Institute for Civil Infrastructure Systems

Guidelines for Conducting Focus Groups
and
ICIS Focus Group Facilitator's Guide

Prepared by

Howard/Stein Hudson Associates

for

The Institute for Civil Infrastructure Systems (ICIS)

July 15, 2000

Table of Contents

Preface

This report discusses the origin, purpose, and uses of the focus group technique, along with how to plan, conduct, follow-up and use the results of focus groups. This first section excerpts material prepared by the authors from a report that was part of the National Cooperative Highway Research Program (NCHRP) conducted by the Transportation Research Board, with the approval of the Governing Board of the National Research Council. Specifically, it is from Project 20-24(10), Research Report 376, Customer-Based Quality in Transportation, National Academy Press, Washington, D.C., 1995. The authors gratefully acknowledge permission to use the material within this guide. The only changes that have been made to the original text are renumbering and structuring sections to fit within the format of this document and broadening original references to transportation and transportation agencies to refer more generally to those organizations and agencies that own and/or operate infrastructure facilities.

The facilitator's guide used to carry out the ICIS focus groups is included in the second section of this report. This is the actual guide used by the facilitator, so readers will note use of the present tense in the guidelines. The facilitator’s guide also includes bracketed instructions and other notes to guide the facilitator in what specific things to do in a particular way and at a particular time in the agenda.

This material is based upon activities supported by the National Science Foundation under Cooperative Agreement No. CMS9728805. Any opinions, findings, and conclusions or recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

Guidelines for Conducting Focus Groups

Introduction

These guidelines have been developed to assist organizations in effectively using focus groups as part of their regular activities. The format is presented as a simple "how to" guide as well as a brief discussion about the various choices that can be made in planning and conducting focus groups, along with the context and pros and cons of different choices. The guidelines are geared to the needs of users who are familiar with continuous quality improvement principles and customerbased quality (CBQ) and who also have a passing familiarity with group process and facilitation dynamics.

The guidelines are organized into four major sections, beginning with background on what focus groups are and when and why they are used, followed by sections dealing with planning focus groups, conducting them, and using their results as part of CBQ.

Background Information

What Is a Focus Group?

A focus group is a freeflowing interview with a group of ten to twelve people to gain insight and identify perceptions about a stated agenda of topics. It is held as an informal meeting to encourage discussion and stimulate ideas among participants. It is a qualitative research technique used to identify customers' values, needs, perceptions, and expectations, in order to offer the highest possible quality in facilities, products, and services provided to customers.

Historically, the focus group technique has been used in market research by advertisers and others to gain insight into customers' assessments of new products, television shows, and the like, with the goal of creating products that will sell in the marketplace. In recent years, the technique has been used more and more in public agencies as a means of identifying pertinent issues and needs from the viewpoint of diverse citizens and users of facilities and services.

Organizations are using focus groups in several areas:

- with external customers who use the organization’s facilities and services, to help identify their wants, needs, and expectations for quality;
- with internal customers, such as units or divisions within the organization, to help them serve one another better; and with participants in planning programs, to help identify positions and perspectives of diverse constituencies, along with potential solutions to problems and needs.

When and Why Are Focus Groups Used?

Focus groups are a helpful way for an organization to develop greater understanding of customer values and opinions of what constitutes high quality in its services and programs. They are also useful for understanding the different requirements and perspectives of subsets of customers. Then services and products can be designed around particular user groups' needs, and potential conflicts and competing needs can be anticipated and responded to proactively. In the context of planning for potential services, programs, or facilities, focus groups can be used to help identify opportunities for consensus, particularly for complex actions that affect many different customer groups in different ways. This is particularly so when heterogeneous groups of participants in focus groups hear one another's perspectives and needs.

Focus groups are worthwhile in other ways as well:

- they are an indicator that an organization is listening—and is interested in what its customers think, want, and need;
- they give insight into customers' values and indicators customers use to judge what "quality" is; and
- they are a way to learn what weight and emphasis people attach to their preferences and needs.

Focus groups are especially informative when used as a complement to quantitative techniques, such as surveys. They also provide useful information to supplement technical data developed by an agency. While a solution crafted from quantitative information may appear feasible from a technical standpoint, the qualitative information from customers in a focus group can help the agency understand better whether the solution is wanted and supported by customers and, therefore, whether it is desirable for the organization to implement the solution.

Focus groups can be used to gather before-and-after information during the planning and implementation of new or revised products, services, and facilities:

- focus groups conducted before implementation can test customer reactions and avoid missteps during implementation;
- they can be used to get feedback from users while implementation is underway, in order to make midcourse corrections;
- after implementation of a program or project, the focus group technique can be used to test customer satisfaction and assess how well performance met customer expectations and agency goals.

The focus group technique can be used as a component of public outreach and information strategies in order to "take the pulse" of customers and answer the question, "How are we doing?"

Focus groups can also be conducted periodically in order to gather longitudinal information from customers and see how their assessments of the quality of services change over time. This provides particularly valuable information to supplement other data in an organization’s quality improvement process, where tracking the achievement of performance standards and continuously improving quality are central goals.

Guidelines for Conducting Focus Groups

Planning a Focus Group

The most useful first step in planning a focus group is to mentally look ahead and decide why and how you want to use the results. Starting with this orientation will help avoid wasted effort and will lead most directly to appropriate decisions as you plan and carry out the focus groups. This will also help ensure that focus groups are the most appropriate tool for the intended purposes. A well planned focus group will avoid the wasted effort of conducting focus groups and then not using the findings or realizing, too late, that the desired customer input was not obtained.

