

**Findings from the  
National Agricultural  
Workers Survey (NAWS)  
2015-2016:**

A Demographic and  
Employment Profile of  
United States Farmworkers

Research Report No. 13

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Value of solution.*



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January 2018

This report was prepared for the U.S. Department of Labor, Employment and Training Administration, Office of Policy Development and Research by JBS International, Inc., under contract #GS-10F-0285K. Since contractors conducting research and evaluation projects under government sponsorship are encouraged to express their own judgment freely, this report does not necessarily represent official opinion or policy of the U.S. Department of Labor.

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The authors are grateful to Jorge Nakamoto and Alberto Sandoval of JBS International for coordinating the field interviews on which the report is based, as well as to the interviewers and support staff of JBS International. The authors also thank the 5,342 U.S. crop workers who graciously participated in an interview during 2015-2016, and the agricultural employers who helped survey staff reach the workers.

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## EXECUTIVE SUMMARY

This report is the thirteenth in a series of Department of Labor publications on the demographic and employment characteristics of hired agricultural workers in the United States (U.S.). It examines recent information on the demographics and employment characteristics of those who perform U.S. crop work. The primary focus of this report is the presentation of findings for the period covering fiscal years (FY) 2015 and 2016. These findings are based on data collected from face-to-face interviews with 5,342 crop farmworkers through the U.S. Department of Labor's National Agricultural Workers Survey (NAWS) between October 1, 2014 and September 30, 2016.

### *Birthplace, Ethnicity, and Race*

Sixty-nine percent of hired farmworkers interviewed in FYs 2015-2016 were born in Mexico, 24 percent were born in the United States, 1 percent were born in Puerto Rico<sup>1</sup>, 6 percent were born in Central America, and a small portion (1%) originated from various other regions, including South America, the Caribbean, Asia, and the Pacific Islands. Eighty-three percent of all farmworkers were Hispanic. Among U.S.-born workers, 35 percent were Hispanic. In terms of race, nearly a quarter of farmworkers self-identified as White (24%), and nearly three quarters categorized their race with an open-ended "other" response (73%). Six percent of farmworkers were identified as indigenous.

### *Employment Eligibility and Number of Years in the United States*

Just more than half of all farmworkers in 2015-2016 had work authorization (51%): 29 percent were U.S. citizens, 21 percent were legal permanent residents, and 1 percent had work authorization through some other visa program. Among citizens, 85 percent were born in the U.S. and 15 percent were naturalized citizens.

On average, foreign-born farmworkers interviewed in 2015-2016 first came to the United States 18 years before being interviewed. Most respondents had been in the United States at least 10 years (78%), with 58 percent arriving 15 years or more prior to their NAWS interview. Four percent of farmworkers were in their first year in the United States. Eighty-one percent of farmworkers were settled workers and 19 percent were migrants.

### *Demographics and Family Composition*

Males comprised 68 percent of the hired crop labor force in 2015-2016. Farmworkers were relatively young, their average age being 38. Forty-four percent of workers were under the age of 35, 41 percent were ages 35 to 54, and 14 percent were age 55 or older.

Fifty-seven percent of farmworkers were married and 55 percent had children. At the time they were interviewed, farmworker parents with minor children living with them had an average of 2 minor children. Among these parents, 67 percent had 1 or 2 minor children in their household, 23 percent had 3 minor children, and 10 percent had 4 or more minor children.

Forty percent of farmworkers were living apart from all nuclear family members at the time of their interview (i.e. were unaccompanied). Seventy-three percent of these unaccompanied

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<sup>1</sup> Estimate should be interpreted with caution because it has a RSE of 31 to 50 percent.

workers were single without children, 20 percent were parents, and 7 percent had a spouse but no children.

### ***Language and Education***

In 2015-2016, 77 percent of farmworkers said that Spanish was the language in which they are most comfortable conversing, 21 percent said English was, and 1 percent reported an indigenous language. In rating their English language skills, 30 percent of farmworkers reported that they could not speak English “at all”, 41 percent said they could speak English “a little” or “somewhat”, and 29 percent said they could speak English “well”. In terms of their ability to read English, 41 percent of workers reported they could not read English “at all”, 30 percent said they could read English “a little” or “somewhat”, and 28 percent said that they could read English “well”.

The average level of formal education completed by farmworkers was eighth grade. Four percent of workers reported that they had no formal schooling and 37 percent reported that they completed the sixth grade or lower. Nineteen percent of workers said they completed grade 7, 8, or 9, and 30 percent said they completed grade 10, 11, or 12. Ten percent of workers reported completing some education beyond high school. Thirty-five percent of workers reported having taken at least one adult education class in the United States.

### ***Housing***

Fifty-four percent of farmworkers interviewed in 2015-2016 reported that they lived in housing they rented from someone other than their employer, 28 percent of workers said they lived in a home owned by themselves or a family member, and 1 percent said they paid rent for housing provided by the government, a charity, or other organization. Sixteen percent of workers lived in employer-provided housing: 11 percent received it free of charge, 2 percent paid rent either directly or via payroll deduction, and 4 percent had other arrangements with their employers that were not specified.

Fifty-seven percent of all farmworkers reported living in detached, single-family houses, 20 percent said they lived in mobile homes, 20 percent lived in apartments, and 4 percent lived in various other types of housing including duplexes or triplexes, dormitories or barracks, and motels or hotels. Thirty-three percent of farmworkers lived in “crowded” dwellings, defined as housing units in which the number of persons per room was greater than one.

### ***Distance to Work and Transportation***

When asked how far their current farm job was from their current residence, 11 percent of workers reported that they lived where they worked, 70 percent lived fewer than 25 miles from their current farm job, and 16 percent lived between 25 and 49 miles from work. Fifty-eight percent of workers drove a car to work, 13 percent rode with others, 8 percent walked or took public transportation, and 15 percent rode with a “raitero”<sup>2</sup>.

### ***Job Characteristics and Employment History***

In 2015-2016, 80 percent of farmworkers were employed directly by growers and 20 percent were employed by farm labor contractors. At the time of interview, 37 percent of farmworkers

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<sup>2</sup> “Raitero”, derived from “ride”, is the Spanish word for a person who charges a fee for providing a ride to work.

were working in vegetable crops, 32 percent in fruit and nut crops, and 19 percent in horticulture. Another 10 percent were working in field crops and 3 percent were working in mixed crops. Thirty percent of farmworkers were performing pre-harvest tasks, 17 percent were harvesting crops, 25 percent were performing post-harvest activities, and 29 percent were performing technical production tasks.

In the 12 months prior to being interviewed, respondents spent an average of 33 weeks employed in farm work and performed an average of 192 days of farm work. Workers worked an average of 5 days per week for their current employer and reported an average of 45 work hours in the previous week. The majority of workers said that their basis for pay was an hourly wage (88%), and workers reported earning an average of \$10.60 per hour. Forty-three percent of farmworkers said that they were covered by Unemployment Insurance (UI) if they were to lose their current job, 62 percent said they would receive workers' compensation if they were injured at work or became ill as a result of their work, and 18 percent reported that their employer offered health insurance for injury or illness suffered while not on the job.

Farmworkers in 2015-2016 worked for an average of 1 U.S. farm employer in the 12 months prior to being interviewed. Eighty percent of workers reported having worked for only 1 farm employer in the previous 12 months, 13 percent worked for 2 employers, and 7 percent had 3 or more farm employers. At the time of interview, farmworkers had been employed by their current farm employer for an average of 7 years. The majority of farmworkers interviewed in 2015-2016 expected to continue doing farm work for more than 5 years (76%).

