

COUNTING MIGRANT FARM WORKERS
CAUSES OF THE UNDERCOUNT OF FARMWORKERS IN THE NORTHEASTERN
UNITED STATES IN THE 1990 CENSUS
AND
STRATEGIES TO INCREASE COVERAGE FOR CENSUS 2000

Final Report
by

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TABLE OF CONTENTS

Executive Summary.....	
Introduction.....	1
Case Study #1: Southern New Jersey Farmworkers: Cumberland, Atlantic, and Camden Counties, and the Two Season Harvest.....	4
Case Study #2: Scott and Shelby Counties, KY, and the Tobacco and Nursery Industries.....	14
Case Study #3: Chautauqua County, New York, and the Nursery, Grape, and Cherry Tomato Industries.....	20
Case Study #4: Chester County, PA, and the Pennsylvania Mushroom Industry	23
Conclusion: Strategies for Improving Census Coverage in the Year 2000	26
Acknowledgments.....	28
Bibliography.....	29
Appendix.....	30

EXECUTIVE SUMMARY

This report analyzes the demographic, migratory, work, and service use patterns of farmworkers in southern New Jersey, up-state New York, north-central Kentucky, and eastern Pennsylvania counties, to discover possible causes of census omissions, and to suggest methods to improve coverage in the next Census. The study shows that the factors affecting Census coverage combine differently in each area making the development of area-specific enumeration strategies highly desirable. General recommendations are advanced where common barriers are encountered.

Among factors that affect the outcomes of enumeration are worker mobility, type and supply of local housing, the worker's relationship with his employer, crew chief, or local service agencies. The worker's undocumented status, illegal employment, and his use of overcrowded, uninspected, and often illegally subdivided housing, are among the most important reasons for avoiding authorities. First time undocumented migrants, with little knowledge of the English language or American society, and who are isolated from the mainstream by having an indirect relationship with the grower through a crew chief, and frequently moving between work sites and scattered camp housing, are least likely to be counted.

The author also recommends moving the census date closer to the peak of the summer work season when more migrants are present. Although the Advisory Committee of the National Research Council recommended in 1970 that "enumeration dates other than April 1 should continue to be considered," (Parsons 1972: 85) this has been done in the past Censuses only with the enumeration of homeless persons. The goal of the Census is to count the entire population at a specified time, and not to produce a comprehensive count of farmworkers *per se*.¹ The purpose of this research was to explore the reasons why farmworkers may be omitted from the Census and the author has provided good data on this. Including transnational migrants not present on Census day is problematic under current census residential rules due to the ambiguity of their residential status. Implementing Smith's recommendation would require a change in enumeration procedures similar to what was done in the case of homeless persons during S-Night in 1990.

Another suggestion for improving coverage is to use informal migrant networks, social institutions, or key individuals, trusted by the farmworkers, for outreach and enumeration. People who are already known are more likely to ease the migrants' fear of exposure to immigration officials, and also to explain the importance of the Census in their terms. The use of culturally correct messages disseminated through locally popular media, such as Spanish language radio and newspapers, could also help to get the Census message to the people. Other means could include publicity at migrant-frequented locations, such as tortilla delivery truck stops, Mexican restaurants and local shops.

¹ Some of the author's text has been edited by Census staff to clarify the relevance of his findings to existing Census procedures.

Another strategy for improving coverage suggested by the author is to "piggy-back" on the experience of existing institutions, such as the Agricultural Extension Service, growers' associations, church-related, or other service agencies, to promote the Census and obtain access to farmworkers in the area. If growers' associations are to be used, incentives would have to be provided and their fears about penalties for hiring undocumented workers, or losing them, would have to be overcome.

INTRODUCTION

Statement of Purpose

This report provides an analysis of some possible causes of missing farmworkers in the 1990 Census among several areas of the eastern United States, and attempts to identify institutions, individuals, and sources of data that might be used in developing strategies for improving their enumeration in the year 2000 Census. The analysis covers the migratory, demographic and other farmworker characteristics in the Atlantic, Camden and Cumberland counties of southern New Jersey; Chautauqua county in upstate New York; Shelby and Scott counties in Kentucky; and Chester County in eastern Pennsylvania. The study attempts to identify those characteristics and social conditions of farmworkers that would lead to their being missed in the Census, and to explore patterns of their movement and other behaviors that might be used to more accurately enumerate them in the next Census.

Data

The data used in this report come from several sources. Some statistical data on the farmworkers are from the Department of Labor's National Agricultural Workers Survey (NAWS), administered by Aguirre International, a consulting firm in San Mateo California.² The ethnographic data come, first, from the author's observations while doing these interviews for the NAWS; and second, from the author's own survey and ethnographic research in these areas, especially in Pennsylvania. The ethnographic data is more comprehensive for Pennsylvania and southern New Jersey than for the other locales. In Pennsylvania, the analysis is based on ethnographic work done during the 1985-86 academic year and the summer of 1989 during which interviews were done with 58 workers and 15-20 growers plus others; and later on intermittent interviews done periodically as I returned to Pennsylvania, including one during the several month-long strike in 1993. In southern Jersey, my ethnographic work is based on the relationships developed over the course of five years of intermittent interviewing.

In New York, New Jersey, and Kentucky, the fieldwork was done during the summer and fall of 1993 and summer of 1992. The data consist of 215 farmworker interviews split among the counties in those states: 37 in Kentucky, 50 in upstate New York, and 128 in southern New Jersey. I also interviewed approximately 50 growers and service providers in these counties (20 in Pennsylvania, and 10 each in New Jersey, Kentucky and New York). The farmworker interviews were coded for statistical analysis by the Department

² These data were provided by Aguirre with the permission of the Department of Labor for use in the current report.

of Labor subcontractor, Aguirre International. In this report, I use fieldnotes taken from these trips over the course of the last two or more years, including the several trips during 1993, producing 215 interviews. About 70% of workers approached agreed to be interviewed.

Reasons Why Farmworkers are Omitted from the Census and Analytical Framework of the Report

Gabbard, Kissam and Martin (1993:217) describe four reasons why farmworkers are omitted from the Census, as "separate components of the farmworker undercount": 1) Out-of-country migration, where the farmworker is missed because he or she is migrating out of the country at the time of the count; 2) the farmworker is not identified in the census as a farmworker, even if he or she is counted; 3) total household omission, in which the farmworker and the household are completely missed by the Census; and 4) partial household omission, where the Census captures data on some of the household members but not all of them. Partial capture can occur for many reasons: the household members wish to hide the presence of a member from the Census, i.e. the government; it is not clear who is and is not a member of the household; or the respondents do not understand what is wanted by the Census. In this report, I will refer to these "components of undercount" and, where appropriate, make recommendations regarding the specific strategies that might be effective in addressing each of them. All of these types of omission are likely to be represented in the populations I have studied for this report.

The Census is designed to be carried out under a "normal" set of conditions constituting a particular kind of social structure. These conditions include stable household address and membership, English language literacy, and a clear and ready application of Census categories to the lives of the respondents, to name just a few. The state and its derivative institutions have given rise to this mainstream life style and the social structures that organize it. In the case of farmworkers, most of the "normal" conditions do not hold, the social structures are not the same, and the state and other institutions do not structure life in the same way. These differences must be taken into account when analyzing the possible reasons for census omissions. In particular, this report focuses on the kinds of social structures, relationships and networks with which farmworkers may be involved, and what effect these could have on enumeration. This focus is chosen in the belief that the Census can craft more appropriate, and ultimately more successful, enumeration strategies to increase farmworker coverage by paying attention to the social milieu in which they are enumerated.

