Los Angeles County
Metropolitan Transportation
Authority
FY 2002 On-Board Bus
Survey: Follow-up Telephone
Survey Report

Report to the Los Angeles County
Metropolitan Transportation
Authority
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by

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EXECUTIVE SUMMARY

This report summarizes the results of the FY 2002 Bus Telephone Survey. The population interviewed was a subset of weekday MTA and other bus patrons who filled out one-page On-Board surveys. The telephone interviews took place from January through March 2002. This report concentrates on MTA bus riders, but it is most revealing when contrasted to riders on Municipal Operator systems and to the companion report on Metro Rail riders.

Demographic Profile

- MTA patrons who were interviewed by telephone differed from the larger pool of MTA’s On-Board survey respondents. The interviewees were less likely to be Latinos (45% vs. 58%), more likely to be African-American (27% vs. 20%), and more likely to be White (18% vs. 12%).
- Municipal Operator patrons have a significantly higher median income ($22,000 vs. $14,000) and are more likely to be White (30% vs. 18%) than are MTA bus riders.
- Among MTA Latino respondents, 68% live in households where Spanish is the primary language – representing 30% of the total surveyed population.
- 29% of MTA riders are high school graduates. Another 30% have taken some college or vocational courses, and 19% have achieved bachelor's degrees or higher.

Travel Characteristics

- MTA bus riders have, on average, ridden MTA buses for 9.5 years. They have ridden their current line for 3.8 years. Municipal Operator riders have ridden their system approximately one-half as long (5.0 years), but have ridden their current line slightly longer than have MTA riders (4.0 years).
- 82% of MTA patrons ride the bus 5 or more days per week, with 64% of Municipal Operator riders riding at that level of frequency.
- 57% of MTA riders use passes, as do only 20% of Municipal Operator riders.
- 77% of MTA riders have no car available to make their most frequent transit trip; 60% of Municipal Operator riders have no car.
- Among MTA bus riders, 8% have at one time used a bicycle rack on the front of a bus (4% for Municipal Operator riders).

Service and Security Priorities

- MTA bus riders generally prefer more service to more security; 68% chose more service when asked to choose between the two.
- 67% of MTA riders feel that security officers are most needed on the bus as opposed to deployment at bus stops.

Concerns About the Bus

- Bus service features that elicited the most concern were crowding, on time performance and being passed up by the bus. These concerns are very similar in terms of priority for both MTA and Municipal Operator patrons.
**Service-Related Problems**
- Overcrowding and operating behind schedule are problems experienced by the greatest percentage of MTA riders. Municipal Operator riders cite the same problems, but with fewer occurrences.
- Both MTA and Municipal Operator riders rate drivers highly.
- Almost all bus patrons (MTA 94% and Municipal Operators 97%) are able to occupy a seat on-board the bus for some portion of their trip.

**Customer Service Information**
- 57% of MTA bus riders have used 1-800-COMMUTE for information.
- “Courtesy of representative” and “usefulness of information” receive the most favorable ratings, while “ability to get through to a representative” and “speed of response” are least favorably rated.
- Patrons rate MTA customer services favorably. The most highly rated service attribute is “ease of buying bus tokens or passes” and the lowest rated is “availability of bus maps and schedules”.

**Advertising and Publicity**
- During the past several months, 56% of MTA riders have seen or heard about MTA getting new buses, having more service, or becoming more reliable.
- More than one-half of MTA riders (57%) are aware of the cartoon character, "Safety Guy."
- The Galaxy soccer player campaign successfully targeted the Latino market; 58% of Latinos recalled these messages in contrast to 28% of Whites.
- Among those who believe that "It is getting better on the bus," 68% think that advertising has helped them notice improvements on the MTA buses.

**Internet/Website Access**
- Among MTA bus riders, 44% have access to the Internet and 20% have visited the MTA website, predominantly for the trip planner (79% of website visitors) and timetables (76% of website visitors).

**Overall Satisfaction**
- MTA patrons are moderately satisfied (2.4 on a 5-point scale, with 1.0 reflecting very satisfied) with their bus service. Municipal Operator riders are more highly satisfied (1.8).
- Increases in the occurrence of particular problems that are most correlated with decreased levels of satisfaction are being passed up by the bus ($r = -.26$), the bus running behind schedule ($r = -.25$), and dirty seats or floors ($r = -.23$).
- When weighted by frequency of problem occurrence (Impact Score), the largest impacts on satisfaction are long waits at the bus stop, overcrowding, and the bus being behind schedule.
- Those service features that are of a high level of concern to MTA bus riders and are being delivered at a less than average level of satisfaction are crowding, buses being on time, being passed up by the bus, and cleanliness inside the bus.
- Safety is also a core service delivery concern; however, MTA patrons approach their concern with a high degree of satisfaction and a minimal number of problems.
The Los Angeles County Metropolitan Transportation Authority (MTA) operates 185 bus routes in Los Angeles County spanning a 1,400 square mile area from the northern portions of the San Fernando Valley to the San Pedro harbor area and from the Pacific Ocean to the San Gabriel Valley. Its 8,000 employees plan, design, coordinate, build, and operate one of the largest transit systems in the nation, with a fleet of approximately 2,000 buses. On an average weekday almost 1.25 million passengers board MTA buses, with over 700,000 boardings on weekend days, placing MTA in the top three bus systems in the nation, along with New York City Transit and Chicago Transit Authority. There are almost 20,000 bus stops in the system. MTA also funds 16 smaller municipal bus operators in Los Angeles County.

Framework for the Bus Telephone Survey

The MTA authorized a representative telephone survey of bus riders who participated in the 2002 On-Board Bus Survey.

The goal of this telephone survey was to provide accurate and representative baseline data on MTA bus riders' demographics, travel patterns, experiences, and preferences regarding their bus service.

Of fundamental interest were issues pertaining to the following, among others:

- Automobile availability
- Seating and space availability on-board the buses
- Driver courtesy and performance
- Concerns riders may have about bus service
- Problems experienced on bus trips
- Marketing and media messages
- Security issues on-board and at bus stops
- Fare media usage
- Customer service
- MTA website usage
- Additional demographic data
The telephone survey was deemed to be necessary because an on-board survey, by its very nature, is severely limited in its ability to probe deeply into many aspects of rider demographics, travel behavior, and opinions. On-board surveys are generally very short instruments that orient themselves more toward trip characteristics than rider characteristics. Accordingly, MTA added a component to the On-Board 2002 Bus Survey that was to consist of follow-up telephone interviews with approximately 2,500 weekday bus riders who had previously completed the On-Board Survey instrument on MTA buses and on the buses of 12 municipal operators who also participated in the On-Board Bus Survey (Santa Monica Big Blue Bus, Torrance Transit, Culver City Bus Lines, Santa Clarita Transit, Pasadena ARTS, Commerce Transit, Foothill Transit, Alhambra Community Transit, El Monte Trolley, Cerritos on Wheels, Carson Circuit, and Los Angeles Department of Transportation’s Commuter Express).

It should be noted at the outset that the comparisons of MTA to the municipal operators in this report are exploratory rather than definitive. The MTA data is from a rigorously drawn representative sample of MTA patrons. The municipal data was similarly drawn from each participating operator— but not all municipal operators participated, and not all participating operators allowed all of their services to be sampled. The municipal operator data, therefore, is not a representative sample of all municipal operator patrons, especially since less than a majority of the four largest municipal operator patrons was sampled, but all of the patrons from the six smallest operators were. In this report municipal operator patrons are very different from MTA patrons in their demographics, satisfaction and travel patterns. While it cannot be said with confidence if these differences would be representative of all municipal operator patrons, it can be concluded that the differences will hold for the specific population of municipal operator patrons that were sampled.
METHODOLOGY

The bus telephone survey was designed by the combined efforts of the MTA staff and Rea & Parker Research. The survey was constructed along with a similar follow-up survey that was being designed for the 2002 On-Board Rail Survey. The process of developing both surveys spanned a period from August-December, 2001, including two pretests of each. The pretests of the bus telephone survey were conducted among 80 respondents (15 in Spanish) in December 2001 and January 2002. Modifications to the bus survey, as a result of these pretests, were incorporated into an instrument possessing minor changes from the initially pre-tested questionnaire. The survey, itself, was conducted in December 2001 and March 2002.

Survey Instrument

The survey instrument consisted of 37 questions, including 91 individual items (variables). The length of the survey and, in particular, certain questions (Question 4a-w and Question 5a-i–see Appendix A for copy of final survey instrument) required that these questions be randomly rotated among a subset of respondents. Only 10 of the 23 parts of Questions 4 and 5 of the 9 parts of Question 11 were asked of any one respondent.

In total, each respondent was asked up to 73 of the 91 individual items, depending upon filtering and screening of other questions. Mean survey time was 10.81 minutes. The survey was administered in both English and Spanish, with the majority of respondents (85%) choosing to respond in English.

Sample

A random sample of 2,504 respondents (2,099 MTA bus riders and 405 from the municipal operators) was selected from those who had volunteered their telephone numbers on the On-Board Survey form. In order to maintain representativeness, the sample was drawn from surveys that were
not necessarily fully "complete" according to MTA contract definitions but were at least 75% complete overall. The telephone survey analysis references some of the On-Board data. The overall sample contained a margin of error of ± 2.0% at the 95% level of confidence. Within the total sample, the MTA portion had a margin of error of ± 2.1%, with the municipal operator sample at ± 4.9% (both at 95% confidence).

In December 2001, 1,453 respondents were interviewed (based upon 60% of the completed bus surveys having been entered at the data input stage). The remaining 1,051 interviews were conducted in March, 2002. Rea & Parker Research made several attempts to contact sampled respondents; out of 15,949 eligible working telephone numbers 2,504 interviews were completed, indicating a survey completion rate of 15.7%.

Data were extracted from the On-Board Survey in order to evaluate the representativeness of the telephone sample. Table 1 depicts two important sources of sample validation—time segment of travel and direction of travel. Table 1 shows that the sample's consumption of bus service is symmetrically distributed by direction of travel, but not by time of day where AM peak is over-represented in relation to PM peak—just as it was in the On-Board Survey.

The responses were weighted, therefore, in order to replicate the actual distribution of bus riders. For MTA riders, the weights used in the On-Board Survey were used in precisely the same manner in the telephone survey. On-Board Survey weights were established for MTA weekday riders by time period traveled and by bus line. Those weights were directly transferred to the telephone survey participants based upon their bus line and time of travel. These weights are fully explained in Appendix A of the 2001 On-Board Bus Survey weekday report.