In the year prior to their NAWS interview, workers spent an average of 11 weeks living in the United States but not working and 3 weeks abroad. Twenty-four percent of farmworkers held at least 1 non-crop work job in the previous 12 months, and those who held a non-crop job worked an average of 25 weeks in non-crop employment.

### ***Income and Assets***

Farmworkers' mean and median personal incomes the previous year were in the range of \$17,500 to \$19,999. Fourteen percent of workers said their total personal income was less than \$10,000, 29 percent said they had personal incomes of \$10,000 to \$19,999, another 29 percent had personal incomes of \$20,000 to \$29,999, and 14 percent reported that their total personal income was \$30,000 or more. Nine percent of workers reported that they did not work at all during the prior calendar year.

Workers' mean and median total family incomes the previous year were in the range of \$20,000 to \$24,999. Six percent of workers said that they did not work in the prior year, twenty-seven percent said that their total family income the prior year was less than \$20,000, another 27 percent had a family income of \$20,000 to \$29,999, and 32 percent had a family income of \$30,000 or more<sup>3</sup>. Thirty-three percent of farmworkers had family incomes below the poverty level.

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<sup>3</sup> An additional 8 percent of workers reported that they did not know their family income for the prior year.

Approximately two-thirds of farmworkers stated that they owned or were buying at least one asset in the United States (68%). The most common assets were a vehicle (reported by 63% of workers) or a home (reported by 18% of workers).

In 2015-2016, 14 percent of farmworkers reported that someone in their household received a benefit from at least one contribution-based program, including disability insurance, UI, or Social Security. Ten percent of households received payments from UI, three percent received Social Security payments, and one percent received payments from disability insurance. Fifty-four percent of farmworkers reported that they or someone in their household used at least one type of public assistance program in the previous two years. The most common programs utilized were Medicaid (44%), Supplemental Nutrition Assistance Program (SNAP, 18%), Special Supplemental Nutrition Program for Women, Infants, and Children (WIC, 17%), and public health clinics (10%).

### ***Health Care***

Forty-seven percent of farmworkers interviewed in 2015-2016 reported that they had health insurance. Among them, 29 percent said their employer provided the insurance, 43 percent reported that they had insurance provided by the government, 12 percent said that they or their spouse paid for insurance themselves, 6 percent reported that they had insurance under their spouse's employer's plan, 6 percent reported that they were covered by a family member other than the spouse, such as a parent, and another 7 percent reported that some other entity paid for their insurance<sup>4</sup>. Among workers with spouses, 56 percent said their spouse had health insurance. Among workers with minor children in the US or Puerto Rico, 89 percent reported that all of their children had health insurance, 3 percent reported that some of their children had health insurance, and 7 percent reported that none of their children had health insurance.

Sixty-three percent of farmworkers used a health care provider in the United States sometime in the last two years. The last time they visited a health care provider, 40 percent of workers went to a private medical doctor's office or private clinic, 34 percent said they visited a community health center or migrant health clinic, 12 percent saw a dentist, 11 percent went to a hospital, and 3 percent went to some other health care provider.

Thirty-four percent of farmworkers paid for their last health care visit out of their own pockets, 22 percent said that they had Medicaid or Medicare, 13 percent reported that the cost was covered by health insurance provided by their employer, and 11 percent said the majority of the cost was covered by health insurance that they or their family had purchased themselves. An additional nine percent of workers stated that they went to a public clinic that did not charge for the visit, three percent reported that they used some combination of sources to pay, they were covered by worker's compensation, or that they were billed for service but did not pay, and the remaining seven percent provided a variety of other responses. The most common difficulty farmworkers said they faced when they needed to access health care was that health care visits were too expensive (reported by 23% of respondents).

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<sup>4</sup> Percentages sum to more than 100 percent because respondents could select all that apply.

## INTRODUCTION

The U.S. Department of Labor's National Agricultural Workers Survey (NAWS) is an employment-based, random-sample survey of U.S. crop workers that collects demographic, employment, and health data in face-to-face interviews. The survey began in Federal Fiscal Year (FY) 1989; since then over 66,000 workers have been interviewed. The primary purposes of the NAWS are to monitor the terms and conditions of agricultural employment and assess the conditions of farmworkers. The survey also generates information for various Federal agencies that oversee farmworker programs.

The NAWS is a survey of hired workers who are currently employed in crop and crop-related work. To be interviewed, workers must be hired by an eligible establishment and working at an eligible task. Eligible establishments are those classified in the North American Industrial Classification System (NAICS) as Crop Production (NAICS code 111) or as Support Activities for Crop Production (NAICS code 1151). NAICS 111 comprises establishments such as farms, orchards, groves, greenhouses, and nurseries that are primarily engaged in growing crops, plants, vines, or trees and their seeds. NAICS 1151 includes establishments primarily engaged in providing support activities for growing crops. Examples of support activities include supplying labor, aerial dusting or spraying, cotton ginning, cultivating services, farm management services, planting crops, and vineyard cultivation services.

Eligible tasks include work in all phases of crop production (pre-harvest, harvest, and post-harvest), as well as supervising workers, operating machinery, and packing crops. Workers who pack crops, however, are interviewed only if the packing facility at which they are employed is on or adjacent to the sampled crop producer, and the facility is owned by and primarily packs crops for that producer.

The NAWS sampling universe does not include:

- persons employed at eligible establishments who do not perform crop-related work, such as secretaries or mechanics, unless such workers also perform crop-related work; and
- crop workers with an H-2A visa (a temporary-employment visa for foreign agricultural workers).

Both migrant and seasonal crop workers are sampled in the NAWS.

The NAWS is unique for its broad coverage of the characteristics of hired crop workers and their dependents and its nearly year-round interviewing schedule. Data are collected throughout the year, over three cycles, to reflect the seasonality of agricultural production and employment. The NAWS differs from many Federal worker surveys in that: 1) it is an establishment survey (workers are sampled at their workplaces); 2) only currently employed persons are sampled; and 3) data is collected through face-to-face interviews with farmworkers.

The use of an employer-based sample rather than a household-based sample increases the likelihood that migrant workers will be interviewed in the NAWS. Multi-stage sampling is implemented to account for seasonal and regional fluctuations in the level of farm employment. To capture seasonal fluctuations in the agricultural work force, the sampling year is divided into three interviewing cycles. For each cycle, there are six levels of selection:

- region;
- single counties or groupings of counties called farm labor areas (FLA), which constitute the primary sampling unit;
- county
- ZIP Code region;
- employer; and
- respondent.

A full description of the survey's sampling design is available in the Statistical Methods of the National Agricultural Workers Survey (<https://www.doleta.gov/pdf/NAWS%20Statistical%20Methods%20AKA%20Supporting%20Statement%20Part%20B.pdf>).

The NAWS has benefited from collaboration with multiple Federal agencies, which continue to share in the design of the questionnaire. Information provided through the NAWS informs the policies and programs of the many Federal government agencies that protect and provide services to migrant and seasonal farmworkers and their dependents.

### *Topics Covered*

This report presents information collected from face-to-face interviews with 5,342 crop workers interviewed between October 1, 2014 and September 30, 2016. It is organized into nine chapters, each beginning with a summary of the chapter's key findings. The report also contains three appendices: Appendix A describes the procedures used to select the sample, Appendix B displays a map of the NAWS migrant streams, and Appendix C contains a table of the percentages and means of the principle variables presented in the report.

