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FEDERAL PROGRAMS

Ethnographic Studies Can Inform Agencies' Actions



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#### **Abbreviations**

CDC	Centers for Disease Control and Prevention
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DOD Department of Defense DSTDP Division of STD Prevention

EHS Early Head Start

EPA Environmental Protection Agency

HHS Department of Health and Human Services

NMFS National Marine Fisheries Service

NOAA National Oceanic and Atmospheric Administration

NPS National Park Service

ONDCP Office of National Drug Control Policy

SIA social impact assessment
STD sexually transmitted disease
VISTA<sup>TM</sup> Values in Strategy Assessment
YATS Youth Attitudes Tracking Study

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United States General Accounting Office Washington, DC 20548

## **Preface**

In this time of emphasis on performance and results, federal agencies and congressional committees can benefit from knowing the full range of social science methods that can help them improve the programs they oversee. Among the methods they might consider are those of ethnography, derived from anthropology. However, information about the past and present uses of ethnography to improve federal programs has not been systematically gathered or analyzed. Therefore, its potential for program improvement may be overlooked.

Ethnography can fill gaps in what we know about a community whose beliefs and behavior affect how federal programs operate. This can be especially useful when such beliefs or behavior present barriers to a program's objectives. Ethnography helps build knowledge of a community by observing its members and by interviewing them in their natural setting. Although many people associate ethnography with lengthy anthropological research aimed at cultures remote from our own, it can be used to inform public programs and has a long history of application in the federal government.

Our aim in this study has been to describe how federal agencies have used the results of ethnographic studies to improve agency programs, policies, and procedures. We have done this by examining the range and scope of the use of ethnography in the federal government. In working through a network of anthropologists in the federal government and other social science networks, among our other resources, we constructed a list of examples of the use of ethnography that were established, not merely onetime or grant-funded, elements in agency programs. From this list, we have been able to present case studies that illustrate different agencies whose application of ethnography varies in purpose, method, and the use of results. We believe that this study not only provides examples of how the federal government uses ethnography but also suggests some means of expanding and improving its use of ethnography and its results. We hope that it will provide a resource to agencies that face site-specific or broader issues involving communities or populations important to program success.

Within the body of our text, we offer original visual presentations that define the ethnographic research process and that suggest some relationships between ethnographic studies and ways of enumerating populations that are difficult to count. Readers will also find tables summarizing our cases of the agencies' uses of ethnography.

Copies of this study are available on request. For additional information, please contact me at (202) 512-8430. Key contributors to this project included Gail MacColl, Emily Jackson, and Tahra Edwards.

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## Appendix I: How Ethnographic Studies Can Inform Agencies' Actions

### Introduction

Gaps in information about and understanding of communities or populations whose beliefs and behavior affect how a federal program operates can be obstacles to a program's objectives. Those gaps are sometimes filled by using ethnography, a set of social science methods designed to build knowledge by observation and in-depth interviewing of a community's members. However, information about how federal agencies have used ethnography has not been systematically gathered and analyzed, and ethnography's potential utility for evaluating programs and improving them in a range of government settings has not been examined. Thus, agencies and congressional committees have little help in ascertaining when ethnographic methods might be useful for the programs they are responsible for.

We undertook this study of federal agencies' use of ethnographic methods as a research and development project under our basic legislative authority to undertake work in support of the Congress and of our performance goal to improve the quality of evaluative information. Our objectives were to (1) examine the range and scope of the use of ethnography in the federal government and (2) illustrate how federal agencies have used the results of ethnographic studies to improve agency programs, policies, and procedures.

### Results in Brief

We identified program offices in 10 federal departments and agencies that have used ethnographic methods. They ranged from the National Park Service (NPS), which has used ethnography to inform park planning and interpretive programs, to the Bureau of the Census, which has used it to conduct alternative enumerations of hard-to-count populations. In each office, ethnography was used to gain a better understanding of the sociocultural life of a group whose beliefs and behavior were important to a federal program. The character and intensity of ethnographic studies and the communities studied varied. For example, the Office of National Drug Control Policy (ONDCP) uses ethnographers as consultants in its ongoing monitoring of trends in street-level drug use. In contrast, the Environmental Protection Agency (EPA) supported community-based efforts to protect local drinking water by providing for ethnographers to help local leaders understand cultural and social motivations and obstacles to community involvement in those efforts.

Our case studies illustrate how four agencies used ethnographic methods to meet statutory requirements and help meet performance objectives. The National Marine Fisheries Service (NMFS) uses ethnography in conducting statutorily required assessments of the impact of proposed fisheries'

management plans on fishing communities. NMFS has also used ethnographies to help identify ways to mitigate the plans' potentially negative effects. Rapid-assessment ethnographic procedures have helped Centers for Disease Control and Prevention (CDC) staff identify factors that contribute to outbreaks of sexually transmitted disease (STD) and suggest preventive actions to local health officials. The Bureau of the Census has used ethnographic studies to understand why certain groups have been undercounted and to propose improved methods of enumeration. To target recruiting efforts more effectively to young people, the Department of Defense (DOD) used ethnographic surveys to obtain indepth information about the propensity to join the military from youths who had participated in an ongoing structured survey and their parents.

In each case, a program's operation or outcomes depended in some way on the actions of a definable cultural community. Overall, ethnographic methods were used to obtain new information about and understanding of the communities and the problem at hand through interaction with community members. In some instances, findings were applied only to the particular program's local community. But the case study agencies also sought to capture ethnographic information across study sites in order to support comparisons, reliably identify recurring themes, or facilitate the integration of ethnographic with economic or other quantitative data.

## Background

Ethnography is a social science method developed within cultural anthropology for studying communities in natural settings. Although ethnography is commonly associated with lengthy research aimed at understanding cultures remote from our own, it can also be used to inform the design, implementation, and evaluation of public programs. Ethnography has a long history of application in the federal government. For example, in 1852, the ethnographic work of an anthropologist commissioned by the Congress to report on the circumstances and prospects of Indian tribes in the United States gave background and direction to Indian policy. During the era of the New Deal, anthropologists in the U.S. Department of Agriculture examined the problems of rural poverty and the relationship of farming to community viability. Anthropologists during World War II established institutes at universities across the country to teach foreign service officers, military personnel, and others regional history, language, culture, society, and politics relevant to national defense and U.S. participation in global affairs.

