

# A Methodology Update on Focus Groups, Expert Panels, and Other Small Group Methods

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## Course Objectives

To provide an overview of:

- Selected small group methods
- Factors to consider when choosing one or more small group methods
- Analysis and reporting of results

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## Introduction

What are the differences between collecting data from individuals versus groups?

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## What are Small Group Methods?

- Systematic data collection from a group of individuals
- Unit of analysis is the group
  - Interaction of participants produces a group response
- Results usually not generalizable to larger population

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## Why Collect Data in Groups?

- Group dynamic → deeper understanding
  - Participants can provide their individual responses + reaction to other responses
  - Interaction → changed opinions, new solutions
- Can use at any point in project when deeper understanding is required

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## Overview of Methods Often Used

- Focus Groups
- Expert Panels
- Discussion Session
- Nominal Group Technique
- Delphi Technique

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## Focus Groups

- **What it is:** groups of individuals participating in a structured discussion on a specific topic, generally meeting for less than 2 hours
- **Why it's used:** to explore issues, concerns, attitudes and beliefs, intentions, and reactions; to get examples
- **Examples:**
  - **GAO-01-172:** What are the strengths and weaknesses of veterans receiving a one-time lump sum payment for compensation?
  - **GAO-05-192:** What are the strengths and weaknesses of the current Social Security Statement?

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## Example:

### Appendix III: 2004 Social Security Statement

Note: The highlighting on pages 2 through 4 shows the information legally required to be included in the statement. Also, the original statement is a two-color document.

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## Characteristics of Focus Groups

- Usually 3-4 questions during a session
- About 7-10 participants per group
- Groups are usually homogeneous
- Usually conduct multiple groups
- Requires experienced moderator

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## Expert Panel

- **What it is:** a group of individuals with expertise in a specific area(s), often meeting 1-2 days to participate in a structured discussion of multiple questions
- **Why it's used:** to elicit in-depth information, viewpoints, and opinions from experts
- **Examples:**
  - **GAO/RCED-99-158:** What are key factors that may influence the development of competition in the subscription television market?
  - **GAO-07-24:** What are the methodological strengths and shortcomings of the six estimates of the number of deaths in Darfur?

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## Characteristics of Expert Panels

- Usually about 6-7 discussion questions
- About 7-12 people with knowledge in substantive area
- Can yield consensus or highlight contrasting views
- Requires experienced moderator
- Collaboration with National Academies of Science

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## Discussion Session

- **What it is:** a group of selected individuals, generally meeting for 1-2 hours, to participate in guided discussion of general questions within a specific area
- **Why it's used:** to explore issues with a specific population; may be used as a preliminary step in framing job or in designing data collection methods
- **Example:**
  - **GAO-04-19:** How do small and larger housing agencies view the impact of recent housing reforms on their ability to administer HUD programs?

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## Characteristics of Discussion Session

- Number of participants varies (ideally < 10)
- Less structured than other methods and requires less preparation
- Moderator may be a project team member

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## Complementary Techniques to Small Group Methods

- Nominal Group
- Delphi

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## Nominal Group Technique

- **What it is:** an iterative process where group decisions derive from group discussion and individual rank-ordering
- **Why it's used:** to try to obtain group consensus

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## Steps in Nominal Group Technique

- Participants respond individually to a question
- Participants share individual responses, developing a list
- Group discusses/refines list
- Participants individually vote on items on the list; participants have multiple votes

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## Nominal Group Technique Demonstration

What two characteristics are most important  
in determining whether a restaurant is  
“good” for dining out?

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## Nominal Group Technique Demonstration

Popular/crowded	Atmosphere
Quality of food	Value
Cleanliness	Location
Quality ratings	Service
Type of food	Parking
Close to other venues	Wait time

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## Nominal Group Technique Demonstration

Choose top two from collapsed categories:

- Quality of service
- Type of food
- Location
- Atmosphere

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## Example: Nominal Group Technique

Question: What are the most significant barriers to improving agency compliance? (GAO-03-304)

- Voting Results: Lack of OMB leadership, guidance, & assistance (32 points); Low agency priority/resources (24 pts); Insufficient training (21 pts)