Following are useful questions to think through carefully at the earliest planning stages:

- Why do I want to conduct focus groups?
- What do I want to learn from customers?
- How will I use the results?
- From what customers do I need input?
- Is the focus group technique the right tool for the job?
- What needs to happen to make the focus groups most successful?
- When is/are the best time(s) to use them?
- Do I need to use them in tandem with other CBQ techniques or other data collection and technical analysis processes?
- How do I expect they will help improve the quality of performance?
- How will I know if I have been successful?

Once you have determined that you are on the right track in wanting to conduct focus groups, you can proceed with the more detailed steps of preparing for them. Keeping these overall questions in mind as you develop the details will help you to make various choices, such as whether to have heterogeneous groups of customers in the focus groups, how many groups you want, whether you need to spread them around geographically, and so forth.

Anticipate Resource Requirements

Costs for focus groups can vary considerably, so it is worthwhile to consider what resources you have available before moving ahead with detailed planning. While it is possible to spend quite a bit of money, focus groups can also be conducted very successfully while keeping monetary costs to a minimum. If funds are tight, then you will want to plan to conduct the groups in free public spaces, rule out videotaping, serve simple refreshments, and so forth. Details on these and other monetary cost considerations are discussed more in following sections.

Guidelines for Conducting Focus Groups

It requires a considerable amount of time to plan, carry out, and report on focus groups. This includes both the amount of staff time devoted to the effort, as well as lapsed time that you must allow for to get management's approval of topics, invite participants, write the focus group report, and similar tasks. Until you have done five to ten focus groups and have a good feel for how long it takes, you should probably double your estimate of time requirements. It is also worthwhile to have more than one person working on the focus groups to allocate tasks most efficiently, such as conducting follow up calls to invitees, having the benefit of others' thoughts and advice, and having assistance in facilitation and recording activities during the focus group.

Identify Issues for the Focus Group

The next step in the planning stage is to identify the topics you want to cover in the focus group. Usually you will have one overall topic—for example, getting customer feedback on your motor vehicle services—and then three to five subtopics under it. Potential topics include

- a particular service, activity, or product, such as roadside maintenance;
- a project, such as a proposed new interchange along a roadway;
- a program/policy, such as services for disabled customers.

Focus groups on services and products can be as broad or narrow as you need to get the desired customer feedback. You will just need to keep in mind how much can reasonably be covered in a couple of hours. Conducting a focus group about a proposed or existing project allows for discussion about a number of aspects of a project, or even just one if there has been particular controversy in one area. Similarly, for a program or policy, the discussion can be organized to glean information in a general or more detailed fashion. In each case, you may want to have focus groups with a heterogeneous mix of customers; or, if you are trying to flesh out different needs and concerns of customer subgroups of customers, then you will want to tailor the agenda around each subgroup.

Create an Agenda

Once the topics have been decided, create an agenda to fill no more than a two or two-and-a-half-hour period. Participants tend to get tired and restless if a focus group runs longer—and it is hard on the facilitator, too. It is important to remember that one of the goals of the focus group is to stimulate ideas and discussion among the participants, and time must be allowed for this. The agenda should be organized around your three to five topics under your main topic. You will also want to allow for introductions and other opening remarks, plus a wrap-up as the last item to allow time to summarize the main themes of each agenda topic.

Depending on the topics, the introduction may or may not include brief, descriptive information to orient participants to the topic and provide them with a minimal, common base of information from which to start the discussion. One caution is in order here: you want to give only enough information to briefly orient participants. Often, you might be tempted to provide much more information than is necessary, taking away time from discussion and turning the focus group into a presentation meeting. More importantly, this risks biasing the discussion, narrowing the range of participants' comments and the openness and creativity of their responses, or otherwise directing the content of the discussion and, therefore, not really getting the full range of what customers might have to say.

Select a Site

Market researchers and advertisers typically tend to use sophisticated sites with one-way mirrors, videotaping capabilities, and a room for observers. This can be expensive and is not really necessary. Videotaping or audiotaping can be used but will need to capture all participants. While videotaping can initially be intrusive, participants often forget about the camera after some time has elapsed. The expense and potential intrusiveness of videotaping is counterbalanced by the fact that the tapes can be viewed afterwards by more people.

There are a number of other determinants in selecting a site. First, consider geographic location within your state or region, since this will influence the range of participants you get in the focus group, as well as the ease of their access to the focus group. If you want broad geographic diversity and plan multiple focus groups, then hold them in various locations around the area. If you are holding only one or two focus groups and you want this diversity, you may want to make arrangements to assist participants with transportation to the site. Add any expense for this into your cost estimate.

The second siting choice is the meeting facility itself, and you will want to consider these features:

- *Facility:* the focus groups can certainly be held at the agency's own premises, but it should be in a relaxed and comfortable setting—not, for example, in a public hearing room.

- *Accessibility:* the site should be accessible to the disabled community and by public transit.

- *Parking*: There should be parking adjacent to the site.

- *Room:* The room should comfortably fit ten to twelve people around a table, conference style.

- *Recording the session:* Audiotaping or videotaping should be provided to record what was said, so that a written report of the session is accurate. It is also helpful to “board” comments (i.e., to write comments on large pads of paper prominently displayed on an easel) as they are offered by participants.