The 12 participating municipal operators are not fully representative of all municipal operators in Los Angeles County. It is noteworthy that Long Beach Transit, the largest municipal operator, elected not to participate and that another large system, Montebello Bus Lines, did not participate. Further, Foothill Transit, Los Angeles Department of Transportation (LADOT), and Santa Clarita Transit limited their participation to only a portion of their systems, including the non-involvement of LADOT's DASH system.
### TABLE 1
Sample Validation

<table>
<thead>
<tr>
<th>Time Period Traveling When Surveyed On-Board</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Peak (4 hour period: 5 a.m. - 9 a.m.)</td>
<td>43</td>
</tr>
<tr>
<td>Non-Peak (6 hour period: 9 a.m. - 3 p.m.)</td>
<td>32</td>
</tr>
<tr>
<td>PM Peak (4 hour period: 3 p.m. - 7 p.m.)</td>
<td>25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Direction of Travel When Surveyed on Board</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>24</td>
</tr>
<tr>
<td>South</td>
<td>24</td>
</tr>
<tr>
<td>East</td>
<td>27</td>
</tr>
<tr>
<td>West</td>
<td>24</td>
</tr>
<tr>
<td>Other (Clockwise, etc.)</td>
<td>1</td>
</tr>
</tbody>
</table>

Inasmuch as the sample was drawn randomly from participating bus systems, including MTA, the limited participation of municipal operators resulted in a smaller allocation of telephone interviews (405) than they would have been allocated under conditions of stronger participation.

Based upon this small sample of municipal operators, subsets of these bus systems would be insufficient in size for analysis and were, consequently, aggregated as one entity in the analysis.

This aggregation of municipal operators required that they be weighted according to their relative ridership volume and relative representation in the survey. Boarding statistics were provided by each municipal operator, and these were utilized in the development of the following weights:

<table>
<thead>
<tr>
<th>Municipal Operator</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foothill Transit</td>
<td>1.16</td>
</tr>
<tr>
<td>Culver CityBus Lines</td>
<td>1.13</td>
</tr>
<tr>
<td>Santa Monica Big Blue Bus</td>
<td>1.12</td>
</tr>
<tr>
<td>Commerce Transit</td>
<td>1.00</td>
</tr>
<tr>
<td>El Monte Trolley</td>
<td>.94</td>
</tr>
</tbody>
</table>
Pasadena ARTS .88
Torrance Transit .83
Los Angeles DOT Commuter Express .70
Alhambra Community Transit .54
Carson Circuit .43
Cerritos on Wheels .33

Note that only 11 weights are provided for the 12 participating municipal operators. Because Santa Clarita Transit chose not to ask for home addresses and telephone numbers, no riders of that system participated in the telephone survey.
Table 2 depicts the demographic profile of the bus riders in Los Angeles County who were interviewed by telephone. Among the 2,504 interviewed bus riders, 2,099 were MTA riders and 405 were riders on municipal operator systems. It is shown that 40% of MTA riders are male and 60% are female. Riders on the municipal systems parallel this gender distribution (42% male; 58% female).

The annual median household income for MTA bus riders is $14,000 and the mean household income is $19,000. This disparity between the mean and median incomes indicates that there are significant numbers of respondents at very high income levels. For municipal bus riders, the median annual income is $22,000 and the mean is $27,000. These income averages are considerably higher than those representing MTA riders, and like the situation for MTA riders, there is a distinct disparity between the median and the mean.¹

Table 3 shows that the median income for MTA riders is highest among Asians ($27,000) and lowest among Latino bus riders ($12,000). This income pattern for Asians and Latinos holds for municipal riders, at higher absolute income levels, however. The municipal median income for Latinos ($18,000) is 50% more than that of the MTA counterpart ($12,000). On the MTA system, the median income, for those whose language spoken at home is English, is $16,000, while the median is $12,000 for those whose language spoken at home is Spanish. Among municipal operator patrons, those who speak English have higher median incomes ($26,000).

¹ Income and other demographic characteristics are not homogeneous among the twelve municipal operator systems. Four municipal operators are more demographically similar to MTA than they are to the other municipal operators (Carson Circuit, Commerce Transit, El Monte Trolley, and Pasadena ARTS). However, these four systems are small and represent only 4.5% of the municipal operator sample. Consequently, the inclusion of these four systems within the aggregated municipal sample slightly diminishes the differences between MTA and the majority of participating municipal operators, but not in sufficient magnitude to alter the findings.
<table>
<thead>
<tr>
<th></th>
<th>MTA</th>
<th>Municipal Operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>40%</td>
<td>42%</td>
</tr>
<tr>
<td>Female</td>
<td>60</td>
<td>58</td>
</tr>
<tr>
<td>Mean Household Income*</td>
<td>$19,000</td>
<td>$27,000</td>
</tr>
<tr>
<td>Median Household Income*</td>
<td>14,000</td>
<td>22,000</td>
</tr>
<tr>
<td>Mean Age (Years)*</td>
<td>39.1</td>
<td>40.3</td>
</tr>
<tr>
<td>Ethnicity*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>45%</td>
<td>35%</td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>18</td>
<td>30</td>
</tr>
<tr>
<td>Black/African-American</td>
<td>27</td>
<td>18</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Other (e.g., American Indian/Mixed)</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Primary Language Spoken at Home</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>65%</td>
<td>78%</td>
</tr>
<tr>
<td>Spanish</td>
<td>31</td>
<td>15</td>
</tr>
<tr>
<td>Tagalog</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Vietnamese, Chinese, Korean</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Language of Interview</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>83%</td>
<td>93%</td>
</tr>
<tr>
<td>Spanish</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>Highest Grade/Level of School Completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less Than High School</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>Some High School</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>High School Grad/GED</td>
<td>29</td>
<td>24</td>
</tr>
<tr>
<td>Some College/Trade/Vocational School</td>
<td>30</td>
<td>34</td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>Some Graduate School</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Mean Number of People in Household</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Persons</td>
<td>3.5</td>
<td>3.1</td>
</tr>
<tr>
<td>Age 18 and Over</td>
<td>2.4</td>
<td>2.3</td>
</tr>
<tr>
<td>Years Lived in Los Angeles County</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>22.4</td>
<td>23.1</td>
</tr>
</tbody>
</table>

*Data extracted from telephone interviewees' original responses to the On-Board Bus Survey.
### TABLE 3

Demographic Characteristics by Ethnic Group: MTA and Municipal Operator Bus Riders

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>MTA</th>
<th>Municipal Operators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Median Income by Ethnic Group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>$20,000</td>
<td>$24,000</td>
</tr>
<tr>
<td>Black</td>
<td>14,000</td>
<td>24,000</td>
</tr>
<tr>
<td>Hispanic</td>
<td>12,000</td>
<td>18,000</td>
</tr>
<tr>
<td>Asian</td>
<td>27,000</td>
<td>32,000</td>
</tr>
<tr>
<td><strong>Median Income by Language Spoken at Home</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>$16,000</td>
<td>$26,000</td>
</tr>
<tr>
<td>Spanish</td>
<td>12,000</td>
<td>13,000</td>
</tr>
<tr>
<td><strong>Mean Age of Bus Riders (Years)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>49.3</td>
<td>47.4</td>
</tr>
<tr>
<td>Black</td>
<td>40.9</td>
<td>37.8</td>
</tr>
<tr>
<td>Hispanic</td>
<td>33.1</td>
<td>35.3</td>
</tr>
<tr>
<td>Asian</td>
<td>45.4</td>
<td>38.1</td>
</tr>
<tr>
<td><strong>Percentage of Riders Under 25 Years of Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>10%</td>
<td>14%</td>
</tr>
<tr>
<td>Black</td>
<td>21</td>
<td>31</td>
</tr>
<tr>
<td>Hispanic</td>
<td>39</td>
<td>40</td>
</tr>
<tr>
<td>Asian</td>
<td>19</td>
<td>28</td>
</tr>
<tr>
<td><strong>Percentage of Riders Over 50 Years of Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>48%</td>
<td>46%</td>
</tr>
<tr>
<td>Black</td>
<td>26</td>
<td>17</td>
</tr>
<tr>
<td>Hispanic</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>Asian</td>
<td>41</td>
<td>28</td>
</tr>
<tr>
<td><strong>Percentage of Bus Riders for Certain Age Groups by Language Spoken at Home</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Spoken at Home</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 and Under</td>
<td>21%</td>
<td>24%</td>
</tr>
<tr>
<td>26-50</td>
<td>48</td>
<td>46</td>
</tr>
<tr>
<td>51 and Over</td>
<td>31</td>
<td>30</td>
</tr>
<tr>
<td>Spanish Spoken at Home</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 and Under</td>
<td>41%</td>
<td>42%</td>
</tr>
<tr>
<td>26-50</td>
<td>46</td>
<td>43</td>
</tr>
<tr>
<td>51 and Over</td>
<td>13</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 3: Demographic Characteristics by Ethnic Group-MTA and Municipal Operator Bus Riders
In this report three distinctions are made regarding ethnicity and language for MTA and municipal bus riders. Using MTA as an example, Latinos represent 45% of survey respondents. Among these Latino respondents, 68% live in households where Spanish is the primary language—representing 30%\(^2\) of the total survey population. Further, among the Latino households where Spanish is the primary language, 51% of those respondents (15% of the total) preferred to respond to the survey in Spanish. That is to say, most respondents who indicated that Spanish is the primary language at their home still chose to respond to the telephone survey in English.

Table 2 reports that the MTA ridership is 45% Latino, 27% African-American, and 18% White. The ethnic distribution among municipal bus riders is somewhat different, where Whites become the second most common user group. Latinos represent 35% of municipal ridership and African-Americans and Whites represent 18% and 30%, respectively. English is the primary language spoken at home for MTA riders (65%) as well as municipal riders (78%). Spanish is the primary language spoken at home by 31% of MTA bus riders—more than double the percentage for municipal riders (15%). Respondents had the option of being interviewed in English or Spanish. English was usually chosen by both MTA and municipal riders (83% and 93%, respectively).

The age distribution for MTA and the municipal operators is similar. Table 2 shows that the mean age of MTA riders is 39.1 years, and the mean age of municipal riders is 40.3 years. Table 3 shows that the mean age is highest among Whites (49.3 years) and lowest among Latinos (33.1 years). This finding is fairly consistent for municipal riders, where the mean ages for Whites and Latinos is 48.2 and 33.2 years, respectively. Among municipal riders, the mean ages for African-Americans and Asians are substantially lower than they are for MTA riders (37.8 versus 40.9 years for African-Americans and 38.1 versus 45.4 for Asians).

Differences in the educational levels between MTA and municipal operator patrons are comparable to differences in income. Among MTA riders, 29% say that high school is their highest

\(^2\) Actual percentage of Spanish language households is 31%, including non-Latino households that primarily speak Spanish.
level of education, 30% have taken some college or vocational courses, and 19% have at least a bachelor's degree. Municipal riders are more highly educated with 24% achieving a high school diploma, 34% having some college or vocational training, and 27% having at least a bachelor's degree. For MTA riders, the mean number of persons per household is 3.5 (including 2.4 adults age 18 and over).

