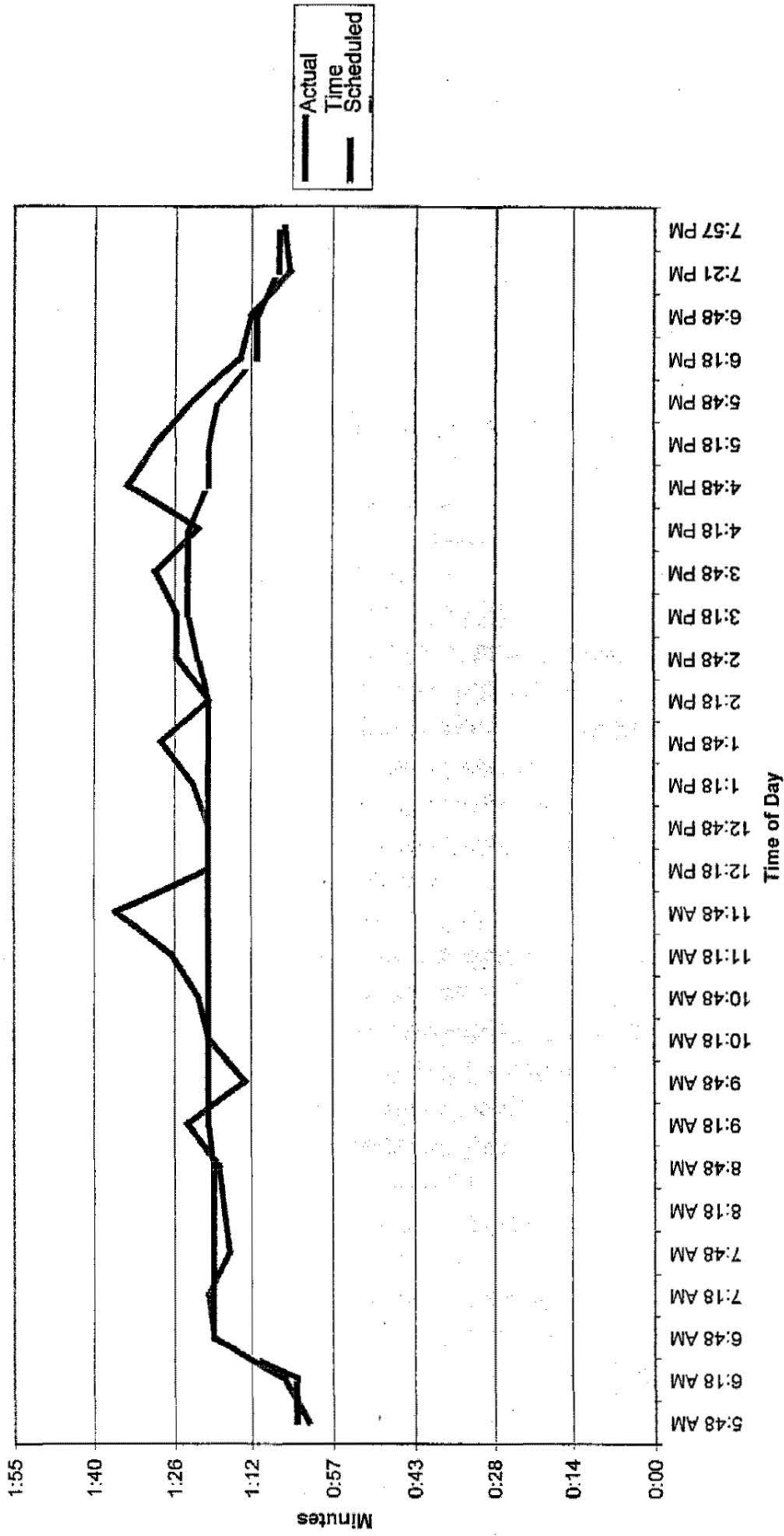
72M Outbound

- Boardings are fairly heavy between 7:00am and 5:00pm, with peaks occurring during the traditional AM and PM peak periods and late morning.
- The most active stops throughout the day are Del Norte BART (205 boardings) and Broadway & 14th Street (186).
- The most alightings occur at Richmond BART (121) and Del Norte BART (116).
- Passenger loads of 40 and above occur between Del Norte BART and Richmond BART.
- Run times are on-time most of the day, with only a few trips behind schedule.

Route 72M Outbound Daily Boardings (March 2004)