- *Lighting and acoustics:* Proper lighting should be provided to make it easy to see boarded comments. Proper acoustics shall be provided to make it easy to hear everything that is said. Background noise may interfere with recordings, so you will want to check in advance that you will get a clear audiotape of the conversation.

- *Table and chair setup:* The setup should be intimate, not a large circle, to lend itself to informality and comfort; be sure that the temperature is comfortable and, if possible, that you have access to the thermostat.

- *Service personnel:* If you are holding the focus group during offhours, be sure personnel are there to open and lock up.

Select a Time

There is no perfect time when everyone you invite will be able to attend. However, when selecting a time, consider who your participants are.

- *Business or internal customers:* If the focus group comprises business or internal customers, you can probably schedule it during normal business hours. Early morning or late afternoon is best with a group like this to interfere as little as possible with the work day.

- *External customers:* If you are recruiting from the general public, you may want to consider a lunchtime focus group, if it is being held in an easily accessible urban setting. Or schedule it at the end of the day but at a time that will not keep people out too late; for example, somewhere between 4:00 and 7:30 P.M. If you want viewpoints from commuters by transit, try a focus group at or near a terminal and at the start or end of the day.

If you are holding multiple focus groups with a heterogeneous mix of participants, you may be able to offer participants a choice of times and locations so they can select their preference. Also, if you find that you are getting a high refusal or noshow rate among potential participants, you may want to ask them at the time of refusal or in a followup phone call about times they prefer and then take this into account in future planning.

Recruit Participants

This is one of the important steps to make sure your focus groups are successful in doing what you intend. Spend time thinking carefully about who you want to participate and how best to reach them. If you do not already have a broad profile or description of who your customers are, you will want to do this.

It is also important at this time to distinguish between different types of customers and persons with "customer perspectives" so that you recruit at the right customer "level." For example, an individual driver or transit rider is an end user, the most specific type of customer you have. UPS is an "intermediate" customer between a department of transportation and shippers of packages; but it is also a direct, end-user customer of the department when its trucks travel on the highways. AAA is an organization representing the interests and views of thousands of your customers, but it is not a direct customer. While you can learn greatly from having such organizations in focus groups because of their extensive knowledge of the agency and their customers, you need to be clear that you are not getting firsthand customer input. (The term "stakeholder" that is used in strategic planning is helpful for identifying this distinction.) Likewise, partners are not customers but people who help an organization do its job; i.e., those who, acting together with the agency, serve the agency's customers—for example, consultants, contractors, vendors, and other service providers.

All of the customers mentioned above are external customers—those who are users of the organization's facilities and services and not a part of the organization itself. However, there is no reason why a focus group could not be conducted with internal customers—that is, people who are part of the organization.

Recruiting participants is a time- and labor-intensive task for staff, since there are a number of steps to be taken, as outlined below. Be sure to allow enough lead time to issue invitations with reasonable advance notice; and set aside ample time for invitation and/or follow-up calls to potential participants.

Depending on whom you want to include, you may use either a "random" or nonrandom method to generate a list of people you will invite. Remember that the focus group technique is not a statistically valid method of representing a larger population. This means that you do not need to worry about having a true statistically random sample. However, if the population from which you draw your sample is biased, then you may be excluding people you want to include. For example, if you want to discuss transit service options, a list of persons with motor vehicles registered in the state would not be the best source, since it would exclude transit-dependent users without cars.

"Random" selection can be accomplished through a variety of methods:

- *Lists*: voter, census, DMV, from within an agency or MPO, and community outreach programs;
- *Stop and ask:* in transit stations, state office buildings, malls, and other public facilities
- *Groups of customers:* truckers, transit, other kinds of agency customers, if you want to have a "random" sample within one customer population.

Nonrandom selection can include people you know are interested in a particular topic and have a depth of knowledge that would enhance the results. For example, if you are proposing a specific project or program and have identified a specific impacted population, you may want to recruit community members and/or interest groups who have the most knowledge about the impacted area and who also may be familiar with the organization and the types of services it provides.

At this point in planning, you will also want to decide whether you want to have homogeneous or heterogeneous groups of participants. Heterogeneous groups are those that represent a broad cross-section of society—people from all walks of life. Homogenous groups are more narrowly defined; for example, people from one neighborhood or people who are most affected by a proposal.

Heterogeneous groups are best used when an agency wants input on a program or policy or issues that affect the agency as a whole; this produces a range of opinions from a variety of customers and provides a better understanding of how agenda items might impact the broad community.

Homogeneous groups are most helpful when dealing with a specific project or program affecting a subset of customers. Here, it is important to conduct more than one focus group in order to get representation from different subsets. Homogeneous groups allow for detailed probing within each group.

Once the type of group has been selected, identify four or five candidates for every one participant you want to attend, in order to allow for refusals and no-shows. This means that in order to have a focus group of ten to twelve participants, you may need to contact up to forty to sixty people.

Monetary incentives are often used by market researchers when conducting focus groups as a way to increase the response rate, entice people to participate, and compensate them nominally for their time and input. However, in the public sector, offering incentives can be viewed as an inappropriate expenditure of public monies. Generally, people are responsive to requests from public agencies to tell them what they think. If an agency has maps, brochures, key rings, and the like, packets can be put together and given out to participants at the end of the focus group session.

The actual recruitment involves the following:

- *Letter of invitation*: Three weeks before the date of the focus group, send a letter of invitation from a high official in the agency. This gives participants a sense of the importance of the focus group and his/her attendance.