Patrons were asked how long they lived in Los Angeles County. MTA and municipal riders are not nearly as different in this regard as are subgroups within these populations. MTA riders have lived in Los Angeles County a mean of 22.4 years. The mean for municipal riders is slightly higher at 23.1 years. Among MTA riders, African-American and Whites (26.8 years and 26.1 years, respectively) have lived in Los Angeles County significantly longer than other ethnic groups (Latinos 19.2 years and Asians 13.2 years). African-Americans and Whites have used the MTA system longer (15.8 years and 13.7 years) than other groups (Latinos 11.8 years and Asians 8.0 years). Whites (8.0 years) have used their current MTA bus lines longer than others (African-Americans 6.6 years and Latinos 6.4 years). Women have used MTA services longer than men (13.6 years versus 12.5 years) and women have been using their current line longer (7.1 years versus 6.2 years).
Ridership Tenure

In general, the average municipal bus rider has been riding his or her bus system for a shorter period of time than the average MTA bus rider. Table 4 shows travel characteristics of MTA bus riders as well as riders of the municipal systems. The mean number of years that bus riders have used MTA bus service is 13.2 years, and the median number of years is 9.5. For municipal bus riders, the mean number of years bus riders have been using a municipal system is 8.1 and the median is 5.0. In both the MTA and the municipal systems, there is a significant number of long-term riders who generate means that are significantly higher than the medians.

Regarding the length of time that bus riders have used the MTA bus system, the following findings are significant:

- The number of years MTA bus riders have used the MTA system increases, as would be expected, with age (25 years old and younger, 6.9 years; 51 years and older, 19.5 years).
- Riders with lower incomes ($15,000 and under) have used the MTA system longer than higher income riders (over $50,000)–(14.1 years versus 9.4 years).
- Riders whose primary language in the household is Spanish have used the MTA systems for a shorter period than those whose primary language in the household is English (10.8 years versus 14.8 years).

MTA bus riders have used their current bus line for a mean of 6.8 years and a median of 3.8 years. The comparable statistics for riders of municipal systems are similar, 6.4 and 4.0, respectively. The disparity between means and medians suggests that there is a large subset of riders who have been patrons of their particular bus line for long periods. The similar tenure by line between MTA and the municipal operators does not extend to the system level, where MTA riders have ridden MTA buses about twice as long as riders on the municipal systems (median tenure: 9.5 years versus 5.0 years, respectively).
# TABLE 4

## Travel Characteristics

<table>
<thead>
<tr>
<th></th>
<th>MTA</th>
<th>Municipal Operators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Years Using MTA or Municipal Bus Service</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>13.2 years</td>
<td>8.7 years</td>
</tr>
<tr>
<td>Median</td>
<td>9.5 years</td>
<td>5.0 years</td>
</tr>
<tr>
<td><strong>Years Using Current Bus Line</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>6.8 years</td>
<td>6.4 years</td>
</tr>
<tr>
<td>Median</td>
<td>3.8 years</td>
<td>4.0 years</td>
</tr>
<tr>
<td><strong>Mean Number of Days Per Week Riding Bus</strong></td>
<td>5.0 days</td>
<td>4.4 days</td>
</tr>
<tr>
<td><strong>Mean Number of Cars, Vans, Trucks, Motorcycles Available in Working Condition in Household</strong></td>
<td>1.0 vehicle</td>
<td>1.4 vehicles</td>
</tr>
<tr>
<td><strong>Percentage With No Vehicle Available</strong></td>
<td>77%</td>
<td>60%</td>
</tr>
<tr>
<td><strong>Percentage Who Possess Valid Driver's License</strong></td>
<td>42%</td>
<td>54%</td>
</tr>
<tr>
<td><strong>Fare Payment Method</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pass</td>
<td>57%</td>
<td>20%</td>
</tr>
<tr>
<td>Cash</td>
<td>22</td>
<td>61</td>
</tr>
<tr>
<td>Tokens</td>
<td>21</td>
<td>5</td>
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<td>Transfer</td>
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<td>4</td>
</tr>
<tr>
<td>Metrocard</td>
<td>N/A</td>
<td>10</td>
</tr>
</tbody>
</table>

**Frequency of Travel**

MTA riders are more intensive riders of their system than are municipal riders. MTA bus riders ride their system a mean of 5.0 days per week, with 82% riding 5 or more days per week. By comparison, municipal bus riders ride their system a mean of 4.4 days per week, and 64% of these riders use municipal buses 5 or more days per week. Ethnic status is a very good predictor of frequency of use. Riders interviewed in Spanish are everyday (5 days or more) riders of the bus (87%). Also among everyday riders are those who earn less than $50,000 annually (83%),
Hispanics (86%), and African-Americans (81%).

**Method of Fare Payment**

The method of fare payment varies among MTA bus riders with 57% paying through the use of a pass, 22% with cash, and 21% with a token (Table 4). Riders on the municipal systems have a different pattern of fare payment in that 61% pay cash, 20% use a pass, and 5% use tokens. This difference is largely a function of fare structure in that several municipal operators do not offer passes at all.

The following characteristics of the MTA bus ridership pertain to the method by which riders pay their bus fare:

- Riders who have used the MTA system for 20 or more years tend to use a bus pass more than those who have used the system for 3 years or less (66% versus 45%).

- As expected, because of the fixed price of passes, frequency of bus use increases so does the use of a bus pass (62% for those who ride 5 days or more per week; 17% for those 1-2 days or less). The use of cash and tokens decline with frequency of bus use.

- Older riders (51 years of age and older) use bus passes more than younger riders (25 years of age and younger)—77% versus 39%.

- Hispanics use bus passes to a lesser extent than all other ethnic groups (49% versus 63%). However, Hispanics tend to use tokens more than all other ethnic groups (28% versus 16%).

- Pass use is highest among those with a bachelor's degree or more education (65%) and is in contrast to those who have a high school diploma or less education (51%).

- Riders who have used their current bus line for 5 or more years (63%) use passes more than riders who have used their current line for less than 1 year (44%).

**Available Alternatives to Transit**

MTA riders have fewer cars available than municipal riders and are more likely not to have one at all. Among MTA bus riders, an average of 1.0 vehicle (cars, truck, and motorcycles) per household is available in working condition. This mean is higher (1.4 vehicles) for riders of the municipal systems. For MTA bus riders, 77% have no vehicle available. For municipal riders, the parallel percentage is 60%.
The following characteristics of the MTA bus rider population pertain to car availability for the trip made most often:

- Riders who have used the MTA bus system for 20 years or more (56%) tend not to have a car available more than shorter term MTA riders of 3 years or less (27%).

- As expected, frequent bus riders tend not to have a car available relative to less frequent riders. For example, 43% of those who ride the bus 3 days per week or more do not have a car available; 18% of those who ride the bus less often than 1-2 days per week do not have access to a car.

- Older riders (51 and older) do not have a car available (60%); only 21% of riders 25 years old and under do not have access to a car.

- White riders (55%) tend not to have access to a car more than other ethnicities–Black (48%), Hispanic (34%), and Asian (29%).

- Riders at the lower income levels (under $15,000 annually) tend not to have a car available (51%), while only 10% of those earning over $50,000 have no car available.

- Riders with a lower level of education tend not to have a car available. For example, 53% of those with less than a high school education do not have access to a car; 34% of riders with a postgraduate education do not have the availability of a car.

- Riders who have used their current bus line for 10 or more years have less access to a car than those who have used their bus line for 1 year or less (54% versus 28%).

MTA patrons have fewer driver's licenses–42% of MTA bus riders have a license; 54% of municipal riders have a valid driver's license. The following characteristics of the MTA bus rider population pertain to whether or not riders possess a valid driver's license:

- Older riders tend to possess a valid driver's license more than younger riders–26 years of age and older (49%); 25 years of age and younger (24%).

- Hispanics (30%) have driver's licenses to a lesser extent than other ethnic groups (52%).

- Riders earning $50,000 or more annually have a valid driver's license more than those earning less than $7,500 (65% versus 31%).

- Riders whose primary language at home is English are more likely to have valid driver's licenses than those whose primary language at home is Spanish (50% versus 26%).

- Riders with a postgraduate education (80%) have driver's licenses to a greater extent than those with less than a high school education (13%).
Riders with longevity as residents of Los Angeles County (30 years or more) tend to have driver's licenses more than riders who have lived in Los Angeles County for 19 years or less (56% versus 32%).

Use of Bicycle Racks on Buses

Figure 1 indicates that 8% of MTA bus riders have at one time used a bicycle rack on the front of a bus compared to 4% of municipal riders. Among those who have used bicycle racks, the mean monthly number of times MTA riders take their bicycle on the bus is 2.1. The mean monthly figure for riders on the municipal system is 2.7.

The following characteristics of the MTA bus rider population pertains to the use of bicycle racks on buses:

- The age group between 26 and 40 makes use of bicycle racks on buses more than all the other age groups (11% versus 6%).
- MTA riders whose primary language at home is Spanish tend to make use of bicycle racks more than riders whose primary language at home is English (11% versus 6%). Asians are least likely to use bicycle racks on buses (2%).
- Riders with a valid driver's license use bicycle racks on buses to a greater extent than those without a license (10% versus 5%).

Geographic Access

The same percentage of riders for both MTA and municipal operators (27%) indicated that there is a place they cannot get to using public transportation (Figure 2).
Figure 1: Used a Bike Rack on Front of Bus MTA and Municipal Operators

<table>
<thead>
<tr>
<th></th>
<th>MTA</th>
<th>Municipal Operators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean Frequency of Taking Bicycle Per Month</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTA</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Municipal Operators</td>
<td>2.7</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1: Used a Bike Rack on Front of Bus MTA and Municipal Operators
Figure 2: Desire to Get to a Place at Least Once per Week that is Not Accessible by Public Transit
Security Preferences

Riders were asked to choose between service and security as a spending priority. Figure 3 indicates that bus riders generally prefer more service rather than more security (MTA–68% service; municipal systems–74% service). Bus service is most often preferred by Whites (79%); bus security is preferred by Asians (51%).

Figure 4 shows where bus riders think security officers are most needed. MTA riders feel that officers are most needed on buses (66%) as opposed to bus stops (34%). Municipal bus riders are fairly evenly split, where 53% prefer that officers be placed on buses and 47% prefer that they be deployed at bus stops. Bus stop security is preferred more (although still a minority) by those who have been using MTA bus service for 3 years or less (44%); only 24% of those who have used MTA service for 20 years or more prefer bus stop security.

One-half of MTA bus riders rated the law enforcement performance of LAPD Officers and Sheriff's Deputies as either very good or good. The mean rating of this performance on a 7-point scale is 3.2, where 1 = very good and 7 = very poor.

The following differences in mean ratings indicate how various subgroups among the MTA bus ridership perceive the law enforcement performance of LAPD Officers and Sheriff's Deputies:

- The longer MTA bus riders have used their current line, the more favorably they rate the performance of the law enforcement officers (2.9 for users of 10 or more years; 3.5 for users of 1 year or less).

