

METHODS OF RIDER COMMUNICATION

SUMMARY Access to transit services is dependent on the effectiveness of communicating information to existing and potential riders. Furthermore, the effectiveness of this communication is one of the most critical factors determining customers' perception of the services provided by transit agencies. In ridership surveys conducted by agencies across the United States, customers are often asked to rate the performance of the system in terms of rider communication. For example, 2005 ridership surveys conducted for several transit agencies included specific questions that addressed each agency's performance in terms of communicating with riders and which methods of communication were most effective.

Communications play a significant role in transportation agencies striving to build new ridership and maintain existing riders. In addition to common communications, such as maps and timetables, there are several types of communications that contribute to what is considered "high-quality service," which can maintain existing riders and attract potential new riders. High-quality service includes not only improved elements of transit services, such as reduced travel times and improved service reliability, but also direct customer service elements, such as real-time arrival and departure information, on-board information and amenities (e.g., wireless Internet), and automated fare payment.

Given this background, the primary purpose of this synthesis is to document effective methods of communicating with riders. This synthesis reviews the state of the practice in agency communications with customers using the following elements as a way to determine what constitutes successful communication:

- Who the agency is communicating with and where they are located;
- Content, format, and accessibility of communication;
- Communication timing and frequency;
- Communication dissemination media and access; and
- Capital, and operations and maintenance costs associated with communication.

There is a wealth of literature on the subject of rider communication, and three major conclusions were derived from the literature review. First, customer needs for communication and their access to information is fairly well understood. Second, the literature confirms that it is a challenge to measure the effectiveness of communication. Finally, there is a distinct difference between the United States, and European and Asian experience in using electronic media to disseminate communication. Just as public transit is embraced more in Europe and Asia than it is in the United States, the use of technology, such wireless application protocol devices and short message services (text messaging) is more prevalent in Europe and Asia than it is in the United States.

The survey conducted as part of this synthesis covered the most fundamental elements of communicating with riders: characteristics of the communication (content, format, accessibility, frequency, and timing); types of riders receiving the communication; dissemination media and access methods; and costs associated with communication. Surveys were received from 33 transit agencies, including two from international agencies. Annual ridership ranged

from 276,000 (paratransit-only respondent) to 425,000 (rail-only respondent) to 95.8 million (multi-modal respondent) and 685.3 million (for an international respondent).

Many agency communications programs include technology, including automated transit information. The term automated transit information covers both static (e.g., schedules and fares) and dynamic information (e.g., real-time bus arrival time) provided through an automated means at various stages of a trip (pre-trip, en-route, on-board). This information can be disseminated using a variety of media, including 511 systems (the Federal Communications Commission-designated phone number for regional and statewide traveler information in the United States), land and mobile telephones, interactive voice response (IVR), Internet, cable television, pagers, personal digital assistants, kiosks, e-mail, electronic dynamic message signs (DMSs) at stops or stations, and on-board DMSs. As of 2004, a total of 488 U.S. transit agencies had implemented an automated transit information system. The majority of these systems have been deployed for the pre-trip stage of a journey (90%).

Nearly all of the survey respondents provide the following types of communication to their riders:

- Operational information (e.g., route detours),
- Route and schedule information,
- Proposed service changes,
- Public meeting information,
- Security,
- Safety (e.g., mind the gap),
- General information (e.g., how to ride and fare information), and
- Transit in the community (e.g., transit agency teamed with local business).

There is considerable variation in the content and frequency of communication as reported by the survey respondents. In terms of operational information, the most prevalent provided in real-time is next vehicle arrival and departure time. The most prevalent information provided periodically and on a one-time basis concerns detours and delays. The next most prevalent type of operational information provided on a one-time basis is trip and/or connection time.

As expected, general information is the most prevalent of all rider communications. Under safety and security, reminders about suspicious activities and packages were the most common under the periodic category.

The most prevalent dissemination media used by the survey respondents included hard-copy, Internet, telephone, and static signs at stops and stations. The methods used to determine the content of rider communication is summarized as follows. For operational and general information, complaint information provides the majority of input to determining content. Consulting with riders is the next most common method of determining the content of operational and general information.