- *Followup phone calls:* Allow time for everyone to receive the letter (no more than one week), and then make follow-up phone calls to all invitees to confirm attendance.

- *Second round of phone calls:* On the day before the focus group, make a second round of phone calls to all confirmed participants. Do not be discouraged if not all confirmed attendees show up—often they do not. Granted, ten to twelve attendees is a perfect number for a focus group, but fewer people will still yield significant information.

Conducting the Focus Group

Skillful facilitation is the key to a successful focus group. Participants must be made to feel that what they have to say is important and that the facilitator is unbiased and has the ability to draw everyone out and stay with the agenda. The facilitator must be in charge but allow all participants to have their say.

Leadership

Focus groups must be conducted by a skilled facilitator—a person who:

- has good listening skills and can sustain active, attentive listening for several hours;

- can hear both the facts and the feelings in a statement;
- is encouraging and effective, but unobtrusive, in managing the flow of discussion;
- can follow the agenda and timetable and keep discussion on track;
- can gracefully draw out quiet participants and cut off dominating ones;
- exercises self-control and does not inject her/his opinions and answers into the discussion;
- can read others' body language and is skillful in managing her/his own;
- is nonjudgmental in listening to and recording participants' comments in their own terms;
- is not defensive or argumentative when participants criticize the organization or say things the facilitator disagrees with or thinks are incorrect;
- is and appears to be neutral;
- is genuinely interested in what participants think and feel; and
- has no direct stake in the output/outcome of the focus group.

Many organizations have facilitator training as part of their TQM program or other ongoing internal training courses. Trained facilitators might be called upon to help conduct focus groups if the staff planning or sponsoring them do not have the required skills.

Assistants and Observers

It is usually easier if two people are involved in conducting the focus group, one to facilitate the discussion and one to board comments (i.e., to write comments on large pads of paper). This kind of team facilitation can be helpful as onthejob facilitator training for the assistant. A person can board comments at his/her first focus group and then facilitate a future group, gradually improving skills over time as experience grows.

DOT staff can observe the session. Typically, one or two people from the sponsoring agency observe the focus group. They are not there to participate but to watch, listen, and hear firsthand what participants have to say. If they are not acting as assistants, they should sit away from the table and be totally unobtrusive as discussion proceeds.

Preparatory Work

Agenda: Prior to the focus group, the facilitator has two main areas of responsibility: preparing for the actual facilitation and assembling the necessary supplies and materials, including tent cards for names, pads and easels, refreshments for participants, and the like.

Guidelines for Conducting Focus Groups

- Work out a detailed agenda with items that are likely to come up under each and prepare a facilitator's guide for the main topics to be covered, including a list of questions you might ask of participants under each of the headings. All of the facilitator’s questions may not get covered, but it helps to focus the facilitator’s thoughts highlight the most important questions, plot out the flow of the discussion, and help the facilitator avoid being at a loss for words or not knowing where to steer the discussion during the focus group.

- Preboard the main agenda topics for participants to see and allocate time periods for each item. This will serve as a guide and framework for the session.

Two or two-and-a-half hours may seem like a lot of time but it isn't. A detailed agenda with questions to be covered will allow you see how to fill the time; and often you will find that you have more questions than can realistically be covered in the available time. This is one reason why it is very helpful to conduct a pretest or dry-run of the focus group. The detailed agenda will help not only in preparation but also in building confidence.

Supplies and Refreshments: Public agencies are, understandably, very sensitive about appearing to be or being lavish in spending taxpayers' money. Therefore, many of the amenities that private sponsors of focus groups would use without question—a fancy room in a hotel or conference facility, one-way mirrors, upscale refreshments, payments to focus group participants—are out of the question for many public agencies.

- If the focus group is held at noon time, provide a simple lunch—for example, sandwiches and soft drinks.

- If the focus group is held in early evening, provide a light supper with soft drinks, similar to lunch.

- Otherwise, hot and cold beverages, muffins for morning sessions and cookies for evening.

Encourage participants to help themselves to refreshments during the session. This reinforces the informal, comfortable atmosphere.

Supplies required include

- two flip charts at the head of the room to be used for pre-boarding the agenda and recording the discussion

- markers in different colors that may be used for emphasis

- index cards

- Name/tent cards folded the long way to provide a freestanding name card to place in front of each participant;

- pens/pencils and pads for each participant

- recording equipment—be sure to test it before group starts.
- Extension cord, backup batteries, and tapes.

At the Focus Group

Greet participants: Prior to the start of the session, greet people as they come in—play “host." There should not be a sign-in sheet—this is a discussion group and not a formal meeting.

Start on time: Start no later than ten minutes after the scheduled start time so that you don't penalize those who arrive promptly. If there are latecomers, have the observers fill them in on the discussion thus far, out in the hall or very quietly off to one side; then ask them to sit at the table.

Introductions are essential. Introduce yourself and thank people for coming.

- Give brief background information on the agency or project —for example, if the focus group is about agency programs, describe what the organization does so people know where to focus their remarks.
- Introduce the observers and clarify that they are there to listen, not participate.
- Have the participants introduce themselves. It is helpful to have tent cards so participants can call one another by name.

At this point, stress that participants are there to offer their own comments and ideas, not to represent an official position of their organization or company. It is important to acknowledge the special information or knowledge participants may have because of their affiliations, but clarify that they are not being asked to be a spokesperson for their organization.