- As MTA riders become older, they tend to favor the law enforcement performance of the officers. For example, riders 51 years of age and over demonstrate a mean rating of 2.9, while those 25 years of age and under have a mean rating of 3.6.
Latinos, Asians, and Whites (each with a mean rating of 3.1) have a more favorable impression of the officers' performances than African-Americans (3.5).

**Hypothetical Tradeoffs**

Figure 5 presents choices of bus riders regarding various trade-offs associated with transfers, fares, and level of service. Both MTA riders and riders of the municipal systems prefer a quicker ride to one less transfer (MTA: 82% versus 18%; municipal: 75% versus 25%). Similarly, riders of both systems prefer lower fares to fewer transfers (MTA: 72% versus 28%; municipal: 63% versus 37%). By contrast, riders prefer higher fares to less service (MTA: 71% versus 29%; municipal: 75% versus 25%).

The low level of preference for fewer transfers is seemingly contradictory to traditional transportation modeling that holds that waiting time is the greatest impedance to satisfaction. It would also seem to conflict with findings in this report and the others associated with the 2001 On-Board Bus Survey that time waiting is more important than travel time and cost.

It is clear that respondents did not equate one less transfer to less waiting time, and this is not unreasonable on their part in that bus headway and buses being on time may also affect waiting time—not simple number of transfers.
Figure 3: Choice of Spending Priority: Bus Service or Bus Security
MTA & Municipal Operators

MTA:
- More Service: 68%
- More Security: 32%

Municipal Operators:
- More Service: 74%
- More Security: 26%
Figure 4
Security Officers Most Needed: Bus Stops or Buses
MTA & Municipal Operators

Figure 4: Security Officers Most Needed: Bus Stops or Buses MTA and Municipal Operators
Figure 5: Choices Concerning Transfers, Bus Service, and Fares MTA and Municipal Operators
CONCERNS ABOUT THE BUS SYSTEM

MTA riders (Figure 6) tend to express greater levels of concern about every one of 21 service features than do municipal patrons (Figure 7). Concern is a complicated concept. While this report uses it to array features by relative salience, it also has a satisfaction component. As will be shown below, municipal operator patrons are more satisfied and experience fewer problems than MTA riders. For MTA bus riders, the features that elicited the most concern were as follows:

- Crowding on Bus (5.0)
- Passed Up by Bus (4.8)
- Bus on Time (4.8)
- Frequency Buses Run on Line (4.7)
- Bus Shelter (4.7)

Among these five features, the percentage of MTA respondents who selected choices 6 and 7 (high levels of concern) on the 7-point scale ranged from 43% (bus shelter) to 52% (passed up by bus). MTA riders were least concerned about ease of paying fare (3.3), distance to bus stop (3.3), and ease getting on/off bus (3.6).

Figure 7 is presented in the same order as Figure 6 in order to facilitate comparison between MTA and municipal riders. For municipal riders, the features associated with the highest level of concern were as follows:

- Bus on Time (4.4)
- Crowding on Bus (4.3)
- Having a Bus Shelter (4.2)
- Frequency Buses Run on Line (4.2)
- Passed Up by Bus (4.2)

Among these five features, the percentage of municipal operator respondents who selected choices 6 and 7 on the 7-point scale, indicating heightened level of concern, ranged from 36% (bus
shelters) to 42% (bus on time). The four features that emerged as evoking the least concern among riders of the municipal operator bus systems were cost of ride (2.9), ease of paying fare (3.0), distance to bus stop (3.0), and ease of getting on/off bus (3.0).

Riders with more education and African-Americans tended to demonstrate consistently higher levels of concern than other groups.

These various concerns were further analyzed against time spent traveling. There was comparatively little in the way of statistically significant relationships established between the level of concern and time spent traveling, with only three concerns demonstrating any relationship at all (all of which are very weak or weak). Pearson's $r$ measures of association revealed that the more time spent traveling, not surprisingly, the more concerned riders were with the amount of time that they spent traveling–($r = .13$) and the more concerned they were with safety while waiting for the bus (.09) and with having clean, unscratched windows ($r = .08$). All of these relationships, although statistically significant, can be characterized as weak.
Figure 6

Level of Concern Regarding Bus Service Features

MTA: Part 1

(1=not at all concerned; 7=very concerned)

<table>
<thead>
<tr>
<th>Bus Features</th>
<th>% Indicating Choices 6 &amp; 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crowding on Bus</td>
<td>51%</td>
</tr>
<tr>
<td>Passed Up by Bus</td>
<td>52%</td>
</tr>
<tr>
<td>Bus On Time</td>
<td>47%</td>
</tr>
<tr>
<td>Frequency Buses Run on Line</td>
<td>44%</td>
</tr>
<tr>
<td>Bus Shelter</td>
<td>43%</td>
</tr>
<tr>
<td>Graffiti</td>
<td>44%</td>
</tr>
<tr>
<td>Safety Waiting for Bus</td>
<td>42%</td>
</tr>
<tr>
<td>Cleanliness Inside Bus</td>
<td>41%</td>
</tr>
<tr>
<td>Benches at Bus Stop</td>
<td>41%</td>
</tr>
<tr>
<td>Clear Unscratched Windows</td>
<td>36%</td>
</tr>
</tbody>
</table>

Figure 6: Level of Concern Regarding Bus Service Features- MTA Part 1
Level of Concern Regarding Bus Service Features

MTA: Part 2

(1=not at all concerned; 7=very concerned)

Figure 6: Level of Concern Regarding Bus Service Features - MTA Part 2

Bus Features

% Indicating Choices 6 & 7

Bus Driver Courtesy: 38%
Cleanliness of Bus Stop: 22%
Time Traveling on Bus: 30%
Getting Seat on Bus: 27%
Convenience of Route Visibility, Route Name/#: 34%
Visibility of Route Name & Number on Bus: 35%
Availability of Timetables on Buses: 35%
Safety Inside Bus: 36%
Cost of Ride: 36%
Temperature Inside Bus: 35%
Ease Getting On/Off Bus: 40%
Ease of Paying Fare: 29%
Distance to Bus Stop: 33%
Availability of Timetables on Buses: 34%
Convenience of Route: 41%
Cleanliness of Bus Stop: 44%
Bus Drive Courtesy: 44%
Cleanliness of Bus Stop: 44%
Time Traveling on Bus: 43%
Getting Seat on Bus: 43
Convenience of Route Visibility, Route Name/#: 43%
Visibility of Route Name & Number on Bus: 43%
Availability of Timetables on Buses: 43%
Safety Inside Bus: 43%
Cost of Ride: 40%
Temperature Inside Bus: 39%
Ease Getting On/Off Bus: 39%
Ease of Paying Fare: 37%
Distance to Bus Stop: 36

Figure 6: Level of Concern Regarding Bus Service Features - MTA Part 2

(1=not at all concerned; 7=very concerned)
Figure 7
Level of Concern Regarding Bus Service Features
Municipal Operators: Part 1
(1=not at all concerned; 7=very concerned)

<table>
<thead>
<tr>
<th>Bus Features</th>
<th>% Indicating Choices 6 &amp; 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crowding on Bus</td>
<td>39%</td>
</tr>
<tr>
<td>Passed Up by Bus</td>
<td>38%</td>
</tr>
<tr>
<td>Bus On Time</td>
<td>42%</td>
</tr>
<tr>
<td>Frequency Buses Run on Line</td>
<td>40%</td>
</tr>
<tr>
<td>Safety Waiting for Bus</td>
<td>32%</td>
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<tr>
<td>Cleanliness Inside Bus</td>
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</tr>
<tr>
<td>Benches at Bus Stop</td>
<td>34%</td>
</tr>
<tr>
<td>Graffiti</td>
<td>25%</td>
</tr>
<tr>
<td>Bus Shelter</td>
<td>36%</td>
</tr>
<tr>
<td>Unscratched Windows</td>
<td>23%</td>
</tr>
</tbody>
</table>

Figure 7: Level of Concern Regarding Bus Service Features- Municipal Operators Part 1
## Figure 7

### Level of Concern Regarding Bus Service Features

#### Municipal Operators: Part 2

(1=not at all concerned; 7=very concerned)

<table>
<thead>
<tr>
<th>Bus Features</th>
<th>% Indicating Choices 6 &amp; 7</th>
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</thead>
<tbody>
<tr>
<td>Bus Driver Courtesy</td>
<td>29%</td>
</tr>
<tr>
<td>Cleanliness of Bus Stop</td>
<td>29%</td>
</tr>
<tr>
<td>Time Traveling on Bus</td>
<td>27%</td>
</tr>
<tr>
<td>Getting Seat on Bus</td>
<td>29%</td>
</tr>
<tr>
<td>Availability of Timetables on Buses</td>
<td>28%</td>
</tr>
<tr>
<td>Safety Inside Bus</td>
<td>34%</td>
</tr>
<tr>
<td>Convenience of Route</td>
<td>36%</td>
</tr>
<tr>
<td>Visibility...Route Name/#</td>
<td>28%</td>
</tr>
<tr>
<td>Temperature Inside Bus</td>
<td>22%</td>
</tr>
<tr>
<td>Cost of Ride</td>
<td>22%</td>
</tr>
<tr>
<td>Ease Getting On/Off Bus</td>
<td>22%</td>
</tr>
<tr>
<td>Ease of Paying Fare</td>
<td>24%</td>
</tr>
<tr>
<td>Distance to Bus Stop</td>
<td>20%</td>
</tr>
</tbody>
</table>

Figure 7: Level of Concern Regarding Bus Service Features- Municipal Operators Part 2
SERVICE RELATED PROBLEMS

A higher proportion of MTA riders report problems (Figure 8) than do municipal riders (Figure 9). Among MTA bus riders, overcrowding (82%) and bus behind schedule (76%) are problems experienced by the greatest percentage of riders. The problems most frequently experienced are overcrowding, an average of 4.1 times per month, bus behind schedule 3.1 times per month, and long waits at bus stop 3.1 times per month. Measures of frequency of occurrence were determined by equating a response of "almost never/never" to 0 times per month, "once per month" to 1 times per month, "once per week" to 4 times per month, and "more often" to 6 times per month. Interestingly, there are a few problems that happen more frequently on municipal buses–most notably feeling unsafe (1.3 occurrences per month versus 1.0 for MTA).

Differences were found most often by ethnicity and primary household language. These differences consistently reflected that African-American riders say that they experience a higher incidence of problems with overcrowding (4.7 times per week), long waits at the bus stop (3.6 times per week), buses running behind schedule (3.4 trains per week), dirty seats or floors (3.0 times per week), and being passed up by the bus (2.6 times per week). Primarily Spanish speaking households and Asians say that they experience fewer problem occurrences–overcrowding (3.7 and 3.6 times per week, respectively), buses running behind schedule (Asians–2.9 times per week) dirty seats or floors (Spanish language households–2.0 times per week), and being passed up by the bus (2.0 and 1.8 times per week, respectively).