My discussion is separated into factors that increase or decrease the likelihood of the farmworkers' chances of being enumerated. These include the workers' settlement and migration patterns; the relationships they develop with their employers, crew chiefs,

local service agencies and advocacy groups; as well as their legal status with the state as documented or undocumented aliens. They also include the more practical structural factors, such as the degree of overlap between the growing season and the Census enumeration period. Factors such as greater settlement and contact with institutions of the larger society; better English language skills; a diversified economy with a steady demand for labor (which encourages settlement); direct relations with the grower, may all make it more likely that the farmworkers can and will be counted. Greater isolation from the mainstream society, an indirect relationship with the grower through a crew chief and dispersed sources and destinations of migrants, make it less likely that they will be counted. What follows is an analysis of how these factors combine differently in each case to affect both the Census count. The focus is on what the changes in the social relationships portend for changes in coverage in the next Census. The following analysis is organized as case studies by county, and according to the kind of data used. The data for counties in New Jersey, New York and Kentucky are analyzed using the same kind of data from the NAWS survey and ethnographic observation. Hence, the analyses are presented serially with the same internal organization. In each of these case studies a comparative assessment is presented on the likelihood of missing farmworkers within these counties. An analysis follows of the effects of selected farmworker subpopulation characteristics from within each sample (25 in New Jersey, 10 each in New York and Kentucky); along with an analysis of the likely effects of the workers' relationships with employers and others, on the possibility of workers being missed in the 2000 Census. The analysis of the Pennsylvania mushroom industry draws on a different, non-NAWS, data source, and is presented in the next to the last section of the paper. The final section of the paper suggests strategies to be used to improve Census coverage. Because the recommendations for improving enumeration are site-specific, specific strategies are recommended for each county at the end of each case study, and more general recommendations are made in the final section.

Description of the Research Sites and Farmworkers

The research sites discussed in this report receive large numbers of migrant workers from Mexico, Puerto Rico, Guatemala, and the southern United States, especially Texas and Florida, as well as smaller numbers from other places. The sections that follow attempt to identify and analyze factors that could affect census coverage and suggest strategies to improve it. Table #1³ lists the numbers of farmworkers reported in the counties by the Census Bureau, according to its office of Equal Employment Opportunity.

³ Table 1 and subsequent tables referred to in the text can be found in the appendix.

STUDY #1: FARMWORKERS IN THE CUMBERLAND, ATLANTIC AND CAMDEN COUNTIES OF SOUTHERN NEW JERSEY AND THE TWO SEASON HARVEST

A Brief History of Immigration and Settlement of Migrant Farmworkers into Southern New Jersey

Migrant farmworkers have been coming into southern New Jersey in large numbers since the 1930s, and increasingly since the postwar period of the late 1940s. The migrants at that time were mostly Blacks traveling along the east coast migrant stream, from Florida orange harvesting to Maine apple picking. After the civil rights movement, there was a large exodus of Blacks out of agriculture. An influx of Puerto Ricans began at the same time in the late 1950s and early 1960s. By the late 1960s and early 1970s, most of the farmworkers were Puerto Ricans; only a few Blacks remained. The Puerto Rican workers were brought in through an arrangement with the Puerto Rican government, through the Puerto Rican Division of Migration, which negotiated contracts specifying living and working conditions for the workers. While many of the workers were brought in directly to the growers, more were brought in through secondary associations such as the Glassboro Service Association, which mediated between the Puerto Rican Division of Migration and the growers. At its peak, in the early 1970s, the Glassboro Service Association brought in approximately 10,000 to 11,000 Puerto Rican workers per season.

In the past several years, the Glassboro Service Association has brought in nearly a 1,000 Puerto Rican workers. This change reflects significant demographic changes that have taken place in the agricultural labor force from the late 1970s to the early 1980s. Between the early 1980s and early 1990s the composition of the work force changed; now mestizo Mexicans from traditional sending states, such as Guanajato, Oaxaca and Michoacan constitute the majority of the workers. Since the late 1980s an increasing minority of workers consist of indigenous Zapotec and Mixtec speakers from Oaxaca, Mexico, or Kankobal speakers from Guatemala. Some are also Indo-Chinese, especially Laotian day-haulers out of Philadelphia and Camden. The characteristics of these different groups, especially their relations with employers and with the state, have important implications on whether they are enumerated in the year 2000 Census.

The Mexicans, who constitute the majority of farmworkers in much of Cumberland county for the last decade, are from the state of Guanajato. Most had lived in and around a place called la Canada de Caricheo. Many of the workers are related by marriage and fictive kinship (compadrazgo). These networks have helped them establish a certain level of control over access to jobs in the county, as their members advanced to foremen positions on particular farms. That there are relatively more non-Guanajatan

farmworkers in the 1990s reflects larger changes in the flow of workers into the United States. It also indicates changes in the labor supply in Texas and Florida, where many of these workers and their foremen spend their winter months.

These southern Jersey counties provide interesting comparisons with each other and with counties in other states. Cumberland county shows a different mix of employment, migration and settlement patterns than Atlantic and Camden, though all three are broadly similar. Compared with Kentucky and upstate New York counties, these New Jersey counties have the largest settled and migrant populations of Latino farmworkers, particularly Mexicans. These counties also have different patterns of recently arrived, undocumented workers traveling in crews and of the more settled workers. The latter have their own contacts with growers and other farmworkers, who are relatives or friends from their villages and some of whom are living permanently in the county. This section focuses mostly on Cumberland County, where the variations in the last several years have been the greatest. The following analysis draws on interviews with 121 Latino farmworkers in 1992 and 1993, and on continued intermittent ethnographic work over the last three years in these counties. During this time I have developed friendships with several migrant and settled farmworker families in the county. This enabled me to observe changes in the migration and settlement patterns myself as well as have them explained to me by the migrants.

Characteristics of 25 Farmworkers Interviewed for Case Study I

Table # 2 presents data on the residency of 25 farmworkers interviewed during August of 1993. The workers were interviewed in labor camps, where they lived in Cumberland county, and each was working in some aspect of lettuce or cucumber harvesting. There were 23 Mexicans and two Puerto Ricans in this sub-sample.

The data in Table #2 reflect the relatively stable pattern of migration between places in Guanajato, particularly la Canada de Caricheo, and agricultural areas in Florida. Of the 25 farmworkers, 20 fit into this broadly stable pattern of migration between these places: eight had split their time between New Jersey and Mexico, ten had split their time between New Jersey, Mexico and Florida, and two had split their time between New Jersey and Florida only. Of the remaining five, four spent their time between Mexico, New Jersey and another state; one spent his time in New Jersey only. It is important to note that the 20 workers involved in migration between New Jersey-Florida or New Jersey-Florida-Mexico or New Jersey-Mexico might easily be in one of the other categories the following year. That is, someone who did not visit his family last year in Mexico, but instead remained in Florida to earn extra money, might spend more time in Mexico next year. These were all people from the same region of Guanajato, and all exhibit similar migration characteristics.

The months spent unemployed is an interesting characteristic of the workers. In the last several years, increasing numbers of Mexicans, who were legalized through the 1986 Immigration Reform and Control Act (IRCA), have stayed for at least part of the winter. Normally they might return home in order to collect unemployment insurance in between seasons or during the off-season. This is particularly useful to them while they wait for the orange or lettuce harvest to begin in Florida. While only two reported having done so during the slack season in New Jersey, increasing numbers are moving to Texas or California in order to be closer to their families in Mexico. From Texas or California they can drive overnight to visit their families, as compared to a three or four day drive from New Jersey.

It is more common for the migrants to be in New Jersey between the months of May and October. The immediate significance of these dates for the Census is that most of the farmworkers are absent from the county during the Census date of April 1, even though they typically spend half or more of the year living in the county.

Of the 25 workers interviewed, 14 are married and 11 single; 21 have families in Mexico and 2 in Puerto Rico. Only 5 of the 25 have family in the United States; 4 of these 5 have siblings or cousins with whom they are traveling; 1 of the 5 has brought a family member to settle in New Jersey. A person is counted as a member of the household if the person is either related to the person by blood or marriage, including common law marriage (uniones libres), or reported as a member of the person's family with whom he/she shares income or expenses. The latter category was devised to capture the relationship between young, single migrants and their families in Mexico or Puerto Rico. Such single males normally send a portion of their income home. Of the 25 respondents, two are unattached; they do not share expenses with their families, nor do they send remittances back home.

These data do not reflect several recent trends towards settlement among Mexican farmworkers in the area. The reasons for this exclusion is that these interviews were done in labor camps, which normally have no space for families. Most of the settled farmworker families live in Bridgeton, which were not sampled. This settlement pattern is discussed in a subsequent section.

Table #3 shows how these workers obtained their jobs. Out of the 25 workers, 20 reported that they were "referred by a relative, friend, or work mate;" four said that they had "applied for the job on my own;" and one said that he was "recruited by a farm labor contractor or his foreman." These answers reinforce my observations that personal networks are the most important way that jobs and opportunities are allocated in agriculture in Cumberland county. That four of the workers applied on their own is an indication of a surplus in the labor supply in the county.

In the last several years, since the amnesty program, so many workers have been coming into the county that a floating pool of agricultural labor has reemerged in the county. Growers report that almost every day at least one or two farmworkers, usually Mexicans, come looking for work. The single respondent, who said that he received work through a contractor or a foreman is not typical of the trend toward the return of labor contractors after more than a decade or more since that system was widely used in Cumberland county.