Chapters 1 through 3 summarize the demographic characteristics of farmworkers, including place of birth, ethnicity and race, work authorization, gender, age, marital status, household size and structure, education, and language ability. Chapter 4 discusses farmworkers' housing, including the types of housing they live in, the location of their housing in relation to their jobs, and crowded conditions. Chapter 5 summarizes the characteristics of farm jobs, including crops and tasks, job recruitment, hours and wages, and benefits. Chapter 6 gives an overview of farmworkers' participation in U.S. agricultural employment and chapter 7 discusses workers' participation in non-crop employment, including farm jobs in other types of agriculture, and periods of unemployment. Chapter 8 presents information on farmworkers' income, assets, and use of assistance programs, and chapter 9 summarizes health insurance coverage for farmworkers and their family members, health care utilization in the United States, and barriers to health care access.

## CHAPTER 1: Birthplace, Employment Eligibility, and Migrant Types

### *Summary of Findings:*

- Nearly 7 in 10 hired farmworkers were born in Mexico (69%).
- Eighty-three percent of all farmworkers were Hispanic. Among U.S.-born workers, 35 percent were Hispanic.
- Twenty-four percent of farmworkers self-identified as White, one percent as American Indian or Alaska Native, and three percent as Black or African American. Seventy-three percent of respondents categorized their race with an open-ended “other” response.
- Six percent of farmworkers were identified as indigenous.
- Farmworkers who were in their first year in the United States comprised only four percent of the hired crop labor force.
- Just more than half of all farmworkers had work authorization (51%).
- The vast majority of farmworkers were settled workers (81%). Nineteen percent were migrants.

### *Place of Birth*

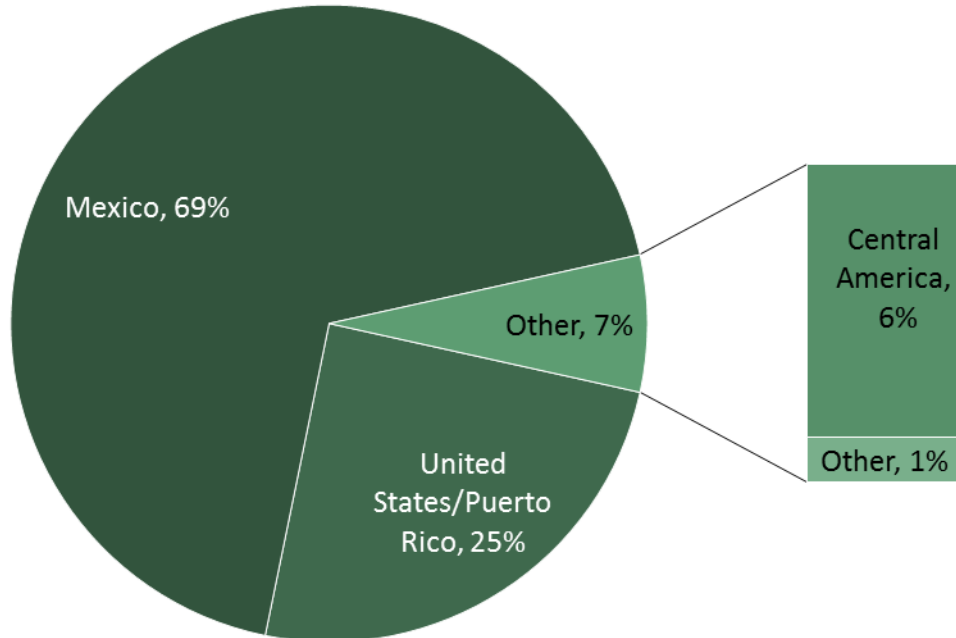
Nearly 7 in 10 hired farmworkers interviewed in 2015-2016 were born in Mexico (69%), one-quarter were born in the United States (24%), 1 percent were born in Puerto Rico<sup>5</sup>, 6 percent were born in Central America, and a small portion (1%) originated from various other regions, including South America, the Caribbean, Asia, and the Pacific Islands (figure 1.1).

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<sup>5</sup> Estimate should be interpreted with caution because it has a RSE of 31 to 50 percent.

Figure 1.1: Place of Birth, 2015-2016

**Two-thirds of farmworkers are from Mexico.**



### *Ethnicity and Race*

Hispanic origin, as defined in the United States, can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person’s parents or ancestors.<sup>6</sup> Foreign-born workers may more readily identify with a national origin rather than an abstract ethnicity concept such as Hispanic or Latino. Workers born in the United States, or those who have been in the United States for several years, may have a better understanding of the U.S.-based ethnicity label system.

To capture Hispanic identity, farmworkers were asked to indicate which of a variety of categories best described them. Eighty-three percent of workers identified themselves as members of a Hispanic group: 65 percent as Mexican, 9 percent as Mexican-American, and the remaining 9 percent as Chicano, Puerto Rican, or other Hispanic. Among U.S.-born workers, 35 percent self-identified as Hispanic: 20 percent as Mexican-American, 4 percent as Mexican, and 11 percent as Puerto Rican, Chicano, or other Hispanic.

Farmworker respondents were also asked to indicate the race with which they identify. Respondents had the opportunity to choose one or more race categories from the standard list

<sup>6</sup> Humes, K. R., Jones, N. A., and Ramirez, R. R. (2011). [Overview of Race and Hispanic Origin: 2010](#). 2010 Census Briefs (p. 2).



required by the U.S. Office of Management and Budget. Twenty-four percent of all respondents in 2015-2016 self-identified as White, 1 percent as American Indian or Alaska Native, and 3 percent as Black or African American<sup>7</sup>. Nearly three-quarters of respondents gave an answer not on the standard list (73%). Among them, 84 percent classified their race as Latino or Hispanic (including Latino/a, Hispanic, Hispano/a, Mexican, Mexicano/a, Mexican-American, and Chicano), 10 percent referenced their complexion (including *moreno/a* and *café*), 3 percent identified with an indigenous group, 2 percent identified with their Central American origin (Guatemalan, Honduran, and Salvadoran), and another 1 percent provided a variety of other responses (examples include American, Filipino, and Portuguese).

The categories used in the NAWS questions on ethnicity and race might not be intuitively understood by indigenous individuals who identify themselves as members of a specific community or language group rather than a more generic racial group such as indigenous. Beginning in 2005, the NAWS began supplementing the question on primary language use with questions that ask about adult languages spoken as well as childhood language exposure.<sup>8</sup> The NAWS uses a combination of the responses to these questions and the question about race to identify farmworkers who are indigenous, and in 2015-2016, 6 percent of NAWS respondents were identified as indigenous.

### *Foreign-born Workers' First Arrival to the United States*

While not a measure of continued residence, data on the month and year a foreign-born farmworker first entered the United States provides some information about migration history. For example, time in the United States since first arrival can serve as a measure of attachment to the farm workforce.

On average, foreign-born farmworkers interviewed in 2015-2016 first came to the United States 18 years before being interviewed. The vast majority of respondents had been in the United States at least 10 years (78%), with more than half arriving at least 15 years prior to their NAWS interview (58%). Farmworkers who first arrived in the United States in the year predating their interview comprised 3 percent of workers interviewed in 2015-2016 (figure 1.2).