For riders of the municipal bus systems, there are three problems that stand out, as shown in Figure 9. These problems are as follows: bus behind schedule (68%), overcrowding (67%), and long waits at bus stop (65%). For all problems, the frequency of occurrences ranges from 1.2 occurrences per month for the bus breaking down to 2.5 times per month for overcrowding.
Figure 8
Experienced Service-Related Problems
MTA

<table>
<thead>
<tr>
<th>Mean Number of Monthly Incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overcrowding</td>
</tr>
<tr>
<td>Bus Behind Schedule</td>
</tr>
<tr>
<td>Long Waits...</td>
</tr>
<tr>
<td>Dirty Seats/Floor</td>
</tr>
<tr>
<td>Being Passed Up</td>
</tr>
<tr>
<td>Bus Leaving Too Early</td>
</tr>
<tr>
<td>A/C Not Working</td>
</tr>
<tr>
<td>Unsafe Riding Bus</td>
</tr>
<tr>
<td>Bus Breaking Down</td>
</tr>
</tbody>
</table>

Figure 8: Experienced Service-Related Problems MTA
Figure 9: Experienced Service-Related Problems - Municipal Operators

- Overcrowding: 67%
- Bus Behind Schedule: 68%
- Long Waits at Bus Stop: 65%
- Dirty Seats/Floor: 25%
- Being Passed Up: 40%
- Bus Leaving Too Early: 44%
- A/C Not Working: 35%
- Feel Unsafe Riding Bus: 21%
- Bus Breaking Down: 15%

Mean Number of Monthly Incidents:

<table>
<thead>
<tr>
<th>Service-Related Problem</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overcrowding</td>
<td>2.5</td>
</tr>
<tr>
<td>Bus Behind Schedule</td>
<td>2.4</td>
</tr>
<tr>
<td>Long Waits at Bus Stop</td>
<td>2.4</td>
</tr>
<tr>
<td>Dirty Seats/Floor</td>
<td>1.4</td>
</tr>
<tr>
<td>Being Passed Up</td>
<td>1.7</td>
</tr>
<tr>
<td>Bus Leaving Too Early</td>
<td>1.9</td>
</tr>
<tr>
<td>A/C Not Working</td>
<td>1.6</td>
</tr>
<tr>
<td>Unsafe Riding Bus</td>
<td>1.3</td>
</tr>
<tr>
<td>Bus Breaking Down</td>
<td>1.2</td>
</tr>
</tbody>
</table>
Figure 10
Mean Rating of Bus Driver on Last Bus Trip
MTA & Municipal Operators
(1=very good; 7=very poor)

Figure 10: Mean Rating of Bus Driver on Last Bus Trip- MTA and Municipal Operators
Figure 11: Announcement of Stops on Last Bus Trip - MTA and Municipal Operators

MTA

- None: 30%
- All: 20%
- Most: 21%
- Some: 29%

Municipal Operators

- None: 30%
- All: 20%
- Most: 25%
- Some: 25%

Figure 11: Announcement of Stops on Last Bus Trip - MTA and Municipal Operators
Figure 12
Availability of Seat on Bus for Last Bus Trip
MTA & Municipal Operators

Figure 12: Availability of Seat on Bus for Last Bus Trip- MTA and Municipal Operators
Figure 13
Mean Likelihood of Purchasing Stored Value Cards
MTA Cards and All L.A. County Transit Agencies
(1=very likely; 7=very unlikely)

<table>
<thead>
<tr>
<th>Purchase Option</th>
<th>% Indicating Choices 1 &amp; 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase All L.A. Transit Agency Cards (MTA Only)</td>
<td>57%</td>
</tr>
<tr>
<td>Purchase all L.A. Transit Agency Cards (Municipal Operator)</td>
<td>53%</td>
</tr>
</tbody>
</table>

Figure 13: Mean Likelihood of Purchasing Stored Value Cards MTA Cards and All L.A. County Transit Agencies
**Driver Performance**

Both MTA riders and municipal riders rated drivers highly with regard to driver courtesy, knowledge of routes, and driving skill.

Figure 10 depicts mean ratings for those service features related to the bus driver on MTA buses as well as on municipal line buses. The rating is based upon a 7-point scale, where 1 = very good and 7 = very poor. For MTA bus drivers, the bus driver's knowledge of routes received the highest rating (2.2), while the lowest rating (2.5) was associated with driver courtesy. Municipal bus drivers are rated slightly higher than MTA drivers in all three categories. For bus drivers on the municipal bus systems, ratings were almost equal among these categories, with the highest rating (2.0) associated with the bus driver's knowledge of routes, and the lowest ratings of 2.1 associated with driver courtesy and the way the bus driver drove.

Figure 11 shows the frequency that bus drivers call bus stops. Among MTA riders, 41% report that bus drivers call out all or most of the stops. This finding is similar among riders of the municipal bus system where 45% perceive that all of the stops or most of them are announced.

**Seat Availability**

Figure 12 depicts the availability of seats for the last bus trip taken by MTA and municipal bus riders. Among MTA bus riders, 66% indicated that a seat was available to them for their whole trip and 6% indicated that no seat was available. For riders of the municipal systems, 79% indicated that a seat was available for their whole trip; 3% had no seat available. It is noteworthy that almost all patrons are able to sit for some portion of their trip–94% MTA and 97% municipal operators.
COUNTYWIDE STORED VALUE CARDS

MTA patrons are somewhat more likely to purchase Countywide Stored Value Cards than are riders of the municipal bus systems (Figure 13). Stored value cards are similar to prepaid telephone cards. They are purchased for a given amount of money and fares are automatically deducted as the card is used for boarding. Patrons were asked to indicate how likely they are to purchase a stored value card for all Los Angeles County transit agencies (3.2 on a 1-7 scale, with 1 = very likely to purchase the card and 7 = very unlikely). Choices 1 or 2, indicative of relatively strong interest, were selected by 57% of MTA riders; 28% selected choices 6 and 7. The mean likelihood of riders of the municipal systems to purchase a stored value card for all Los Angeles County transit agencies is 3.4. Among municipal riders, 53% indicated choices 1 or 2 for purchasing a countywide card in contrast to 31% who selected choices 6 and 7–proportions not highly dissimilar from those of MTA riders.

The following characteristics of MTA riders help to determine the likelihood that certain groups will purchase stored value cards for all Los Angeles County transit agencies:

- MTA riders whose survey language is English are less likely to purchase Los Angeles County stored value cards for all transit agencies than those whose survey language is Spanish (3.4 versus 2.8).
- Older MTA riders (51 years of age or older) have a lesser likelihood of purchasing a stored value card for all Los Angeles County transit agencies than younger riders (50 years of age and younger)–3.5 versus 3.1.
- White MTA riders (3.8) are less likely to purchase stored value cards for all Los Angeles County transit agencies than African-Americans (3.3), Latinos (3.0), and Asians (2.6).

Lower income MTA riders (those earning less than $25,000 annually) are less likely to purchase stored value cards for all Los Angeles County transit agencies than higher income riders (those earning $25,000 or more–3.3 versus 2.8).
CUSTOMER SERVICE INFORMATION

Telephone Services

Figure 14 indicates that MTA bus riders (57%) are more likely to call 1-800-COMMUTE for information than are municipal bus riders who also call in significant numbers (43%).

Usage varies in the following ways:

- MTA riders who are over the age of 25 call 1-800-COMMUTE to a greater extent than those 25 years of age or younger (61% versus 46%).
- African-American (65%) and Whites (59%) tend to call 1-800-COMMUTE more than Hispanics (51%) and Asians (48%).
- Riders earning between $15,000 and $35,000 represent the income group that makes the greatest use of 1-800-COMMUTE (65%).
- MTA riders whose primary language at home is English (62%) use 1-800-COMMUTE more than those whose primary language at home is Spanish (46%).
- Riders with a higher level of education (high school graduate or above) make more use of 1-800-COMMUTE than riders with less than a high school education (63% versus 38%).
- Long-term residents of Los Angeles County (20 years or more) call 1-800-COMMUTE to a greater extent than shorter term residents (less than 20 years)–64% versus 49%.
- Riders who have used the MTA system for 20 years or more tend to call 1-800-COMMUTE more than those who have used the system for 3 years or less (64% versus 49%).

Figure 15 represents ratings of customer service for those who have called the 1-800-COMMUTE number. The ratings are on a scale of 1 to 7, where 1 = very good and 7 = very poor. The percentage of respondents who selected choice categories 1 and 2 ranges from 47% to 77%. Among MTA bus riders, courtesy of representative (2.0) and usefulness of information (2.1) received the most favorable ratings, while ability to get through to a representative (3.2) and speed of response (2.9) received the least favorable ratings.
MTA Customer Information Services

Figure 16 uses the same 7-point scale to show ratings of MTA bus riders for various customer information services. Generally, respondents rate the various aspects of customer information service quite favorably. The most favorably rated features of service are the ease of buying bus tokens or passes (2.1) and the ease of understanding schedules (2.4). The availability of bus maps (3.3) had the least favorable rating. Patrons participating in the focus groups for this study indicated that the source of their dissatisfaction was the quick disappearance of take-ones, maps, and schedules early in the morning peak period. The percentage of respondents indicating choices 1 or 2 range from 46% to 76% for these customer service ratings.
Figure 14: Have Called 1-800-COMMUTE - MTA and Municipal Operators

MTA
- Called: 57%
- Have Never Called: 43%

Municipal Operators
- Called: 57%
- Have Never Called: 43%

Figure 14: Have Called 1-800-COMMUTE - MTA and Municipal Operators
Figure 15: Rating of Customer Service at 1-800-COMMUTE - MTA and Municipal Operators

<table>
<thead>
<tr>
<th>Service Features</th>
<th>% Indicating Choices 1 and 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to Get Through to a</td>
<td>MTA 47%</td>
</tr>
<tr>
<td>Representative</td>
<td>Munis 45%</td>
</tr>
<tr>
<td>Speed of Response</td>
<td>MTA 58%</td>
</tr>
<tr>
<td>Timeliness of Information...</td>
<td>MTA 64%</td>
</tr>
<tr>
<td>Mail</td>
<td>Munis 62%</td>
</tr>
<tr>
<td>Usefulness of Information...</td>
<td>MTA 76%</td>
</tr>
<tr>
<td>Received</td>
<td>Munis 74%</td>
</tr>
<tr>
<td>Courtesy of Representative</td>
<td>MTA 77%</td>
</tr>
<tr>
<td></td>
<td>Munis 74%</td>
</tr>
</tbody>
</table>
Figure 16
Ratings of MTA Customer Information Services
(MTA Customers Only)
(1=very good; 7=very poor)

<table>
<thead>
<tr>
<th>Service Features</th>
<th>% Indicating Choices 1 and 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of Buying Bus Tokens or Passes</td>
<td>76%</td>
</tr>
<tr>
<td>Ease of Understanding Schedules</td>
<td>66%</td>
</tr>
<tr>
<td>Rep's Help at a Customer Center</td>
<td>60%</td>
</tr>
<tr>
<td>Availability of Bus Schedules</td>
<td>46%</td>
</tr>
<tr>
<td>Availability of Bus Maps</td>
<td>46%</td>
</tr>
</tbody>
</table>

Figure 16: Ratings of MTA Customer Information Services- MTA Customers Only
**Knowledge of Improvements**

Figure 17 shows that 56% of MTA riders have seen or heard about MTA getting new buses, having more service, or becoming more reliable during the past few months.