In this study, we focus on how federal agencies can use ethnographic techniques to understand and address issues or problems important to a

program, such as the relationship between natural resources and communities or between community beliefs and behaviors and program activities. In the remainder of this section, we describe some of the defining features of ethnography as a method of study.

### Ethnographic Methods Explore Behavior in a Social Setting

Ethnographic methods are exploratory. They are appropriate for studying issues or problems that are not readily amenable to traditional quantitative or experimental methods alone and in which it is important to discover what the participants do and why they do it from their own perspective. Ethnographic techniques are used to

- define an issue or problem when it is not clear, when it is complex, or when it is embedded in multiple systems or sectors;
- identify the range of the problem's settings and the participants, sectors, or stakeholders in those settings who are not known or who have not been identified;
- explore the factors associated with the issue or problem in order to understand and address them or to identify them when they are not known;
- describe unexpected or unanticipated outcomes; and
- design measures that match the characteristics of the target population, clients, or community participants when existing measures are not a good fit.

Ethnographic studies follow the steps illustrated in figure 1. In the preparation stage, the study team assembles existing information about the local community to be studied. The research often begins with an initial question about a situation—for example, "What accounts for the undercount of urban minorities during the decennial census?" The researcher uses prior knowledge about a setting to create a formative theory or explanation of the situation.

<sup>&</sup>lt;sup>1</sup>For a comprehensive discussion of ethnographic methods, see Jean J. Schensul and Margaret D. Le Compte (eds.), *Ethnographer's Toolkit* (Walnut Creek, Calif.: AltaMira Press, 1999).

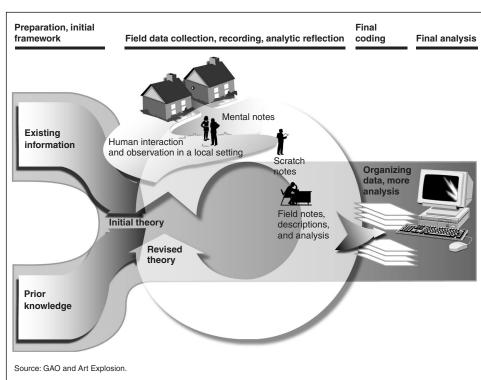


Figure 1: The Ethnographic Research Process

Then field data collection, the next stage, begins. Ethnography is distinguished by the collection of data by means of human observation and interaction in a local setting, with the researcher as the primary data collection tool.

Key exploratory ethnographic data collection techniques include

- **Exploratory or participant observation**, which requires the ethnographer to be present at, involved in, and recording the daily activities in the field setting. It is the starting point for ethnographic research.
- In-depth, open-ended interviewing, which explores a topic in detail in order to deepen the interviewer's knowledge of an area about which little is known. The interviewer is open to all relevant responses and has flexibility to cover new topics as they arise.

• **Semi-structured interviewing**, which is more focused than openended interviewing and may be administered to a representative sample of respondents. It is based on an interview guide of predetermined questions but seeks open-ended answers and allows the researcher to expand questions through probes.<sup>2</sup>

Fieldwork varies in depth and duration. In studies of an entire culture, the ethnographer may be fully immersed in the research setting, living in the setting and participating in all possible daily activities for a number of years. Ethnographic studies that focus on a particular dimension or aspect of culture often involve shorter periods. For example, they may use techniques such as a rapid assessment procedure to gather in-depth information on a particular problem in a short time.

In circumstances where it is inappropriate to take notes openly, ethnographers may make *mental notes* that they keep in memory until it is possible to write them down. They make *scratch notes*, or jottings and scribblings during events in the field, or immediately after events, often written in shorthand or code; these help the ethnographer remember their mental notes. Ethnographers later turn their mental notes and scratch notes into descriptions, developed in turn into *field notes*, which make a custom, belief, or practice comprehensible not only to the ethnographer but also to outsiders. In other circumstances, where information collected is of legal significance, federal ethnographers may record interviews openly, making sure that respondents know that their answers are being recorded.

### Analysis and Interpretation Proceed Throughout an Ethnographic Study

In an ethnographic study, analysis and interpretation proceed from the moment the researcher enters the field.<sup>3</sup> As depicted in figure 1, the researcher's initial theory is continually modified as new information is obtained. Field notes include reflection, preliminary analysis, initial interpretations, and new questions to be explored and tested in future observations or interviews. They are organized around the basic

<sup>&</sup>lt;sup>2</sup>In addition to these general techniques, ethnography has specialized techniques for mapping social networks or spatial data, audiovisual techniques, and focused group interviewing. Schensul and LeCompte (eds.), vols. 3 and 4, discuss these methods.

<sup>&</sup>lt;sup>3</sup>Analysis refers to the process of coding, counting, tallying, and summarizing so as to reduce field notes to manageable form and to reveal patterns and themes. Analysis enables the ethnographer to tell a story about the group that is the focus of research. Interpretation permits the ethnographer to tell readers what the story means.

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conceptual frames or questions that structured the study in the beginning, and they become increasingly focused as research progresses.

Analysis out of the field begins with final coding of text data—that is, organizing the data in terms of a framework with which the researcher can support the analysis and reach conclusions. The researcher decides which data should be coded and devises a strategy for separating them into conceptual categories. After the data are coded, researchers can begin to examine collections of codes, through a variety of systematic qualitative analysis techniques, to see how they are related to one another, and organize related items by their patterns. Qualitative data can also be integrated with or compared to results from surveys or other sources.

Reporting results from ethnographic research commonly involves constructing an analytically informed narrative portrait of what is being studied. The narrative may include vignettes or descriptions intended to convey typical events or situations, as well as contingency tables and other graphic or numerical displays.

#### Ethnography Overlaps but Is Distinct from Other Social Sciences

Field observation and exploratory interviews are not exclusive to ethnography: Other social sciences draw on them as well. And ethnographic work may include measurement and analysis methods common to other social sciences. For example, it may include a structured survey administered to a representative sample of respondents that can be used to measure relationships among the variables that emerged from exploratory work. The standards of quality that apply to these methods apply in ethnographic studies, as they would in any social science.