72M Outbound Actual Vs. Scheduled Run Time

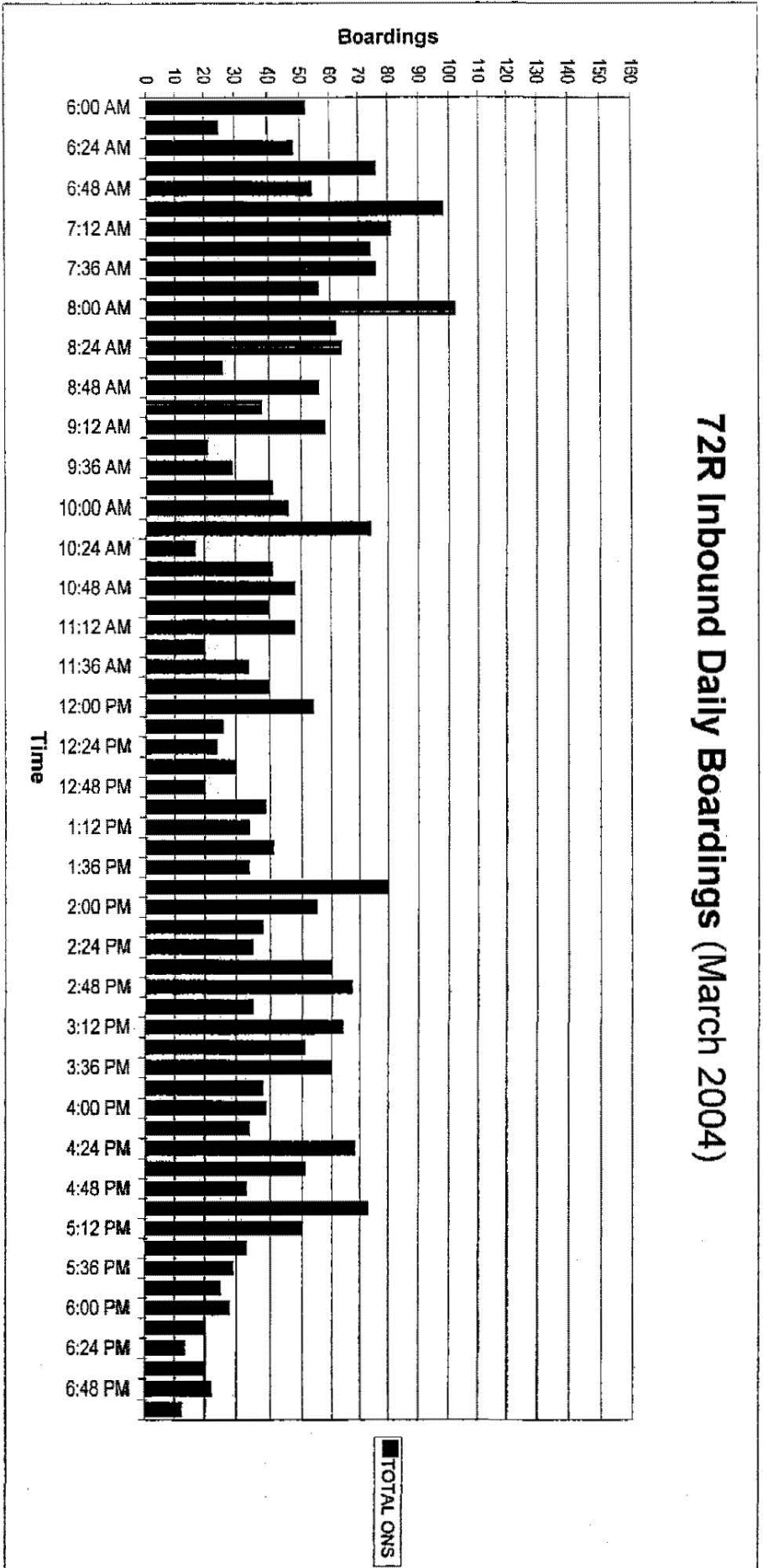


Route 72R

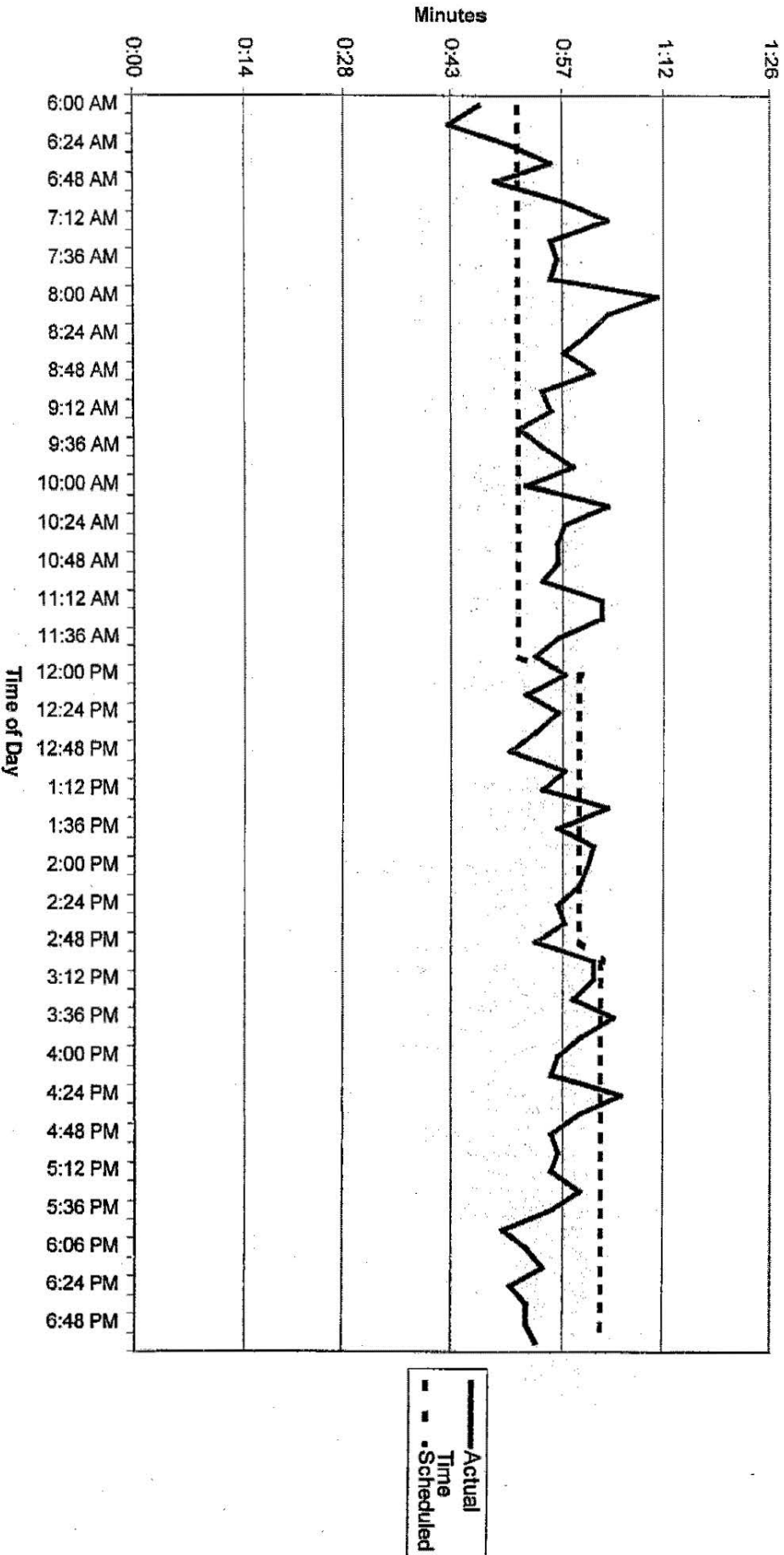
72R Inbound

- Boardings fluctuate throughout the day, with peaking occurring during the AM peak period (6:30am – 9:00am).
- Heaviest boarding totals at Contra Costa College (328), Del Norte BART (245), and San Pablo & Stone (237).
- Heaviest alighting totals at Broadway & 14th Street (468), Del Norte BART (371), and 20th & Broadway (240).
- Passenger loads are fairly steady, exceeding 40 passengers on the segment between San Pablo & MacDonald and San Pablo & Solano.
- Run times tend to run behind schedule during the morning trips and on-time in afternoon.