The following characteristics of the MTA bus ridership pertain to those who have heard or seen about MTA getting more improved or reliable service. The common thread in most of these characteristics is that tenure and frequency of riding are related to this knowledge.

- The more frequently riders use the bus, the more likely it is that they hear or see information about better service (5 days per week or more, 58%; less than 1 day per week, 26%).
- Riders who have used MTA service for 20 years or more are more likely to have heard or have seen information about better service than those who have been using MTA service for less than 3 years (64% versus 43%).
- As riders get older, they tend to hear or see information about better service to a greater extent. For example, 43% of riders 25 years of age and younger hear or see such information; 64% of riders 41 years of age and older hear or see such information.
- Asians hear or see information about better service less than all other ethnic groups (42% versus 58%).
- The income group between $15,000-$25,000 hear or see information about better service more than other income groups–63%.
- The longer riders have lived in Los Angeles County, the more likely it is that they have heard or seen information about better service. (Less than 10 years–49%; 30 years or more–65%).

**Safety Campaign**

Figure 18 indicates that more than half of MTA riders (57%) are aware of the cartoon character "Safety Guy." Also shown in Figure 18 is the level of recall of safety messages from the soccer player from the Los Angeles Galaxy. Less than half (45%) of MTA bus riders recall such messages. The soccer player campaign targeted the Hispanic market and was successful in doing so.
Latinos (58%) tended to recall L.A. Galaxy safety messages more than Whites (28%)\(^3\). Similarly, riders whose primary language at home is Spanish are more likely to recall messages from the L.A. Galaxy player than those whose primary language at home is English (61% versus 38%).

The following characteristics of the MTA bus rider population pertain to those who are aware of the cartoon character "Safety Guy" or recall safety messages involving a soccer player from the L.A. Galaxy:

- Asians (45%) are less aware of "Safety Guy" than Hispanics (63%).
- As riders get older, the less likely it is that they will recall messages from the L.A. Galaxy soccer player (40 years of age and younger, 55%; 51 years of age and older, 28%).
- Riders with higher levels of education are less likely to recall the safety messages from the L.A. Galaxy (less than high school, 72%; college graduate or more, 32%).
- Riders who have lived in Los Angeles County for 30 or more years are less likely to recall messages about the L.A. Galaxy player than those who have lived in Los Angeles County for less than 20 years (33% versus 53%). This is similar to the pattern depicted with regard to the awareness of "Safety Guy."
- Newer riders (1 year or less) of a bus line are more likely to recall the safety messages from L.A. Galaxy more than long-term riders of their bus line (10 years or more)–56% versus 38%.

In summary, MTA frequent riders, Latinos, and short-term residents of Los Angeles County are more likely to be aware of the cartoon character, "Safety Guy." Safety messages through the Los Angeles Galaxy soccer player are recalled primarily by younger riders, Latinos, those with lower levels of education, newer riders, and short-term residents of Los Angeles County.

**Impact of "It’s Getting Better on the Bus" Campaign**

Figure 19 indicates that 54% of MTA riders have not noticed any advertising for transit services in the past year. Of the 46% who have noticed such advertising, 35% have heard the slogan

\(^3\) The relatively low recall of the Galaxy player by non-Latinos versus the high proportion indicated for Latinos is one of the widest divergences between any two groups in this analysis. Clearly, soccer is less relevant to non-Latinos than it is to Latino households and riders whose primary language at home is Spanish.
"It's Getting Better on the Bus." Among this 35%, 26% agree with the slogan, 7% disagree, and 2% think it is too soon to state whether they agree or disagree. Looking at this from a different angle, 68% of those who agree that it is getting better on the bus believe that advertising helped them to notice improvements on MTA buses.

The following characteristics of MTA riders pertain to those who indicated that advertising has helped them to notice improvements to the system (68%).

- Hispanics (73%) and African-Americans (71%) have been helped by advertisements to notice system improvements more than Whites (47%).
- Riders in the lowest income groups (less than $25,000 annually) have been helped by advertisements to notice system improvements to a greater extent than all other income groups (72% versus 54%).
Figure 17
Heard About MTA Getting New Buses or Having Better Service (MTA Only)

Heard about New Buses or Better Service:

- Yes: 56%
- No: 44%

Figure 17: Heard About MTA Getting New Buses or Having Better Service- MTA Only
Figure 18

Safety Campaign Awareness
(MTA Only; Only Those Who Noticed Advertising)

Awareness of Safety Guy

- Yes: 57%
- No: 43%

Recall L.A. Galaxy Player

- Yes: 45%
- No: 55%
Figure 19

Noticed Advertising for Transit Service and Agree with Slogan: "It's Getting Better on the Bus"—MTA Only
According to Figure 20, 44% of MTA bus riders have access to the Internet and 20% of these bus riders have visited the MTA website. The proportion of riders who visited the website is greater than the proportion who indicated that they had Internet access in the 1996 On-Board Survey.

Significant differences among subgroups within the MTA bus ridership that relate to having access to Internet service are as follows:

- Internet access declines with the age of MTA riders. For example, Internet access is available to 57% of those 25 years of age and younger, while 45% of those who are 26-50 have Internet access, and only 28% of those 51 years and older have such access.
- Asian (58%) and White (55%) MTA riders tend to have access to the Internet more than Latino riders (36%).
- Internet access increases as the annual income of MTA riders rises. Specifically, 28% of those whose income is $7,500 or less have Internet access; by contrast, 78% of those who earn over $50,000 have Internet access.
- MTA riders whose primary language at home is English tend to have more access to the Internet than those whose primary language is Spanish (49% versus 32%).
- Riders with higher levels of education have more access to the Internet. For example, those with postgraduate education (71%) tend to have greater Internet access than those with less than a high school education (16%).
- Those who have used MTA bus service for 9 years or less have a higher level of Internet access (55%); those with 10 or more years using MTA services have a lower level of access (34%).
- Riders who have used their current bus line for 1 year or less have high Internet access (58%), while those who have used their current line for 10 years or more have lower Internet access (30%).

In summary, riders who have access to the Internet tend to be shorter term users of the MTA system, and shorter term users of their current bus line. Internet access declines with age but increases with income and education. Asians and Whites as well as riders whose primary language at home is English are significant Internet users.

The following characteristics of the MTA bus riders address significant differences associated with those who have visited the MTA website:
MTA riders who are between 26 and 50 years of age make the greatest use of the MTA website (24%), while those 25 years of age and younger make the least use of the website (15%).

Whites and Asians (25% each) make more use of the MTA website than African-Americans (15%).

Those who have a postgraduate education have a higher level of website visitation than do riders with less than a high school education (31% versus 7%).

In summary, older riders who have higher educational levels are more likely to be users of the MTA website. Whites and Asians are also more likely website users.

Figure 21 shows how frequently various website features are used. Website features used most frequently are the trip planner (79%), timetables (76%), and maps (63%). The stakeholder's page is least used (12%) by website visitors.

The most frequent users\(^4\) of each website feature are presented below:

**Trip Planner**: The trip planner is used by bus riders in the 26-40 age group (87%) and by Whites (87%).

**Timetables**: Timetables are used by Asian bus riders (88%) and by the 26-40 age group (85%).

**System Maps**: System maps are consulted by riders having some high school or less education (81%).

**Service Changes**: MTA bus riders who consult the MTA website for service changes are largely those with less than a high school education (75%) and Hispanics (41%).

**Pass/Token Sales Directory**: There is no distinct user group for this website feature.

**Customer Comment Form**: Riders who have some college or more education make use of the customer comment form (23%).

---

\(^4\) The term "users" refers to riders having at some time accessed these website features. The percentages represent the proportion of people in each group who have done so at some time—not the number of times ("hits") that they have actually visited the site.
Press Releases:  Website users who earn $35,000-$50,000 per year (37%) are more likely to visit the press release page.

Stakeholder's Page:  The Stakeholder's page is used largely by those who have had some high school or less (29%) as well as riders in the 41-50 age group (22%).
Figure 20: MTA Website Visitors/Internet Access
Figure 21: Use of MTA Website Features - Website Visitors Only

- Trip Planner: 79%
- Timetables: 76%
- System Maps: 63%
- Service Changes: 30%
- Pass/Token Sales Directory: 29%
- Customer Comment Form: 20%
- Press Release/Pressroom: 19%
- Stakeholders’ Page: 12%
The overall satisfaction of bus riders (extracted from the On-Board Survey for the telephone interviews) is presented in Figure 22. Municipal patrons are much more satisfied than MTA patrons. MTA bus riders rate the bus service at a mean of 2.4 (based on a 5-point scale where 1 = very good and 5 = very poor). The percentage of responses in categories 1 (very good) and 2 (good) is 55%. Riders of the municipal bus systems rated overall satisfaction with their bus service at a mean of 1.8, including 80% at a rating of “very good” or “good”.

### Overall Satisfaction and Frequency of Problems

Pearson’s $r$ measures of association were utilized to assess the relationship between increased occurrences of problems riding MTA buses and a decreased level of overall satisfaction. Those who traveled by MTA bus 5 or more days per week experience a decreased level of satisfaction as occurrences of any of the problems posed in the survey increase. The relationships, although statistically significant and genuine, are all weak to moderate in relative strength. All relationships are inverse in nature (as indicated by the minus sign), whereby as one variable increases in value, the other decreases. Specifically, increases in the occurrence of problems are correlated with a decrease in satisfaction. Among these relationships, those that can be categorized as moderate in strength are as follows:

- Being Passed Up by Bus \( r = -.26 \)
- Bus Running Behind Schedule \( r = -.25 \)
- Dirty Seats or Floors \( r = -.23 \)
- Long Waits at the Bus Stop \( r = -.22 \)
- Air Conditioning Not Working \( r = -.21 \)
Figure 22
Overall Satisfaction with Bus Service
MTA & Municipal Operators
(1=very good; 5=very poor)

Figure 22: Overall Satisfaction with Bus Service- MTA and Municipal Operators

<table>
<thead>
<tr>
<th>% Indicating Very Good &amp; Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTA</td>
</tr>
<tr>
<td>Municipal Operators</td>
</tr>
</tbody>
</table>
For those who ride 3-4 days per week, only 2 problems are moderate in strength: long waits at the bus stop \((r = -.27)\) and bus breaking down \((r = -.20)\).