When I looked at who provided housing for the worker and the types and locations of living quarters for the 25 respondents I found that all of the respondents lived in a grower provided labor camp on the farm itself. A room and a bed were provided to the worker free of charge. About 40-50% of the workers in the county live under such arrangements (Pfeffer, et al. 1992; Burgess 1994).

Respondents were also asked if they had needed medical assistance in the last two years while in the United States. Only four of 25 of the workers reported needing such assistance.

Table #4 shows the use of various services by the respondents. They reported a relatively low incidence of service use: only three used Food Stamps or Unemployment Insurance; only two used Medicaid and WIC; and only one person reported using AFDC. These respondents underrepresent the trend towards the use of services among the population. An increasing number of Mexicans are using social welfare programs, especially unemployment programs.

Most of the farmworkers come into the area in May and leave in October or November, and hence the April 1 Census day precludes the enumeration of large numbers of them. Moreover, these workers are not simply "passing through" New Jersey. The small sample analyzed in Table #2 shows that 20 of 25 workers spent at least five months in New Jersey; only two of the 25 spent more time in another state, and only three spent more time in Mexico, where their families live, than in New Jersey, where their work is. This suggests that even though only one of the 25 workers spent all of the previous year in New Jersey, it has become the place where most workers spend most of their time.

In addition to the many farmworkers temporarily absent on April 1, 1990, there were also many others who were present, but were not enumerated. There are several important reasons for their being missed related to the kind of housing they live in, and the kind of relationships with their employers and with the state. One obvious reason for avoiding censustakers is their wish not to be counted because of their legal status in the United States. Much of the Mexican and Guatemalan farmworker population in Cumberland county is undocumented, and, in all likelihood, would attempt to remain undetected by any agency, including the Census Bureau.

A second reason for the probable omission of farmworkers is the large and growing population of settled farmworkers who live in irregular or overcrowded housing, both in the cities of Vineland, Bridgeton, and Millville and in grower-owned housing in rural areas. Bridgeton, in particular, has become an important site for settlement of Mexican, Puerto Rican, and most recently, Guatemalan farmworkers. This is so for two reasons: first, the city of Bridgeton has relatively large pockets of poverty with a large stock of low-cost housing. The importance of the cheap housing stock is obvious. There is also a readiness to rent to the Mexicans as opposed to other groups (such as poor African Americans) because the Mexicans pay their rent in cash. Moreover, because the neighborhoods into which many of the Mexican immigrants are moving are poor, they do not encounter the same difficulties with neighbors that could result from overcrowded dwellings in a more middle class neighborhood, such as reports to the police or zoning commission. The cheap housing stock has led to the creation of a small, but growing number of Mexican homeowners in Bridgeton, who then serve as the nucleus for further permanent settlement.

Another reason Bridgeton has become such an important center of settlement for Mexicans is that it lies only a 10 to 15 minute drive from the fields in the surrounding townships of Fairton and Cedarville, where some of the biggest farms in the county are located. Moreover, many workers who are not settling permanently in Cumberland will rent houses and fill them well beyond capacity during harvest season, sometimes renting out bed or sofa space by the night. The relevance of these two factors for the Census is that the larger settlement leads to the presence of a greater number of irregularly housed Mexicans on April 1, and hence the likelihood of a larger number of persons missed by the Census.

Much of this increased settlement is related to changes in the local economy and the insertion of migrants into it. At least four different types of relationships between growers and their workers were noted, each with different implications for the housing and settlement habits of the workers and their contact with the state and the larger society.

1) **"Personal Networks."** This arrangement consists of a steady and ongoing relationship between workers and the grower or his foremen over several years of migration through the region. In this case, the workers know they have a place to stay and a job at a given farm or farms. One example is the relationship that often emerges between growers and lechugeros (professional lettuce cutters) in the east coast migrant stream. The growers want to keep good crews coming back, and the workers want to go back to good growers. Some settlement occurs as a result.

2) **"Hired Hands"** This is a type of settlement that emerges over time whereby some workers drop out of the migrant stream. It is more likely to happen with crops that require intermittent year-

round attention, e.g. with tobacco. It also happens among a relatively small number of workers in crops like lettuce. Under this arrangement the grower often provides the workers and their families with free housing year-round, and odd-job employment in the off-season.

3) "**Crew Chief**". This relationship is normally one established between recently arrived, undocumented Mexicans or Guatemalans and their Mexican mestizo crew leaders. They normally work on crops with short seasons, such as tomatoes, and migrate frequently from harvest to harvest. Under this arrangement, the transportation, housing, and job arrangements are all made by the crew chief; the workers are completely dependent upon him. The degree of isolation created from the larger society and lack of access to protection by the state, as well as the potential for exploiting the workers, make this arrangement quite different from those of other workers.

4) "**Permanent Settlers**". These workers have settled more or less permanently in the area, although they may return periodically to their home countries, even for considerable time. They return to the same places and same jobs. Some may buy houses in the United States, and have their children attend school here. They tend to have stable work, for example in nurseries, that lasts all year round.

Irregularities in housing and changes in the economy are related and may contribute to the omission of farmworkers in the Census. There has been a significant consolidation of many small farms into a few much larger farms over the last 15-20 years. The larger farms have more year-round positions, such as maintenance work (e.g. barn painting and equipment repairs), which increase sufficiently to require "hired hands" to do it. Moreover, with the purchase of the smaller family farms, the larger growers also acquired houses that serve as free housing for the workers who stay during the winter months. This relationship has encouraged settlement. However, such workers also are likely to be missed by the Census, as the farmer is unlikely to include their names on his own census form, due to the often undocumented status of the workers and the informal, "under the table," nature of their employment relationship.

Another reason for the increased settlement has been the growth of the nursery industry in New Jersey over the last several years, and the introduction of Mexican farmworkers. Nurseries are, in general, more stable agricultural enterprises, and provide steadier hours, income and months of work for the farmworkers. Nurseries are more stable and profitable than traditional farming because they require less land, have higher profits, and a steadier cash flow. Their prices fluctuate less, there are more possibilities for export, and the labor problems are less complicated. In particular, nurseries can have a steady workforce and develop a relationship with it over the course of

years, rather than trying to hire several hundred workers over the course of the summer. This diversified and year-round agricultural economy fosters settlement, which also has implications for Census enumeration. A small but growing home-owning, middle class of Mexican farmworkers is developing in Cumberland county, especially in the City of Bridgeton where housing prices are cheaper. This pattern suggests that more farmworkers will be present on April 1, Census day, but many may not be counted for the variety of reasons mentioned earlier: fear of authorities, undocumented legal status, difficulties with filling in the form or uncertainty about whether to respond at all.

A variation of this settlement pattern occurs where some farmworkers have made New Jersey their base of operations, and then migrate to other parts of the country during the off-season in New Jersey. There is now a critical mass of Latino farmworkers in the county, and the population increase in the last year or two seems more rapid than previous increases I have observed.

Another factor affecting the settlement was the legalization of a large number of the farmworkers in the area through the special agricultural amnesty provisions of the 1986 Immigration Reform and Control Act. The legalization of many farmworkers coupled with the availability of cheap housing has led to a much more extensive family reunification here than in the other counties studied, especially in Kentucky and New York. Such a process is also under way on a significant scale in the mushroom industry in Chester County, Pennsylvania. This implies even greater settlement for the coming years, with a potential for an even larger number of people being missed by the Census. Although the majority of the relatives of the farmworkers are not initially eligible to come legally to the United States, they come anyway, arranging for legal papers later. This is done through family reunification provisions of United States immigration law, and after the farmworker, legalized under the 1986 law, has acquired permanent residential status. Finally, Bridgeton has served as a base and "port of entry" for agricultural workers moving into other industries in southern and central New Jersey.