72R Inbound Daily Boardings (March 2004)



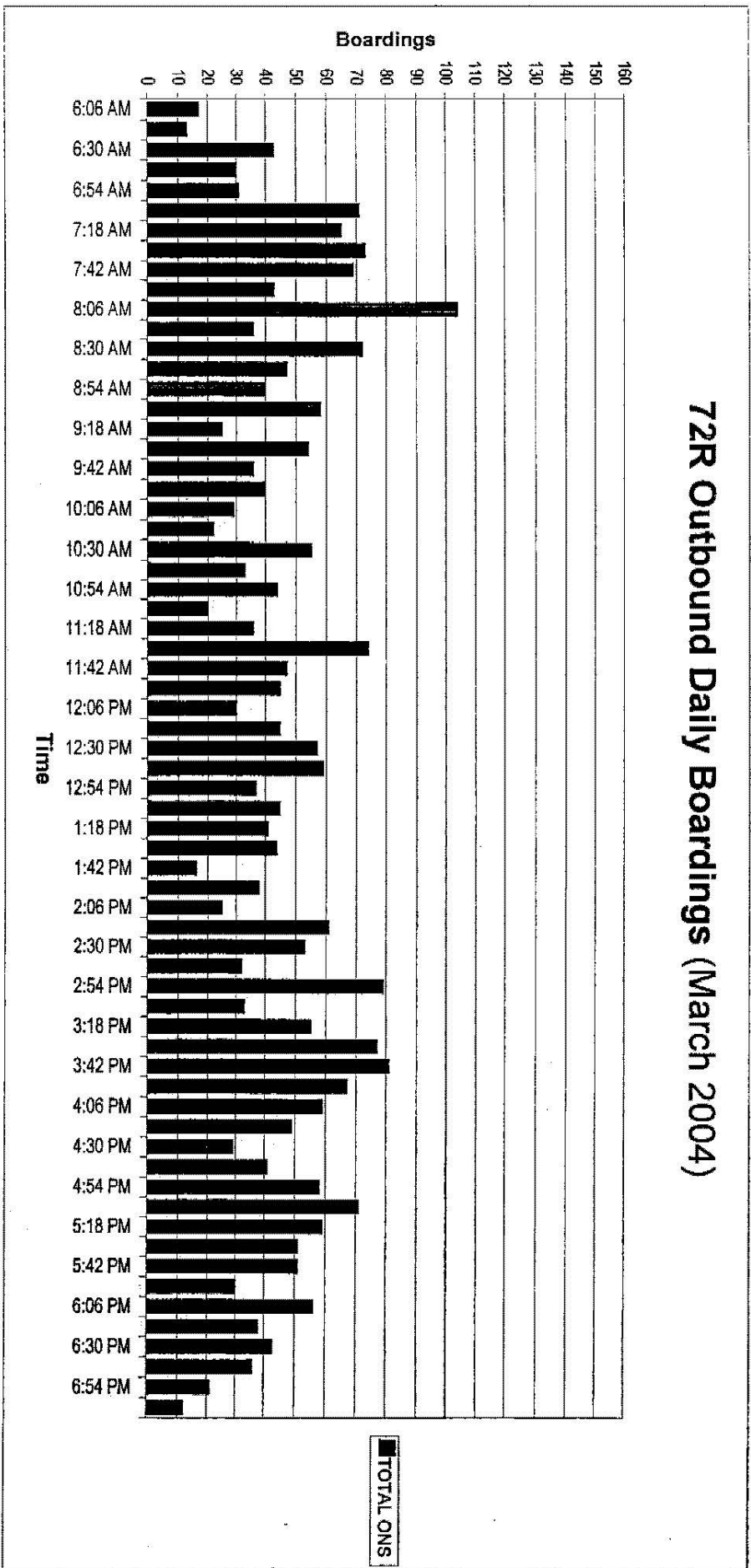
72R Inbound Actual Vs. Scheduled Run Time