However, two important features distinguish the ethnographic approach from other social sciences. First, ethnography seeks to understand culturally based behaviors and beliefs from the perspective of a community's members and to use local perspectives as the foundation for building testable theories. Second, the researcher is the primary tool for data collection, which takes place under conditions that the ethnographer cannot control. The second feature raises potential threats to validity and reliability, but these can be minimized by careful procedures that are

outlined in the professional ethnographic literature and are emphasized in ethnographers' training.<sup>4</sup>

## Scope and Methodology

To ascertain the range and scope of the federal agencies' use of ethnography, we solicited information through a network of anthropologists in the federal government and other social science networks and newsletters, conducted literature reviews, and searched agency Internet sites. Given the limitations of our initial search, some federal agency uses may not have come to our attention, and our list of agencies that have used ethnography should not be interpreted as complete.

From initial information from our search and follow-up conversations with individuals who identified agency uses, we constructed a list of examples of the use of ethnography that were an established element in a program (not merely one-time or grant-funded studies) and that were sufficiently mature to have generated results. For more detailed study, we then chose four examples that illustrate different agencies whose use of ethnography varied in purpose, method, and use of results. We obtained additional information about these programs from agency documents, external reports that discussed the ethnographic studies, and interviews with knowledgeable officials. Our four case studies do not constitute a complete set or representative sample of established agency uses. They are intended only to be illustrative.

We requested comments on a draft of this report from the Department of Commerce and the Department of Defense and the National Center for HIV, STD, and TB Prevention. DOD and Commerce provided technical comments that we incorporated where appropriate throughout the report.

## Federal Agencies Employ Ethnography in a Variety of Ways

Table 1 shows program offices in 10 federal departments or agencies that we found employed ethnographic methods in the past 15 years. They include NPS's work to ensure that park planning and interpretive programs are culturally informed and the Bureau of the Census's enumerating in alternative ways populations that are difficult to count. In

<sup>&</sup>lt;sup>4</sup>Schensul and Le Compte (eds.), *Ethnographer's Toolkit*, vols. 2–4, address these issues in connection with a variety of methods.

each case, we found that ethnography was used to understand better a group's sociocultural life with respect to an important federal program issue.

Sponsoring agency		Population studied	Purpose
Department of Commerce	Bureau of the Census	Urban and rural, hard-to-count populations	Examine factors contributing to undercounts and conduct an alternative enumeration in the sites studied
	National Marine Fisheries Service	Members of fishing communities	Gauge the potential social and cultural consequences of alternative fishery management actions or policies on local communities
Department of Defense	Defense Human Resources Activity	Youths of military enrollment age	Understand factors affecting youths' propensity to join the military and strengthen recruitment targeting them
	Naval Health Research Center	Military winter-over personnel in Antarctica	Understand and help improve health and performance of personnel under conditions of prolonged isolation in an extreme environment
Department of Health and Human Services	Administration for Children and Families	Early Head Start children and families	Examine how children and their families experienced a Montessori preschool program and help interpret patterns in quantitative data
	Centers for Disease Control and Prevention	Local populations at risk for or experiencing higher rates of STDs	Develop intervention strategies specific to areas in which increases in STDs occur to prevent further transmission
	Centers for Medicare and Medicaid Services	Nurses and managers in long- term care facilities	Explore management practices and other factors that affect nursing staff recruitment and retention
	National Institute on Drug Abuse	Populations of drug users	Obtain detailed information about patterns of drug use and emerging trends
Department of Housing and Urban Development		Populations that have traditionally lacked access to home mortgage lending	Gain better understanding of barriers to homeownership for these groups and inform policy

Sponsoring agency		Population studied	Purpose	
Department of the Interior	National Park Service	Members of present-day tribes and communities associated with national parks	Support policy making, program planning, and management and ensure that park site interpretations are culturally informed	
Department of Justice	Office of Justice Programs	Drug-users, dealers, and gang members and other populations involved in street crime	Build knowledge of criminal behavior that can be applied to the operations of the justice system	
Department of Labor	Employment and Training Administration	Communities targeted by Labor's youth opportunity programs	Assess the neighborhoods' sense of well being before, during, and after the Youth Opportunity Area Demonstration in order to evaluate the program's overall effectiveness	
Environmental Protection Agency	Office of Ground Water and Drinking Water	Neighborhoods involved in community-based environmental protection efforts	Provide details about community values and perspectives that relate to community-based environmental behavior	
Office of National Drug Control Policy		Drug-using populations	Provide information that can alert policy makers to short- term changes or newly emerging problems on specific drugs, drug users, or drug sellers	
U.S. Agency for International Development		Overseas communities targeted for USAID programs	Provide a more detailed picture of the local context in which a project will be carried out in order to tailor it better to the needs of the target population	

Source: Agency documents.

Before turning to our more extended examples, we summarize a few that illustrate the range of the agencies' use of ethnography. The National Park Service established its Applied Ethnography Program to systematically conduct, contract for, and share the results of studies in cultural anthropology with park planners, managers, and other decision makers. The program uses ethnographic studies to identify diverse present-day tribes and communities and to ascertain the cultural meanings of park resources to their members. The results of the studies are used in assessing the impact of planned actions on the cultural and natural environment, as required pursuant to the National Environmental Policy Act, and on sacred places, pursuant to the American Indian Religious Freedom Act (and Executive Order 13007 on Sacred Sites). In addition, ethnographic studies help NPS ensure that diverse local views and community concerns are considered in park planning and that NPS's site presentations to visitors are culturally informed. This can be particularly

helpful in interpreting sites that have a divisive past, such as massacre sites, where American Indians lost their lives, and plantation parks, which are characterized by strong, often divergent views of slavery among descendants of enslaved people and their owners.

EPA, recognizing the importance of human and social needs and local community actions in ecosystem protection, has drawn on ethnography to support such community actions. Staff in EPA's Office of Wetlands, Oceans, and Watersheds created a guide that incorporates ethnographic approaches in outlining procedures for identifying community cultural values, beliefs, and behaviors related to the environment.<sup>5</sup> The guide is intended for training people, organizations, and institutions in watershed protection and public health professionals as well as federal, tribal, state, and local agencies seeking technical skills for improving stakeholder involvement. EPA has also made ethnographic consultants available. In 1996, EPA's Office of Ground Water and Drinking Water set up a 5-year cooperative agreement with the Society for Applied Anthropology to assist community-based efforts to protect local drinking water supplies and to understand the cultural and social motivations and obstacles to community involvement at the local level. For example, an anthropologist helped the Lower Elwha Klallam Tribe explore how its traditional cultural emphasis on loose local control of natural resources may affect its ability to adopt source water protection programs and helped tribal members see the need for protective management in light of the reservation's growing population.