The emergence of the day labor markets between the City of Bridgeton and the surrounding rural areas provide some of the clearest evidence of the increase in population. Whereas earlier the growers were anxious to hold on to their workers and provided them with housing, now many of them will provide housing only during the busiest work season. Several farmers mentioned a recently developed practice by many farmers in the area: they house men during the peak season, and then close their housing during the slacker period of the season, starting in October and running in many cases to early December. They then drive into town to pick workers for three or four days per week; often these are the same men who worked for them earlier. The workers are picked up at designated parking lots and on certain streets in

downtown Bridgeton. The growers feel quite secure that they will be able to find workers this way, which suggests that there may be a surplus of workers now. This day labor system has not been routinely seen in the county since the pick up of blacks and other farmworkers in the early 1970s or even 1960s, before the civil rights movement opened up many more avenues for blacks and changed their orientation towards farmwork (Thomas, 1986). Other signs of increase in the Latino population include the general "browning," i.e. the visible increase in the numbers of Latinos, in public places of the downtown area. Moreover, areas within the previously predominantly black areas of Bridgeton have changed into mixed Latino-Black areas, and some have become predominantly Latino over the last several years.

Other factors that may cause farmworkers to be missed by the Census include the increased use of the crew chief system and the characteristics of the farmworkers hired under this system. These characteristics consist of the undocumented status of the workers, their isolation, and dependence on the crew chief for their employment and transportation. Similar to the trends observed in the other agricultural northeastern counties, there has been an influx of undocumented Guatemalan and Mexican workers during the last year or two. Many of them are coming for the first time to the United States, and are being picked up by crew chiefs in Texas and Florida within days or weeks of their arrival in the United States. Many of them have few family connections in the United States, and depend utterly on the crew chief for employment. The crew chiefs often are not registered, as required by New Jersey state law, and hence are eager to keep their relationship with the workers a secret.

Although the official employment relationship is directly between the worker and the grower, the crew chief really does all the hiring and firing of the workers; he brings them into the state and controls most of their contact with the larger society. Also, by presenting himself as the sole employing agent, the grower can avoid the stringent state laws that regulate crew chief activities. With the growers', crew chiefs' and undocumented workers' interests so tightly aligned towards hiding the presence of the workers from any and all state inspection, it seems unlikely that standard Census operations will count many workers, even if they are actually present in the county on Census day.

A final point involves the likely implications of the differences between the farmworker populations in Atlantic and Cumberland counties for the Census. Atlantic county, in general, has smaller farms for vegetables and fruits, and some very large ones for blueberries (which have a short season). Cumberland has small but also very large farms in both fruits and vegetables. Individual vegetable and fruit farms in Cumberland can employ more than 300 people over the course of the season; in Atlantic county, most farms employ 5-10 farmworkers over the season, the larger ones only about 50. These different types of farms also draw on

different kinds of labor. Atlantic county vegetable and fruit farms have more Puerto Rican workers than Cumberland farms, and their workers are more likely to be brought in by an agency or by the Division of Migration of the Puerto Rican Government. In Cumberland, the workers are more likely to transport themselves from Mexico and they are also likely to have more permanent farmworkers. The large concentrations of Latinos in Cumberland county are in Bridgeton, Millville, and Vineland. There are no similar large urban concentrations in Atlantic county.

The implications for the Census are twofold. The Puerto Rican farmworkers who come from the island for the season and then return are more likely to be counted when they are away from New Jersey than the Mexicans simply because they remain in the United States, physically, when they are "away." Second, more of the workers in Cumberland are likely to be in the county on Census day (April 1) than in Atlantic county.

Strategies for Increasing Census Coverage of Farmworkers in Cumberland County

The first and most important recommendation for enumerating farmworkers in Cumberland County, New Jersey, is to have the Census date changed from April first to some time in June or September, when the farmworker population is at its peak. In this way, not only will more farmworkers be enumerated, but such characteristics, as their typical employment status will be more accurately reported. For example, many of the farmworkers present on April 1st are not yet working, or working only sporadically, while they wait for the season to begin in earnest in May. Many come up early in April to ensure that their jobs are secure. Moreover, workers with families may not yet have their children enrolled in the migrant school, because they have only recently arrived. Hence, attempting to enumerate them on April 1st is, not only likely to lead to omissions, but also to yield data that does not reflect the typical social and economic conditions of the farmworkers and their children.

One way that Census coverage of the farmworker population may be improved in Cumberland county is through the use of the social networks, service organizations, and Latino-oriented institutions existing within its Latino and farmworker communities. The first of these are local churches, especially Roman Catholic parishes. There are several churches that have large numbers of Mexicans, including farmworkers, as parishioners. A church in downtown Bridgeton has a weekly attendance of about 125-150 Mexicans, out of a total of about 250 worshipers. This small number should not be taken to represent the numbers the church can reach. One Spanish-speaking priest in the area estimates that the parish sees only one in ten of the Catholic Mexican farmworkers in the area in church. Many more attend other church functions; e.g. 200-300 Mexican farmworkers and their family members came to the

church grounds on Good Friday to attend a dramatization of Jesus' rise from the dead.

The church is also across the street from the most important Mexican food store in the area, El Paisano, (roughly, "The Compatriot") which serves as a center of information and community life among the Mexican population in the county. This store and the church are located within the neighborhoods in which the Mexican population of both farmworkers and non-farmworkers is burgeoning. This central location would make Immaculate Conception Church and El Paisano invaluable communication nodes for the Census.

In addition, the larger institutions of the Catholic Church might provide assistance for the Census effort. There is a Spanish Catholic Center in Vineland, the largest urban center in the county, as well as the Immigration Service of the Diocese of Camden, which assists immigrants with immigration issues. The priests I have spoken with have all expressed interest in helping the Census to achieve an accurate count of farmworkers.

The presence of a fairly well-developed Spanish language media in the area could also be used to improve Census coverage. Two Spanish language radio stations exist in the county, WMIZ 1270 AM, through which Radio Familiar, or Family Radio, is broadcast daily from 9-11 AM. There is also WREY, 1440 AM, which is received clearly in the Bridgeton, Cedarville and Fairton areas where the interviews were done. In addition, the area has had a Spanish language newspaper, El Veterano, for about 5 years. It is published biweekly in Vineland and has been increasing its distribution.

Several service agencies keep administrative records, which, if access were allowed, could provide cross-checks of Census counts. CASA-PRAC (Puerto Rican Action Committee) is a non-profit group with more than 20 years of activity in the Latino community in Cumberland county. It offers all kinds of social services, such as domestic problem, family dynamics and HIV counseling; tutoring programs for youth and the aged; and other services. They have a daily and monthly log that records how many visits have been made for services, how many users of services have come in, and how many new, on-going, or repeat clients they serve. Most of these clients are settled Puerto Ricans, but some Mexican farmworkers are also included.

Another agency, New Jersey Rural Opportunities, served about 600 clients last year and has data on their demographic and other characteristics. For the Child Care project they run, it would be possible to obtain information about the family structure of the children involved (e.g. single mothers vs. nuclear families), as well as the educational levels, migratory histories, health problems and family incomes. This project served about 150 families and 250 children, most of whom were migrant Mexicans; a

smaller number were Guatemalans. This project is doubly valuable because it does not require proof of visa status for eligibility, in accordance with the Plyler v. Doe case in Texas, which ruled that the children of undocumented immigrants have a constitutional right to educational services regardless of their own legal status. This is the "Migrant Head Start" project in the state of New Jersey. There is also an adult migrant education component that might also be helpful. This organization shares an office with Comite de Apoyo a Trabajadores Agricolas (CATA), a labor and fraternal organization, which would also be interested in improving Census coverage of farmworkers.

Another organization that may be helpful is Community Health Care of New Jersey in Bridgeton. As mentioned previously, they have links with most of the labor camps in the county; these links could be used to improve census coverage. Moreover, the organization coordinates an informal network of service providers for farmworkers. Such a social infrastructure could be very useful in coordinating efforts to boost coverage of the Census.

There are several other kinds of social networks that might be tapped. The first are the networks of the migrants themselves. In Cumberland county, many workers come from a particular county (municipio) in Guanajato in Mexico, and others from this area have settled in particular spots in Florida. These networks are dense, and information about the importance and implementation of the Census would travel through them quickly. Other sets of networks among farmworkers from Oaxaca, including Zapotecs and Mixtecs, might also be used. These networks could serve several other functions, such as reducing the workers' fear of the Migra, the immigration agents, or correcting the perception that the Census has no relevance to their lives.

Other contacts that might be used for disseminating information about the Census are provided by the sales trucks that circulate among the migrant camps throughout the season. They consist of a fleet of converted delivery trucks used to sell food, clothes and other goods to the workers in the camps and in town. These truck vendors might be enlisted to aid with the Census effort.