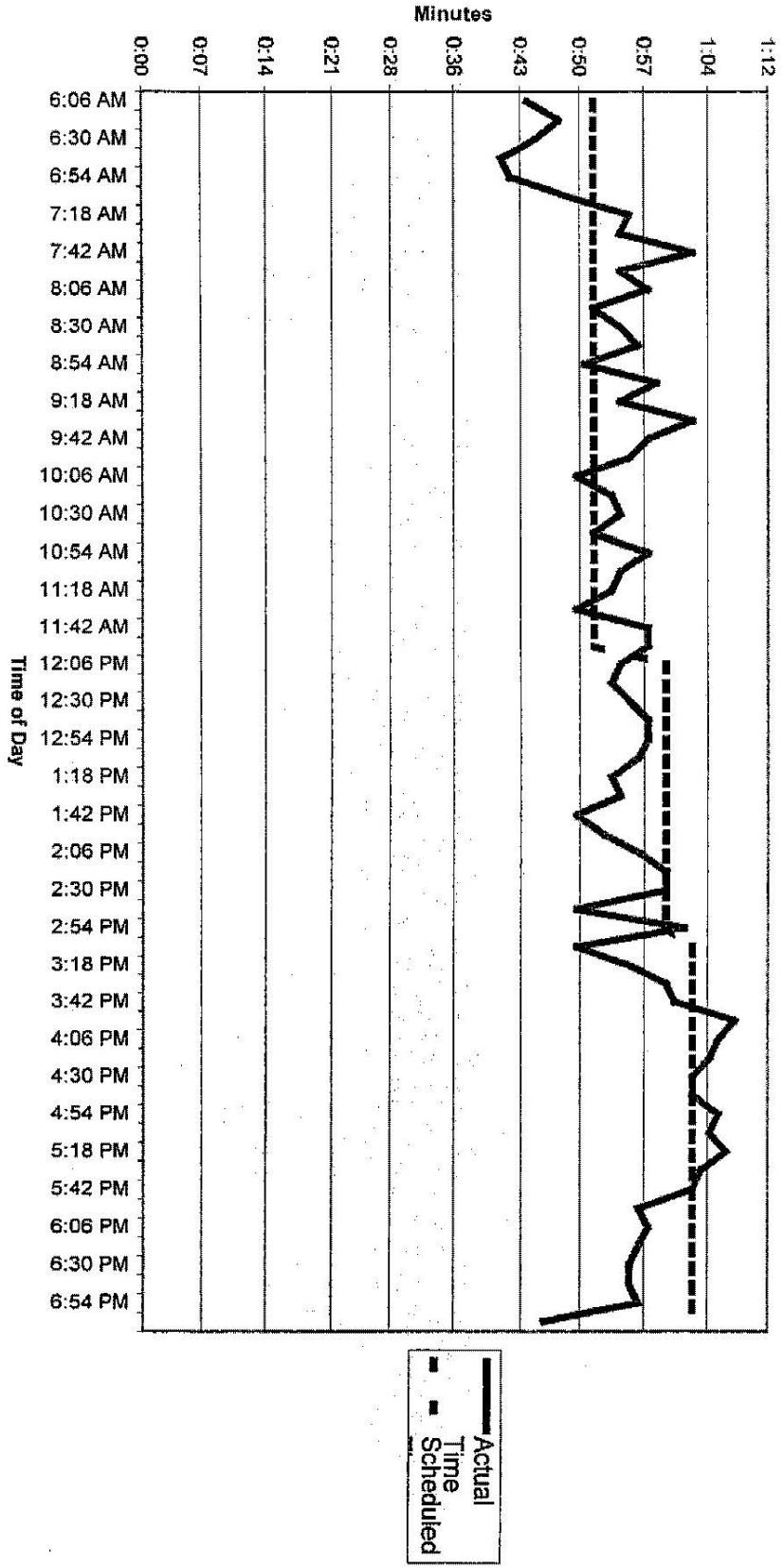
72R Outbound

- The highest number of boardings occur at Broadway & 14th Street (375), Broadway & 12th Street (350), and Del Norte BART (347).
- Heaviest alighings totals occur at San Pablo & University (297), Contra Costa College (270), and Del Norte BART (233).
- Boardings fluctuate throughout the day, peaking at 8:06am (103 boardings).
- Passenger loads exceed 40 passengers between 20th & Broadway and San Pablo & Ashby.
- Run times are consistently behind schedule in the morning and on-schedule in the afternoon.

72R Outbound Daily Boardings (March 2004)



72R Outbound Actual Vs. Scheduled Run Time



72R On-Board Survey

A total of 1,733 surveys were collected on the 72R San Pablo Rapid Bus from bus riders during the week of March 8, 2004 and on March 23, 2004. The survey was conducted during weekdays only and was administered in both English and Spanish³. A copy of the survey tool in English and Spanish is attached to this memorandum.

The surveys asked riders to evaluate various elements of the bus service to determine if the introduction of Rapid Bus has changed their perceptions of service on the San Pablo corridor. Questions focused primarily on the impacts of Rapid Bus, travel behavior and the personal profile of each rider.

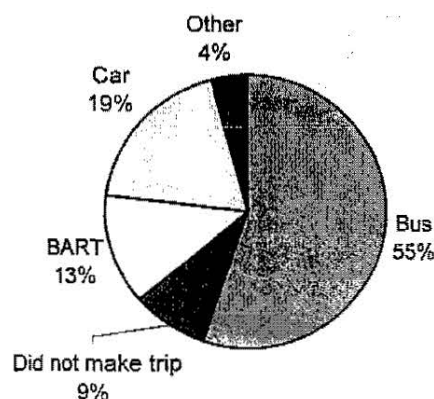
Impact of Rapid Bus

The survey's primary goal was to determine rider's perceptions of the Rapid Bus and how the new service has affected travel times and the overall level of service.

Mode used before the introduction of Rapid Bus

One of the major findings from the survey results was that almost half (45%) of Rapid Bus riders did not take a bus prior to Rapid. Of these 45%, 19% made the trip by car and 13% took BART. The results show that a substantial number of riders feel that the level of service provided by Rapid Bus either equals or exceeds those two modes. The shift from the car to the Rapid Bus is particularly noteworthy given the overall goals of reductions in auto dependency through the provision of Rapid Bus Service.

Mode Used Before the Introduction of Rapid Bus



³ The Spanish survey sample of 63 was collected on March 23, 2004. Survey results were very consistent with English surveys for all questions except for annual household income where 96% said that they earned less than \$30,000 (compared to 57% of English responses).

Not surprisingly, the vast majority of the respondents who previously made the trip by bus switched to the Rapid Bus from one of the local routes that run along San Pablo. The data shows that nearly 75% of the riders rode the 72, 72L and/or 73. The results confirm that riders perceive the Rapid Bus as providing better service than the local routes and that they view the time savings of the Rapid Bus as more important than the convenience of more bus stops along the local bus route.

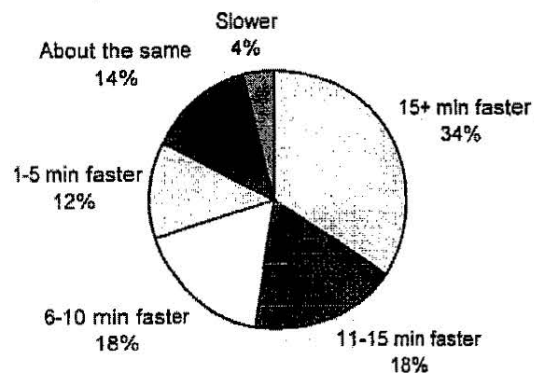
Bus Rode before Introduction of Rapid

Bus	No. of Responses	Percent
72, 72L, 73	635	73.3%
Other	231	26.7%

Change in Travel Time

Riders overwhelmingly indicated a decrease in travel time (82%) compared to their previous trip along this route. Over 50% of respondents said that the Rapid Bus was more than ten minutes faster than their previous mode, while the actual time savings averaged 12 minutes (see figure below). Of those surveyed, only 4% felt the Rapid Bus traveled slower and 14% indicated that their travel time was about the same.

Has your travel time changed with Rapid Bus?



Rapid Bus Service Overall

The very high ratings for the Rapid Bus service clearly shows that riders see the new service as a positive shift in quality and performance. The figure below indicates that 83% of riders rate the overall service of Rapid Bus as either "Good" or "Excellent", an improvement of 11% over the system-wide results from a 2002 on-board survey⁴.

