# What's Happening? Where Are We? When Do We Get There?

Results of the 2005 Long Island Rail Road Commuter's Council Customer Communication Survey

August 2005

#### Introduction

Communication between transportation providers and their passengers is an essential element of customer service. While effective communication cannot eliminate delays or increase seating capacity, it can enhance passengers' sense of control over the situation and allow them to adapt their personal schedule and choice of route to the situation at hand. The task of effective communication is not as simple as it may seem. While strides are being made, communication remains a problem. Passengers on the Long Island Rail Road range from the first-time rider to the quarter-century commuter, making the balance between too little and too much information problematic. Riders, for their part, understand that not every trip will be perfect, but they do expect to be kept informed.

The Long Island Rail Road Commuter's Council (LIRRCC) conducted this survey at a time of considerable change in the LIRR's communication systems. The introduction of the M7 cars have changed on-board announcements for thousands of riders, and forthcoming improvements to the LIRR's communication technology promise to greatly improve station communication through Audio/Visual Paging System installation and upgrades. In addition, the LIRR Transportation Department has recently greatly emphasized customer communication with its on-board personnel.

Improved communication will be necessary to deal with changes in ridership patterns expected in coming years. Economic growth on Long Island is already fueling increased demand for reverse peak service on the Rail Road. In addition, projects such as East Side Access and the Main Line Corridor Improvements Project promise to provide riders with more choices, but also with a greater need for information about those choices.

#### Methodology

The announcement survey was conducted in a two-month period between April 16 and June 15, 2005. Long Island Rail Road Commuter's Council members traveled on the LIRR as they normally would, recording the date, origin, destination, and boarding time of each trip segment that they completed. Once on the train, members recorded instances where upcoming stops were not announced. Where there was a delay or a disruption to service, members also recorded the content, clarity, accuracy, and timing of announcements that were made. The appendix of this report contains the instructions given to the surveyors.

Because the survey relied on information collected in the course of the members' normal course of travel, these results cannot be taken as representing customer communication on the LIRR as a whole. Our members did not travel on all parts of the system; several branches and portions of branches were not surveyed. Also, even in the segments of the system that the LIRRCC surveyed, our observations do not constitute a statistically valid random sample of all trips. As is the case with most commuters, the trains that our members ride are highly dependent upon their daily schedules and are not randomly selected. At the same time, our members' commuting patterns are fairly typical, and their observations would be shared by a typical rider.

Our observations of communication during service disruptions are likewise related to the travel patterns of LIRRCC members. The incidence of communication problems related to service disruptions depends upon the frequency and nature of service disruptions on the trip segments traveled during the survey period. Where members encountered fewer service disruptions, they had fewer opportunities to report communication problems. Because lines and directions of travel differ in their frequency of service disruption, this also partially explains differences in rates of communication problems between these categories.

As a result, the information collected in this survey is best viewed as a snapshot in time that highlights common customer communication issues on the LIRR. It should not be taken as a definitive, statistically robust study of customer communication on the Rail Road as a whole.

#### **Overall Results**

The survey includes observations from 463 trip segments. Members reported at least one communication problem in 32 percent of these segments. At least one on-board communication problem was reported in 30 percent of the observations, while 3 percent of the trip segments had communication problems on the platform. The most frequent communication problem was lack of stop announcements, noted on almost 19 percent of trip segments.

Closely following was the problem of inoperative train message boards, cited on 18 percent of trip segments. Many of these observations, however, stem from chronic problems with message boards on double-decker cars, which were primarily reported by a single member who frequently rides these cars. Other on-board communication problems include a lack of delay announcements, reported on 3 percent of trip segments, and inaudible or not understandable announcements, found on 1 percent of trip segments. On the platforms, members reported problems with message boards on 1.5 percent of trip segments and a lack of delay announcements in almost 1 percent of trip segments surveyed.