CASE STUDY #2: SCOTT AND SHELBY COUNTIES, KENTUCKY AND THE TOBACCO AND NURSERY INDUSTRIES

Scott and Shelby, two rural Kentucky counties, provide a much more difficult challenge for improving Census coverage than New Jersey. Since the farmworkers have arrived more recently into Kentucky, they are less well established and less likely to have links with the larger society. They are also more likely to be involved with the crew chief system, and more likely to be widely dispersed than their counterparts in New Jersey. However, there

is a small but growing settled population that will provide an opportunity for the Census to develop a strategy for better census coverage of farmworkers.

This analysis draws on statistical data and ethnographic notes of interviews with 37 workers in the two counties, as well as seven growers, interviewed over a period of more than two years; and a paper by Rosenberg (1989). Hence, it has been possible to make some sense of changes in the settlement patterns, return migration patterns, and other pertinent behavior on the part of the farmworkers. The analysis first covers the history and social structures of Latino farmworker migration to the counties, and then concludes with a discussion of the characteristics of ten farmworkers interviewed for this project.

It is likely, however, that there were fewer farmworkers present in the county on April 1, 1990, than at other times because of the seasonal nature of tobacco work. April is a "down time" for tobacco pickers. Tobacco workers start "setting," i.e. putting the plants in ground, after May 10th; they "top," or cut the flower top off, in late July or August and "cut house" i.e. put the plants into barns, in September and August. The "stripping" of the tobacco plants inside the barns begins in November and can go on through the end of January or into February. Between February and May, work is fairly light. Hence, it is unlikely that there would be large numbers of farmworkers there during this time.

A Brief History of the Immigration of Latino Farmworkers into the Area and their Settlement Patterns

The influx of Latino, mostly Mexican and Guatemalan, farmworkers into Scott and Shelby counties has been rapid. The Latinos have, to a significant degree, replaced the local, mostly white, and to a lesser extent, black farmworkers, who, a few years ago, had predominated in the tobacco industry, which provides most of the farm jobs in the area. This influx of farmworkers began through the use of crew chiefs from Florida and Texas, where large numbers of new undocumented workers have been arriving for the last several years. While the majority of the workers still have home bases in these two states, especially in Florida, some of them have begun developing circular migrant links between their home towns in Mexico and Guatemala and the areas in Kentucky where they work. A smaller number are staying on a semi-permanent, or permanent, basis in Kentucky.

There have been at least three migration and settlement patterns, in large part determined by the kind of labor relations they enter into in Kentucky. These settlement patterns affect the extent to which these workers are likely to be counted in the next census. These patterns of settlement correspond to those in New Jersey: "personal networks", "hired hand" and "Crew chief." The "settled migrants" pattern is not yet present. When I was in

these counties in 1991, the crew chief system used to bring in most of the Latino farmworkers, and it appeared that this would be the case in the future too. The workers were being contracted in Texas and Florida and then brought up and dropped off in Kentucky, to large and small growers alike. While the large growers have continued with this recruitment pattern, small growers have abandoned the crew chief system in favor of a much more personal, even patrimonial, system, in which they develop a direct relationship with certain workers and their families, who then return to work the following year. This pattern of return migration seems to be less extensive in Kentucky than it is for the lettuce cutters in New Jersey or upstate New York, but it is nonetheless occurring. These personal relationships are manifest in the "personal networks" and "hired hand" patterns of settlement.

An important aspect of the "personal networks" and "hired hand" patterns of settlement is that the growers offer "free" housing to the workers. Of the 7 growers whom I spoke with, six offered free housing to their Guatemalan or Mexican workers. Three provided trailers, one provided a slightly improved milking barn, and two had workers living in spare bedrooms of their houses that had been vacated when their adult children moved out. One grower was actually building a house for his Guatemalan workers, on the condition that they would stay for at least two more years. This case was interesting, and I served as translator between the Guatemalan workers and the English-speaking grower. The grower was only going to build the house if he could get a two-year commitment out of the workers; the workers wanted to stay only if they had housing. The important point is that the grower told me that he anticipated having these workers or others from the same place on a largely permanent basis, and he was recommending the workers to his friends who were growers. The grower told me that he expected to have his labor problems solved by building the house. This is an important part of the "hired hand" pattern of settlement.

This pattern also seems to be spreading. Several other growers had hired migrant Mexicans and Guatemalans throughout the entire year since I have last spoken with them. They did this because they liked the workers and did not want to lose them. They renovated housing so that the workers could live in them year-round, and hired the workers to do all the work of the farm: fixing barns and mending fences in the winter, and other such chores, for hourly pay. They are in some sense replacing the extended family or even nuclear family labor that small farms have often counted on, as many of these farms are owned by older men whose children have not taken up farming.

Another important reason that the hired hand settlement pattern will likely increase is that tobacco farmers are beginning to diversify their crops in order to survive. They see that demand for tobacco will not sustain them into the future. Moreover, most

farms today need a steadier flow of capital than one single cash crop can assure. They are being advised to move into other crops, and as they do so, the demand for year round farmworkers will increase. Some of the growers told me that they linked diversification with the presence of year-round "hired hand" workers. With new workers (Mexicans and Guatemalans) readily available, they would now be able to produce all year without fear that labor shortages would hamper their efforts to run the farm.

Just as growers have diversified their planting, the workers too have diversified their jobs within the agricultural economy in these counties. Originally brought in to do tobacco work, the Mexican and Guatemalan workers are moving into nurseries which are also quite important to the agricultural economy in the area. These jobs lead to settlement in the area more quickly than migrant jobs, and hence tend to increase the numbers of Latino farmworkers who will be in these counties on the next Census Day. The importance of the "hired hand" settlement pattern is that it will add a significant population of Latino farmworkers to the area. Nevertheless, they are unlikely to be enumerated, for several reasons. First, because many of these workers are undocumented, the growers desire to avoid their detection by government agencies. Further, many are also staying in irregular housing arrangements that easily could be missed by enumerators. The trailers, for example, are often set far back from the road and would not be visible to someone who did not know to look for them.

However, these semipermanent, semi-settled, workers are relatively easier to enumerate than those who remain migratory. This group of semipermanent "hired hands" is also important because it will foster the development of a larger group of farmworkers who have personal relationships with the growers, more links to jobs in the area, and who will return year after year.

The Guatemalan and Mexican workers on the small farms, where I interviewed people, have quite different migration and settlement patterns. The Guatemalans seem to be settling more quickly than the Mexicans; they seem to have fewer options in terms of other places to work, have worked at fewer locations in the United States, and are more dependent on the growers. The Mexicans, by contrast, seem to be more consistently involved in migration, traveling from Florida or Texas through Ohio, Illinois, Georgia and other states, on their way to Kentucky, though some have also settled in the area. The likelihood of settling is partly related to the kind of work each group is doing: the Guatemalans, who become settled, move into nursery work, while most of the Mexicans, who remain transient, are in tobacco work. The hired hand pattern, however, holds in tobacco as well.

The third settlement/migration pattern resulting from employing a crew chief is found today mostly at large tobacco farms where more than 50 and up to 300 workers might be employed at one time. Workers hired under this arrangement are least likely to be counted by the Census at any point in their migration. They are most likely to work for brief periods at a large number of places, remain in one place only during the peak picking period before moving on, and have more spells of unemployment. Many of these workers are recent arrivals from Mexico or Guatemala, who were recruited by the crew chiefs at the large camps in Imokalee, Bell Glade, West Palm Beach and other areas of Florida. Moreover, it is unlikely, because of the seasonal nature of tobacco growing, that there will be many migrant workers from this category in the counties by April during the next Census.

Characteristics of 10 Farmworkers Interviewed in Shelby and Scott Counties

Table #5 shows the various kinds of settlement among the farmworkers interviewed in these two Kentucky counties and where they spent the previous 12 months. None of them were Mexicans, and only one was American (#2). Two of the farmworkers, including the American, stayed the entire year in Kentucky in the "hired hand" pattern, but the rest of the workers went to a variety of locations. The migratory farmworkers are more likely to be recent arrivals, and hence moving from place to place in search of work. Only one worker migrated between a place in the United States (Kentucky) and his home base in Mexico, which was the characteristic pattern of the better established farmworkers, who stay through the two seasons in New Jersey. Four workers moved between Kentucky, Mexico and either Florida or Texas. Several of them were moving with a crew chief who made the arrangements for their work. Three workers spent most of the year looking for work in various places within the United States.

The farmworkers were in Kentucky for relatively short periods. Of the 10, four spent only one month there for the peak cutting season; three others spent four months or less there. Only three spent eight or more months in the area. This suggests, on the one hand, that the employment base for permanent settlement for most workers in this area is less secure than for workers in New Jersey, at least in agriculture. On the other hand, those workers filling the "hired hand" niche will be able to settle permanently rather quickly.