ONDCP uses ethnographic expertise to alert policy makers to short-term changes and newly emerging problems concerning specific drugs, drug users, and drug sellers. An ONDCP quarterly publication, *Pulse Check*, uses reports from telephone interviews with ethnographers and epidemiologists who work in drug research to gather information about trends in use, areas where drugs are sold, availability, quality, and pricing. *Pulse Check* provides a quick sense of what is happening with regard to drug abuse across the nation.

The Department of Justice has turned to ethnographic research to learn about street crime and gang activity. For example, the National Institute of Justice's 1999 annual conference on criminal justice research and

<sup>&</sup>lt;sup>5</sup>EPA, "Community, Culture, and the Environment: A Guide to Understanding a Sense of Place," Washington, D.C., November 2002.

evaluation featured work by ethnographers who had studied crime and drugs from the street level. In one study, ethnography was used to obtain quantitative information—numerical data on the economic practices of a street gang (wage and nonwage expenditures)—through key informants and participant observation. Ethnography was helpful in gathering two data sets that may assist in the policy arena: (1) the ethnographer gained access to financial records a single gang maintained for a 4-year period that contained data on the price and quantity of drugs sold, other sources of revenue, and gang expenditures for wages, weapons, funerals, and other items and (2) ethnographers and macroeconomists longitudinally tracked nearly a dozen gangs in a large city, producing a taxonomy of the various organizational structures in which drug trafficking took place.

The Administration for Children and Families of the Department of Health and Human Services (HHS) used ethnographic techniques in two national Early Head Start (EHS) evaluation sites to illuminate ways in which the families EHS served accepted or rejected the program's Montessori intervention. The national EHS evaluation follows a traditional random-assignment research design, with quantitative measures of process and outcome. Several sites, however, included anthropological work as part of their local research to tell the story of program implementation more fully and to document the sociocultural contexts in which programs operated. An ethnographer observed the classroom regularly and visited selected families in their homes to discuss their thoughts about the Montessori EHS intervention in more detail. The preliminary results from this ethnographic research have emphasized that contrary to what may have been believed about Montessori before the program's experience, low-income parents appreciated and valued the changes they saw in their children.

The Employment and Training Administration in the Department of Labor included an ethnographic community assessment in an evaluation of the 1996 Youth Opportunity Area (Kulick) Initiative for out-of-school youths. Findings from the ethnographic component, along with a process evaluation and survey data, will be integrated into an overall evaluation of the effectiveness of the Kulick project. Ethnographic methods in this context are used to assess the neighborhoods' sense of well-being before, during, and after the demonstration.

<sup>&</sup>lt;sup>6</sup>The conference is reported in *Looking at Crime from the Street Level: Plenary Papers of the 1999 Conference on Criminal Justice Research and Evaluation—Enhancing Policy and Practice through Research*, vol. I (Washington, D.C.: Department of Justice, 1999).

## Cases Illustrate Ethnography's Incorporation in Agency Programs

The examples below illustrate how a regulatory agency, a preventive health services agency, a statistical agency, and a defense agency incorporated ethnographic methods to shed light on program-relevant aspects of cultural communities critical to program success. The ethnographic work represented immersion in a community for an extended period, rapid assessment, and cognitive interviewing by external and in-house experts. The cases include both immediate and long-term results of study findings.

### NMFS Uses Ethnographic Techniques in Assessing the Effects of Fishery Management Plans

NMFS, a unit within the National Oceanic and Atmospheric Administration (NOAA) in the Department of Commerce, is responsible for the science-based conservation and management of the nation's living marine resources and their environment. In allocating fishing resources through the fisheries management planning process, NMFS is required by statute to consider the impact of its allocations on fishing communities. Ethnographic studies have contributed to this decision making process.

NMFS is responsible for upholding the guidelines and regulations promulgated under the Magnuson-Stevens Fishery Conservation and Management Act. The act established eight Regional Fishery Management Councils, giving them the responsibility of managing fisheries resources for conservation purposes and for allocating these resources fairly among various and competing users, such as commercial, charter, and recreational fishers. To carry out this responsibility, the councils prepare recommendations, known as fishery management plans, to the Secretary of Commerce. The plans are sent first to the appropriate NMFS Regional Office and then to NMFS's Office of Sustainable Fisheries, where they are checked for compliance with this act and other laws concerning marine resources that require agencies to assess the social and economic effects of proposed regulatory or policy changes. Fishery plans that pass the review are sent to the Secretary of Commerce for approval. Once a plan is approved, NMFS issues regulations to implement it.

 $<sup>^7</sup>$ 16 U.S.C. §§1853–63 (2000). The act gave this responsibility to the Secretary of Commerce, who delegated it to NMFS.

 $<sup>^8</sup>$ Examples include the National Environmental Policy Act and Executive Order 12898 on Environmental Justice.

<sup>&</sup>lt;sup>9</sup>U.S. General Accounting Office, *Individual Fishing Quotas: Better Information Could Improve Program Management*, GAO-03-159 (Washington, D.C.: Dec. 11, 2002).

The Magnuson-Stevens Fishery Conservation and Management Act stipulates that conservation and management measures take into account the importance of fishery resources to fishing communities in order to provide for the communities' sustained participation and, to the extent practicable, minimize adverse economic impact on them. This is done by conducting social impact assessments (SIA), which are like economic or ecological impact assessments but focus on the human environment of fisheries—on the effects of change in resource availability or fishing practices on fishermen, communities, fishing-related businesses and employment, families and other social institutions, social norms of behavior, and cultural values. Social impact assessments provide a basis for assessing the social and cultural consequences of alternative fishery management actions or policies. NMFS considers them an essential element in fisheries' decision making.