| On-Board  | 1            |              |              |              | On Board | Trips with |
|-----------|--------------|--------------|--------------|--------------|----------|------------|
| Duablance | No Stop      | No Delay     | Inaccurate   | Inaudible    | Sign     | On Board   |
| Problems  | Announcement | Announcement | Announcement | Announcement | Problem  | Problem(s) |
|           | 18.57%       | 3.02%        | 0.22%        | 1.08%        | 18.36%   | 30.45%     |

| In-Station | N. 51.16                 | No Platform           |                         | Inaudible                | Message            | Trips with               |
|------------|--------------------------|-----------------------|-------------------------|--------------------------|--------------------|--------------------------|
| Problems   | No Platform Announcement | Delay<br>Announcement | Inaccurate Announcement | Platform<br>Announcement | Board<br>  Problem | In Station<br>Problem(s) |
|            | 0.22%                    | 0.86%                 | 0.43%                   | 0.22%                    | 1.51%              | 3.02%                    |

#### **Inbound Versus Outbound Trips**

The direction of travel appears to have some impact on the quality of announcements that are delivered to riders. Traveling inbound, 26 percent of trip segments had at least one onboard announcement deficiency, compared with 36 percent of outbound trip segments with at least one on-board announcement problem. A lack of on-board stop announcements, however, was cited on over 80 percent of inbound trip segments with announcement deficiencies, while a lack of on-board stop announcements was found in just over 40 percent of outbound trip segments with announcement problems.

The overall frequency of unmade stop announcements was about 40 percent higher on inbound trains compared with outbound trains. This is somewhat understandable, as few inbound travelers disembark at intermediate stations along the line, but a lack of stop announcements can be confusing to those riders who are traveling to intermediate stations, especially if they are unfamiliar with the LIRR. Otherwise, the incidence of announcement problems was generally higher on outbound trips than on inbound trips.

| On-Board<br>Problems | No Stop<br>Announcement | No Delay<br>Announcement | Inaccurate Announcement | Inaudible<br>Announcement | On Board<br>Sign<br>Problem | Trips with<br>On Board<br>Problem(s) |
|----------------------|-------------------------|--------------------------|-------------------------|---------------------------|-----------------------------|--------------------------------------|
| Inbound Trips        | 21.21%                  | 2.27%                    | 0.00%                   | 0.76%                     | 17.42%                      | 26.14%                               |
| Outbound Trips       | 15.08%                  | 4.02%                    | 0.50%                   | 1.51%                     | 19.60%                      | 36.18%                               |

| In-Station Problems | No Platform<br>Announcement | No Platform<br>Delay<br>Announcement | Inaccurate<br>Announcement | Inaudible<br>Platform<br>Announcement | Message<br>Board<br>Problem | Trips with<br>Station<br>Problem(s) |
|---------------------|-----------------------------|--------------------------------------|----------------------------|---------------------------------------|-----------------------------|-------------------------------------|
| Inbound Trips       | 0.38%                       | 0.76%                                | 0.00%                      | 0.38%                                 | 1.52%                       | 2.65%                               |
| Outbound Trips      | 0.00%                       | 1.01%                                | 1.01%                      | 0.00%                                 | 1.51%                       | 3.52%                               |

#### **Observations by Line**

Council members collected observations on trains running between the City Terminal Zone and four branches or lines: the Babylon Branch, the Main Line, the Port Washington Branch, and the Ronkonkoma Branch, as well as on other trains running through the City Terminal Zone. When members' trip segments both originated and terminated within the City Terminal Zone, we did not attempt to determine the originating or terminating line or branch of the train, but classified them as "City Terminal Zone" trip segments. When trip segments had an origin or destination on one of the branches or lines, the trip segment was classified according to that origin or destination of the trip segment.

Trip segments on the Babylon and Ronkonkoma branches had substantially higher frequencies of reported communication problems than on the other three lines. At the other end of the spectrum, there was a relatively low proportion of trips with reported communication problems on the Port Washington Branch. This result is not unexpected, as

the Port Washington Branch is relatively self-contained and does not include connections at the Jamaica terminal.