Present a pre-boarded agenda, emphasizing that the times assigned to each item are not meant to constrain discussion but rather to guide the progress of the session. The group should then proceed with the agenda, keeping to times as closely as possible in order to cover all items.

Facilitation Tips and Troubleshooting Techniques

Facilitator's role: Be sure it is clear that you are not there to answer questions or act as a spokesperson for the agency.

Goals: Two main goals should guide you in conducting a focus group—keeping the discussion on track and getting everyone to participate. Neither of these goals is easy, but they are important to provide structure to the session.

- Keep the discussion on track.
- Put the preboarded agenda on a wall or someplace in the room where you and the group can refer to it easily.

Guidelines for Conducting Focus Groups

- Keep participants on track by referring to the agenda and noting the times. The discussion may be interesting, but if it runs too long, agenda items may get dropped.

- Encourage everyone to participate.

- Record comments on a flip chart in participants' own words. This is important because it emphasizes that you are listening and that what people have to say is important and will be reported accurately. It is acceptable to ask people to repeat what they say so that it can be recorded correctly. Boarding comments also helps later in preparing the report.

- Get people to converse with one another, not with the facilitator. Sharing thoughts with each other stimulates ideas and enhances people's awareness and knowledge — which, in turn, provides a greater wealth of information overall.

- If one person begins to dominate the discussion, thank that person but acknowledge that there are others everyone wants to hear from. Here, you might call on someone who has not yet spoken.

- One way to get quiet participants involved is to say, "What do you think about...?"

There may be times when a focus group has a number of quiet participants, or when it has been difficult to get the session off the ground. In this instance, you might use one of the following techniques:

- Get answers from each participant through a "round robin"-type discussion.

- Ask a question and have people write their answers on index cards, then go around the table so each one gives an answer.

After the focus group has occurred, the original inviter should send a letter to all participants thanking them for their attendance.

Followup

The facilitator should prepare a report on the focus group proceedings, using the agenda as the outline for the report. A typical outline would include

- Introduction

- A brief history of use of the focus group technique

- Its growing use in public agencies

- A description of how participants were chosen and the recruitment process: letters, phone calls, etc.

- Agenda items. This is the meat of the report and is meant to present highlights of the session and to cull significant points, including major areas of agreement and disagreement.

- Quotes (from boarded comments and taped remarks) are often helpful because they convey the tone and texture of the meeting. It is important to acknowledge even the narrowest perspective; for example, "One person said..."

- Summary. This section should provide a summary of the main themes of the session and recommendations for next steps to take—in other words, what to do with the information gleaned from the session. A focus group may raise thought-provoking questions or possibilities for an organization that can be followed up in a pilot program, a survey, and other techniques.

Because focus groups are a qualitative technique, the interpretation of the material gleaned from them can be subjective. This subjectivity is reflected in a report in its organization, tone, emphasis, and inclusiveness of the range and flavor of customer comments. This, among other reasons, is why the impartiality of the staff members who conduct and summarize focus groups is so crucial to capturing customers' comments fairly and accurately.

In the public sector, reports such as these are public documents and need to be prepared with greater sensitivity than might be the case in a report to a private company. Very often, public agencies share focus group reports with participants, particularly if they are representatives of customer groups, citizen participants in a project or study, or other individuals with whom the agency has a continuing relationship (in contrast with individuals chosen randomly from a voter list, for example, who take part in a focus group as a onetime experience). Therefore, it is important that participants see the report as a fair, accurate reflection of what they said, and that individuals can also recognize at least some of their contributions to the discussion. As a result, public sector focus group reports will probably contain more information—and more individual points—than would a confidential report that would not include "fringe" points.

By sharing focus group reports with participants and other concerned customers, an agency can enhance its credibility as a customer-sensitive organization, foster improved relations with customers, and create a vehicle for ongoing dialogue.

Using Focus Group Findings

Many organizations have begun customer-based quality initiatives as a way of repeatedly tuning in to customers’ wants and needs, developing ways to respond to them more effectively, and then assessing how well the organization has performed and how satisfied customers are with its services. The focus group technique is a useful tool at each phase in this cyclical process. It is especially helpful early in a quality improvement cycle, since an organization can be in direct touch with customers and get early input from them on their requirements and expectations. Then the organization can use this information to help decide how best to make its facilities, services, and plans responsive to customer needs. Likewise, at the end of a quality improvement cycle, focus groups can provide feedback on the extent to which customers think their needs have been met, along with remaining gaps where additional improvements are in order. During the middle of a quality improvement cycle, focus groups give information that can be used to make midcourse corrections.

The information gleaned from focus groups is used both directly and indirectly in a quality improvement process. Here are some of the questions that can be answered directly using focus group results:

- What do our customers want and need?
- Do different sets of customers want or need different things?
- What do they expect in terms of the quality of service?
- What does "quality" mean to them? What are the characteristics and indicators they use to judge top quality?
- How well do they think we have met their needs?
- What do they need in the way of more, less, better, or different performance from us to be satisfied customers?

Much of the information gleaned from customers in focus groups is raw material that the organization needs to process in order to use it in making quality improvements. Customers may express their needs in informal, lay terms, qualitative ways, and experiential terms; staff members need to translate this information into operational and quantified terms that are meaningful for management, planning, construction, maintenance, operations, service delivery, and other functions.