Many such assessments used in fisheries plans are supported by ethnographic studies, some performed by firms under contract to the regional council, others by academics. In addition, a social anthropologist on the NOAA staff reviews each proposed plan for compliance with the assessment's requirement. As outlined in a recent NOAA guidance document, conducting an SIA to fulfill the standards of the Magnuson-Stevens Fishery Conservation and Management Act involves

- identifying communities substantially dependent on fishing within the area that is affected,
- establishing a baseline profile of each community that covers a range of economic and sociocultural variables,
- describing and analyzing community social factors,
- identifying fisheries' issues from the community members' perspectives and collecting and analyzing information on them, and
- assessing alternative management actions with respect to these issues and their likely effects on the community.

To illustrate, an SIA using a rapid ethnographic assessment method was conducted with respect to a Multispecies Groundfish Fishery in New

<sup>&</sup>lt;sup>10</sup>16 U.S.C. §1851(a)(8)(2000).

England and the Mid-Atlantic region. The ports studied were selected by using a combination of information derived from field visits, licensing data, telephone interviews in the local area, and consultation with national and regional NMFS representatives. Both social and economic aspects of the Multispecies Groundfish Fishery fleet were identified and described, based on information from in-depth interviews, focus groups, and other sources. The assessment report noted each port's dependence on the fishery and the role of available public programs, explained the fisheries issues that fishing communities faced, and contrasted issues fishermen identified with those of fishery managers. This rapid SIA emphasized the importance of understanding the nature and extent of the Multispecies Groundfish Fishery crisis and the unique characteristics and adaptive strategies of its fisher families and communities.

NMFS officials cited instances in which ethnographic assessments had provided key information for fisheries' plans. For example, in 1990 a social science consulting firm developed community profiles for the North Pacific Fisheries Management Council that concerned the allocation of the catch between various participants. It addressed the critical question of how the fishing catch in the region should be allocated between the mother ship fleet (floating processors), the factory trawler fleet, and the onshore processors. According to an NMFS official, an economic impact statement had also been performed in the area, but its data had stated that there would be little change in the cost of fish to consumers if catch were restricted for any one of these groups. However, the social data showed that if the fisheries management plan did not properly allocate catch between the three groups, there would be significant disruption in the social and cultural lives of the fishers in Alaskan communities. There were also some hidden economic costs, such as welfare payments to the fishers who suffered because their catch allocation was reduced. According to the NMFS official, the community profiles were incorporated into the plan and served as the basis for the Inshore/Offshore Allocation Agreement in 1991. They were also used as building blocks, in combination with the preliminary results of the economic modeling group, for future reports analyzing the potential social effects of different inshore-offshore allocative regulations.

NMFS and the regions have in the past had few social scientists on staff and have relied largely on sociocultural studies by outside experts, each

<sup>&</sup>lt;sup>11</sup>Groundfish are fishes that swim near the bottom, such as cod, haddock, and flounder.

with its own design. While individually designed studies can provide useful insight into local or regional conditions in a given year, study-to-study differences in specific variables and analyses make it difficult to analyze study results over time. Noting an increase in legal challenges to fishery plans, NMFS has recently taken steps to build its capacity to assess and analyze social, cultural, and economic issues and impacts related to fisheries' management actions. This includes hiring additional social scientists as well as revising existing NMFS operational guidelines and creating new guidelines and manuals to help social science professionals and fisheries managers research and write the numerous analyses for each management action.

NMFS officials are also working on creating a longitudinal database for sociocultural data. The Sociocultural Practitioners Manual recommends a basic set of demographic, social structural, cultural, and socioeconomic data elements to be collected for every fishery, fishing community, and fishing port in order to create community profiles that will support comparative analysis—over time, across fisheries, and nationally. Activities to develop a common database involve economists and experts in information technology as well as social scientists knowledgeable about ethnography. These activities are coordinated with a NOAA science quality assurance project and the development of agency guidelines under the Information Quality Law, which covers all agency-sponsored documents and presentations, including fisheries management plans signed by the agency's secretary. 12

CDC's Rapid Ethnographic Assessments Help Communities Respond to Outbreaks of Sexually Transmitted Disease

CDC is the nation's focus for developing and applying disease prevention and control, environmental health, and health promotion and education activities designed to improve the health of the people of the United States. One of today's most critical public health challenges is controlling and preventing STDs, not only because they are the most frequently reported communicable diseases in the country but also because they cause largely preventable, severe, and costly complications in the nation's most vulnerable populations.<sup>13</sup> Toward this end, CDC's Division of STD Prevention (DSTDP) employs the rapid assessment procedure, an

 $<sup>^{12}\</sup>mathrm{Treasury}$  and General Government Appropriation Act, 2001, §515, Pub. L. 106-554, H.R. 5658

<sup>&</sup>lt;sup>13</sup>STDs have severe consequences for women and infants (especially ethnic and racial minority populations).

ethnographic technique, to help state and local health departments develop STD prevention strategies. Often local health departments ask for assistance, but CDC also initiates the procedure, based on data that show increases in STD infection. In offering this technical assistance, DSTDP is faced with two challenges: (1) to identify the social and environmental causes of a disease outbreak in a local area and (2) to develop intervention strategies specific to the area in which the increase in STD is occurring to prevent further transmission of disease.

The rapid assessment procedure is concerned specifically with collecting information about beliefs and perceptions about health, the prevention and treatment of illness, and community members' interaction with local health services. A team, usually consisting of four CDC staff members, including the senior research anthropologist in DSTDP plus others trained in public health, sociology, or psychology, typically comes from DSTDP but may include individuals from the HIV/AIDS unit, if appropriate. The local health department that is the "customer" for the procedure sometimes contributes employees to assist in the effort.

Rapid assessment procedures have been conducted both during and after an STD outbreak. To prepare for a site visit, the team typically spends about 2 weeks collecting background information about the community through the Internet and other secondary data sources. Team members also talk with health department officials to identify key informants, and from this initial conversation, a list of people to talk with and places to go to "snowballs."