Rapid Bus Service

	No. of Responses	Percent
Very Poor	17	1.2%
Poor	16	1.2%
Fair	205	14.8%
Good	605	43.6%
Excellent	546	39.3%

Travel Behavior

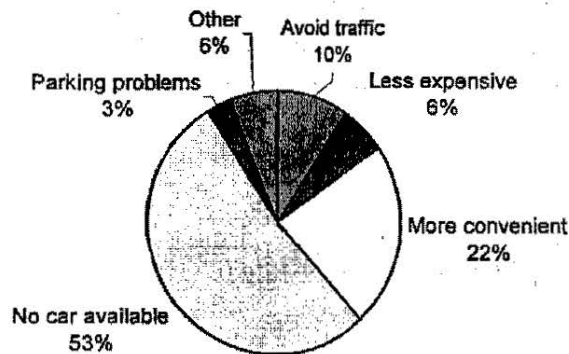
The survey provides information on travel behavior including trip purpose, trip origin and destination, and fare payment.

Trip Purpose

A significant finding of the survey was that 47% of the respondents rode the bus for reasons other than lack of access to a vehicle. The results are 8% lower than the system-wide numbers, which are likely impacted by the large percentage of "choice" riders (with access to a vehicle) on the Transbay routes. Overall the data shows that factors such as "avoiding traffic" and "convenience" play key roles in determining riders' transportation decisions. It appears that the Rapid Bus has successfully attracted both "choice" riders and those dependent on transit services.

⁴ San Francisco State University's Public Research Institute conducted a system-wide on-board survey for AC Transit in the fall of 2002.

Reason for Riding the Bus



Trip Origins and Destinations

Respondents were asked to provide the name of the bus stop where they boarded the bus and the bus stop where they planned to alight the bus. The two figures below display a distribution of boarding and alighting activity at the five heaviest points in the system. These data show that Del Norte BART and University Avenue were both popular origins and destinations (see figures below). In addition, the pattern of responses shows that there may have been an imbalance in survey responses indicating a slight bias in the southbound direction. These numbers are generally consistent with those produced in the ridecheck survey.

Top 5 Weekday Trip Origins

Bus Stop	No. of Responses	Percent
Contra Costa College	224	17.2%
Del Norte BART	152	11.7%
University Ave	90	6.9%
Stone St/El Portal	73	5.6%
40th St	61	4.7%

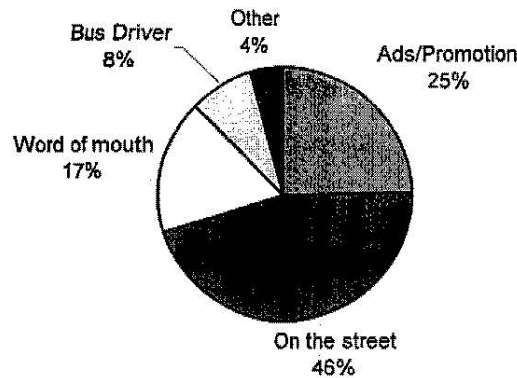
Top 5 Weekday Trip Destinations

Bus Stop	No. of Responses	Percent
Del Norte BART	166	13.6%
14th St	123	10.1%
12th St	109	8.9%
University Ave	95	7.8%
Berkeley Way	78	6.4%

Marketing Rapid Bus

The majority of riders said that they learned about the Rapid Bus “on the street” or through “word of mouth”, which may be a result of successful bus branding with unique and recognizable shelters and signs. One-quarter of riders found out about the new service from ads and promotions.

How did you find out about Rapid Bus?



Fare Payment

Nearly half of the riders (46.4%) paid the regular \$1.50 fare in cash, which is 10% more than the system-wide average. The 31-day pass accounted for approximately one-third of the Rapid Bus respondents.

Fare Payment Method

	No. of Responses	Percent
Cash	787	46.4%
AC Transfer	91	5.4%
EcoPass	26	1.5%
10-Ride Pass	88	5.2%
31-Day Pass	558	32.9%
Class Pass	46	2.7%
Other	99	5.8%

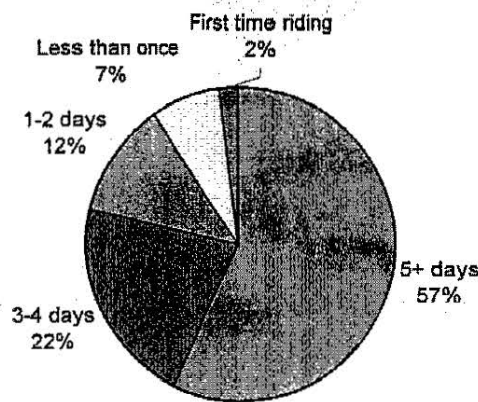
Passenger Profile

This section discusses key demographic factors of Rapid Bus riders, including frequency and length of AC Transit use, age, ethnic origin, auto availability, and household income.

Frequency of Use

The majority of riders (57%) use the Rapid Bus for five or more trips per week. 22% use it three to four times a week. The results show a solid commuter ridership base that uses the Rapid on a consistent basis multiple times per week.

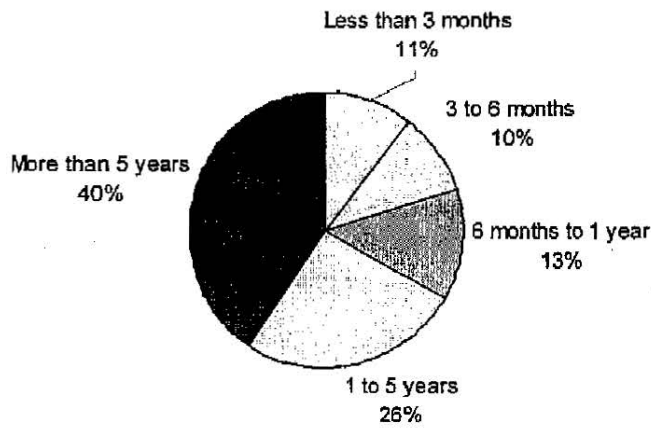
How often do you ride the Rapid per week?



Length of Use

Most riders have used the system for over one year. Forty percent of customers answered that they have ridden AC Transit for more than five years and 26% stated that they have used the system between one and five years. 34% of the riders started using the service within the last year, strongly suggesting that the introduction of Rapid has been a catalyst for attracting new riders.