Only two of the migrants were completely alone, and had no family in either Mexico or the United States. Two of the farmworkers were single and traveling with siblings. Two others, including the American, were married and settled in Kentucky; both had their families living with them. Another worker was married and settled with his family in Texas on the US/Mexico border.

Table #6 shows how these workers obtained their jobs. Two reported that they had obtained their jobs through labor contractors, two others report having a standing agreement with their current employers, and 6 were referred through friends, work mates or relatives. This percentage very well might have been different during the period from 1985 to 1991, when contractors brought almost all the Mexican labor into the area (Rosenberg, 1989). That six of 10 of the workers now obtain their jobs through informal mechanisms suggests that the migration process has established itself in the area, and further immigration independent of contractors can be expected. However, it is still probable that contractors will also continue to import workers to the larger farms.

The type of housing provided and location of quarters among the ten farmworkers interviewed varied little. All ten were living in housing on the farms where they worked, including the American, who was the only home owner. Eight workers lived in trailers and one in a fixed structure, set up specifically as a labor camp,

Table #7 shows the use of services by the ten farmworkers. Only one respondent has used Food Stamps, a government health clinic or medicaid; two have used Unemployment insurance. Three of the ten workers reported having needed medical assistance in the last two years in the United States, and seven reported not having needed such attention. If they needed medical attention in the United States, seven of the ten reported that they would go back to their country, three reported that they would go the emergency room, and one (the American) reported that he/she would go to a private doctor.

Strategies for Increasing Census Coverage of Migrant Farmworkers in Two Kentucky Counties

Formulating a strategy for increasing coverage in these Kentucky counties will be harder than in New Jersey, because of the lack of secondary organizations with links to farmworkers, such as the service organizations of the Catholic Church, or the Spanish language newspapers or radio stations. There are several steps that could improve the census, however.

The first would be to move the date of the Census to a date when more workers will be there, such as late August or September or to January. Regardless of the date, the Census should show a marked increase in the numbers of migrant Hispanic farmworkers in the County because of the "hired hand" pattern of settlement.

A second suggestion would be to "piggy-back" on the Census of Agriculture or some other existing program in the county. The United States Department of Agriculture has a large extension service outreach in the area, and this arm of the government might be put to use in helping to enumerate the number of migrant workers. Using a program that already has existing links to

growers also circumvents to some degree the problem of trust. The growers will not volunteer information regarding the presence of undocumented workers on their farms to anyone they do not know and trust. Other institutions that may be of help are the local churches. Several pentecostal churches have recruited new members, especially Guatemalans, from the migrant farmworker population.

Developing methods to improve coverage will take a lot of work because of the relative newness of the migration itself and the isolation of the migrants. There are no established immigrant organizations and few organizations with services directed towards immigrants.

CASE STUDY #3: CHAUTAUQUA COUNTY NEW YORK AND THE NURSERY, GRAPE, AND CHERRY TOMATO INDUSTRIES

The case of Chautauqua County, New York provides a very similar case to that of Shelby and Scott counties, Kentucky because of the multiple settlement patterns. Two fundamental differences are that some of the Latino farmworkers have been migrating to Chautauqua county for much longer than workers in Kentucky, and that it also has a significant, settled, Puerto Rican population. More of the recently arrived Mexicans and also some Guatemalans are settling in the "hired hand" settlement pattern than in Kentucky. This analysis draws on interviews with 36 Latino and 14 non-Latino farmworkers; with a most intensive focus on ten of the Latino farmworkers, representing the most prevalent group in the industry. The report also draws on the survey and ethnographic research I have conducted during my four visits there over the last two years.

Chautauqua county demonstrates the same three settlement and migration patterns as the counties in Kentucky, but at a more advanced stage. Latinos have comprised the majority of the farmworkers in the area for at least the past 10 to 15 years. Puerto Ricans came in during the 1960s and 1970s, and Mexicans have come in since the early 1980s. In the past two to three years, Guatemalans have been arriving in increasing numbers. This ethnic succession has progressed to the point where half or more of the farmworkers on some of the larger cherry tomato farms are Guatemalans. Their crews have Guatemalan crew chiefs and show other evidence of organization along ethnic lines. For example, there was a specific crew leader whom all of the workers knew and to whom I was directed to obtain permission to do interviews. Moreover, local service advocates also spoke with this crew leader when they needed to convey information to the workers.

The settlement of farmworkers in Chautauqua county bears some resemblance to the development of the settlements in Kentucky and New Jersey. Similar settlement processes also occurred with the

Puerto Ricans previously; and now Mexicans are repeating the pattern. As the agricultural economy has changed, new jobs have been created leading to new kinds of settlement. Migrants first came into the area through the east coast, and to some extent, through the midwest migrant streams, out of Florida and Texas respectively. They stayed only for the cherry tomato or other vegetable harvests, which have a relatively short season lasting from the end of the July to the end of September. The climate permits only one growing season, as opposed to New Jersey, for example, which has two. However, in the last 10 to 15 years, new jobs have been created lasting over the winter, as new technology and practices have enabled larger farms to store the products harvested in the fall and sell them through the winter. At these larger farms with cold storage capacity, workers clean cabbages through the entire winter, working three to five days per week on this task. "Cleaning" the cabbages means cutting off the rotten parts and shipping them to customers. Hence, what began as a summer long season has stretched to become a year-long work season, with some layoff time.

Settlement has also been intensified by the diversification of the agricultural jobs that the migrants are taking. They have moved from simply working in the tomato harvest, to learning year-round work in grape vine harvesting and to working in local nurseries. Jobs in these industries require more skills than those in tomato harvest. In the case of grapes in particular, this work often involves farmworkers in planting, and to a certain degree, in managing the running of the farm; for example, working with heavy machinery such as tractors.

These job characteristics have led to the permanent settlement of the Latino farmworkers in the county, including an increase in the number of Mexican families that have settled in the area. During the short time I have been returning to the area to do more interviews, I have seen literally dozens of Mexicans and also, to a lesser extent, Guatemalans settle in the Dunkirk area, mostly from the same families. These two groups are becoming visible minorities in the county.

Members of this group make regular return visits to Mexico, but they have also settled here and are bringing more of their family members to the area. Guatemalans do not seem to return to their native country as frequently as the Mexicans. This is partly because they do not yet have a tradition of regular migration, as the Mexicans do, and also because it is more difficult for undocumented workers to cross two national borders. The newcomers in these families come partly from the migrant stream out of Florida, and some from Texas, and a few even from California, but increasing numbers come directly from Mexico and Guatemala.

There is another group of migrants who, as a group, are not settling and who are not tied into good networks. These are the recently arrived, undocumented Mexican and Guatemalan crews,

coming through Florida. Many are single men; many others are married, but have few if any contacts in the United States, and hence must link up with crew chiefs. They work mainly in harvesting tomatoes during the short season from July through September. As in the Kentucky case, these are among the farmworkers least likely to be enumerated in the Census. Even if they are in the area on Census Day, their presence is unlikely to be detected. They are mostly undocumented men, and almost none have their families with them. The workers who stay in the area live in different kinds of housing, each of which affects their likelihood of being counted. Those who live in grower-provided housing are less likely to be counted, even if they are in the area at Census time. A larger proportion, live in the low-income housing in areas of Dunkirk, inhabited by African-Americans and Puerto Ricans. This housing is less likely than that in Kentucky or Pennsylvania to present obstacles to farmworker enumeration, other things being equal. There are no overt political (as in the case of Pennsylvania) or logistical reasons (e.g. camps or houses set out of view on roads), why they would not be counted. The count of this segment of the county farmworker population will depend more on other common factors responsible for the undercount of minorities in general.

Characteristics of Ten Migrant Farmworkers in Chautauqua County

Table #8 lists the locations and number of months where ten of the migrant farmworkers spent their time in 1992, the year preceding the interviews. This table shows that two of the workers migrated between Mexico and New York, and one other migrated between Mexico, New York and other places in the United States. Two stayed all year in New York; two migrated between New York and other places in the United States. One migrated between Puerto Rico and New York and other places in the United States, while two migrated between New York and Puerto Rico. There were four Puerto Ricans and six Mexicans interviewed. This table shows that two of the ten stayed all year in 1992 in Chautauqua county.