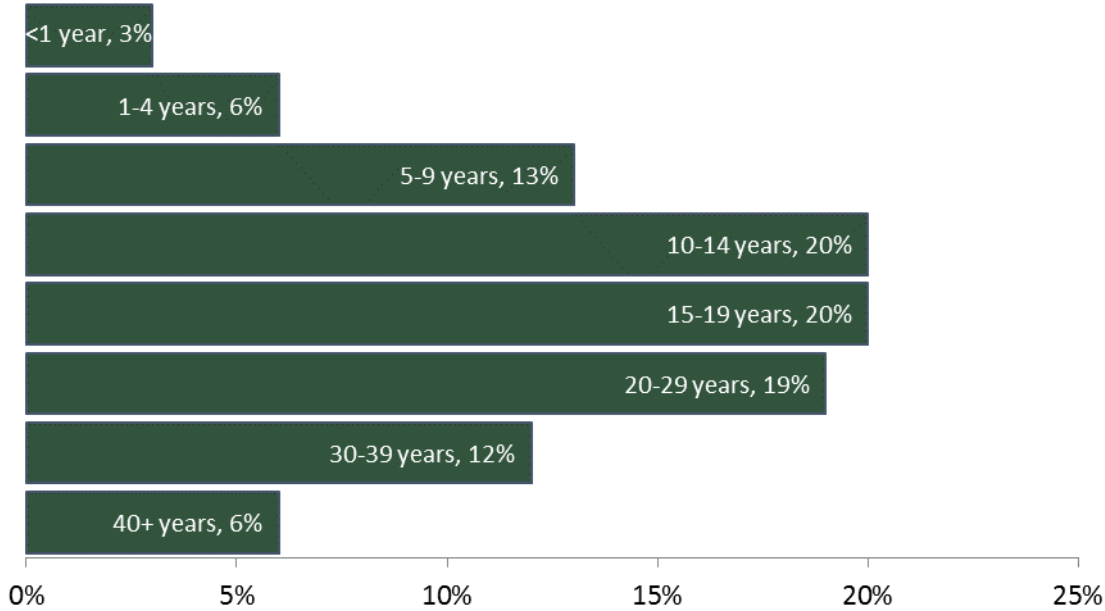
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<sup>7</sup> Estimates with relative standard errors (RSE) higher than 30 percent are identified throughout this report. The RSE is calculated by dividing the standard error of the estimate (mean or percentage) by the estimate itself. Estimates with RSEs greater than 30 percent but no more than 50 percent are published but should be used with caution. Estimates with RSEs greater than 50 percent are considered statistically unreliable and are suppressed. The estimate of 3 percent of workers who identified as Black or African American has a RSE of 31 percent to 50 percent and should be interpreted with caution.

<sup>8</sup> Gabbard, S., Kissam, E., Glasnapp, J., Nakamoto, J., Saltz, R., Carroll, D. J., & Georges, A. (November, 2012). *Identifying Indigenous Mexicans and Central Americans in Surveys*. International Conference on Methods for Surveying and Enumerating Hard-to-Reach Populations (November, 2012) New Orleans, LA.

Figure 1.2: Years Since First Arrival to the United States, 2015-2016

**Three-quarters of farmworkers had been in the United States for at least 10 years.**



Foreign-born respondents were asked to report where they lived (state/department/province) before coming to the United States. Among Mexico-born workers interviewed in 2015-2016, most came from the states of Michoacán (20%), Guanajuato (15%), Jalisco (10%), Oaxaca (7%), and Guerrero (7%). The greatest proportion of Mexico-born farmworkers originated from the Western Central region (47%), 28 percent came from Northern Mexico, and another 25 percent came from Southern Mexico<sup>9</sup>.

**Work Authorization**

A series of related questions in the survey provides a picture of whether foreign-born respondents have work authorization. These questions address the foreign-born worker’s existing status (citizen, legal permanent resident, border crossing-card holder, applicant for residency, temporary visa holder, or unauthorized) and, when applicable, the date and program under which the individual applied for legal status. In addition, each foreign-born respondent is asked whether he or she has authorization to work in the United States. To be classified as work authorized, a worker must provide consistent answers, and answers that conform to visa regulations. For example, a worker who reports work authorization from a visa program that expired before he or she entered the country would be classified as unauthorized.

<sup>9</sup> The Western Central region of Mexico includes the states of Colima, Guanajuato, Jalisco, and Michoacán. The Northern region includes the states of Aguascalientes, Baja California, Chihuahua, Coahuila, Mexico City, Durango, Estado de Mexico, Hidalgo, Nayarit, Nuevo Leon, Queretaro, San Luis Potosi, Sinaloa, Sonora, Tamaulipas, and Zacatecas. The Southern region of Mexico includes the states of Campeche, Chiapas, Guerrero, Morelos, Oaxaca, Puebla, Quintana Roo, Tabasco, Tlaxcala, Veracruz, and Yucatan.

Fifty-one percent of the hired crop labor force had work authorization in 2015-2016. U.S. citizens comprised 29 percent of the work-authorized population and among them, 85 percent were born in the United States and 15 percent were naturalized citizens. The remainder of the work authorized population consisted mainly of legal permanent residents (21%) and 1 percent had work authorization through some other visa program.

### *Migrant Farmworkers*

The definition of “migrant” has varied across Federal government agencies and programs that provide services to migrant and seasonal farmworkers. The NAWS has defined a migrant as a person who reported jobs that were at least 75 miles apart or who reported moving more than 75 miles to obtain a farm job during a 12-month period<sup>10</sup>.

Interpreting migration patterns requires some caution. Since the analysis presented here covers only one year of farm employment data, these definitions describe movement during that particular year. The discussion below assumes that most of the workers making a move during the year were cyclical migrants. However, a portion of these workers may have been making a permanent move.

For the purpose of this report, migrant farmworkers were categorized according to their migrant travel patterns. Migration consisted of moving from a “home base”, the location where the migrant spent the greatest amount of time during the year preceding his/her NAWS interview, to one or more destination locations where work was available. Shuttle migrants were workers who did not work on a U.S. farm at their home base, but who traveled 75 miles or more to do farm work in a single U.S. location, and worked only within a 75-mile radius of that location. Follow-the-crop migrants were workers who traveled to multiple U.S. farm locations for work. Follow-the-crop migrants might or might not have done U.S. farm work at their home base. This report further classifies migrants into domestic migrants (those who traveled solely within the United States in the 12 months preceding their interview to do farm work) or international migrants (those who crossed the U.S. border to do farm work).

Nineteen percent of farmworkers interviewed in 2015-2016 were migrants. Among them, nearly half were domestic migrants (27% domestic follow-the-crop and 21% domestic shuttle migrants), a third were international migrants (3% international follow-the-crop and 32% international shuttle migrants), and 18 percent were newcomers who had been in the U.S. less than a year (see figures 1.3 and 1.4).

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<sup>10</sup> Migrant programs often use a 24-month look-back period in their definitions of migrant. The NAWS collects data about travel to another city to do farm work during the 12 months preceding the NAWS interview, and also the 12 months prior to that. In 2015-2016, 24 percent of farmworkers reported that they traveled to another city to do farm work sometime during the previous 24 months.

Figure 1.3: Distribution of Migrant Types (As Percent of Migrants), 2015-2016

Nearly half of migrants were **domestic**.