The unusually high reported incidence of deficiencies in on-board communication on Babylon Branch trains is largely due to a high proportion of non functioning on-board message signs on double-decker cars, which were reported by one Council member who frequently rides trains using this equipment. This member reports that since the survey period, the performance of on-board message signage has seen a slight improvement. It should be noted that the frequency of reported problems on the Babylon Branch would have been relatively high even were on-board sign problems not taken into consideration.

| On-Board<br>Problems | No Stop<br>Announcement | No Delay<br>Announcement | Inaccurate<br>Announcement | Inaudible<br>Announcement | On Board<br>Sign<br>Problem | Trips with On Board Problem(s) |
|----------------------|-------------------------|--------------------------|----------------------------|---------------------------|-----------------------------|--------------------------------|
| Babylon              | 23.12%                  | 3.76%                    | 0.54%                      | 1.08%                     | 43.01%                      | 46.77%                         |
| City Terminal Zone   | 14.63%                  | 0.00%                    | 0.00%                      | 4.88%                     | 4.88%                       | 21.95%                         |
| Main                 | 10.00%                  | 1.25%                    | 0.00%                      | 0.00%                     | 2.50%                       | 12.50%                         |
| Port Washington      | 8.54%                   | 1.22%                    | 0.00%                      | 0.00%                     | 0.00%                       | 9.76%                          |
| Ronkonkoma           | 29.73%                  | 6.76%                    | 0.00%                      | 1.35%                     | 1.35%                       | 36.49%                         |

| In-Station         |              | No Platform  |              | Inaudible    | Message | Trips with |
|--------------------|--------------|--------------|--------------|--------------|---------|------------|
| Duablance          | No Platform  | Delay        | Inaccurate   | Platform     | Board   | Station    |
| Problems           | Announcement | Announcement | Announcement | Announcement | Problem | Problem(s) |
| Babylon            | 0.00%        | 1.61%        | 0.54%        | 0.00%        | 3.23%   | 4.84%      |
| City Terminal Zone | 2.44%        | 0.00%        | 0.00%        | 0.00%        | 0.00%   | 2.44%      |
| Main               | 0.00%        | 1.25%        | 0.00%        | 1.25%        | 0.00%   | 2.50%      |
| Port Washington    | 0.00%        | 0.00%        | 0.00%        | 0.00%        | 0.00%   | 0.00%      |
| Ronkonkoma         | 0.00%        | 0.00%        | 1.35%        | 0.00%        | 1.35%   | 2.70%      |

#### Conclusions

While the LIRR is making strides in improving its communication with customers, our survey shows that work remains to be done. In particular, the Rail Road should work to ensure that upcoming stops are announced early enough to allow passenger to prepare to alight from the train. The emphasis on frequent communication with passengers in the case of service disruptions should continue, as should improvements in communication technology that will permit the Rail Road to more effectively transmit information to their customers. Good customer communication cannot substitute for operational efficiency, but it can go a long way toward making the LIRR passenger's experience a pleasant one.

## Appendix Survey Instructions

#### **MEMORANDUM**

**TO:** LIRRCC Members

**FROM:** Bill Henderson

Associate Director

**RE:** Communications Research Project

**DATE:** April 14, 2005

As was discussed at the February LIRRCC meeting, our 2005 research project will document the quality and content of announcements at stations and on board trains. Members will gather information in their normal course of riding the LIRR; no special trips will be required. We will focus on three classes of announcements: on board announcements of upcoming stops, on board announcements about delays or service disruptions, and station announcements about delays or service disruptions. You should record observations in spiral bound books of index cards ("observation books"), which will be furnished to LIRRCC members. The project will begin April 16 and continue through June 15.

As part of the project, you should log each trip that you make on the LIRR on the last page and inside and outside back cover of the observation book. We need this information to establish how frequently communication problems occur. You should then complete an observation record whenever there is a delay or service disruption for which announcements are made, whether you are at a station or on board, and for each trip where the crew fails to announce at least one upcoming station. If more than one delay or service disruption is announced in a trip, use a separate card for each delay or disruption. Follow the format shown on the inside front cover of the observation book in completing each observation record.

### (Inside Front Cover of the Survey Instruction Book)

## Please log each trip you take on the LIRR on the inside/outside back cover of this book.

Use one card per observation. On the top of each card, you should record:

Day, date, and time of the observation Name of station (if applicable) Train and car number (if applicable) Direction of travel (if applicable) Type of observation (Stop Announcement or Delay/Service Disruption)

For On Board Stop Announcements record any stops not announced.

For Delay or Service Disruption Announcements (on board or at station) record:

a summary of the announcement whether the announcement detailed the nature of the delay or disruption how often the announcement was repeated whether the announcement stated the expected length of delay whether the announcement was clear and easy to understand whether the information in the announcement was accurate