Table #9 shows where the migrants' families are located, their family type, and their marital status. Only one farmworker reported himself to be completely alone and without family. Two were traveling with a sibling. One had his spouse with him in New York. Six were married with no family members with them in New York. All were members of nuclear families except the two siblings, who were young single males traveling together on their own. Respondents were asked how they obtained their jobs. Six of them reported that they had been referred by a friend, one was recruited by a contractor, and two have a standing agreement with the grower year after year.

Respondents were also asked about the providers of their living quarters and the type of housing provided. In contrast to the other counties, most of the workers in Chautauqua were renting

housing. Seven out of 10 reported renting their accommodations from someone other than their employer. One rented from his employer. One was the owner of his own house, and one was given free housing by the grower. This is a very different pattern from the other counties, and reflects a trend within the county. Many growers have been shutting down their housing permanently or opening it for shorter and shorter periods, only at the peak of the work season. Growers report that they are doing so because the costs of litigation and fines related to housing code infractions due to actions brought by Legal Aid in the county have made it economically advantageous to shut the housing down and force the workers to fend for themselves.

Five of the workers reported living in a house they rented; one lived in a labor camp. Four lived in an apartment. Only one of these workers lived on the farm where he worked. All others lived off the farm where the farmers were not their landlords.

The respondents were asked about medical assistance. Only two of ten had reported needing medical assistance in the United States in the last two years. Eight of ten reported that they would go to the emergency room in the hospital if they were sick. One reported that he would go back to his country, and one said he would go to the community health clinic.

Strategies for Improving Census Coverage in Chautauqua County

The strategies for improving the coverage of the Census are similar as for the other counties discussed so far. First, change the date of the Census to a later period between mid-July through early September. Second, attempt to piggy-back on other agencies or institutions such as the Extension Service, that have standing relationships with the growers in the county. A third recommendation is to advertise in local stores that sell Mexican and Puerto Rican products, or in the local churches where they worship. There is also a Dunkirk Puerto Rican Social Club that may be useful in reaching out to them.

The most useful resource in the area is a woman who works for the county, coordinating migrant services. She is well known and respected among the farmworker community, and she might serve as a person to help Census improve its coverage of the farmworkers. Chautauqua has a growing population of Latino farmworkers who are remaining for the entire year and increasingly bringing their families to stay also. The greater employment and residential stability of the families should make it likely that the Census will be able to enumerate more farmworkers in the year 2000.

CASE STUDY # 4: THE PENNSYLVANIA MUSHROOM INDUSTRY IN CHESTER COUNTY, PENNSYLVANIA⁴

The Pennsylvania mushroom industry provides an interesting case for analyzing farmworker omissions in the Census. This industry provides a mix of characteristics that make it both more and less likely that the workers will be counted. Most important in increasing enumeration may be the residency patterns of the mushroom pickers. Mushroom pickers live nearly year-round in Chester county, Pennsylvania, primarily in large labor camps maintained by the growers, and in several apartment complexes in the same townships. However, several factors, such as inspections of camps for overcrowding, the provision of illegal housing in trailers and converted outbuildings, and the presence of undocumented workers, make it likely that the farmworkers and the growers alike would try to hide their presence from census counters. It may be advantageous for the growers to provide a purposefully low estimate, or not include any farmworkers at all on the Census report.

Among the most important factors leading to an undercount in the Pennsylvania mushroom industry is that the number of workers in the labor camps has become a political and labor relations issue in the industry. That is, the growers and workers alike tend to hide the presence of some of the workers because of a lawsuit pressed by the local Legal Aid (Friends of Farmworkers) Inc.. This suit established an interpretation of the Pennsylvania Seasonal Farm Labor Act of 1978 that classified the mushroom pickers as "seasonal and migrant" despite their year-round employment, according to which employers have dubbed them "staygrants". The result was that the Department of Environmental Resources (DER) has been charged with inspecting the camps for a variety of regulations, including overcrowding. This, in turn, has led to the development of strategies for escaping detection of people living in the camps, and to the development of alternative arrangements to secure off-farm housing which is in fact clandestinely managed by the growers or their foremen.

Two of these strategies are most important. The first involves the literal "hiding" of the workers' presence from the DER. In this case, growers and workers collude to hide their presence through a variety of maneuvers. For example, the workers hide their mattresses under the mattresses of other workers so that when the inspector comes to the camp and counts beds, there will only appear to be 4 people in a room listed for occupancy by 4 people. There will however be 8 mattresses on 4 beds, two piled on top of each other. At night, these other 4 mattresses will be slid onto the floor for workers to sleep on. This is of benefit

⁴ For a fuller examination of these issues, consult Smith 1991 or Smith, forthcoming.

to the employers because it gives them more ready, accessible workers; to the workers, it allows them to have cheap housing, and to offer housing to recently arrived relatives, which would be impossible if the housing limits were properly observed. A second practice is for the growers and their foremen to rent apartments, or more often, houses, for their workers, and then pack them with workers. Since this is done to avoid the Pennsylvania Seasonal and Migrant Farm Labor Act, they most likely do not report the presence of these workers, or at least not all of them, to the Census Bureau.

There are two other housing situations which may lead to farmworkers' being missed by the Census. First, quite a large clandestine rental market has emerged for farmworker housing in the county. It is a wealthy county with little affordable housing. A good number of growers and others have purchased trailers or even converted old mushroom growing houses into housing for workers, which they then rent to them. Some of these landlords do not grow mushrooms any more, but have become only landlords. They are unlikely to report the farmworkers living there. Second, when workers rent on the open market, they often have undocumented people living with them, and are less likely to report their presence to a government agency like the Census Bureau. These situations can lead to a large number of omissions and will require the use of the innovative enumeration strategies discussed below.

Strategies for Improving Census Coverage of Farmworkers in the Pennsylvania Mushroom Industry

This case presents an interesting possibility for increasing Census coverage. Some of these conditions would exacerbate the undercount of farmworkers: the "hiding" of farmworkers from the DER of Pennsylvania, the irregular housing situations, and the undocumented status of many of the workers, as well as others. Some of these conditions would tend to make enumeration easier: the regularity of the workers migrant patterns, the stability of their destinations, that is, they shuttle between Moroleon and Chester County, not usually going elsewhere.

One strategy would be to conduct an enumeration using local resources and networks. This would be possible because most workers live in camps or are concentrated in several housing complexes in the County. It may be possible to use the contacts that the local service agencies, advocates and even the growers' association have with the workers to carry out an enumeration. Organizations like the Friends of Farmworkers, Agricultural Workers Support Committee (CATA), La Comunidad Hispana, the American Mushroom Institute, and others could aid Census efforts.

Another strategy would be to use the applications for amnesty, for spousal petitions for entry, and applications for government benefits, as ways of estimating the numbers of farmworkers in the

county. These data could be obtained by the INS and local offices of the respective agencies, and used to construct a profile of farmworkers. While these data could not be used to estimate a precise number for the population because the percentage of workers applied for amnesty is unknown, it is known that the percentage is high. Hence, any kind of statistical profile or enumeration that could be generated this way would provide another piece of valuable evidence with which to compare the 2000 Census figures.

There are Spanish language radio stations and other media to reach these farmworkers. Moreover, local Mexican restaurants could also be used. Finally, a network of tortilla (and other goods) deliverers could be mobilized to disseminate information regarding the Census. As the tortilla deliverers make deliveries house to house, it might even be possible to get them to insert sample Census forms with information right into the tortilla containers, bring the information literally into the kitchens of each household. This strategy might work on a larger scale in the northeast. There are several tortillerias (tortilla factories) in and around New York City that supply tortillas to the northeast. They may be willing to help out on such a project.

There are other enumeration strategies that could be used for evaluating a farmworker census in the Pennsylvania mushroom industry. One would involve enumerating the migrant workers at both poles of their migration, for example, in Moroleon, Mexico, and in Chester County. This would be a feasible project because the farmworkers live in Mexico in several hamlets of up to 1000 people, and in certain neighborhoods on the outskirts of the city of Moroleon. Hence, it would be possible and affordable to count the workers in Mexico and in Pennsylvania. In this way more comprehensive data could be obtained regarding the whereabouts of farmworkers on Census day, as well as their residence patterns, and other characteristics.

CONCLUSIONS AND RECOMMENDATIONS: STRATEGIES FOR IMPROVING CENSUS COVERAGE IN THE YEAR 2000

One of the several closely related issues to consider has to do with improving methods for counting farmworkers so that the Census will produce better coverage of the U.S. population in 2000 than in 1990. Another issue concerns the evaluation of farmworker coverage in these counties. Because each previous section was followed by a discussion of county-specific strategies, this final section discusses these issues more generally.