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## Delphi Technique

- **What it is:** An iterative process where group decisions are derived through individual ratings, typically anonymous group feedback, and reconsideration of individual ratings
- **Why it's used:** To try to obtain group consensus

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## Delphi Technique (cont'd)

### How it works:

- Phase I: Participants respond to open-ended questions
- Phase II: Closed-ended questions are developed and presented to participants
- Phase III: Group responses presented to participants and have opportunity to change their own responses

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## Example: Web-based Delphi

Researchable Question:

What are the most important factors that affect cattle prices and producers' incomes? (GAO-02-246)

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## Example: Web-based Delphi (cont'd)

Phase I: Open-Ended Question

*What are the most important factors affecting domestic cattle producers' income?*

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## Example: Web-based Delphi (cont'd)

### Phase I continued: Content analysis

- Cattle Quality
- Input Costs
- Futures Prices

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## Example: Web-based Delphi (cont'd)

### Phase II: Closed-Ended Questions

*Please rate the importance of the following factors related to domestic supply of cattle that affect producers' income:*

Factors	Least Important (1)	Somewhat Important (2)	Moderately Important (3)	Very Important (4)	Most Important (5)
1. Cattle Quality	[ ]	[ ]	[ ]	[ X ]	[ ]
2. Input Costs	[ ]	[ ]	[ X ]	[ ]	[ ]
3. Futures Prices	[ ]	[ X ]	[ ]	[ ]	[ ]

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## Example: Web-based Delphi (cont'd)

### Phase II (con't): Closed-Ended Questions With Aggregated Responses

*Please rate the importance of the following factors related to domestic supply of cattle that affect producers' income:*

Factors	Least Important (1)	Somewhat Important (2)	Moderately Important (3)	Very Important (4)	Most Important (5)
1. Cattle Quality	3%	16%	12%	57%	12%
2. Input Costs	3%	12%	13%	54%	18%
3. Futures Prices	4%	28%	25%	36%	7%

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## Example: Web-based Delphi (cont'd)

### A Comparison of Responses for Phase II and Phase III

*(Phase II Responses are in parentheses.)*

*Phase III responses are below.*

Factors	Least Important (1)	Somewhat Important (2)	Moderately Important (3)	Very Important (4)	Most Important (5)
1. Cattle Quality	(3%) 3%	(16%) 13%	(12%) 13%	(57%) 58%	(12%) 13%
2. Input Costs	(1%) 2%	(12%) 12%	(11%) 14%	(56%) 54%	(20%) 18%
3. Futures Prices	(4%) 1%	(28%) 36%	(22%) 35%	(36%) 25%	(10%) 3%

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## Exercise: Identify Small Group Methods

Which could be used to answer these research questions?

- How can the federal government improve homeless peoples' access to and use of assistance programs (e.g., housing, food, health care, job training, transportation)?
- What is the expected acceptability of proposals for a one dollar coin to the public and private sector?

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## Method Selection: Additional Considerations

- Participants
- Support/administrative resources
- Need for a moderator or facilitator
- Cost
- Timeframes

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## Analysis and Reporting

- Reporting themes not numbers\*
- Content analysis

\*Exceptions: Complementary techniques;  
ballots used with expert panels

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## Analysis and Reporting (cont'd)

- Examples (handouts)

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## Analysis and Reporting (cont'd)

- Use of quotes
- Transcription
  - Verbatim vs. Hand-written notes
- Confidentiality

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## Wrap Up

- Summary
- Questions?
- Resources
  - Handouts

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# **SMALL GROUP METHODS**

**Using Group Methods and Techniques**

## **Using Group Methods and Techniques**

Group methods are one type of systematic data collection that can be used for a project. The methods presented here include expert panel, focus groups, and discussion sessions. Also included are two other companion group techniques -- Delphi technique, and nominal group technique -- that are used to reach consensus. Some of these methods and techniques are more flexible than others and can be used alone, in combination, or with other methods not discussed here. For example, the Delphi method may be used with an expert panel or the nominal group technique may be used as part of discussion sessions.

Each method has unique key features, core requirements, and methodological considerations. Most of these methods require a trained moderator or facilitator or can be done with facilitator oversight. Some methods may have other requirements, such as transcription services or meeting arrangements.