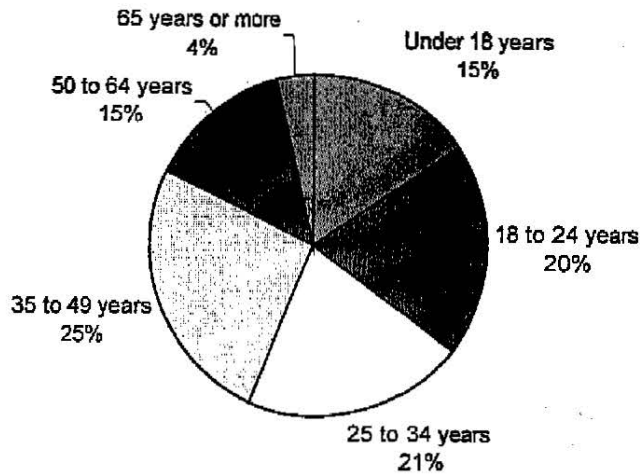
How long have you been using AC Transit?



Age

The majority of passengers (61%) fell into the 25 to 64 year old category, while only 4% of riders were over 64. These numbers are fairly consistent with system-wide patterns. It appears that the Rapid has been successful in attracting student riders, as 15% of the respondents were under 18 years and 20% fell into the college age bracket of 18 – 24 year olds (see figure below).

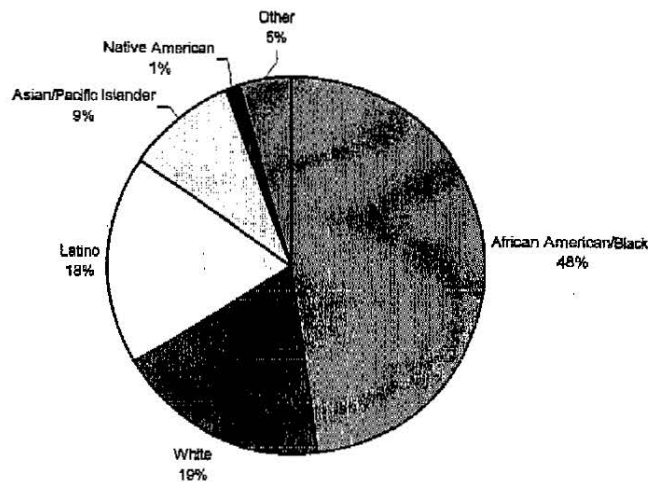
Age



Ethnic Origin

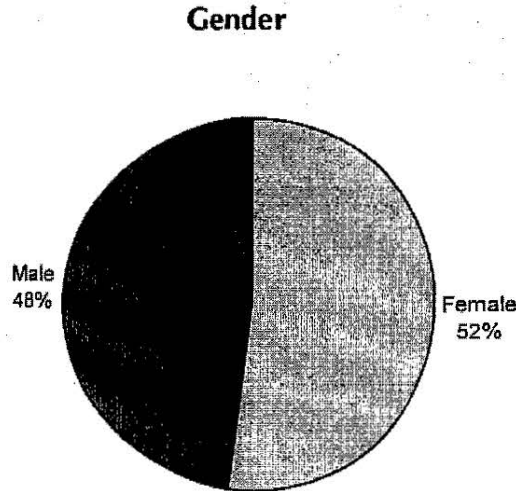
Nearly half (48%) of all riders were African American, which is about 9% higher than the system average. Latinos and Whites made up 37% of the ridership with Asian Americans, Native Americans and others making up the remainder of the riders.

Ethnic Origin



Gender

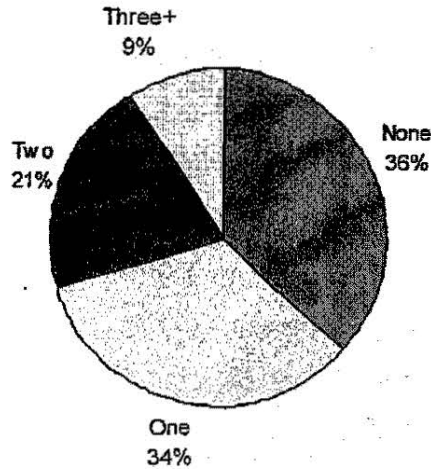
A slight majority of the 72R survey respondents were females (52%). This is 2% less than the system-wide results.



Auto Availability

As the figure below shows, the majority of the riders have at least limited access to a car. 30% have access to two or more cars, which confirms the earlier finding that the Rapid may have an impact on attracting "choice" riders to the AC Transit system. Approximately, one-third of the riders surveyed indicated that they are transit dependent. The results are consistent with the 2002 AC Transit system-wide survey.

How many motor vehicles are available in your household?



Household Income

Over half (57.7%) of survey respondents reported household incomes below \$30,000, compared to about 49% system-wide. About one fourth reported incomes between \$30,000 and \$49,999. Only 7% of 72R riders said they had a household income of \$75,000 or above, compared to 10.5% system-wide. The higher incomes system-wide probably reflects the influence of the Transbay ridership.

Total Annual Household Income

	No. of Responses	Percent
Less than \$10,000	312	26.4%
\$10,000 to \$29,999	371	31.3%
\$30,000 to \$49,999	277	23.4%
\$50,000 to \$74,999	141	11.9%
\$75,000 to \$99,999	53	4.5%
\$100,000 and over	30	2.5%

