Transit Cooperative Research Program
Project J-7, Topic SH-05

On-Board/Intercept Passenger Survey Techniques
Study Questionnaire

This questionnaire should be completed by the transit system manager responsible for on-board and intercept surveys. Please forward this questionnaire to that person as necessary. If multiple departments or divisions conduct on-board or intercept surveys (e.g., a different department conducts origin and destination surveys than customer satisfaction surveys), please have the appropriate department complete pages 1-3 and both departments complete pages 3-10 for surveys for which they are responsible.

Note to Individual Filling Out This Questionnaire:

My sincere thanks for taking the time to fill out this questionnaire. The information that you and others from different transit systems provide will offer all of us valuable insights into on-board and intercept passenger survey techniques. This study is on a fast track to bring you results and we will be happy to notify you by email when the study is printed.

Please complete this questionnaire as quickly and completely as you can. If you don't have all the information available, please send what you do have now and forward any additional information when it becomes available. Thanks again for your time and effort.

This questionnaire can be completed on-line and I encourage you to do so. Go to www.schallerconsult.com/onboard and click the link on that page to access the on-line version of this survey.

Return by December 15, 2004, to:

Bruce Schaller
Schaller Consulting
94 Windsor Place
Brooklyn, NY 11215
Voice: (718) 768-3487
Fax: (718) 768-5985
schaller@schallerconsult.com

Your Name: _________________________________________________________
Title: ______________________________________________________________
Department: _________________________________________________________
Transit Agency: _______________________________________________________
Street Address: _______________________________________________________
City, State, ZIP: _____________________________________________________
Phone: ______________________     Email: _______________________________
Part I. Survey Practices

1. What survey methodologies has your agency used in the past 3 years? (Check all that apply)
   - Telephone survey
   - On-board surveys (conducted on buses, rail cars, etc.)
   - Intercept surveys (conducted at bus stops, in subway stations, etc.)
   - Mail surveys
   - Web-based surveys
   - Other: _______________________

2. For customer satisfaction and customer opinion studies, what survey methodologies has your agency used in the past 3 years? (Check all that apply)
   - Telephone survey
   - On-board surveys (conducted on buses, rail cars, etc.)
   - Intercept surveys (conducted at bus stops, in subway stations, etc.)
   - Mail surveys
   - Web-based surveys
   - Other: _______________________

3. For origin and destination studies:
   a) What year was an origin and destination (O&D) study last conducted?
      ________ (year)  ___Check if have not conducted O&D study
   b) What year was the previous origin and destination study conducted?
      ________ (year)  ___Check if have not conducted O&D study
   c) What survey methodology(ies) were used? (Check all that apply)
      - Telephone survey
      - On-board surveys (conducted on buses, rail cars, etc.)
      - Intercept surveys (conducted at bus stops, in subway stations, etc.)
      - Mail surveys
      - Web-based surveys
      - Other: _______________________

On-board and intercept surveys:

4. How often does your agency conduct any type of on-board or intercept survey?
   - Several times a year: About how many per year? ______
   - About once a year
   - About once every 2 years
   - About once every 3 years
   - About once every 4 years
   - In excess of every 4 years
5. Who has conducted fieldwork (handing out and collecting surveys and interviewing) for on-board and intercept surveys in the past 3 years? (Check all that apply)
   __ Transit agency staff
   __ Consultants
   __ Academia

6. Who has conducted analytic tasks for on-board and intercept surveys in the past 3 years? (Check all that apply)
   __ Transit agency staff
   __ Consultants
   __ Academia

7. What are the top 1-5 reasons that you use an on-board or intercept methodology instead of a different survey methodology?
   __ Lower cost
   __ Faster turnaround
   __ Ability to obtain a representative sample of the desired population
   __ Ability to target specific routes, customer segments, etc.
   __ Higher response rate
   __ Better information (accuracy, reliability, detail) from respondents
   __ Ability to survey during the immediate experience of the service
   __ Availability of staff
   __ Availability of consultants
   __ Other: _________________________________________
   __ Do not conduct on-board/intercept surveys

8. When you use a different methodology, what are the top 1-5 reasons that you use a different survey methodology rather than an on-board or intercept survey?
   __ Lower cost
   __ Faster turnaround
   __ Length and/or complexity of survey
   __ Ability to obtain a representative sample of the desired population
   __ Ability to target specific routes, customer segments, etc.
   __ Need to include non-users in study
   __ Higher response rate
   __ Better information (accuracy, reliability, detail) from respondents
   __ Availability of staff
   __ Availability of consultants
   __ Other: _________________________________________
   __ Do not conduct other types of surveys

NOTE: If you have not conducted any on-board or intercept surveys in the past 5 years, please check here and return pages 1-3 of the survey. _____
Otherwise, continue with Part II.
Part II. Experience With On-Board/Intercept Surveys

Complete this section for a specific on-board or intercept survey conducted by your agency. Please make photocopies of this section to complete for up to 2 additional on-board and/or intercept surveys completed by your agency. (The on-line version also allows you to report on multiple surveys.)