### **Selecting Members and Collecting Data**

Most group methods involve small groups of individuals (that is, about 7 to 12), although sometimes the group may be larger. Members of the group usually meet in person for a specified period of time. However, in some cases, the Internet is where the “meetings” take place.

Members of the group are selected based on specific characteristics. For example, members might be selected based on (1) expertise relative to a topic or (2) particular experiences. Issues such as a limited number of participants, group process influences, and selection of participants preclude the findings from these methods from being generalized to a larger population. In general, the data that are collected are qualitative.

### **Considering Which Method(s) to Use**

The information below can help project teams select the most appropriate method to answer research questions and locate additional resources to help with this process. This document is divided into five sections.

Section 1: A Comparison of Methods by Key Features, Core Requirements, and Methodological Considerations

Section 2. Companion Techniques by Key Features, Core Requirements, and Methodological Considerations

Section 3. GAO Reports That Have Used Group Methods, Grouped by Method (includes a brief description of how method was used)

Section 4. Bibliography (additional resources on group methods)

**SECTION 1. A COMPARISON OF METHODS BY KEY FEATURES, CORE REQUIREMENTS, AND METHODOLOGICAL CONSIDERATIONS**

<b>Expert Panel</b>			
<b>Description</b>	<b>Key Features</b>	<b>Core Requirements</b>	<b>Methodological Considerations</b>
<ul style="list-style-type: none"> <li>• A group of people (usually 7 to 12) with expertise in specific area(s)</li> <li>• Generally meet for 1 to 2 days to discuss a set of questions developed by the team</li> <li>• GAO has a contract with the National Academy of Sciences to help with selection of experts and to provide arrangements for expert panels; using the National Academies is recommended but not required</li> </ul>	<ul style="list-style-type: none"> <li>• Used to elicit information, viewpoints, and opinions from knowledgeable individuals</li> <li>• Questions or topics to be discussed, as well as background materials, are provided to the members of the expert panel prior to the meeting</li> <li>• Consensus may be sought or the discussion may be used to highlight competing or contrasting views</li> <li>• Results may be less vulnerable to political bias or criticism than information obtained from individual interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Trained or experienced moderator to facilitate group interaction and a co-moderator (for example, someone from the team) with substantive knowledge of issue area</li> <li>• Agency/organization must approve costs (for example, travel, food and transcription services)</li> <li>• Advance preparation (for example, developing questions; arranging for transcription services; and making arrangements for meeting room)</li> <li>• Systematic identification and selection of panel members and the documentation of the rationale for selection of experts</li> </ul>	<ul style="list-style-type: none"> <li>• Provides high-level information about a topic</li> <li>• Group interaction may produce information and details not usually obtained from a single interview or serial interviews</li> <li>• Because a panel member’s statements may influence other panel members, this method is not a substitute for individual interviews or surveys</li> <li>• Potential for synthesizing current knowledge that may be useful beyond the scope of a single project</li> <li>• Analyzing and interpreting the transcribed discussion can be difficult and time consuming</li> <li>• May or may not obtain results that demonstrate a consensus of opinion, common themes, or patterns</li> </ul>

## Focus Groups

Description	Key Features	Core Requirements	Methodological Considerations
<ul style="list-style-type: none"> <li>• Structured discussions with multiple groups that provide information on a specific topic</li> <li>• Typically involves 7 to 10 individuals</li> <li>• Multiple focus groups are generally recommended, with each group meeting for a short period of time, typically less than 2 hours</li> </ul>	<ul style="list-style-type: none"> <li>• Useful for exploring issues, concerns, attitudes, beliefs, rationales, intentions, and reactions to stimuli</li> <li>• Flexible, reasonably quick technique to implement</li> </ul>	<ul style="list-style-type: none"> <li>• Trained or experienced facilitator</li> <li>• Documentation of rationale for identification and selection of group members</li> <li>• Agency/organization must approve costs (for example, travel, food and transcription services)</li> <li>• Advance preparation (for example, developing questions, arranging for transcription services, and making arrangements for meeting room)</li> <li>• Composition of a specific group is generally homogeneous; several focus groups may be held with different group characteristics (for example, one group of program managers and one group of program recipients); participants for each group may be randomly selected</li> </ul>	<ul style="list-style-type: none"> <li>• Provides in-depth information about a topic, problem, or relationships between concepts, which cannot be obtained from single or serial interviews</li> <li>• Because a member's statements may influence other group members, this method is not a substitute for individual interviews or surveys</li> <li>• Assembling some groups may be difficult, so incentives for participation may be necessary</li> <li>• Multiple group sessions can be time consuming</li> <li>• Analyzing and interpreting the discussion(s) can be difficult and time consuming</li> <li>• Results may or may not demonstrate a consensus of opinion, common themes, or patterns</li> <li>• Differences between groups can present difficulties in reporting results</li> <li>• May require travel to different locations</li> </ul>