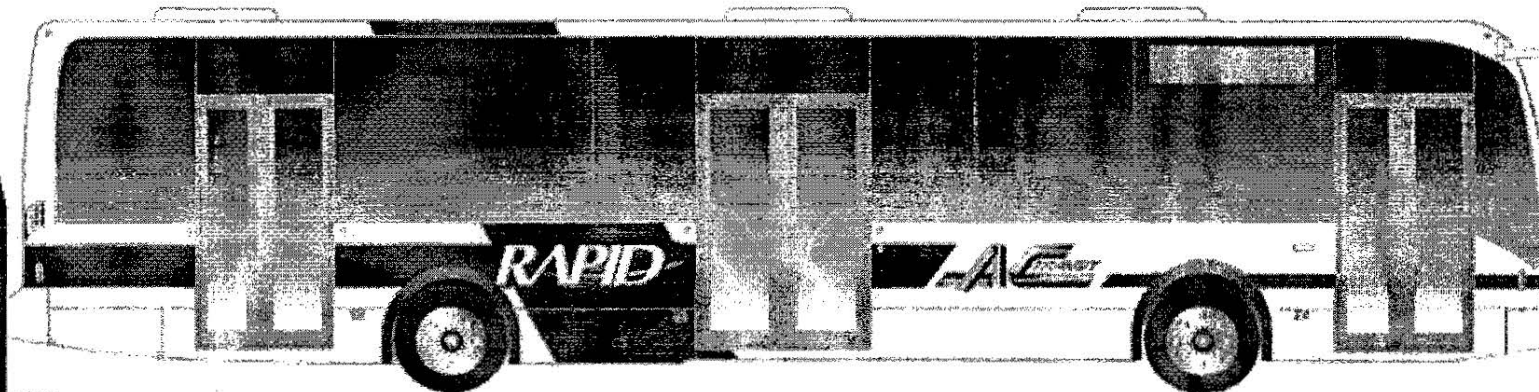
Performance Survey

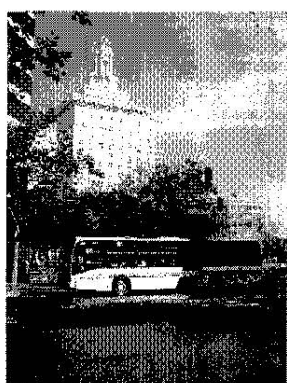
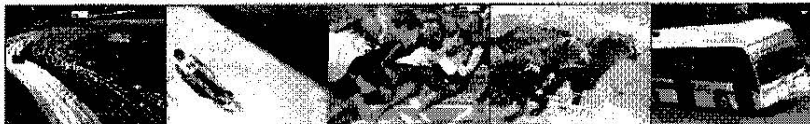
GM Memo 04-221
Attachment B





	Excellent	Good	Excellent + Good	Fair	Poor	Very Poor
Rapid Bus service overall	39.3	43.6	82.9	14.8	1.2	1.2
Easy to identify the right bus	45.8	36.5	82.3	14.5	1.7	1.5
Wheelchair Securement	42.4	37.8	80.2	16.6	1.9	1.3
Travel time on the bus	37.2	40.3	77.5	19.2	1.9	1.4
Quality of New Buses	39.9	37.2	77.1	17.4	3	2.5
Location of bus signs	35.5	41.6	77.1	18.3	2.8	1.9
Frequency of Buses	34.1	40.9	75	19.3	3.8	1.8
Reliability	30.3	42	72.3	23	3.3	1.4
Routes go where I need to go	34.7	36.6	71.3	21.8	4.7	2.3
Quality of Bus Shelters	27.6	41.7	69.3	24.1	4.5	2
Cleanliness	26.7	42.1	68.8	23.2	5.5	2.5
Personal safety on buses	26	42.2	68.2	24.4	4.7	2.7
Driver courtesy	29.6	38	67.6	24.2	4.6	3.6
Information at bus stops	27.2	37.8	65	22.3	9.4	3.3
Availability of seats	21.2	39.4	60.6	28.3	8.3	2.9
Value for fare paid	23.1	33.5	56.6	27.7	9.7	6

RAPID





San Pablo Rapid



AC Transit

»Service Area	364 square miles
»Population	1,415,129
»Bus lines	125
»Bus Fleet	650
»Bus stops	6,500
»Annual service miles	21 million
»Daily Ridership	206,259

RAPID

AC Transit buses connect with 9 other public and private bus systems, 21 BART stations, 6 Amtrak stations, and 3 ferry terminals.



2001 to 2003

»Daily Ridership

- From 237,171 to 206,259 average daily trips
- Decrease by 13%

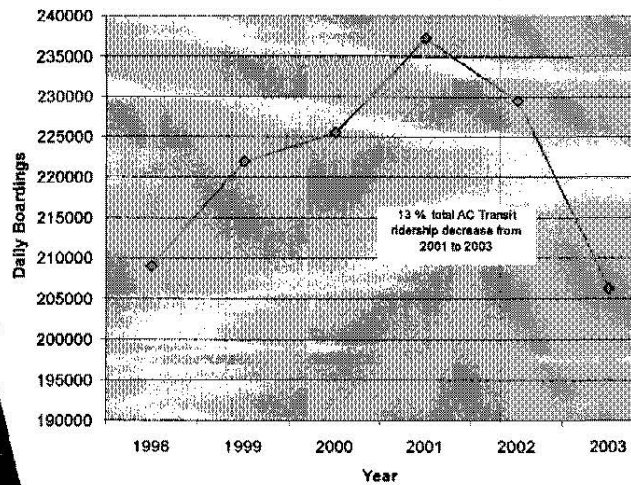
»Platform Hours

- 7379 hours before June 2003
- 7088 hours after June 2003
- 6420 hours after Dec 2003
- Decrease by 13% since June 2003

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Total AC Transit Ridership



RAPID



AC Transit Definition of Rapid Bus

RAPID

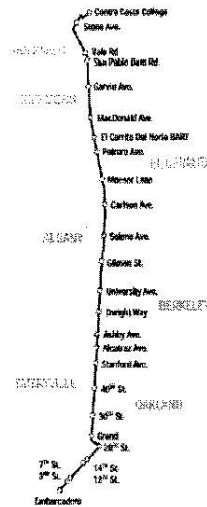
- » Headway based schedule w/ maximum 12-minute headways
- » Stops one-half to two-thirds of a mile apart, on average
- » As many stops far side as possible
- » Traffic signal coordination, transit signal priority, queue jump lanes
- » Recognizable shelters, with Rapid branding and bus arrival information signs
- » Recognizable vehicles, with Rapid branding and features which reduce dwell time.



Service Changes for 72R

RAPID

- » Headway-based schedule
 - 12-minute peak frequency on top of local service
- » 26 Rapid stops at major intersections
 - 0.54 miles apart on average
- » Far-side stops
- » 20% time savings calculated into schedule





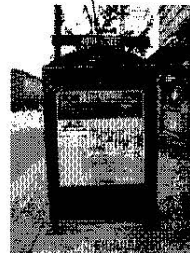
Technology Improvements for 72R

- »3M's Opticom Transit Signal Priority System
- »Coordination and re-timing of traffic signals
- »Addition of queue-jump lanes
- »Next Bus type Bus Arrival Information System in conjunction with Orbital A.V.L. system
- »40' three-door, low-floor Van Hool buses

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Real-Time Bus Arrival Information



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Streetscape Improvements for 72R

- » Recognizable Shelters with Rapid branding
- » Trashcans
- » Bollards as required
- » Removed unused curbcuts