In terms of costs, data were collected on the capital and operations and maintenance costs of several communications methods. The data reported by agencies were limited, indicating that either agencies are not fully aware of the costs and/or the costs of specific systems could not be separated from larger capital purchases.

This synthesis revealed that agencies have used various types of campaigns to communicate specific information to existing and potential riders, and brief descriptions of sample programs being used by responding agencies are reported. In addition, responding agencies reported many innovative programs to maintain and attract riders, and nearly two-thirds of the agencies

reported programs and/or goals that use technology, such as DMSs at stops and stations and information provided by means of various media.

The survey included five specific questions on how an agency determines the effectiveness of its rider communications. First, a majority of responding agencies reported that they conduct surveys of riders to determine if the communication reached the market for which it was intended. Second, most responding agencies noted that they consult with an advisory committee to determine if the communications are accessible. Third, the use of surveys and rider feedback accounted for the majority of responses as to how agencies determine if the communications were understandable. Fourth, rider feedback through focus groups, citizen advocacy groups, and surveys was used to determine timeliness; however, employee monitoring and feedback were also noted as useful methods. The final factor in communications effectiveness is determining whether the changes that were expected as a result of the communication (e.g., increased ridership) actually occurred. The survey instrument is shown in Appendix A.

Several quantifiable measures were used by responding agencies, including ridership statistics, volume of calls to customer information, number of complaints, and hits on the website. Several other agencies use surveys and overall service monitoring to ensure that routes are productive and that ridership levels are remaining stable or increasing.

Key lessons learned from agencies regarding the use of electronic media to disseminate communication and the effectiveness of communications covered a wide variety of issues, including organizational, technical, and operational factors. The following technical factors are summarized here:

- Maintenance of current and accurate information can be more resource-intensive and expensive than providing the information.
- There should be a simple method for riders to update their e-mail addresses and other electronic information.
- Server hosting needs should be outsourced. It is much more reliable to host the communication technologies in an off-site, secure environment.
- On-street equipment must be damage-proof from deliberate acts of vandalism, and weatherproofed from extreme weather conditions.
- Procure only transit-specific products, equipment, and services that can be modified with minimal effort.
- Anticipate growth and the need for adequate systems capacity.
- Consider alternatives to an IVR system, because it can take much time and money to implement, and because there is a limit to the amount of information that can be effectively communicated by means of an IVR.

The organizational factors can be summarized as follows:

- The communications department must be in charge of the content of electronic communications, because it is a communications function, not a technology infrastructure function.
- Partnering with business is a strategy that not only saves money, but increases the effectiveness of communications.
- The maintenance of any system requires multidisciplinary approaches. An information technology person who does not understand transit cannot create or maintain an effective information system. Creating a strong team approach is the best method to make communications products functional and effective.
- An agency should consider the post-project maintenance of hardware and software. An agency should know the cost of repair, maintenance, and replacement before any system is procured.
- Proper training of all staff in good customer relations is a necessity when electronic communications fail.

The operational lessons learned can be summarized as follows:

- Ensure that internal processes and resources for delivering a consistent quality of information are in place.
- Conduct pre-project research.
- Perform quality control of vendors.
- Provide consistent, simple messages.

The six key conclusions resulting from the synthesis are summarized here:

- Agencies need to take into account a variety of factors when determining the most effective method of communicating with riders. These include the stage of the travel chain in which the communication is needed and the demographic characteristics of the communications recipients, and their ownership of and ability to use technology.
- If technology is used to communicate with riders, agencies must establish a process for testing and monitoring the accuracy and timeliness of the communications.
- The selection of appropriate dissemination media is based on not only the content of the communication but also the demographics of the riders.
- An agency should have an “information strategy” to ensure effective communication.
- Agencies should ensure that internal processes and resources are in place for delivering a consistent quality of information.
- Maintaining or increasing ridership should not be the only metric that determines the effectiveness of communications.