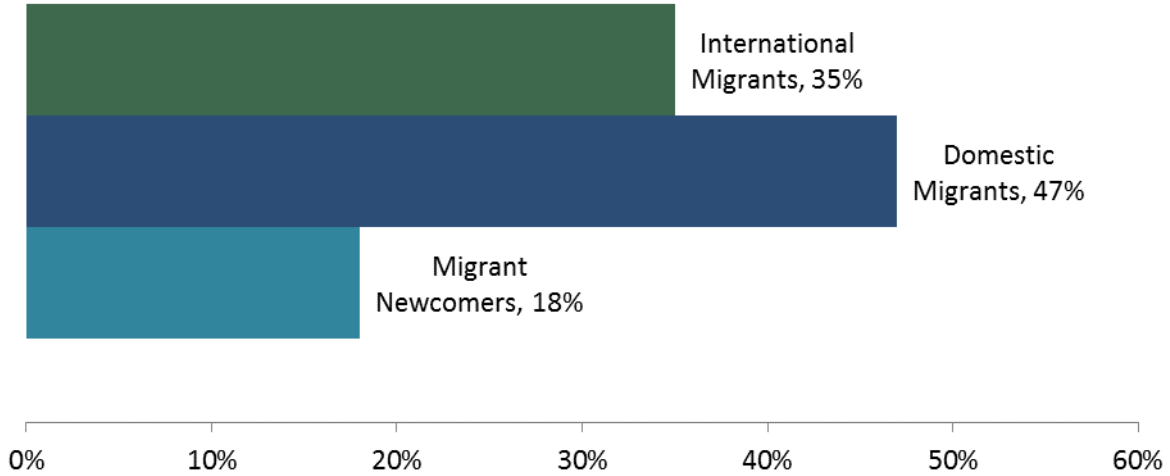
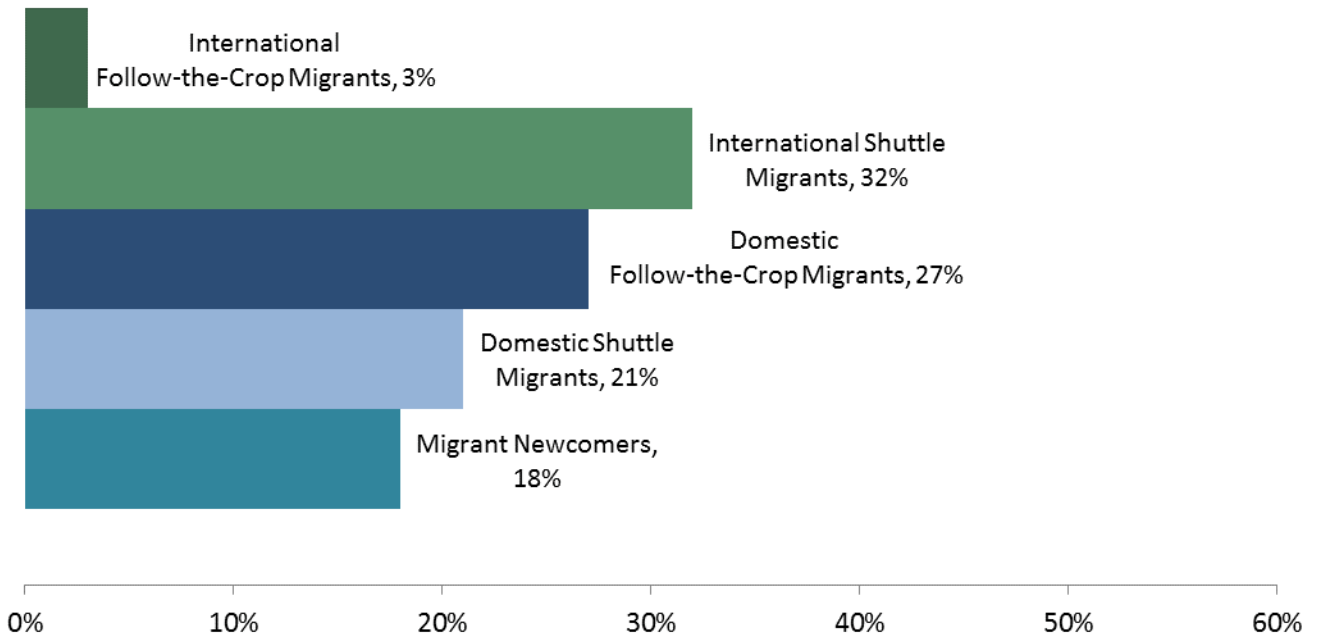


Figure 1.4: Distribution of Migrant Types According To Their Migrant Travel Patterns (As Percent of Migrants), 2015-2016

Most international migrants were **shuttle** migrants.



## CHAPTER 2: Demographics, Family Size, and Children and Household Structure

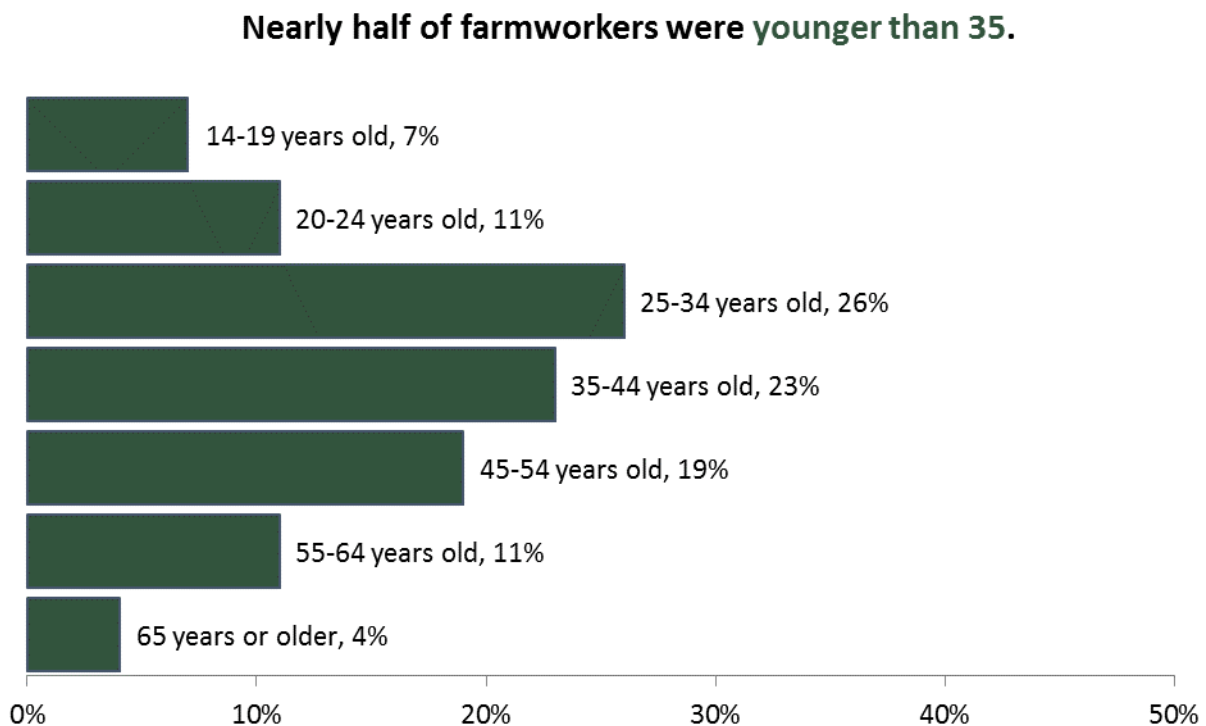
### *Summary of Findings:*

- Sixty-eight percent of farmworkers were men.
- Farmworkers were relatively young: their average age was 38.
- Fifty-seven percent of farmworkers were married and 55 percent had children.
- Forty percent of farmworkers were living apart from all nuclear family members at the time of their interview. Seventy-three percent of the unaccompanied were single workers without children, 20 percent were parents, and 7 percent had a spouse but no children.

### *Gender and Age*

In 2015-2016, the U.S. crop labor force was predominantly male (68%) and relatively young, with an average age of 38. Just under half of all workers were under the age of 35 (44%) and 14 percent were age 55 or older (figure 2.1).

**Figure 2.1: Age Distribution of Farmworkers, 2015-2016**



In 2015-2016, unauthorized workers were younger than authorized workers (an average of 36 and 41 years of age respectively) and newcomers to U.S. farm work (i.e., those arriving in the United States within the year prior to interview) were younger than experienced workers (an average of 25 and 39 years of age respectively). The average age of males and females was nearly the same – 38 and 39 years respectively.