A first strategy for maximizing Census coverage is to change the Census date to one which corresponds to the peak season of agriculture in each county. This would enable the Census to

enumerate farmworkers such as those in New Jersey who live at least half of their time in New Jersey and the other half in Mexico with their families. Because they are usually in Mexico on April 1, they may have never been enumerated, even though some have spent 10 or more years working at least half the year in the state. An obvious hazard in this regard is that one might count the same migrant in, for example, Florida and New Jersey. Such possible double counting could be minimized by questions about whether the migrant had been counted in Florida or elsewhere.

A second strategy for improving the coverage of a first enumeration would be to "piggy-back" on existing institutions. The Census could use the Agricultural Extension Service or growers associations to obtain access to farmworkers in the area. One obvious problem of any strategy relying on the cooperation of the growers is that many of them will perceive it to be against their interests to cooperate in the enumeration of their farmworkers. Their reasons for not cooperating include first, that the workers are undocumented, and second, that if such an enumeration results in more social service programs for farmworkers, the growers fear that the workers will not want to work any more. This is a concern that many growers have voiced in different contexts. The use of existing service institutions, such as the Catholic Church, for implementing the Census 2000, also could be a great help in many areas, such as New Jersey.

Pursuant to this strategy would be to use the existing social institutions and networks of the migrants themselves. One network of the migrants' relationships to other migrants from his home town is used in the United States for getting jobs, housing and other services. Each of the counties studied here has at least one or two towns from which many members migrate to the same place in the United States. Such kinship and friendship networks could be utilized in either getting more complete coverage or estimating the degree of undercounting. Another network that would allow a large number of farmworkers to be reached would be the tortilleria distribution network in the northeast.

An important advantage of using either of these informal networks or the existing institutions with long-standing relations with the farmworkers (such as the church) is that they are more likely to overcome the migrants' fear of exposure to the Immigration Service, and also to explain the importance of the Census in culturally appropriate terms and contexts. Attempts to increase the coverage of the Census are most likely to succeed if its benefits are made apparent to the farmworkers, and if it becomes something that everyone else is doing. Such was the clear lesson from the Amnesty program in the 1986 Immigration Reform and Control Act. Such a cultural consensus regarding the meaning of the Census 2000 can be reached most successfully with the cooperative action of those institutions and networks that pervade the lives of the migrants, and are already their own.

A final suggestion is to evaluate Census coverage by conducting alternative enumerations of the farmworker population in selected areas. Studies such as Brooks and Pfeffer (1992) or Larsen and Plascencia (1993) offer innovative approaches for reaching these populations. A larger scale project could be done using the National Agricultural Workers Survey (NAWS) itself. The NAWS is the most comprehensive extant survey of the farmworker population. Moreover, NAWS has a research team of ethnographers and survey researchers who have been working for 4-5 years on profiling farmworker populations in various counties. It would be possible to use the data that the NAWS has generated over the last 5 years to develop strategies for doing an alternative enumeration for the 2000 Census. The counties could be chosen according to the characteristics of the farmworkers and the conditions of the counties which might lead to greater or lesser coverage. By comparing the results of such alternative enumerations, it would be possible to gauge more precisely the effects of different social conditions or population characteristics on enumeration.

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APPENDIX

TABLE 1: Numbers of Farmworkers in Each County Studied in 1990⁵

Chester County, PA		
Total # of Farmworkers	Male	Female
	932	230
Hispanics	444	11
Atlantic County, NJ		
Total	159	60
Hispanics	77	0
Cumberland County, NJ		
Total	367	31
Hispanics	180	12
Scott County, KY		
Total	214	79
Hispanics	0	0
Shelby County, KY		
Total,	228	61
Hispanics	0	0
Chautauqua, NY		
Total	530	183
Hispanics	39	6

⁵ These figures, compiled by State Data Centers of New Jersey, New York, Pennsylvania, and Kentucky, are derived from the 1990 Census of Population and Housing, Equal Employment Opportunity (EEO) file (U.S. Bureau of the Census 1990). The myriad sources of Census Data that include farmworkers yield varying estimates for each county. I chose the EEO file because it provides an occupational category of "farmworkers" *per se*, rather than categories of "farmworkers and related occupations" or "farming, fishing and forestry" used in other Census files.

TABLE 2: Farmworkers Interviewed in Cumberland County, NJ in 1993

Number of Months Respondents Spent at
Various Locations during 1992

<u>Respondent</u>	<u>NJ</u>	<u>FL</u>	<u>TX</u>	<u>CA</u>	<u>Other U.S.</u>	<u>Mexico/ Puerto Rico</u>	<u>Months Unemployed in the US</u>
1	9					3	3
2	8					4	2
3	3				3	6	4
4	5					7	1
5	6					6	0
6	4					8	1
7	6				2	4	2
8	5		5			2	0
9	6					6	0
10	4	5				3	1
11	5	5				2	3
12	7	5					1
13	6	2				4	0
14	12						4
15	5	2				5	0
16	9	2				1	4
17	4					8	1
18	7	3				2	1
19	6					6	2
20	6	2				4	1
21	6	4				2	3
22	6	5				1	1
23	6	4		2			8
24	8	4					1
25	3	6				3	0

TABLE 3: How A Farmworker Obtained Job

Referred by a relative/friend/work mate.....	20
Recruited by farm labor contractor or his foreman.....	1
Applied for the job on his own.....	4

TABLE 4: Use of Services By Respondents

AFDC	1
Food Stamps	3
Disability Insurance	0
Unemployment Insurance	3
Social Security Ins.	0
Veteran's pay	0
Welfare	0
Low Income Housing	0
Gov't Health Clinic	0
Medicaid	2
WIC	2
Other Services	0

TABLE 5: Farmworkers Interviewed in Two Kentucky Counties

Number of Months Respondents Spent at Various Locations in 1992

<u>Respondent</u>	<u>KY</u>	<u>CA</u>	<u>TX</u>	<u>FL</u>	<u>Mexico</u>	<u>Guatemala</u>	<u>Months Unemployed in the US</u>
1	3	-	9	-	-	-	1
2	12	-	-	-	-	-	0
3	1	11	-	-	-	-	6
4	1	-	3	3	5	-	0
5	1	-	8	3	-	-	2
6	12	-	-	-	-	-	0
7	1	-	-	6	5	-	2
8	8	-	-	-	4	-	2
9	4	-	5	-	3	-	0
10	3	-	-	6	3	-	0

TABLE 6: Farmworkers Interviewed in Two Kentucky Counties

How Jobs Were Obtained

I was recruited by a farm labor contractor of their foremen	2
I have a standing agreement with this grower from year to year..	2
I was referred by a relative/friend/workmate	6

TABLE 7: Use of Services By Respondents

AFDC	0
Food Stamps	1
Disability Insurance	0
Unemployment Insurance	2
Social Security Ins.	0
Veteran's pay	0
Welfare	0
Low Income Housing	0
Gov't Health Clinic	1
Medicaid	1
WIC	0
Other Services	0

TABLE 8: Farmworkers Interviewed in Chautauqua County

Number of Months Respondents Spent at Various Locations in 1992:

<u>Respondent</u>	<u>NY</u>	<u>FL</u>	<u>GA/NC</u>	<u>TX</u>	<u>Mexico</u>	<u>US</u>	<u>P.R.</u>	<u>Months Unemployed in the US</u>
1	1	10					1	2
2	7						5	2
3	7						5	3
4	12							0
5	12							0
6	2	8	2					3
7	1	9	2					3
8	2			3	7			1
9	1	1	1		5	2		1
10	1	3			6	2		1

TABLE 9: Farmworkers Interviewed in Chautauqua County

Marital Status, Family Type and Size, and Location of Family Members

<u>RESPONDENT</u>	<u>MARITAL STATUS</u>	<u>WITH NUCLEAR FAMILY</u>	<u>WITH SIBLING ONLY</u>	<u>U.S.</u>	<u>MEXICO or GUATEMALA</u>
1	s	-	-	-	-
2	m	x	-	0	4
3	m	x	-	0	1
4	m	x	-	1	1
5	m	x	-	0	1
6	s	-	x	1	0
7	s	-	x	1	0
8	m	x	-	0	3
9	m	x	-	0	3
10	m	x	-	0	3