## Discussion Sessions

Description	Key Features	Core Requirements	Methodological Considerations
<ul style="list-style-type: none"> <li>• Meeting of selected individuals to discuss issues on a particular topic</li> <li>• Number of participants varies (and may involve a sample of convenience)</li> <li>• Questions and agenda are less structured than for an expert panel or focus group, and discussion leader may deviate from the agenda, based on the direction of the discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Useful early in a project as a preliminary step for identifying and framing issues or for designing data collection methods</li> <li>• Useful for gathering information from selected individuals from a specific population; individuals may also provide information useful in other aspects of the job</li> </ul>	<ul style="list-style-type: none"> <li>• Requires discussion leader who may be a member of the engagement team or may come from outside the team</li> <li>• Agency/organization must approve any costs (for example, food, travel)</li> <li>• Advance preparation (for example, arranging transcription services, developing questions; making arrangements for meeting room)</li> </ul>	<ul style="list-style-type: none"> <li>• Discussion group not synonymous with focus groups although it is frequently mistaken for focus groups</li> <li>• Requires less rigorous, less systematic preparation and detailed documentation than other small group methods</li> <li>• Usually used in conjunction with other data collection methods</li> <li>• Interaction between participants may influence responses</li> </ul>

**SECTION 2. COMPANION GROUP TECHNIQUES BY KEY FEATURES, CORE REQUIREMENTS, AND METHODOLOGICAL CONSIDERATIONS**

**Complementary Techniques**

**Delphi Group Technique and Web-Based Delphi**

<b>Description</b>	<b>Key Features</b>	<b>Core Requirements</b>	<b>Methodological Considerations</b>
<ul style="list-style-type: none"> <li>• Used to obtain group agreement or consensus in a series of iterations</li> <li>• Group of experts asked by a facilitator to address a problem or issue; group is provided feedback on group responses; each participant given an opportunity to revise his or her responses in subsequent iterations</li> <li>• Technique should be implemented in-person; however, it can be modified for use by mail or on the Web</li> </ul>	<ul style="list-style-type: none"> <li>• Useful for developing a range of possible program alternatives, exploring underlying assumptions or information leading to different judgments, and seeking potential solutions to problems</li> <li>• Unless the application is in-person, first round responses are synthesized by the team and are not a result of group interaction (web-based Delphi can accommodate a much larger group of experts)</li> </ul>	<ul style="list-style-type: none"> <li>• Trained or experienced moderator or facilitator</li> <li>• Systematic identification and selection of panel members and the documentation of the rationale for selection of experts</li> <li>• In web-based Delphi project team is responsible for synthesizing first round responses and communicating with experts throughout the process</li> </ul>	<ul style="list-style-type: none"> <li>• Iterative component of technique can be labor-intensive and time-consuming</li> <li>• Extreme or minority positions often dropped because agreement or consensus is the goal, possibly resulting in the loss of diverse or creative ideas</li> </ul>