For each survey, attach the survey questionnaire, instructions to survey staff and/or respondents, and explanations of the questionnaire design, sampling method, response rate and other aspects of methodology, fieldwork, data processing and data analysis.

We are especially interested in origin and destination (O&D) surveys conducted by your agency. If a different person/department conducted O&D survey(s), please ask them to complete a copy of Part II of the questionnaire (paper or on-line).

1. Name of survey project: _______________________________________________

2. What was the purpose of the study?

__________________________________________________________________
__________________________________________________________________

3. What method(s) were used to complete the survey? (check as many as apply)
   __ Hand out questionnaire, self-administered and returned to survey staff
   __ Hand out questionnaire, self-administered and mailed back
   __ Interviews conducted by survey staff
   __ Seat drops (surveys left on seats and mailed back or returned at designated location)
   __ Other: __________________

4. What modes were surveyed? (Check all that apply)
   __ Bus
   __ Subway
   __ Light rail
   __ Commuter rail
   __ Paratransit
   __ Other: __________________

5. Who distributed the survey instrument?
   __ Survey staff assigned for this purpose
   __ Bus operators
   __ Other: __________________
6. What was the timeline for the project?

<table>
<thead>
<tr>
<th>Phase of research</th>
<th>Month(s) and year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey design</td>
<td></td>
</tr>
<tr>
<td>Data collection</td>
<td></td>
</tr>
<tr>
<td>Data cleaning/data processing</td>
<td></td>
</tr>
<tr>
<td>Analysis/report-writing</td>
<td></td>
</tr>
<tr>
<td>Report completed</td>
<td></td>
</tr>
</tbody>
</table>

7. Who carried out each of the following phases of the research process for this project?

<table>
<thead>
<tr>
<th>Phase of research</th>
<th>In-house staff</th>
<th>Consultant/contractor</th>
<th>Academic institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey design</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Data collection – permanent staff</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Data collection – temporary workers</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Data cleaning/data processing</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Analysis/report-writing</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

8. What was the approximate cost of the survey, including analysis and report-writing? (Please provide best estimate if exact costs or hours are not known.)

- Consultants/contractors $________
- In-house professional staff $________ or ________ hours
- In-house clerical staff $________ or ________ hours
- In-house field staff $________ or ________ hours

9. Were passengers notified in advance of the survey through the media, on-board posters, announcements, etc.?
   __ Yes: How? _________________________________
   __ No

10. Describe length and nature of training of survey staff

   __________________________________________

11. Were any steps taken to ensure the physical safety of the survey staff?
   __ Yes: Describe: _____________________________________________________________
   __ No
12. What was the survey universe? (e.g., all bus riders, all commuter rail riders, riders on particular lines, weekend subway and bus riders, etc.)

__________________________________________________________________

13. Was stratification (random selection within “strata” such as bus routes, time of day) used in the sample design?
   __ Yes: Describe: ________________________________________________
   __ No

14. Were weights or expansion factors used (to improve representativeness of results)?
   __ Yes: Describe: ________________________________________________
   __ No

15. What languages was the survey offered in?
   __ English only
   English and:
   __ Spanish
   __ Chinese
   __ Other: _______________________________

16. Did you offer incentives to induce higher response rates, (e.g., free bus tokens)?
   __ Yes: Describe: ________________________________________________
   __ No

17. Where was surveying conducted? (Check all that apply)
   Bus:  __On-board   __Bus stops   __Transit center(s)
   Rail: __On-board   __Stations   __Transit center(s)
   Paratransit: __On-board
   __ Other: ________________________

18. During what times of day was surveying conducted? (Check all that apply)
   __ All times that service operates (also check applicable time periods)
   __ AM peak
   __ Midday
   __ PM peak
   __ Evening
   __ Late night

19. On what days was surveying conducted? (Check all that apply)
   __ Monday  ____ Friday
   __ Tuesday  ____ Saturday
   __ Wednesday  ____ Sunday
   __ Thursday
20. Describe how routes or stations were selected for sampling