**Overall Satisfaction and Rider Concerns**

Concerns about the MTA bus system were also analyzed in terms of their relationship to the overall satisfaction with MTA bus service expressed by these riders. Two concerns were moderately associated with overall satisfaction—crowding on the bus \((r = -.24)\) and getting a seat on the bus \((r = -22)\).

**Quadrant Analysis**

Levels of concern and satisfaction data can be mapped on a chart where satisfaction is graphically measured against concern in four cells as follows:

- The upper-right quadrant represents features that are both satisfactory and of high concern.
- The lower-right quadrant represents features that are satisfactory, but of low concern.
- The lower-left quadrant represents features that are not satisfactory, but are of low concern.
- The upper-left quadrant represents features that are not satisfactory and are of high concern.

Table 5 shows how concern data from this telephone survey was matched to on-board satisfaction data in order to construct the quadrants.

In Figure 23, the mean overall bus rider satisfaction level (2.4) and the median level of concern (4.4) were used to divide the quadrants. A different set of boundaries would have changed the location of features within the quadrants. This puts no more than four features in any one quadrant.

The lower-right quadrant represents lower levels of concern but above average satisfaction—what might be considered to be a higher level of service than is necessary. Features that are being satisfactorily delivered by MTA, but are eliciting low levels of concern among patrons, include safety
TABLE 5
Concern (Importance)/Satisfaction Mean Rating of MTA Bus Service Features
(Revised May, 2003)

<table>
<thead>
<tr>
<th>Concern Feature</th>
<th>Satisfaction Feature</th>
<th>Mean Concern Rating</th>
<th>Mean Satisfaction Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Waiting</td>
<td>Safety While Waiting/Riding</td>
<td>4.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Safety Inside Bus</td>
<td>Safety While Waiting/Riding</td>
<td>4.3</td>
<td>2.2</td>
</tr>
<tr>
<td>Time spent waiting for buses</td>
<td>Frequency of buses</td>
<td>4.7</td>
<td>2.8</td>
</tr>
<tr>
<td>Cleanliness Inside Bus</td>
<td>Cleanliness Inside Bus</td>
<td>4.5</td>
<td>2.7</td>
</tr>
<tr>
<td>Cost to Ride</td>
<td>Cost to Ride</td>
<td>3.7</td>
<td>2.5</td>
</tr>
<tr>
<td>Crowding on Bus</td>
<td>Seats/Space on Bus</td>
<td>5.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Getting a Seat on the Bus</td>
<td>Seats/Space on Bus</td>
<td>4.3</td>
<td>2.7</td>
</tr>
<tr>
<td>Being Passed Up by Bus</td>
<td>Buses Do Not Pass By</td>
<td>4.8</td>
<td>2.5</td>
</tr>
<tr>
<td>Bus on Time</td>
<td>Bus on Time</td>
<td>4.8</td>
<td>2.7</td>
</tr>
<tr>
<td>Driver Courtesy</td>
<td>Driver Courtesy</td>
<td>4.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Convenience of Route</td>
<td>Convenience of Route</td>
<td>4.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Time Traveling</td>
<td>Travel Time on Bus</td>
<td>4.3</td>
<td>2.5</td>
</tr>
<tr>
<td>Availability of Timetables on Bus</td>
<td>Availability of Schedules/Route Information</td>
<td>4.3</td>
<td>2.7</td>
</tr>
</tbody>
</table>

inside the bus and convenience of route.

The lower-left quadrant contains features that are low in customer satisfaction but are also of lesser concern (availability of schedules, getting a seat, time traveling, and cost to ride). Because these features are considered to be of less concern than other features, efforts to improve performance
regarding these features will have a relatively minor impact on overall satisfaction.

The upper left quadrant is critically important to this analysis because it contains those features that riders consider to be important but with which they are not adequately satisfied. These features are crowding, buses being on time, being passed up by the bus, and cleanliness inside the bus. Driver courtesy is at the midpoint of concern and satisfaction. A slight change in quadrant boundaries could move driver courtesy to the upper-left quadrant. Therefore, driver courtesy should be considered next in order of importance after those in the upper-left quadrant.

Safety while waiting is in the remaining quadrant. While it is a primary concern, MTA patrons are satisfied with what is being done to ensure it.

**Impact Score Technique**

The Impact Score is a different method of assessing customer satisfaction. It calculates a Gap Score that represents the decrease in satisfaction at different levels of problem occurrence and then multiplies that Gap Score by the rate of occurrence of these problems.

Each problem was separated into those riders who experience the problem more than once per week and those who experience it less than once per month. The differences between the corresponding levels of satisfaction are shown as Gap Scores in Table 6. A Gap Score of 0.5, for example, indicates that the frequent occurrence of a problem causes a 0.5 drop in satisfaction rating.

The overall impact upon customer satisfaction depends not only upon this gap in satisfaction but also upon how frequently the problem occurs. If the problem occurs very infrequently, the impact on customer satisfaction will be much less than if problems were to be very frequent—all else being equal.
Table 6 shows the order of impact (from high impact to low impact) caused by service problems. As such, Impact Score is not unlike the satisfaction/importance quadrant and the correlation analysis performed above in that they all seek to establish a prioritization of activities for the service provider to undertake. Impact Scores are highest overall for long waits, followed by overcrowding and buses behind schedule.

Correlation analysis established that concerns about overcrowding on the bus and getting a seat had the greatest association with satisfaction. Quadrant analysis pointed to overcrowding, buses being on time, being passed up, and cleanliness inside the bus as vital in this regard. The Impact Score Technique also identifies long waits, overcrowding, the bus being behind schedule, and, to a lesser degree, being passed up and dirty seats/floors as priorities for MTA to address. The pattern is clear that there are five core features that MTA is being called upon to continue addressing. These features are as follows:

### TABLE 6

<table>
<thead>
<tr>
<th>Problem Experienced</th>
<th>Gap Score</th>
<th>Frequency of Occurrence Per Month</th>
<th>Impact Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Waits</td>
<td>.6</td>
<td>3.1</td>
<td>1.86</td>
</tr>
<tr>
<td>Overcrowding</td>
<td>.4</td>
<td>4.1</td>
<td>1.64</td>
</tr>
<tr>
<td>Bus Behind Schedule</td>
<td>.5</td>
<td>3.1</td>
<td>1.55</td>
</tr>
<tr>
<td>Being Passed Up by Bus</td>
<td>.6</td>
<td>2.2</td>
<td>1.32</td>
</tr>
<tr>
<td>Dirty Seats/Floors</td>
<td>.5</td>
<td>2.5</td>
<td>1.25</td>
</tr>
<tr>
<td>Feeling Unsafe While Riding</td>
<td>.4</td>
<td>1.0</td>
<td>.40</td>
</tr>
</tbody>
</table>

(High Score = Higher Impact Upon Overall Satisfaction)
- Overcrowding on Bus
- Buses Being Behind Schedule
- Being Passed Up by Bus
- Dirty Seats/Floors
- Long Waits

Each of these analyses also indicates that safety is a core service delivery concern but that patrons approach it with a high degree of satisfaction and a minimal number of problems.
Figure 23: Importance (Concern)/Satisfaction Chart of MTA Bus Services (Revised May, 2003)
Los Angeles County MTA Bus Survey

Follow-Up with Metro Bus Riders (FY 2001 OBS)

Hello, my name is ______________, and I’m calling on behalf of the
Los Angeles County Metropolitan Transportation Authority. [INSERT NAME FROM LIST] recently completed a survey on board a bus and I’d like to ask him/her some follow-up questions. Is he/she home?

[IF NO, SCHEDULE CALLBACK; IF YES:] We’re very interested in getting your honest opinions about your bus service. The questions take about 10 minutes to complete. Is this a good time to get started?

[IF NO, SCHEDULE CALLBACK; IF YES:] To ensure that my work is done honestly and correctly, this call may be monitored. [ONLY IF ASKED ABOUT MONITORING:] My supervisor randomly listens to interviews to make sure we're reading the questions exactly as written and not influencing answers in any way.

STATUS: 1-MTA 2 through 14-ALL OTHERS [OBTAINED FROM SAMPLE]
GENDER: 1-MALE 2-FEMALE

LAN: Would you prefer that we speak in English or Spanish?

1-ENGLISH 2-SPANISH

Q1. Do you have an automobile available to make the trip you most often make by bus?

1 - YES
2 - NO
9 - DK/REF

Q2. Is there some place that you want to go at least once a week that you cannot get to using public transit?

1 - YES
2 - NO
9 - DK/REF

Q2a. [DELETED]

Q2b. [DELETED]
The on-board survey you completed was on the {insert STATUS} bus system. From now on, please answer these questions about that bus system.

Q3. If you use transit systems other than {insert STATUS}, what one other transit system do you ride most often? [DO NOT READ; RECORD ONLY ONE RIDDEN MOST OFTEN; CLARIFY ANY RESPONSE OF "METRO" OR "METRO RAIL" FOR A BUS VERSUS A TRAIN SYSTEM]

0 - NONE
1 - ALHAMBRA
2 - ANTELOPE VALLEY
3 - BURBANK
4 - CARSON
5 - CERRITOS
6 - COMMERCE
7 - CULVER CITY
8 - DASH / L.A.D.O.T. / COMMUTER EXPRESS
9 - EL MONTE
10 - FOOTHILL TRANSIT
11 - GLENDALE / BEE LINE
12 - LONG BEACH
13 - MTA / METRO / METRO RAIL / RED/BLUE/GREEN LINE / SUBWAY
14 - METROLINK (TRAINS ONLY!)
15 - MONTEBELLO
16 - MONTEREY PARK
17 - NORWALK
18 - PALOS VERDES
19 - PASADENA
20 - SANTA CLARITA
21 - SANTA MONICA / THE BIG BLUE BUS
22 - TORRANCE
23 - WEST COVINA
24 - OTHER, SPECIFY: ______________________________________
99 - DK/REF

Q3a. [DELETED]
Q4. These next questions are about any concerns you may have regarding [insert STATUS] bus service. Using a scale of 1 to 7, with 1 being “currently not concerned at all” and 7 being “currently very concerned,” how would you rate your level of concern about each of the following bus service features?