## Complementary Techniques

### Nominal Group Technique

Description	Key Features	Core Requirements	Methodological Considerations
<ul style="list-style-type: none"> <li>• Used in small group settings to help a group identify issues, concerns, or needs</li> <li>• Participants react individually to questions posed to the group, write responses, and then share them with the group</li> <li>• Group decisions are derived through rank-ordering or rating, allowing group consensus to be reached faster; everyone has equal opportunity to present their ideas</li> </ul>	<ul style="list-style-type: none"> <li>• Helps establish priorities -- individuals vote on priority ideas and a “group decision” is derived from the rank ordering or rating scores</li> <li>• Helps identify elements of a problem or situation and identify solutions</li> <li>• Balances participation among members of the group and avoids dominance by strong group members</li> <li>• May produce more creative ideas than interacting groups</li> <li>• May produce a greater number of ideas than do other interacting small groups</li> <li>• Reduces the conforming influence common to most face-to-face group meetings</li> <li>• Encourages participants to confront issues on a problem-solving basis rather than on a personal assault basis</li> <li>• Results in greater participant satisfaction by giving participants a sense of ownership</li> <li>• Promotes a sense of accomplishment and closure</li> </ul>	<ul style="list-style-type: none"> <li>• Trained or experienced moderator or facilitator</li> <li>• Advance preparation (for example, developing questions; making arrangements for meeting room; and securing supplies such as flip charts, LCD monitor, and projector if electronic voting is to occur)</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitates generation of as many ideas as possible to support a comprehensive discussion of a topic</li> <li>• Votes or rankings made without a careful or thorough sorting out of all the ideas</li> <li>• Some participants may not like such a highly structured process</li> <li>• May be limited to a single-purpose, single-topic meeting; difficult to change topics in the middle of the meeting</li> <li>• Needs agreement from all participants to use the same structured method, which may be resisted by some</li> </ul>

### SECTION 3. GAO REPORTS THAT HAVE USED GROUP METHODS, BY METHOD

The following GAO reports are listed by group method: expert panels, focus groups, discussion sessions; Delphi Technique; Nominal Group Technique.

#### Expert Panels

**(GAO-05-172) Highway And Transit Investments: Options for Improving Information on Projects' Benefits and Costs and Increasing Accountability for Results (January 2005).** We contracted with the National Academy of Sciences (National Academies) to convene a balanced, diverse panel of experts to discuss the use of benefit-cost analysis in highway and transit project decision making and gather views about options to improve the information available to decision makers. We worked closely with the National Academies Transportation Research Board to select panelists who could adequately respond to our general and specific questions about conceptualizing, measuring, improving, and using benefit and cost information in investment decisions. The panelists included top transportation economists and practitioners from throughout the country and discussed these four key issues during a one-day discussion. (See App. III for details about the panelists and GAO-05-423SP for additional highlights of the panel.)

**(GAO-04-246) Food Safety: FDA's Imported Seafood Safety Program Shows Some Progress, but Further Improvements Are Needed (January 2004).** To explore options for enhancing Food and Drug Administration's (FDA) current imported seafood inspection program, we convened a panel of nationally recognized food safety experts. The panel, selected with assistance from the National Academies, discussed the effectiveness of FDA's current approach for ensuring the safety of imported seafood and provided advice on ways to strengthen it. Nine seafood safety experts participated in an all-day meeting and provided their views on four questions, which were provided to the scientists prior to the meeting. (Appendix II contains a summary of the expert panel's observations on the safety of imported seafood.)

**(GAO-03-337) Retirement Income Data: Improvements Could Better Support Analysis of Future Retirees' Prospects (March 2003).** To identify (1) data improvements that experts say are a priority for the study of retirement income and wealth and (2) factors limiting efforts to obtain the needed information, we held a daylong meeting with a diverse group of 11 retirement income experts, including 5 federal officials with responsibilities related to retirement income data, 3 university based analysts, and 3 from private not-for-profit agencies.

**(GAO-01-1084SP) Results-Oriented Budget Practices in Federal Agencies (August 2001).** We conducted a case study of budget formulation and implementation practices at the Small Business Administration (SBA), and then formulated a framework of how these practices fit together. To obtain an operational perspective on this framework, we convened a panel of seven senior budget officials. We provided the panelists with a questionnaire and asked them to (1) rate each practice in terms of its importance to the achievement of agency goals and (2) note if they thought the practice was difficult to carry out. The panel discussion was focused on areas where there was greater disagreement among the panelists.

**(GAO/RCED-00-184) Homelessness: Barriers to Using Mainstream Programs (July 2000).** Homeless individuals often cannot effectively access or use mainstream federal programs. As part of an engagement to determine how the federal government can improve the access and use of federal programs, GAO convened a 1-day panel of experts. The eight panel members were from the federal government, non-profit research organizations, and organizations serving the homeless. Discussion questions were grouped into three sections, with three questions in each section. Discussion was moderated by a team member and a trained moderator from GAO.