On arriving at the site, the team meets with local health officials to learn more about their needs in addressing the increase in STDs, learn their perceptions of existing problems, and identify areas and issues about which additional information is needed. Next, they enter the field to gather information from community members, including teachers; health personnel; community, youth, and religious leaders; bar owners; taxi drivers; prostitutes; and other people prominent in the target population. The team uses a rapid assessment procedure fieldwork guide, based on a widely available model. Many questions in the guide are open-ended regarding beliefs and perceptions of STDs in the community. For example,

<sup>&</sup>lt;sup>14</sup>Susan Scrimshaw and Elena Hurtado, *Rapid Assessment Procedures for Nutrition and Primary Health Care: Anthropological Approaches to Improving Programme Effectiveness* (New York: United Nations University, 1987).

one question from the Los Angeles, California, ethnographic interview guide is, "What do you think life is like for HIV-positive men living in Los Angeles?" Another question is, "How would you describe the impact of STDs among communities of men having sex with men?" Broad, openended questions give the persons being interviewed the freedom to discuss a range of issues in the local context that they feel are important. The interview guide also includes more specific questions, called probe questions, that interviewers should ask only if the information has not already been addressed in earlier responses. An example is, "What about the idea that young men who have sex with men don't know people who have HIV or who have died from AIDS and are more willing partners for that reason?"

In addition to conducting interviews, the team looks for physical community characteristics that facilitate the transmission of disease—such as the presence of sex clubs and other establishments that are fertile ground for STDs—and for health program practices that are barriers to seeking care. Where relevant, team members may examine law enforcement or other institutional practices that impede disease prevention.

The rapid assessment procedure team typically spends about a week in the field recording notes, following the procedures outlined in the background section of this report. At the end of the study, team members report findings to site officials and collaborate with the program officers and other stakeholders to develop recommendations. Recommendations focus on interventions at the structural or system level, such as changing procedures within the local health department, and are strictly advisory. However, DSTDP staff indicated that because DSTDP and the local officials develop the interventions collaboratively, with the intention of stopping the increase in STDs, local health officials are highly motivated to implement the recommendations. Recommendations often become the basis for designing educational materials for use in the social marketing of disease prevention practices. Examples that have been adopted include

- Condoms and STD health services were introduced in the holding area in the Los Angeles County jail for male detainees when the rapid assessment procedure identified the lack of condoms as a source of increases in STDs.
- In Florida, a rapid assessment procedure identified gaps in the access among members of the Seminole tribe to health care. To improve awareness of sociocultural issues among health care providers, the

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local health department is developing a liaison with alternative health providers from the tribe.

These examples focus on site-specific benefits of the rapid assessment procedure. However, its successful use in certain communities has made it potentially useful as a guide for future work in similar communities. DSTDP's records date only from 2002 and are thus too few, and the sites and populations are too dissimilar, to allow cross-site generalization. However, DSTDP staff indicated that they are accumulating data from urban sites in the hope of eventually being able to do cross-site analysis. They are also developing an evaluation instrument for the rapid assessment procedure that will take into account the method's feasibility, acceptability, and value in different communities and that will focus on how CDC staff have improved the delivery of public health services.

Census Ethnographic Studies Inform the Enumeration of Populations That Are Difficult to Count

As the premier source of information about America's population, the Bureau of the Census strives to produce data that are accurate, timely, relevant, and cost-effective. It provides the population counts used to apportion seats in the House of Representatives, among other things. For the census, several challenges to accuracy have long been apparent—in particular, the challenges of constructing a comprehensive list of households to survey and of overcoming impediments to participation among certain racial and ethnic groups that have long been undercounted. Through its Statistical Research Division, the Bureau has shed light on these critical problems of data quality by sponsoring a series of studies by in-house and outside ethnographers that have documented undercounts and other enumeration errors, explored factors contributing to them, and led to recommendations for improvements in enumeration practice.

The series began in the late 1960s with an ethnographic study of a single block in a low-income urban neighborhood. The study revealed undercounts of adult men who were observed to be living in households but not reported to Census interviewers. The study's authors concluded that women who filled out Census forms deliberately concealed the presence of adult males in the household to protect household resources such as public assistance and unreported income. However, since only one site was studied, there was no way of knowing how widespread this practice might be. Subsequent ethnographic studies of low-income urban areas and populations provided further evidence of concealment and suggested that ideological resistance to mainstream society, complex and ambiguous living arrangements, and varying beliefs about who should be

considered to be "residing" in a household might also contribute to undercounts.

To further explore these emerging hypotheses, the 1988 Dress Rehearsal Census included ethnographic coverage evaluation studies in five sites encompassing various populations thought likely to be undercounted. Ethnographers documented the census day residence for all persons enumerated and compared their observed count to the "official" count for the same blocks; then ethnographers returned to the field to examine discrepancies. These studies revealed three major types of error:

- undercounts from omitted households (persons in residences that were not on the Census's address list or were erroneously listed as vacant),
- undercounts from omitted individuals (persons present in a residence but not included on the household roster), and
- overcounts from the same person's being counted in more than one household—apparently as a result of extended families whose members (such as a mother or grandmother) circulated between several neighboring housing units.

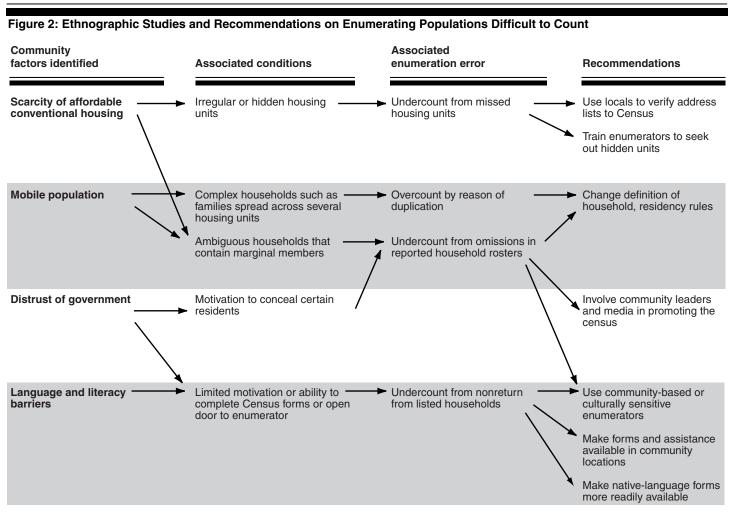
However, the small number of sites and the lack of a standard format for recording data again limited what could be understood from these results.