*Marital Status and Family Type*

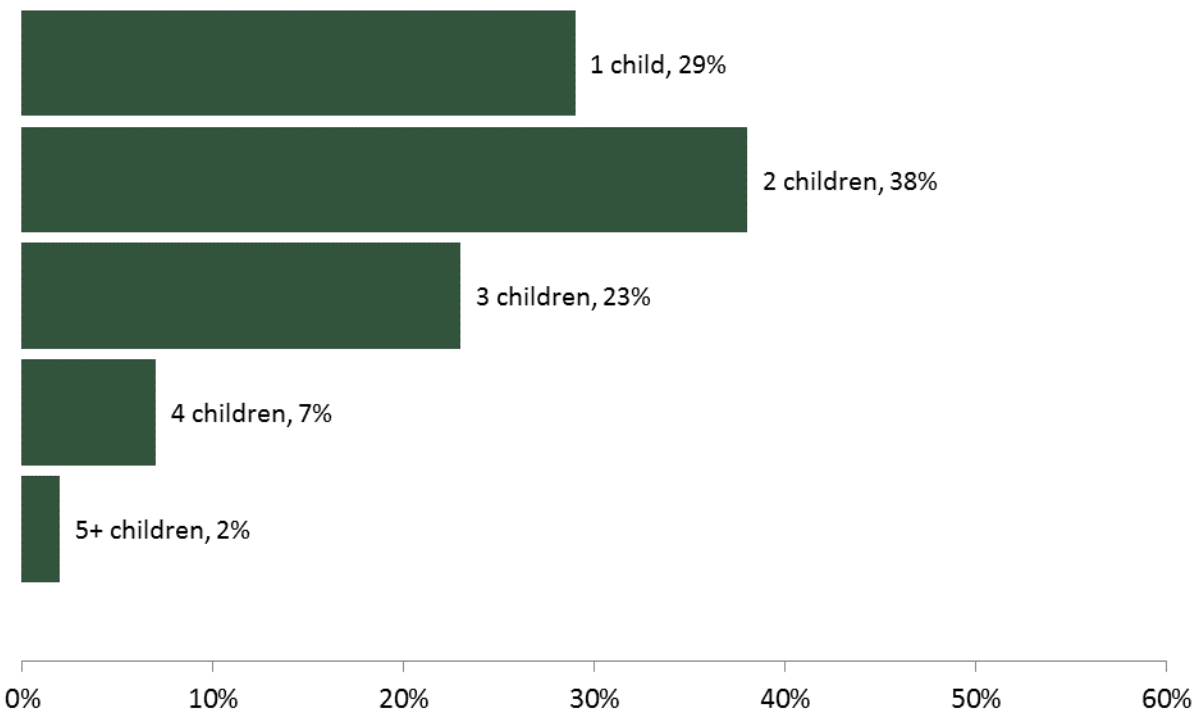
More than half of farmworkers interviewed in 2015-2016 were married (57%) and more than half were parents (55%). Among parents, 76 percent were married or living together, 14 percent were single, and 10 percent were separated, divorced, or widowed.

*Children and Household Structure*

In 2015-2016, farmworker parents with minor children living in their household had an average of 2 minor children living with them at the time they were interviewed. Sixty-seven percent of these parents had 1 or 2 minor children living with them (29% and 38% respectively), 23 percent had 3 minor children, 7 percent had 4 minor children, and 2 percent had 5 or more minor children (figure 2.2).

**Figure 2.2: Number of Minor Children in the Household of Farmworkers, 2015-2016**

**Most farmworker parents with minor children had one or two minor children in their household.**

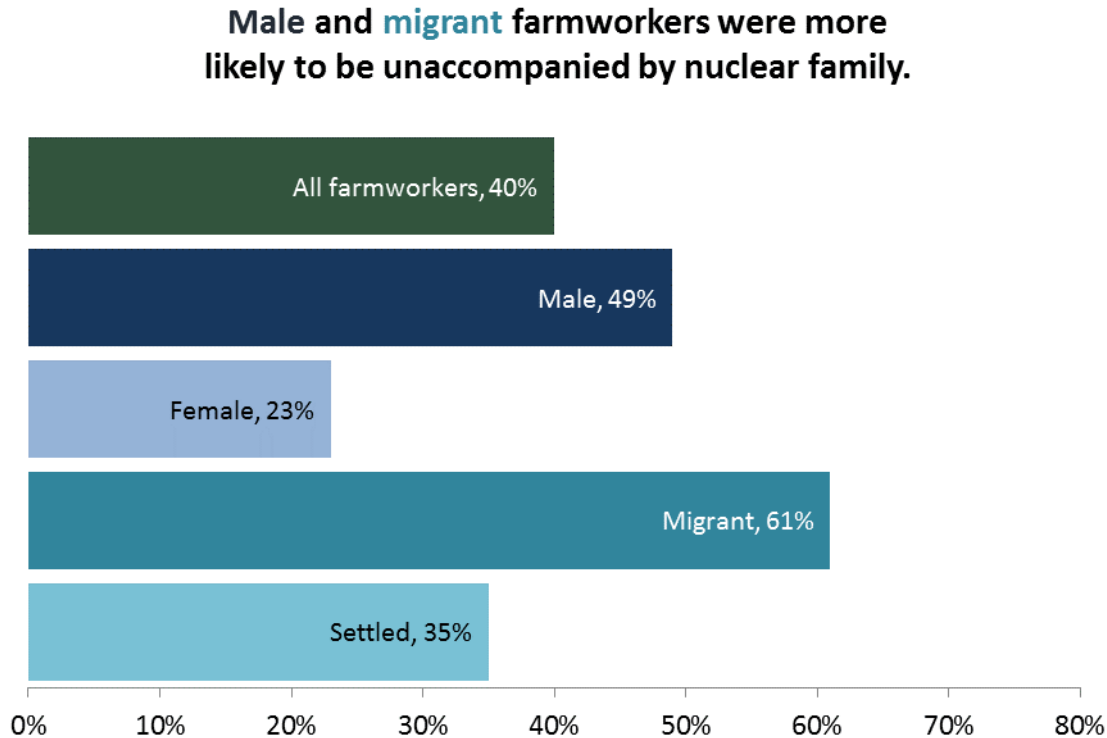


Of parents with children under the age of 18, 53 percent had children younger than age 6, 65 percent had children ages 6-13, and 38 percent had children ages 14-17. Three percent of parents resided with only some of their minor children and 17 percent lived away from all their minor children. Migrant parents were nearly three times more likely than settled parents to be living away from all their minor children (37% and 13% respectively).

“Unaccompanied” farmworkers, defined as those who were living apart from all nuclear family members (parents, siblings, spouse, and children) at the time of their interview, comprised 40

percent of the U.S. crop labor force in 2015-2016. Migrant workers were much more likely than settled workers to be unaccompanied (61% and 35% respectively) as were men when compared to women (49% and 23% respectively). See Figure 2.3. The majority of the unaccompanied were single workers without children (73%), 20 percent were parents, and 7 percent had a spouse but no children.

**Figure 2.3: Percent of Farmworkers Unaccompanied by Nuclear Family, 2015-2016**



Among farmworker parents in 2015-2016, nearly all mothers (98%) and approximately three-quarters of fathers (77%) were accompanied by at least some nuclear family members. Similarly, among married workers without children, 95 percent of women and 75 percent of the men were accompanied at the time of the interview.

## CHAPTER 3: Language, Education, and English Skills

### *Summary of Findings:*

- Approximately three-quarters of farmworkers reported that Spanish is their primary language (77%).
- Twenty-nine percent of workers reported that they could speak English “well” and 30 percent said “not at all”. Twenty-eight percent reported that they could read English “well” while 41 percent said “not at all”.
- The average level of formal education completed by farmworkers was eighth grade.
- Thirty-five percent of workers reported having taken at least one adult education class in the United States.