For instance, customers might say they think top-quality service in highway transportation is having no snow on roads in winter. An agency will need to probe more to determine what characteristics customers perceive—a little dusting of dry snow is okay, but not much wet snow; markings cannot be obscured; quite a bit more snow is perceived as acceptable as long as drivers see lots of plows out and working, and so forth. The agency can then translate this into performance standards and service protocols—how much snow can accumulate, under what conditions, in what locations, when crews should be called out, and so forth.

Carrying on with this example, the agency would also want to track both user feedback and agency indicators, including costs. Then judgments can be made, over time, about increases in the quality of service and the performance requirements and costs to achieve them.

Sometimes organizations perceive that their customers ask for things that are impossible, unsafe, unaffordable, infeasible, or otherwise unacceptable to the agency. Good customer/supplier relationships are a two-way street, and instances such as these point out the need for the organization and its customers to do mutual listening to and informing and educating of each other. Informing and educating customers about what is feasible and affordable, and what are tradeoffs and implications is an essential element of effective CBQ. Through back-and-forth communication, customers and an organization can close the gap between what it, as a supplier, can provide to customers and what they expect, as customers—and as users and taxpayers who buy the public agency's products and services with their tax dollars and user fees.

If agency staff members listen carefully to customers, they usually will find out things they did not know. Most often people say they want more, better, or different products and services. However, it is not unusual for customers to tell an agency things they do not want or need, so that the agency can save scarce resources, do things in less costly ways, and shift resources to higher-priority needs.

Customer information from focus groups (and other techniques) is used in a variety of quality improvement functions, including ones oriented to external and internal customers. It is used to help frame goals, criteria, and desired outcomes in such functions as these:

- develop and track performance measures for the agency as a whole, for units or activities, and for individuals;
- develop staff training and skill improvement programs;
- plan budgets and other resource allocation plans, particularly to identify added costs, needed shifts, and potential savings;
- identify policy and program changes to better meet customer needs;
- develop service delivery process improvements and protocols;
- formulate plans, alternatives, and impact mitigation measures;
- modify customer information and public relations programs to better inform users of services, facilities, and performance;
- provide feedback and verification on the quality of an organization's performance, both internally to staff and externally to its customers, legislators and other public officials, taxpayers, and interests.

It should be noted here that, while focus groups can provide a wealth of information and play a part in an organization's activities, they should not be used as standalone activities, because they are only a small representation of customers and not a statistically valid collection of data. Often the information gleaned from focus groups points to further research the organization might want to engage in, such as surveys, workshops, and interviews.

ICIS Focus Group Facilitator's Guide

The following is a guide used by facilitators who conducted focus groups as part of the Institute for Civil Infrastructure System's Performance Measurement Assessment program. The focus groups wee intended to provide customer/user perspectives on service performance in four areas: water supply, waste water, transportation, and power.

Each focus group lasted for two hours, and included from 12 to 15. Participants were recruited to reflect a cross-section of the population and diversity in residence (urban, suburban and exurban). They were also screened to assure that they were users of most of these infrastructure services (i.e., we did not include people who have their own wells and septic systems, etc.). To conform to New York University's requirements and policies for human subjects, we also excluded protected groups and informed participants of their rights to review the tapes and omit any of their comments. We also informed participants that we would not list them by name or use attributed quotes; and we confirmed that their participation is voluntary.

The following text is drawn directly from the facilitator's guide, so present tense is used. Note that instructions to facilitators to take particular actions are shown in [brackets]. The major questions posed to focus group participants at each major discussion section are shown in **boldface** type. Approximate times for each segment of the focus group are also indicated.

Introduction by Facilitator (10 minutes)

Thank everyone for coming.

State that this focus group is sponsored by the Institute for Civil Infrastructure Systems, a program within New York University being carried out by NYU and other institutions with funding from the National Science Foundation. The purpose of the focus group is to explore participants' perspectives on service quality as customers and users of so-called "infrastructure systems." They will be told more about what this means in a moment.

Note that a focus group is an informal, qualitative research technique used to explore people's ideas, feelings, perceptions, and preferences. It is not a statistical technique like a survey, and we cannot generalize from what is said here to draw conclusions about what other groups of people or the population in general would say on these same topics.

Tell participants that the focus group discussion is being tape recorded to help the facilitator prepare a brief written summary. In that summary, participants will not be listed by name or quoted with attribution. After completion of the summary, the tapes and any written sheets the facilitator or participants use will be destroyed. Ask if there are any questions?

Preboard the list of protected groups—minors under 18 years of age, pregnant women, prisoners, mentally disabled. Refer to the list and tell people we are required to protect the rights of people who participate in research and therefore must exclude anyone who fits any of these groups. Tell people they need not share personal details, but if they are in a protected category, they are excused from the group. Thank them. Tell the remaining people that their participation is voluntary and they have the right to review the tape recording and omit any statements they make that they do not wish to have on the tape. Restate that the tapes and papers will be destroyed after the summary is written and people will not be named or quoted.

If there are observers, tell participants that these people are part of the project research team and are very interested in what you have to say, but they will not be participating in the focus group.

Note the earlier use of the word "infrastructure." Explain that this is a fancy word for systems like transportation, water, waste water, and power that supply people, homes, businesses, and communities with vital services—many public and some private. The systems include things like the pipes that carry water, in addition to the water itself, and the generating plants that produce power for your home.

Tell people we are working on is intended to improve the ways we measure how well the infrastructure is working—how well it is performing and how we and customers can assess the quality of services provided to the customers. The people who own and run different pieces of infrastructure—like the transit authority or the waste transfer station—look at how they are performing from the perspective of a provider of service.