To assess these findings more systematically as part of the 1990 census, Census's Statistical Research Division sponsored ethnographic alternative enumerations in 29 rural and urban sites, about 100 households each, encompassing a variety of undercounted racial and ethnic populations. The work was conducted by ethnographers outside the Bureau who had already established relationships with the sites. Each study team developed a complete list of all housing and people living in the area and recorded logs of systematic behavioral observations about aspects of the neighborhood, housing units, households, and people in the area that might have prevented a complete count. After the Bureau matched the ethnographers' counts with the count obtained from Census forms returned by mail, the ethnographers returned to the field to examine discrepancies and confirm or correct the counts. In addition to providing alternative counts that revealed enumeration errors, the ethnographers' studies identified five key factors that contributed to the disparity of accuracy in census counts for low-income minority populations:

- irregular housing units that were missed in the census,
- complex or ambiguous households that made census residency rules difficult to apply, 15
- residential mobility,
- · limited English proficiency, and
- distrust of government.

The studies also shed light on neighborhood housing and demographic conditions in which these barriers to accuracy were likely to arise—potential hot spots for census coverage problems. As illustrated in figure 2, they yielded recommendations for addressing each factor.

 $<sup>^{15}</sup>$ Such households may include unrelated individuals, mobile members, persons whose only connection is that they share the rent or other costs, or households that contain two or more nuclear families.



Source: GAO analysis of information from Census reports.

Social scientists at the Bureau joined data from the alternative enumeration to data from Census questionnaires to explore clustering among the sites and the relative values of explanatory variables—such as race, geography, or the relationship of an individual to the householder—on the prediction of census omissions and erroneous enumerations. (The Bureau had hoped to be able to use data from ethnographers' observational logs, but these data were not sufficiently complete to sustain analysis.) Related efforts included a Bureau-sponsored 1,000-household survey and semi-structured in-depth interviews on the subject of residence. Other related efforts were methodological studies testing an expanded roster approach that asked respondents to report persons with casual or tenuous attachments to the household as well as core members.

The results of the ethnographic studies fed into planning for the 2000 census as well. The complexity of the planning and the many sources of input make it difficult to trace the influence of any one source. However, reports from panels of the National Academy of Sciences give evidence that the ethnographic studies were important in providing knowledge about the problems of enumerating urban and rural low-income populations, immigrants, and internal migrants. Like the ethnographic studies, the National Academy of Sciences reports recommended using ethnographic methods in hard-to-enumerate areas, such as those characterized by a shortage of affordable housing, a high proportion of undocumented immigrants, and low-income neighborhoods. The 2000 census incorporated several procedures that were consistent with findings and recommendations from the ethnographic studies. The Bureau

- asked local and tribal governments to review the accuracy and completeness of its addresses and field checked the resulting changes;<sup>16</sup>
- reworded the instructions for filling out the household roster, which now asks how many people were "living or staying" in the house on census day;
- made questionnaires and questionnaire guides available in additional languages and at community locations where residents could obtain help in filling them out;
- expanded its partnerships with local organizations, enlisting their
  assistance in recruiting temporary Census workers, providing space
  and volunteers for Questionnaire Assistance Centers, organizing
  promotional events, and customizing informational materials to
  address local residents' concerns, and generally encouraging people—
  especially hard-to-count populations—to participate in the census;
- instituted a paid advertising campaign that included local and national census advertising; and
- called on local Census offices to develop plans for following up with nonresponding households in hard-to-enumerate areas in their

<sup>&</sup>lt;sup>16</sup>The Local Update of Census Addresses program was implemented pursuant to the Census Address List Improvement Act, Pub. L. 103-430.

jurisdictions—for example, using bilingual enumerators in immigrant neighborhoods or paired/team enumerators in high-crime areas.

As we have noted in earlier reports, these practices reflect the Bureau's recognition that a successful head count requires calling on local knowledge, expertise, and experience. The change to a more localized approach signals a change in the Bureau's culture, in which centralized control and standardized methods were traditionally paramount. Census's Statistical Research Division staff saw this change in culture as an important result of the ethnographic studies.

DOD Combined Structured and Ethnographic Surveys of Youths to Better Target Its Recruiting Program An example from DOD illustrates the use of ethnographic surveys to augment information gathered from a national survey and identify factors that affect young people's propensity to join the military. Recruiting and retaining a high-quality, diverse work force is essential to meeting DOD's personnel and readiness goals, and youths are the major source of new entrants into the military. Thus, information about youths' opinions, attitudes, and beliefs about the military and their propensity to enlist is of vital interest to recruitment commands and DOD personnel managers. Youths' attitudes toward the military were monitored from 1975 through 1999 through a national telephone survey called the Youth Attitudes Tracking Study (YATS). In the mid-1990s, YATS data showed a steep decline in a propensity to join the military across the spectrum of American youths. However, the design of the survey—which measures propensity through exactly worded questions to allow valid comparisons across years and ethnic groups—did not allow probes into why a person responded in a particular manner.

To obtain insight into propensity, DOD engaged a social science research firm to conduct a series of ethnographic surveys linked to YATS. The first survey, which focused on young men, illustrates the approach. The study sample was drawn from young men in the prime military recruiting market—high school seniors aged 17 to 21 and high school graduates—who had responded to YATS in fall 1995. It was evenly divided between blacks, whites, and Hispanics and by four categories of propensity, as shown by responses to items in YATS:

- joiners—most likely to join the military;
- nonjoiners—least likely to join the military;
- shifters—had seriously considered joining but changed their minds;

 fence-sitters—had given both positive and negative responses about joining the military.

The final sample of 120 men was monitored for balance in characteristics such as age, employment, and geography. Although not statistically representative, it covered all major areas, groups, and levels of interest in the military.

Respondents participated in in-depth telephone interviews with a small number of senior and midlevel researchers. Telephone interviewing was selected because travel costs would have made face-to-face interviewing prohibitively expensive and because initial interviews had demonstrated that rapport could be adequately maintained over the telephone. Interviewers—who were matched to participants by race and ethnicity used a 45-minute structured interview protocol that covered the career decision-making process, consideration of military enlistment, and knowledge of the military way of life. The instrument included probes to clarify or uncover the deeper meaning of responses but was designed to allow respondents to describe and reflect on their decision processes in their own words. Interviews were voluntarily taped, and each was transcribed verbatim. Using iterative procedures similar to those depicted in figure 1, the researchers reviewed the transcripts, using a set of broad analytic questions, and reviewed them a second time, looking particularly at factors associated with propensity. (One analytic question asked whether there were systematic differences between respondents' stories as they considered entering the military as enlisted personnel versus entering as officers.) Responses to questions about knowledge of the military were tabulated, as were responses to questions on income that required a numeric answer.