**(GAO/RCED-99-158) Telecommunications: The Changing Status of Competition to Cable Television (July 1999).** GAO conducted a 1-day expert panel in order to provide information about (1) the status of competition in the subscription television market and (2) key factors that may influence the development of future competition. Participants were seven identified experts from government, academia, and non-profit research groups. The engagement team developed a set of eight questions, which were distributed to panel members before the meeting. Discussion was moderated by a team member and a trained moderator from GAO.

## Focus Groups

**(GAO-06-110) Best Practices: Better Support of Weapon System Program Managers Needed to Improve Outcomes (November 2005).** In order to determine Department of Defense (DOD) practices for supporting program managers and holding them accountable, we conducted five focus groups, each composed of project managers from one of the services or the Missile Defense Agency and representing a range of DOD programs. For each focus group, the facilitators introduced discussion topics to discover how program managers define success, what they are accountable for, how they are held accountable, how they are supported, and what obstacles they encounter in performing their duties. We analyzed the content of focus group transcripts and used the themes we identified to design a survey to gather information about program managers' perceptions about factors that assist or block their success and to more clearly define other issues in the DOD acquisition process that affect program manager effectiveness.

**(GAO-05-798) Military Personnel: DOD Needs to Improve the Transparency and Reassess the Reasonableness, Appropriateness, Affordability, and Sustainability of Its Military Compensation System (July 2005).** We conducted 40 focus groups with over 400 service members across all four services and enlisted and officer pay grades at eight military installations in the continental United States, in order to obtain service members' perceptions about their compensation and to augment Department of Defense (DOD) survey findings on satisfaction with compensation. We conducted 10 groups of 8 to 12 participants in each of the four services, each based on certain homogeneous factors—such as rank, service, and installation. In all focus groups, in order to hear from different perspectives, efforts were made to select participants with differences in sex, marital status, if the member lived on base or off base, and if the member had been recently deployed.

**(GAO-05-720) Intellectual Property: USPTO Has Made Progress in Hiring Examiners, but Challenges to Retention Remain (June 2005).** We conducted 11 focus groups with patent examiners and supervisory patent examiners to obtain their views on various issues related to US Patent and Trademark Office's (USPTO) ability to attract and retain a qualified patent examination workforce. Participants were randomly selected from all patent examiners and supervisory patent examiners who had been at USPTO at least 9 months and were selected from both USPTO locations. The

number of participants in the groups ranged from 6 to 11; participants in 8 of the groups were patent examiners while the other 3 groups encompassed supervisory patent examiners.

**(GAO-05-192) Social Security Statements: Social Security Administration Should Better Evaluate Whether Workers Understand Their Statements Report to Congressional Requesters (April 2005).** To assess how well recipients understand the Social Security Statement (one of the federal government’s largest efforts to communicate directly with workers about their Social Security benefits), we contracted with a private market research firm to conduct six focus groups that reviewed the statement’s content and design and compared them with those of a private sector benefit statement. These focus groups were held in Seattle, Chicago, and Atlanta and were balanced for age, gender, and ethnicity. In each city, we conducted two focus groups—one for participants without a college degree and one for participants with a college degree or higher. These groups complemented a national random telephone survey and an assessment of the statement by a nationally recognized benefit statement evaluation firm.

**(GAO-01-1084SP) Results-Oriented Budget Practices in Federal Agencies (August 2001).** Before the focus group was convened, senior agency budget officials completed a survey, rating specific budget practices on importance in achieving agency goals and difficulty to execute. The focus group organizers provided survey results to the participants and targeted areas of disagreement for discussion. As a result, aspects of the model were refined or modified.

**(GAO-01-172) Veterans’ Benefits: Veterans Have Mixed Views on a Lump Sum Disability Payment Option (December 2000).** This study show how results of a survey (N=1,921) can be supplemented and enhanced by the details obtained through focus groups. Two groups were conducted (Cheyenne, WY and Grand Junction, CO) with veterans receiving disability compensation and another four groups with active-duty military members in four services.