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Streetscape Improvements

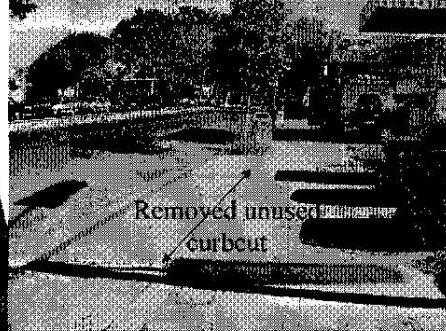


RAPID

Southbound
San Pablo at Solano



Streetscape Improvements



RAPID

Northbound
San Pablo at Gilman



Streetscape Improvements



Northbound
San Pablo at Alcatraz



RAPID



Streetscape Improvements

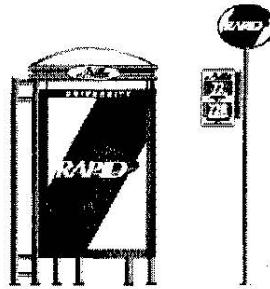


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Southbound
Broadway at 13th



Marketing - Branding



RAPID



Marketing - Branding

RAPID



Alameda County CMA Coordination

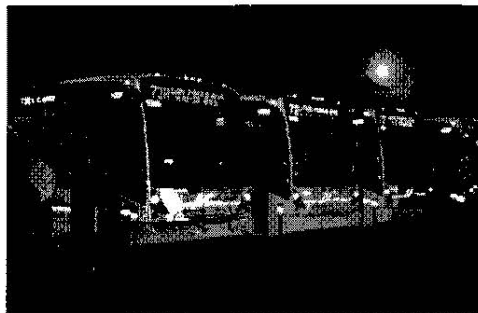
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- » ACCMA is lead Agency for East Bay SMART Corridors Program
 - Policy Advisory Committee
 - Technical Advisory Committee
 - Operations Subcommittee oversight of TSP
- » SMART Corridor responsible for signal upgrades including construction, signal coordination, and TSP software development





Line 72R - SAN PABLO RAPID BUS Implemented June 30, 2003



RAPID



72R vs 72L

- »72L from 6 - 9 AM & 3 - 7 PM (Total 7 hours)
- »72R runs from 6 AM to 7 PM (Total 13 hours)

»Direct Comparison of 72R to 72L trips, from
6 - 9 AM & 3 - 7 PM

- Goals
 - >20% decrease in running time
 - >25% ridership increase
- Results
 - >17.1% decrease in actual running time
 - >65.8 % ridership increase

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Corridor Before & After 72R

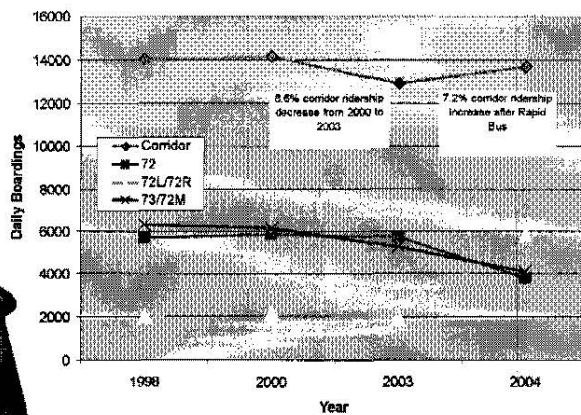
2003 Ridecheck Results				2004 Ridecheck Results			
Route #	Daily Boardings			Route #	Daily Boardings		
	Outbound	Inbound	Total		Outbound	Inbound	Total
72	2,876	2,765	5,641	72	1,943	1,906	3,749
72L	991	948	1,939	72R	2,985	2,914	5,899
73	2,742	2,564	5,306	72M	2,144	2,023	4,167
Total	6,609	6,277	12,886	Total	7,072	6,743	13,815

Route #	Percent Change		
	Outbound	Inbound	Total
72	-32.4%	-34.7%	-33.5%
72L/72R	201.8%	207.4%	204.2%
73	-21.8%	-21.1%	-21.5%
Total	7.0%	7.4%	7.2%

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Corridor Before & After 72R



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Survey Responses

How did you make this trip before Rapid Bus?

	No. of Responses	Percent
Bus	942	55.2%
Did not make trip	149	8.7%
BART	220	12.9%
Car	322	18.9%
Other	72	4.2%
Total	1,705	100.0%

* 26 respondents did not answer this question

If you answered "Bus" on the previous question, what bus line did you use previously?

Bus	No. of Responses	Percent
*72, 72L, 73	635	73.3%
Other	231	26.7%
Total	866	100.0%

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Corridor Ridership Gain Due to 72R

- » Local Bus Ridership Loss or Transfer = 3,031 (Lines 72 & 73/72M)
- » Percent of 72R Riders transferring from 72, 73, 72L = 40.5% (which is 73.3% of 55.2%)
- » Corridor Ridership Loss w/o Rapid Bus = 1,821 (which is 59.5% of 3,031)
- » Percent Corridor Loss w/o Rapid Bus = 14% (which is 1,821 divided by 12,886 total ridership before 72R)
- » Overall Positive Corridor Ridership Impact due to 72R = 21.2% from 14% (local ridership loss) plus 7.2% (total corridor increase)

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Survey Responses

Has your travel time changed with Rapid Bus?

	No. of Responses	Percent
15+ min faster	567	34.6%
11-15 min faster	295	18.0%
6-10 min faster	288	17.6%
1-5 min faster	196	12.0%
About the same	230	14.0%
Slower	63	3.8%
Total	1,639	100.0%

* 94 respondents did not answer this question

Travel time on the bus

	No. of Responses	Percent
Very Poor	20	1.4%
Poor	26	1.9%
Fair	267	19.2%
Good	560	40.3%
Excellent	518	37.2%
Total	1,391	100.0%

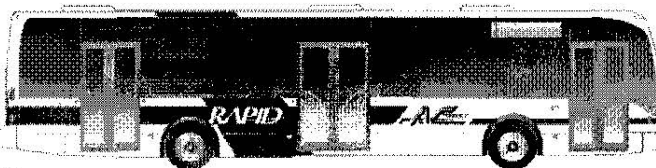
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Performance Survey



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Value for fare paid	23.1	33.5	56.8	27.7	9.7	6

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Future Actions

- »Complete TSP Evaluation
- »Complete NextBus Installations
- »Conduct Fall 2004 Study and Prepare Final Report
- »Begin Implementation of International/Telegraph Rapid Bus - Service Starts Early 2006

The word 'RAPID' is written in a bold, italicized, sans-serif font. A curved line sweeps around the right side of the letters, suggesting motion or speed. This logo is positioned on a dark, diagonal band that runs from the top left towards the bottom right of the slide.

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MOVING YOU FASTER & BETTER