### *Primary Language*

In 2015-2016, approximately three-quarters of farmworkers said that Spanish was the language in which they are most comfortable conversing (77%), 21 percent said English was, and 1 percent reported an indigenous language<sup>11</sup>. Among workers born in Mexico or Central America, nearly all reported that Spanish was their primary language (97%). Of the remainder, one percent said that English was their primary language and two percent reported an indigenous language as the one in which they are most comfortable conversing.

### *English Language Skills*

Farmworkers were asked two questions about their English fluency, “How well do you speak English?” and “How well do you read English?” In 2015-2016, 30 percent of workers responded that they could not speak English “at all”, 32 percent said they could speak English “a little”, 9 percent said they could speak English “somewhat”, and 29 percent said they could speak English “well”. Regarding their ability to read English, 41 percent of workers reported they could not read English “at all”, 24 percent said they could read English “a little”, 7 percent said they could read English “somewhat”, and 28 percent said they could read English “well” (figure 3.1).<sup>12</sup>

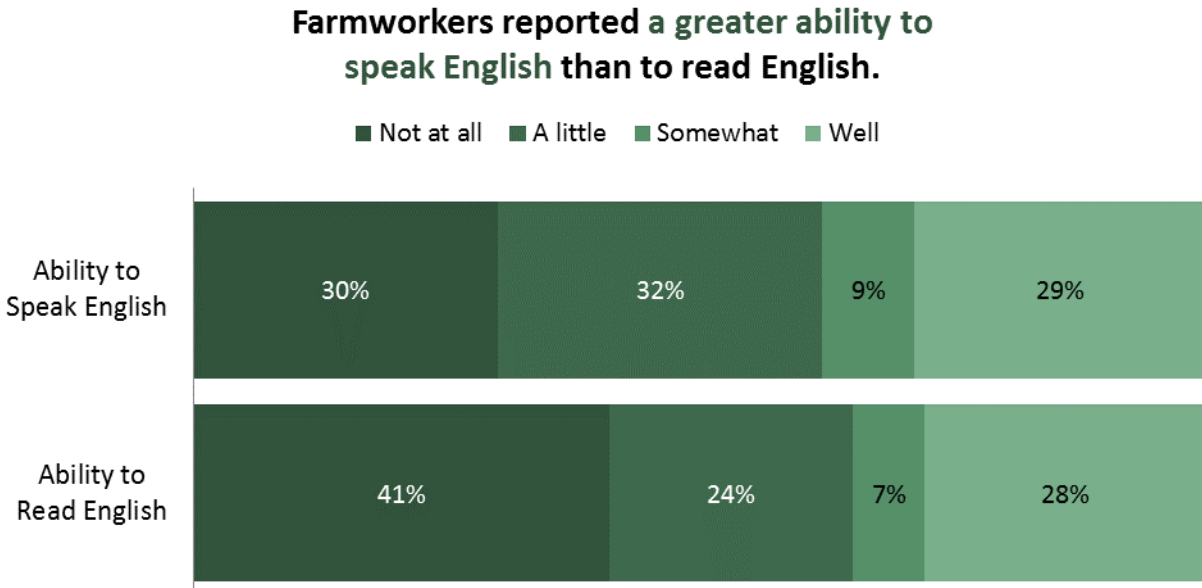
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<sup>11</sup> Indigenous languages reported by farmworkers interviewed in 2015-2016 include Acateco, Amuzgo, Chatino, Chuj, Mam, Nahuatl, Popti, Purepecha/Tarasco, Tlapaneco, and Triqui.

<sup>12</sup> Respondents’ self-reports of language proficiency could be higher or lower than their actual proficiency.



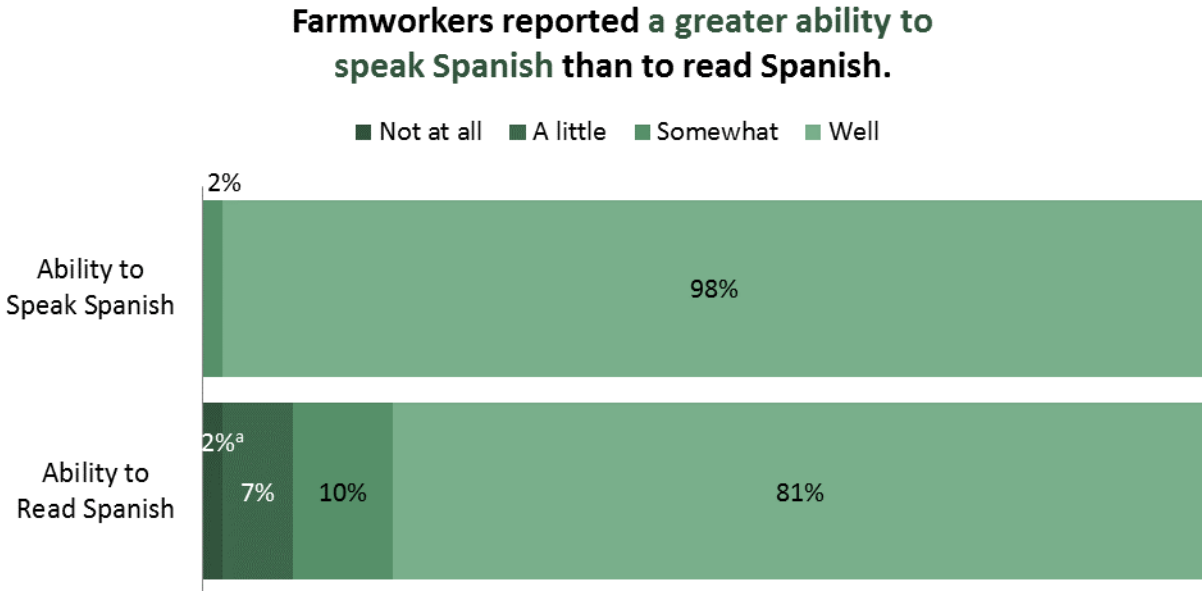
**Figure 3.1: Farmworkers' Self-Reported English Speaking and Reading Ability, 2015-2016**



Farmworkers who reported having a primary language other than English were asked to indicate how well they could speak and read in that language. Among workers whose primary language was Spanish, nearly all reported they could speak Spanish “well” (98%). In describing their Spanish reading ability, 81 percent responded with “well”, 10 percent replied with “somewhat”, 7 percent said “a little”, and 2 percent replied with “not at all.”<sup>13</sup> (figure 3.2).

<sup>13</sup> Estimate should be interpreted with caution because it has a RSE of 31 to 50 percent.