Similar procedures were used with subsequent studies of young women (based on 1997 YATS), young Hispanic men (1997 YATS), and parents of young men who participated in the 1998 YATS. In each case, questions were adapted to the population being studied. For example, the survey of women asked about how, if at all, plans for having a family influenced the respondent's choice of future activities and about perceptions of difference in the military experience for young men and young women. The survey for Hispanics asked about the family's origin, how many generations of the family had been in the United States, and whether the family's experience with the military in the country of origin had affected the respondent's views about military service in the United States. The parents' study was prompted by evidence from other DOD reports concerning the importance of parents as influences on youths' career

decision making. It probed their role in their sons' career decision making and the image of the military that they had and that they conveyed to their sons.

To inform its recruitment advertising, DOD also supported interview studies of parents and others, such as educators and family friends, who influence youths' career decisions. These studies, carried out by a different firm and reported in 2001 and 2002, were conducted through face-to-face interviews and had a qualitative component. Like the ethnographic surveys of youths, the surveys of influencers included open-ended questions and follow-up probes. However, other aspects of the youth-influencer surveys did not reflect ethnography. Their approach was based on theories of individual decision making drawn from psychology, and interviewers were trained in psychological interviewing. Although noting that social norms also drive future behavior, the researchers focused on self-esteem and the role of deeply held values, such as personal security and love of family—in this case, values that drive influencers' choices when recommending military service or other options to youths.

Data collection and analysis followed the Values in Strategy Assessment (VISTA<sup>TM</sup>) method for mapping the factors important in consumer decision making, and the interview guide included many fixed-response questions in addition to those that were open-ended. The method was designed to support the development of psychological profiles of potential users of a product and was used to develop strategies for communication campaigns—in this case, DOD recruiting ads aimed at adult influencers.

The first of these examples from DOD illustrates that using ethnographic techniques can follow up on and yield a deeper understanding of data from structured surveys. The decision to use telephone rather than face-to-face interviewing illustrates how methods can be adapted to fit the circumstances. The second example supports our earlier observation that qualitative techniques like those used in ethnography are also used in studies rooted in other disciplines.

## Concluding Observations

In reviewing information from our overview and the four case studies, we observed that in each example, ethnography helped obtain previously unavailable information about beliefs and behaviors that was important to the federal program's ability to attain its objectives—information that could not be readily obtained by other methods. The studies were not done merely to add to general knowledge about the groups studied. They also addressed program-related issues, such as whether families in Early

Head Start are comfortable with a Montessori approach or how to allocate fishery harvests fairly among the people affected by them.

Grouping our examples, we identified four major study designs and the uses they were put to, as shown in table 2. Reviewing this table and the studies it lists, we offer some concluding observations that may help agencies and the Congress determine when ethnographic approaches may help answer questions about a program.

Nature of study	Example
Site-specific field studies that address a local issue at a particular point in time and support local action to respond to it	<ul> <li>CDC studies of STD outbreaks</li> <li>DOD study of Antarctic over-wintering</li> <li>Anthropologists' work with communities to protect source water for EPA</li> <li>NMFS community-specific SIAs</li> <li>NPS studies of culturally meaningful sites</li> </ul>
Site-specific field studies that alert agency staff to a potentially widespread phenomenon (or demonstrate the absence of a hypothesized phenomenon) and to the need for further investigation or action	<ul> <li>Early Census studies of low-income urban sites</li> <li>HHS studies of two Montessori sites in EHS evaluation</li> <li>Justice studies of street gangs</li> </ul>
Multi-site field studies or observations using a common framework, intended to support comparisons across sites and over time or for program evaluation or planning purposes at the national level. May also support site-specific actions	<ul> <li>1990 Census alternative enumeration studies</li> <li>CDC rapid assessment procedure data as information from more sites becomes available</li> <li>Labor evaluation of Youth Opportunity Act initiative</li> <li>NOAA framework for future community profiles</li> <li>Observations on drug use fed into <i>Pulse Check</i> for ONDCP</li> </ul>
Interview studies to explore more deeply beliefs or behaviors suggested by previous research and (if based on a systematic	Census cognitive interviewing and ethnographic survey regarding residency terms

Source: GAO analysis.

sample) to produce results that can be generalized to a broad

population and inform program changes at the national level

Single-site ethnographic field studies can be valuable for addressing problems specific to a site and for raising red flags—discovering phenomena important to a program that may be widespread and that may merit further investigation. Combined with other evidence from a larger sample, field studies of small numbers of sites can also help disconfirm a suspected problem (such as discomfort with the Montessori approach to early childhood education). However, such studies have an important limitation. Findings from a single site or a small number of sites cannot be generalized to a broader population and, thus, are not sufficient to inform change in a national program.

DOD ethnographic surveys with YATS respondents

The limitations of single-site field studies can be overcome by (1) obtaining sufficient site-specific studies to reliably identify recurring themes or issues and (2) arranging for field researchers to gather and

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report a common core of data in terms of a common framework, while leaving them open to the discovery of additional information. Having this common core facilitates cross-site analysis, site analysis over time, and linking ethnographic to economic or other data.

- Information from multiple field sites can be obtained by design or accretion. For the 1990 alternative enumeration studies, the Bureau of the Census selected the 29 sites to ensure coverage of the range of groups and living situations that were difficult to enumerate. CDC and NMFS sought to achieve broad coverage over time as community studies accumulated.
- One way to build in a common framework is to have in-house staff do the fieldwork, as at CDC. For agencies that rely on outside experts accustomed to working independently, commonality may be more difficult to achieve. Some of the ethnographers conducting the 1990 alternative census enumerations did not collect the full set of data the Bureau had asked for, and the aggregate data set was not sufficiently complete to sustain analysis. Whether NMFS will succeed in obtaining specified core data in profiles of fishing communities remains to be seen. However, NMFS has more than a decade of experience and studies to draw on for crafting guidelines, as well as long experience with the academic experts and contract firms that conduct SIAs. This experience, along with increased NMFS staffing and program direction, may make a difference.

When initial information about a situation is available from previous fieldwork or other research, and the population of interest is scattered geographically, an ethnographic survey of a systematic sample of that population can be used to obtain broadly applicable findings that can inform decisions about national programs.

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