In this focus group, tell participants we want to know about their perspective as a *customer or consumer or user* of infrastructure services—because their perspective might be different from that of the people serving their, and their may have different standards or expectations for what is high quality or poor service. As consumers, they may also want to know certain information about the services they are receiving, so they can better judge quality and make choices between different services (like whether to drive or use transit to get to work). Note that we will talk about these four types of infrastructure today: [pre-board them] water supply, waste water, transportation, and power.

Remind they that when they participate, you will just be representing themselves and their own thoughts, experiences, and perceptions. There are no right or wrong answers. It is okay to have perspectives and opinions that are the same or very different from other people around the table.

Describe how we will proceed. The facilitator will pose questions to the group and will jot notes on responses on the large pads. Sometimes participants will be asked to write down a few things on a card before sharing it with the group. Sometimes the facilitator may need to cut off discussion at some points so we can cover all the topics. Ask people to please speak one at a time and not to have side conversations, so all can hear what everyone has to say. Ask is there are any questions?

Participant Introductions and Opening Discussion (5 minutes)

Ask each participant to state his or her first name, tell where s/he lives, and share one brief comment as a consumer of services supplied by these [refer to the pre-boarded list] types of infrastructure. Facilitator will board comments.

Then say **"now let us concentrate our attention on just one of these types of infrastructure and talk about it for the next 25 minutes".**

ICIS Focus Group Facilitator's Guide

Water Supply (25 minutes)

Let's consider water supply services first. [Flip page, write "Water Supply" on top of sheet.]

Let's talk about what this is, how you are familiar with it, how you use it, what goes into supplying water to you, and why it's important. [This is a brainstorming/warm up conversation to get them thinking and distinguishing their perspective as customer. Don't take questions serially—just use them to stimulate thinking.] As necessary, the facilitator will comment on statements or ask for clarification if points do not seem to relate to water. The facilitator can also ask prompting questions like these: "In addition to the water that comes out of the pipe, is there anything else that's an important part of the system?" "Do you have any choices, as a consumer, about how or whether you use this service?" "Do you influence the quality of the service or product you receive?"

[Do not correct participants; if questions are asked, toss them back to the group—"what do you think?" Do not answer questions yourself unless the conversation gets stuck, and be very, very brief. If it's not germane to the discussion, tell people you will discuss it after the focus group is over (for example, why are water costs increasing so dramatically? Board cost and rate of increase as concerns and keep going!)]

[Facilitator hands out more 3 x 5 cards.] **Take a minute and think about what is important to you, from your perspective as a customer or user, about waste supply services.** Jot down three or four important things on your cards. [Flip to new sheet—write "What's Important" on top. As you board points in a moment, leave lots of room around each point—maybe put six or so topics per page; and use only two-thirds of the width for now.]

Go round robin, taking one response from each person. Circle again until all ideas are boarded. Ask if there are any things that are missing. Are there any other ideas people have from seeing what others said? Anything that doesn't belong on the list? Any things that should be combined —that are different words for the same idea? Did we have things we said a few minutes ago that we should add in here?

Go through the list and ask people to elaborate on points. Why is it important? What are different words for the quality of this aspect of water supply services? Are there different aspects of the point we should flesh out? Board comments next to the original items listed.

Now let's look at the list and identify what information you want or need to have about each in order to be an informed consumer. [Write "Information" over the right third of the page. Start at the top and go down through the items one at a time. Use a different color marker for these points and jot them beside each of the listed items. List as many types of information for a given attribute as are suggested.] Are there any additional ideas? Any other things you would want to know? Board. Note that some types of information may pertain to more than one important attribute. Put arrows or list multiple times.

Now I'd like you to identify your priorities. Look at the list of aspects of water supply that we identified a few minutes ago as important, and select which [one/two/three] is/are most important to you. Choose what's important to you; and forget about where other people are sticking their dots. [Depending on the number of items, give each person either 3, 2 or 1 sticky dots. If there are lots of items, use 3. If there are 10 or so, use 2. If there are fewer than 8 or so, give only 1 dot.]

Now look at the types of information and select the pieces of information you would like or need most to have as a consumer or user. [Consider the total number of information items listed, which will probably be greater than the list of aspects and give 1, 2, or 3 dots, as above, depending on the total number listed. Use a second color dot for these.]

Review the rankings and ask for any observations or elaborations. If there are a clear top set of 3 to 6, read them and confirm that these appear to be the most important. If there are lots of close rankings, ask people whether—if they had to choose between them—one would be more important than another.

Waste Water/ Sewage (20 minutes)

Now let's consider waste water or sewage services. [Flip page, write "Waste Water/Sewage Services" on top of sheet.]

Let's talk about what this is, how you are familiar with it, how you use it, what goes into supplying waste water or sewage service to you, why it's important. As necessary, the facilitator will comment on statements or ask for clarification if points do not seem to relate to waste water/ sewage. Be sure to distinguish between those who have sewer services vs. septic fields or tanks. If comments are made regarding fields or tanks that require service, include and note them. Ask other prompting questions, as above. What choices, if any, do you have as a consumer or user?

[Facilitator hands out more 3 x 5 cards.] **Take a minute and think about what is important to you, from your perspective as a customer or user, about waste water services.** Jot down three or four important things on your cards. [Flip to new sheet—write "What's Important" on top. As you board points in a moment, leave lots of room around each point—maybe put six or so topics per page; and use only two-thirds of the width for now.]