[CONFIRM DIRECTION OF SCALE ON FIRST RESPONSE AND AS NEEDED]

[RANDOMLY ASK 10 ITEMS ONLY:]

<table>
<thead>
<tr>
<th>How concerned are you about...</th>
<th>NOT AT ALL</th>
<th>VERY</th>
<th>DK/REF</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The distance to the bus stop?</td>
<td>1  2  3  4  5  6  7  9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Having benches at the bus stop?</td>
<td>1  2  3  4  5  6  7  9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Having a bus shelter?</td>
<td>1  2  3  4  5  6  7  9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Cleanliness of the bus stop?</td>
<td>1  2  3  4  5  6  7  9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. How often the buses on your line run?</td>
<td>1  2  3  4  5  6  7  9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. The bus is on time?</td>
<td>1  2  3  4  5  6  7  9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Visibility of route name and number on the bus?</td>
<td>1  2  3  4  5  6  7  9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Being passed-up by the bus?</td>
<td>1  2  3  4  5  6  7  9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Safety while waiting for the bus?</td>
<td>1  2  3  4  5  6  7  9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Safety inside the bus?</td>
<td>1  2  3  4  5  6  7  9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. Ease getting on and off the bus?</td>
<td>1  2  3  4  5  6  7  9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. Bus driver courtesy?</td>
<td>1  2  3  4  5  6  7  9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. How much it costs to ride?</td>
<td>1  2  3  4  5  6  7  9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n. Ease of paying the fare?</td>
<td>1  2  3  4  5  6  7  9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o. Availability of timetables on the bus?</td>
<td>1  2  3  4  5  6  7  9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q5. How often are you experiencing the following problems with {insert STATUS} bus service? For each of the following, please tell me if it occurs almost never (or never), about once a month, about once a week, or more than once a week.

How often do you experience...

[RANDOMLY ASK 5 ITEMS ONLY:]

<table>
<thead>
<tr>
<th>Item</th>
<th>ALMOST NEVER/NEVER</th>
<th>ONCE/MONTH</th>
<th>ONCE/WEEK</th>
<th>MORE OFTEN</th>
<th>DK/REF</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Long waits at the bus stop for the bus to arrive?</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
</tr>
<tr>
<td>b. The bus running behind schedule?</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
</tr>
<tr>
<td>c. The bus leaving earlier than the scheduled time?</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
</tr>
<tr>
<td>d. Being passed-up?</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
</tr>
<tr>
<td>e. Overcrowding on the bus?</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
</tr>
<tr>
<td>f. Dirty seats or floors on bus?</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
</tr>
<tr>
<td>g. Feeling unsafe when riding?</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
</tr>
<tr>
<td>h. The bus breaking down?</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
<td>1 2 3 4 9</td>
</tr>
</tbody>
</table>
Q6. Thinking now about your last bus trip on {insert STATUS}, please rate the driver on that bus. For each of the following, please use a scale of 1 to 7, with 1 being "very good" and 7 being "very poor." [CONFIRM DIRECTION OF SCALE ON FIRST RESPONSE AND AS NEEDED]

How would you rate...

<table>
<thead>
<tr>
<th></th>
<th>VG</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The driver’s courtesy?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>b. The driver’s knowledge of the route and connecting routes?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>c. The way he or she drove?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>9</td>
</tr>
</tbody>
</table>
Q7. Did the bus driver call out...

1 - all of the bus stops,
2 - most,
3 - some, or
4 - none of the bus stops?
9 - DK/REF

Q8. On that bus trip, did you have a seat for...

1 - the whole trip,
2 - just part of the trip, or
3 - none of the trip?
9 - DK/REF

Q9. Have you ever used a bike rack on the front of a bus?

1 - YES
2 - NO ——> GO TO Q10
9 - DK/REF ——> GO TO Q10

Q9a. [IF YES:] How often have you done this? Would you say...

1 - rarely,
2 - about once a month,
3 - about once a week, or
4 - more than once a week?
9 - DK/REF

Q10. If you were making the choice, would you choose more bus service or more bus security as your spending priority?

1 - MORE SERVICE
2 - MORE SECURITY
9 - DK/REF

Q11. Again, if you had to make a choice, where do you think security officers are most needed, at bus stops or on buses?

1 - AT BUS STOPS
2 - ON BUSES
9 - DK/REF

[IF STATUS=MTA ONLY]
Q12. How would you rate the LAPD officers and the Sheriffs’ deputies’ law enforcement performance on the MTA buses? Please use a 7-point scale with 1 being "very good" and 7 being "very poor."

________ RATING
9-DK/REF

Q13. Which one would you choose if you were given the following "either/or" choices?

a) Would you choose a bus route with one less transfer, or a route with a quicker overall ride that includes the transfer?

1 - ONE LESS TRANSFER
2 - A QUICKER RIDE
9 - DK/REF

b) Would you choose fewer transfers or lower fares?

1 - FEWER TRANSFERS
2 - LOWER FARES
9 - DK/REF

c) Would you choose less service or higher fares?
This next question asks about stored value cards. They work like prepaid phone cards, except they are used on buses and trains.

You purchase them for a given amount and every time it is used for services, the appropriate cost is automatically deducted.

**[IF STATUS=MTA ONLY]**

Q16. How likely is it that you would purchase a stored value card for MTA service? Please use a 7-point scale with 1 being "very likely" and 7 being "very unlikely."

________ RATING

9-DK/REF

Q17. How likely is it that you would purchase a stored value card that would be recognized by all transit agencies in L.A. County? Please use a 7-point scale with 1 being "very likely" and 7 being "very unlikely."


Q18. These next questions are about MTA's customer information services. Please use a 7-point scale with 1 being "very good" and 7 being "very poor."

How would you rate MTA in terms of...

<table>
<thead>
<tr>
<th></th>
<th>VG</th>
<th>VP</th>
<th>DK/REF</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Availability of bus schedules or timetables?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b. Ease of understanding schedules or timetables?</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>c. Availability of bus maps?</td>
<td>7</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>d. Ease of buying bus tokens or passes?</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>e. Representative’s help at a Customer Center?</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

Q19. Have you ever called 1-800-COMMUTE for information, such as bus routes or fares?

1 - YES
2 - NO ——> GO TO Q20
9 - DK/REF ——> GO TO Q20
Q19a-e. [IF YES:] How would you rate the customer service you received when you called? Use a 7-point scale with 1 being "very good" and 7 being "very poor."

How would you rate the...

<table>
<thead>
<tr>
<th></th>
<th>VG</th>
<th>VP</th>
<th>DK/REF</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Ability to get through to a representative?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b. Speed of response?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c. Courtesy of the customer service representative?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d. Usefulness of the information received?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>e. Timeliness of the information sent by mail?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

[RECORD "9" IF NOT APPLICABLE]

[IF STATUS=MTA ONLY]

Q20. Have you seen or heard anything during the past few months about MTA getting new buses, having more service, or becoming more reliable?

1 - YES
2 - NO
9 - DK/REF

[IF STATUS=MTA ONLY]

Q21. Have you noticed any advertising for transit services in the past year?

1 - YES
2 - NO ——> GO TO Q27
9 - DK/REF ——> GO TO Q27

Q21a-i. [DELETED]

[IF STATUS=MTA ONLY]

Q22. Have you seen or heard the slogan, “It’s Getting Better on the Bus”?

1 - YES
2 - NO
9 - DK/REF

Q22a. [DELETED]

[IF STATUS=MTA ONLY]

Q23. Do you agree or disagree with the slogan that it’s getting better on MTA buses?

1 - AGREE – IT IS GETTING BETTER
2 - DISAGREE – IT’S NOT GETTING BETTER ——> GO TO Q25
3 - TOO SOON TO TELL (VOLUNTEERED) ——> GO TO Q25
9 - DK/REF ————> GO TO Q25
Q24. [IF "GETTING BETTER":] Did any advertising help you notice the improvements on the MTA bus system?

1 - YES
2 - NO
9 - DK/REF

Q25. Are you aware of a cartoon character called "Safety Guy"?

1 - YES
2 - NO
9 - DK/REF

Q26. Do you recall seeing any safety messages recently that involved a soccer player from the L.A. Galaxy?

1 - YES
2 - NO
Q27. Do you have access to the Internet?

1 - YES

2 - NO ——> GO TO Q29

9 - DK/REF ——> GO TO Q29

Q27a. [IF YES:] Have you ever visited MTA’s website?

1 - YES

2 - NO ——> GO TO Q29

9 - DK/REF ——> GO TO Q29

Q27b. [IF YES:] Please tell me if you have used any the following website features. Have you used the...

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>DK/REF</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Trip Planner?</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>b. Timetables?</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>c. Service Changes?</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>d. System Maps?</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>e. Pass or Token Sales Directory?</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>f. Customer Comment Form?</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>g. Stakeholders Page?</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>h. Pressroom or Press Releases?</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>
Q28. [DELETED]

These last questions are for comparison purposes only.

Q29. How many cars, vans, trucks, and motorcycles in running condition are kept at home for use by members of your household?

_________ VEHICLES

99-DK/REF

Q30. Do you currently have a valid driver’s license?

1 - YES
2 - NO
9 - DK/REF

Q31. Including yourself, how many people live in your household?

_________ PEOPLE

99-DK/REF
Q32. Including yourself, how many are 18 years of age or older?

_______ AGE 18+

99-DK/REF

Q33. What is the primary language spoken at home? [RECORD ONLY ONE]

1 - ENGLISH
2 - SPANISH
3 - VIETNAMESE
4 - CHINESE
5 - KOREAN
6 - TAGALOG
7 - OTHER, SPECIFY: _________________________________

9 - DK/REF

Q34. [DELETED]

Q35. What was the highest grade or year of school that you have completed and received credit for? [READ ONLY AS NEEDED; CLARIFY DEGREE EARNED AS NECESSARY]

1 - less than high school,
2 - some high school,
3 - high school graduate (or G.E.D.),
4 - some college, trade or vocational school,
5 - graduated college with a Bachelor's degree, or
6 - some graduate work beyond a Bachelor's degree?
9 - DK/REF

Q36. How many years have you lived in Los Angeles County?

__________ YEARS
0-LESS THAN 6 MONTHS
99-DK/REF

Q37. How many years have you been using {insert STATUS} bus service?

__________ YEARS
0-LESS THAN 6 MONTHS
99-DK/REF

Q38. How many years have you been using your current bus line?

__________ YEARS
0-LESS THAN 6 MONTHS
Q39. Other than what we've already talked about, is there something that you think would make
{insert STATUS} service even better?

_________________________________________________________________

_________________________________________________________________

99-DK/REF/NOTHING

Q40. I'd just like to confirm that I'm speaking with...

[CONFIRM NAME FROM ON-BOARD BUS SURVEY DATA]

RESPONDENT NAME: ________________________________

and that you live at... [CONFIRM STREET ADDRESS, CITY AND ZIP]

STREET ADDRESS: ________________________________

CITY: _____________________  ZIP: _____________

[IF STATUS=MTA ONLY]
Q41. Would you be willing to provide input to the MTA by being paid $40 plus refreshments to participate in a one and one-half hour discussion group?

1 - YES
2 - NO
9 - DK/REF

Those are all the questions I have. [THANK RESPONDENT AND RECORD ALL INFORMATION BELOW]

TELEPHONE NUMBER: _____________________________

IMPORT FROM SAMPLE RECORD → BUSQID: __________
SAMPLE RECORD#: _________ DATE: __________

TIME ENDED: _______ → LENGTH OF INTERVIEW (LEN): _______ minutes

TELEPHONE INTERVIEWER NAME: ___________________________ TI# _______