**(GAO/HEHS-95-14) Veterans Health Care: Veterans’ Perceptions of VA Services and VA’s Role in Health Care Reform (December 1994).** This engagement used a series of “focus group discussions” involving 14 groups, ranging in size from 5 to 14 participants. The participants were selected from VA’s compensation and pension files using eight well-described criteria. Participants were recruited by phone with follow-up confirmation letters and a reminder phone call the day before the session; they received a stipend of \$25 after the focus group session. GAO employees who were trained as moderators guided the discussions. The moderators used broad questions developed from a literature review identifying VA issues in specific areas and encouraged participating veterans to converse among themselves. The group discussions were audiotaped and professionally transcribed. The data were analyzed using an interactive text retrieval and database program in order to categorize responses. The resulting findings were the basis of the entire letter report.

**(GAO/GGD-90-88) National Coinage Proposals: Limited Public Demand for New Dollar Coin or Elimination of Pennies (May 1990).** Good write-up of focus group methodology in appendix IV. An outside contractor conducted nationwide focus groups with members of the general public and individuals who handle cash as part of their work in order to evaluate the acceptability and impact of proposed changes in the U.S. coinage and currency system.

## Discussion Sessions

**(GAO-05-348) Military Personnel: More DOD Actions Needed to Address Servicemembers' Personal Financial Management Issues (April 2005).** This report examined personal financial management (PFM) programs that provide servicemembers with financial literacy training, financial counseling, and other assistance to avoid or mitigate the adverse effects associated with personal financial problems. Interviews, focus groups, and a survey of PFM program managers were supplemented with information obtained from three group discussions with a total of 50 personnel affiliated with the PFM programs while they attended a November 2004 conference.

**(GAO-05-292) Child Welfare: Better Data and Evaluations Could Improve Processes and Programs for Adopting Children with Special Needs (June 2005).** In addition to a state survey, site visits, and document reviews, we conducted discussion groups with adoptive parents and adoption program managers from around the country at two national conferences. We conducted a discussion with 11 adoptive parents from 8 states who were attending an annual conference to learn their perspectives on the adoption process, subsidy rates, and post-adoption services. We also held a discussion group with adoption program managers from 18 states during the annual meeting of the National Association of State Adoption Programs. During this discussion, we learned more about the federal role in promoting and sustaining adoption and obtained managers' perspectives on Title IV-E funding and the provision of subsidies to adoptive parents.

**(GAO-04-19) Public Housing: Small and Larger Agencies Have Similar Views on Many Recent Housing Reforms (October 2003).** To identify specific reform issues to examine in a survey, we held group discussions with 19 directors from small, medium, and large public housing agencies throughout the country. We met with directors of housing agencies at two conferences convened by housing associations. During these discussion sessions, issues explored included the challenges directors face and what is being done to meet the challenges. We used a nominal group technique to prioritize the most important challenges directors of small housing agencies face.

**(GAO-03-899) Charter Schools: New Charter Schools Across the Country and in the District of Columbia Face Similar Start-Up Challenges (September 2003).** To obtain information on new charter schools and those in the District of Columbia, we conducted interviews, reviewed a variety of national studies and surveys of charter schools, as well as the District of Columbia and federal laws affecting charter schools in the District. In addition, we conducted a discussion group consisting of District representatives from charter school advocacy groups, researchers, charter school founders, and other individuals knowledgeable of charter school issues in the District of Columbia.

**(GAO/HRD-90-125) Respite Care: An Overview of Federal, Selected State, and Private Programs (September 1990).** This report combines information from group discussions with several other sources of data, including a questionnaire sent to respite care program officials in 25 states; interviews with officials and secondary data from federal agencies, private and non-profit service associations; and a literature review. The five group discussion sessions were conducted with participants from three populations relevant to respite care. During the group discussions, participants were asked for their views on several respite care issues. The information gathered was used directly in the text of the letter report.