______________________________________________________________________________

______________________________________________________________________________

21. Did you pretest the survey questionnaire?
   __ Yes
   __ No

22. On how many days was the survey fielded? _________ (days)

23. How many surveys were:
   a) Distributed: _____
   b) Returned: ______
   c) “Complete” using your definition: _____

24. How many were completed in each language?
   English ______
   Spanish ______
   Chinese ______
   Other:_______________________: ____ # completed

25. What was the overall response rate? _________ percent

26. How did you measure the base used to calculate the response rate?
   __ Passenger counts
   __ Number of surveys distributed
   __ Number of persons approached by interviewers
   __ Other: _________________________

27. Describe whether you found differences in response rate by route, station, language, time of day, day of week, etc.

______________________________________________________________________________

______________________________________________________________________________

28. Did you use any procedures to ensure that surveys were completed by respondents (not made up by survey staff)?
   __ Yes: Describe:_________________________________________________________________
   __ No
29. Were characteristics of survey respondents compared with any of the following to evaluate the quality of the sample?

- [ ] Census data
- [ ] On and off counts (stop/station level data)
- [ ] Ridership (e.g., route level data)
- [ ] Other: _____________________________________
- [ ] If yes to any of the above, briefly describe data used:
  ______________________________________________________________

**IF THIS WAS NOT AN ORIGIN AND DESTINATION STUDY, SKIP TO Q.33**

30. What steps did you take in processing the data to obtain valid/usable addresses?

- [ ] O&D direction logical with bus/train trip direction
- [ ] Speed of trip (MPH) logical for OD distance and time of trip provided by respondent
- [ ] Speed and distance reasonable for Origin-Boarding and Alighting-Destination pairs based on mode of access/egress (e.g., don’t walk 20 miles or at 60MPH).
- [ ] Verified addresses/intersections using GIS software
- [ ] Looked at route/line used for trip
- [ ] Used landmark listing
- [ ] Used logic or consistency checks
- [ ] Other: _____________________________________________________________________
- [ ] Other: _____________________________________________________________________

31. What standard was used to consider O&D data complete?

- [ ] All origin/destination data complete and could be coded
- [ ] Percentage of origin/destination data complete and could be coded: What percentage? _____
- [ ] Other: _____________________________________________________________________

32. How was origin/destination data used? (Check all that apply):

- [ ] Route planning
- [ ] Schedule planning
- [ ] Long-range planning
- [ ] Modeling
- [ ] Other: ______________________

33. Did you implement any editing procedures or other steps in data cleaning/data processing to ensure accuracy?

- [ ] Yes: Describe: _____________________________________________________________________
- [ ] No
34. What standard did you use to consider the survey “complete” and usable in the results? (in addition to O&D-specific considerations reported in Q. 31)
   __ All questions answered
   __ Percentage of questions answered: What percentage? ___
   __ Other: _____________________________

35. What software did you use in data input, data processing and data analysis? (Check all that apply)
   __ SPSS
   __ SAS
   __ Microsoft Excel
   __ Microsoft Access
   __ Wincross
   __ Other: _____________________________

36. Describe any innovative aspects to this project:

   ____________________________________________
   ____________________________________________
   ____________________________________________

37. Overall, how would you assess the accuracy and usefulness of the survey results?

   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________

38. What affected the quality of the data collected in this survey (for better or worse)?
   (In answering this question, you might think about design of the sample, questionnaire length, wording of questions, languages used in administering the survey, where/when survey was conducted, who distributed survey, method of collecting survey from respondents, staff used (in-house, contracted), incentives.)

   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________
39. Describe any “things to do again” that you learned or used in this survey:

____________________________________________________________

____________________________________________________________

____________________________________________________________

40. Describe any “things not to do again” that you learned in this survey:

____________________________________________________________

____________________________________________________________

____________________________________________________________

41. Provide name and contact information for any follow-up questions specific to this survey:
   __ Same as person named on page 1.
   __ Other person:

   Name: ________________________________________________

   Phone: ________________________________________________

   Email address: _________________________________________

Thank you for completing this section. Please include:
   • Questionnaire for survey described above
   • Instructions to survey staff
   • Written explanations of the methodology, data collection, etc.

Please return this questionnaire (paper or on-line) and documentation (by mail or email) by December 15, 2004 to:

  Bruce Schaller
  Schaller Consulting
  94 Windsor Place
  Brooklyn, NY  11215
  Voice: (718) 768-3487
  Fax: (718) 768-5985
  schaller@schallerconsult.com

THANK YOU FOR YOUR COOPERATION!