Go round robin taking one response from each person. Circle again until all ideas area boarded. Ask if there are any things that are missing. Are there any other ideas people have from hearing what others said? Anything that doesn't belong on the list? Any things that should be combined —that are different words for the same idea? Did we have things we said a few minutes ago that we should add in here?

Go through the list and ask people to elaborate on points. Why is it important? Are there different aspects of the point we should flesh out? Board comments next to the original items listed.

Now let’s look at this list and identify what information you want or need to have about waste water services in order to be an informed consumer. Board comments and use prompt questions as above; for example, are there any additional ideas you have? Any other things you would want to know?

Now I’d like you to identify your priorities. Look at the list of aspects we identified as important a few minutes ago, and select which [one/two/three] is/are most important to you. Choose what’s important to you; forget about where other people are sticking their dots. [Use same procedure as above to decide on number of dots to hand to each person, etc.]

Now look at the types of information and select the pieces of information you would like or need most to have as a customer or user. [Use the same method with different color dots, as above.]

Review the rankings and ask for any observations or elaborations. If there are a clear top set of 3 to 6, read them and confirm that these appear to be the most important. If there are lots of close rankings, ask people whether—if they had to choose between them—one would be more important than another.

Transportation (35 minutes)

Now let’s look at transportation. Since this is a big topic, including both highways and streets as well as public transportation (and other transportation services, like ferries, or facilities, like a big station or terminal), let’s take about 35 minutes. [Flip page, write “Transportation” on top of sheet.]

Let’s talk about what makes up the transportation system, how familiar you are with it, how and how often you use it, what goes into supplying transportation facilities and services to you, why it’s important. [Use same procedure and prompting as above; for example, What are the different types of transportation we use regularly? What are the different elements that make up the system? What choices do you have as consumers and users? [Note that in this and subsequent sections on transportation, the facilitator may need to mark, or use different color pens, or use separate pages for different modes of transportation—probably one for highways and streets, one for transit, one for other (ferries, intermodal terminals, goods movement, aviation and airports, etc.).

[Facilitator hands out more 3 x 5 cards.] **Take a minute and think about what is important to you, from your perspective as a customer or user, about transportation services.** Jot down three or four important things on your cards. [Board as above, under heading “What’s Important”.]

Go through the list and ask people to elaborate on points. Why is it important? Are there different aspects of the point we should flesh out? Board comments next to the original items listed.

Now let's look at this list and identify what information you want or need to have about the transportation systems and services in order to be an informed consumer. [Use procedures and prompting questions as above.]

Now I'd like you to identify your priorities. Look at the list of aspects of transportation we identified a few minutes ago as important, and select which [one/two/three] is/are most important to you. Choose what's important to you; forget about where other people are sticking their dots. [Note here that you may need to have separate rankings for highways/streets and transit, depending on the number of items. Use same method as above to decide on how many dots to hand out. There may also be comparisons *between* modes. Be sure and note these as such.]

Now look at the types of information and select the pieces of information you would like or need most to have as a customer or user. [Again, you may need to have separate ranking for highways/ streets and transit; and note any comparisons *between* modes.]

Review the rankings and ask for any observations or elaborations. If there are a clear top set of 3 to 6, read them and confirm that these appear to be the most important. If there are lots of close rankings, ask people whether—if they had to choose between them, one would be more important than another. [Again, there are likely to be separate comparisons between highways/streets and transit; and note comparisons *between* modes.]

Power Supply (20 minutes)

Now let's consider power supply services. [Flip page, write "Power" on top of sheet.]

Let's talk about what this is, how you are familiar with it, how you use it, what goes into supplying power to you, why it's important. As necessary, the facilitator will comment on statements or ask for clarification if points do not seem to relate power. Ask other prompting questions, as above. What choices, if any, do you have as a consumer or user?

[Facilitator hands out more 3 x 5 cards.] **Take a minute and think about what is important to you, from your perspective as a customer or user, about power.** Jot down three or four important things on your cards. [Flip to new sheet—write "What's Important" on top. As you board points in a moment, leave lots of room as above.]

Go round robin, taking one response from each person. Circle again until all ideas area boarded. Ask if there are any things that are missing. Are there any other ideas people have from hearing what others said? Anything that doesn't belong on the list? Any things that should be combined —that are different words for the same idea? Did we have things we said a few minutes ago that we should add in here?

Go through the list and ask people to elaborate on points. Why is it important? Are there different aspects of the point we should flesh out? Board comments next to the original items listed.

Now let’s look at this list and identify what information you want or need to have about power supply and services in order to be an informed consumer. Board comments and use prompt questions as above; for example, are there any additional ideas? Any other things you would want to know?

Now I’d like you to identify your priorities. Look at the list of aspects we identified a few minutes ago as important, and select which [one/two/three] is/are most important to you. Choose what’s important to you; forget about where other people are sticking their dots. [Use same procedure as above to decide on number of dots to hand to each person, etc.]

Now look at the types of information and select the pieces of information you would like or need most to have as a customer. [Use the same method with different color dots, as above.]

Review the rankings and ask for any observations or elaborations. If there are a clear top set of 3 to 6, read them and confirm that these appear to be the most important. If there are lots of close rankings, ask people whether—if they had to choose between them—one would be more important than another.

Closing (5 minutes)

Ask if there are any additional comments or any questions from participants.

Thank them for coming for sharing their time and ideas.

Tell them they can see (person with incentive payments) to sign a receipt and receive their incentive payment.