## Delphi Technique or Web-Based Delphi

**(GAO-05-165) Wastewater Facilities: Experts' Views on How Federal Funds Should Be Spent to Improve Security (Web use) (January 2005).** This report addressed security-related vulnerabilities affecting the nation's wastewater systems, activities the federal government should support to improve wastewater security, and allocation and distribution of federal funds to improve security. We identified 50 recognized experts from the wastewater community, seeking (1) individuals who were widely recognized as possessing expertise on one or more key aspects of wastewater security and (2) balance in representation from key federal agencies, state or local agencies, industry and nonprofit organizations, academia, and water utilities of varying sizes. In phase 1, we asked experts to identify security actions, allocation criteria, and funding mechanisms. During the second phase, experts rated the relative priority or effectiveness of the security activities, allocation criteria, and funding mechanisms identified in Phase 1, and in Phase 3 were given the opportunity to compare the group results with their own individual answers and to use this information as a basis for reconsidering their answers and revising their individual responses, if so desired.

**(GAO-04-29) Drinking Water: Experts' Views on How Future Federal Funding Can Best Be Spent to Improve Security (Web use) (October 2003).** To examine key security related vulnerabilities affecting the nation's drinking water systems and suggestions for funding allocation and activities the government should support, we conducted a Web-based Delphi survey process involving 43 nationally recognized experts. GAO sought individuals who were widely recognized as possessing expertise on one or more key aspects of drinking water security, and sought to achieve balance in representation from key federal agencies, key state or local agencies, key industry and nonprofit organizations, and water utilities of varying sizes. In the first questionnaire, we asked several broad questions. We used experts' responses to Phase 1 questions to develop more detailed questions for Phase 2 about specific actions or strategies regarding two overall issues regarding funding allocation and specific activities most deserving of federal support. For these two areas, we sought to identify both additional detail and the degree to which consensus could be achieved among the experts on our panel. (See also testimony GAO-04-1098T.)

**(GAO-02-789) International Trade: Small Businesses Face Significant Challenges in Obtaining Foreign Patents (Web use) (July 2002).** This report addressed the impediments small businesses face in obtaining foreign patent protection. To identify the impediments, and to gauge their impact, we conducted a Web-based modification of the Delphi technique with 39 attorneys with substantial foreign patent experience. The first phase was partially focused on identifying the difficulties small businesses have, and the missteps they make, when seeking foreign patents. The second phase was used to determine which of the impediments were most difficult for small businesses, as well as what sorts of things small businesses should do to overcome those impediments. Finally, during the third phase experts were asked what sorts of federal assistance, financial or otherwise, might address some of the problems that small businesses face when seeking foreign patent protection.

**(GAO-02-246) Economic Models of Cattle Prices: How USDA Can Act to Improve Models to Explain Cattle Prices (Web use) (March 2002).** This report addressed economic models that the United States Department of Agriculture (USDA) and International Trade Commission (ITC) use to predict domestic cattle prices. We selected 40 experts (agriculture economists) based on their knowledge of the cattle and beef industry and used a Web-based modification of the Delphi technique to identify the most important factors affecting cattle prices and cattle producers' income. In a subsequent iteration experts were asked to rate the importance of each of these factors. The overall ratings were presented to the experts in the third and final round for their review. In the final phase, we asked the experts to select up to five identified issues that if addressed would improve current

economic models that predict domestic cattle prices. To improve the economic models, USDA implemented all of the recommendations we made in the report.

### Nominal Group Technique

**(GAO-03-304) PRIVACY ACT: OMB Leadership Needed to Improve Agency Compliance (June 2003).** Representatives from 25 agencies (mostly Privacy Act officers) were invited to a meeting in February 2003 to better understand the implications of our survey results. At this meeting, we presented the survey results for all 25 agencies and then asked the participants a series of questions about the barriers to improved compliance with the act, actions needed to improve compliance, the adequacy of the act in today's electronic environment, and what changes, if any, were needed to the act. After discussing their answers to these questions, we asked participants to use electronic devices to anonymously record their "votes" on various privacy issues. To identify the *relative importance* of participants' votes on particular privacy issues, we assigned different point values to their 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> choices. For example, we told participants their 1<sup>st</sup> choice for the most important barrier to improving compliance would receive 3 points, their choice for the 2<sup>nd</sup> most important barrier would receive 2 points, etc. We incorporated the results of these discussions and votes into the appropriate sections of this report. (See app. II for a summary of the results.)

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