**Figure 3.2: Among Farmworkers Whose Primary Language Is Spanish, Self-Reported Spanish Speaking and Reading Ability, 2015-2016**

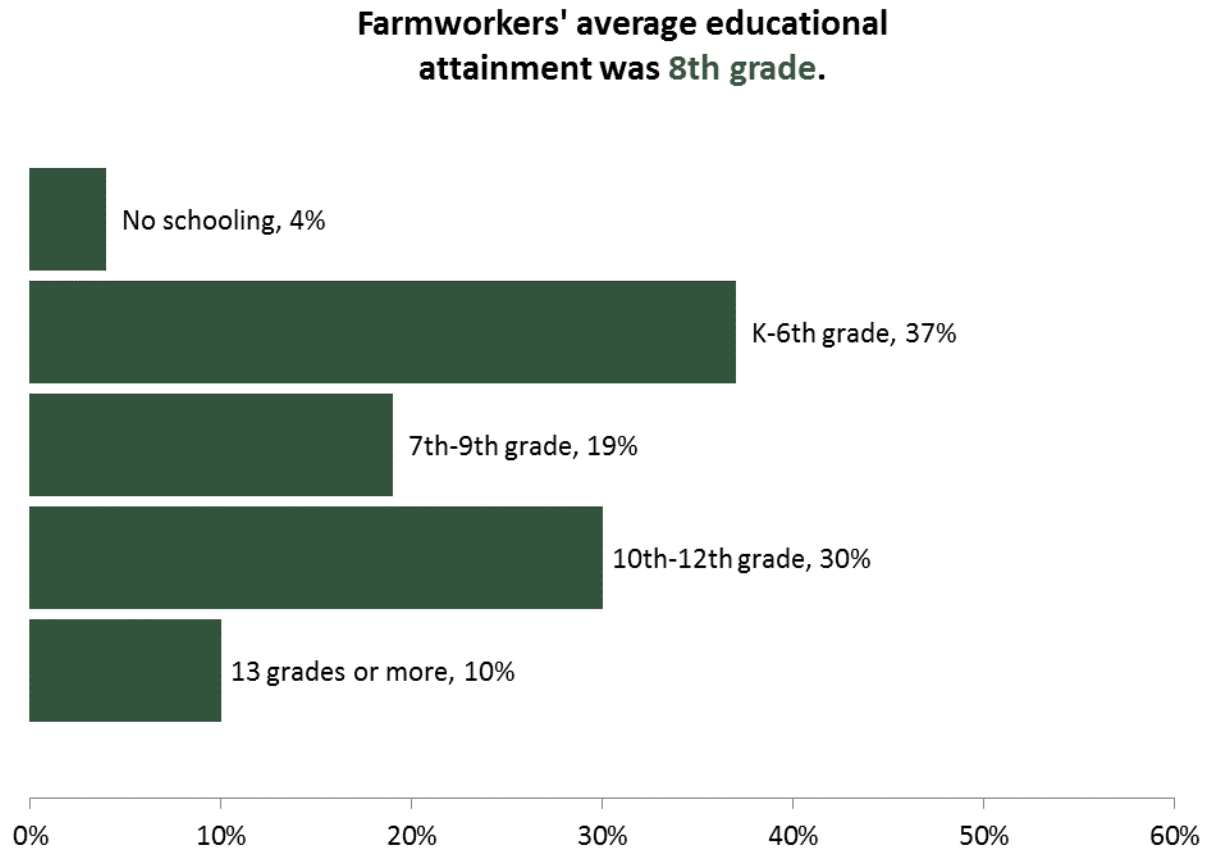


<sup>a</sup> Estimate should be interpreted with caution because it has a RSE of 31 percent to 50 percent.

***Education***

In 2015-2016, farmworkers’ average educational attainment was eighth grade. Four percent of workers reported that they had no formal schooling and 37 percent reported that they completed the 6<sup>th</sup> grade or lower. Nineteen percent of workers said they completed grade 7, 8, or 9, and 30 percent said they completed grade 10, 11, or 12. Ten percent of farmworkers reported completing some education beyond high school (figure 3.3).

Figure 3.3: Distribution of Highest Grade Completed by Farmworkers, 2015-2016



The highest grade completed varied by place of birth. On average, the highest grade completed by workers born in the United States was 12<sup>th</sup> and the highest grade completed by workers born in Mexico or other countries was 7<sup>th</sup>. Approximately 7 in 10 U.S.-born farmworkers completed the 12<sup>th</sup> grade or higher (68%), as did 18 percent of Mexico-born workers and 21 percent of workers born in other countries.

### ***Adult Education***

In 2015-2016, 35 percent of farmworkers reported having taken at least one adult education class in the United States. The most common classes were English (12%), job training (14%), college or university classes (7%), and high school equivalency (GED) classes (3%). Small shares of workers (2%) reported taking other types of classes (figure 3.4).

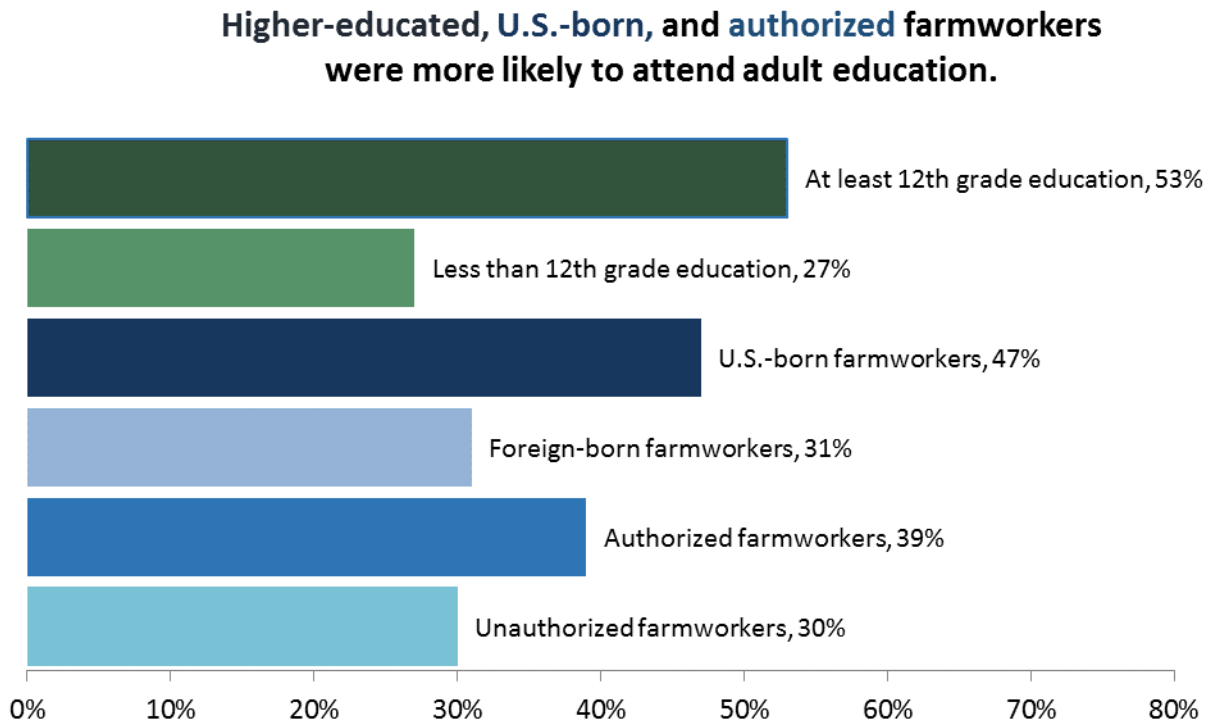
**Figure 3.4: Percent of Farmworkers Who Attended Adult Education Classes, 2015-2016**

Type of Class <sup>a</sup>	Percent of Farmworkers
<b>Any adult education</b>	35%
<b>English/ESL</b>	12%
<b>Job training</b>	14%
<b>College/University</b>	7%
<b>GED, HS equivalency</b>	3%
<b>Citizenship</b>	2%
<b>Other</b>	2%

<sup>a</sup> Farmworkers may have attended multiple types of classes.

Farmworkers with the most formal education were the most likely to attend U.S. adult education classes. The rate of attendance among those who had completed the 12<sup>th</sup> grade was almost twice as high as those who had not (53% and 27% respectively). Similarly, workers born in the United States were more likely than those born abroad to report having attended some type of adult education class (47% and 31% respectively), as were authorized workers when compared to unauthorized workers (39% and 30% respectively). See figure 3.5.

**Figure 3.5: Percent of Farmworkers Who Attended At Least One Adult Education Class in the United States, 2015-2016**



## CHAPTER 4: Housing Characteristics and Distance to Work

### *Summary of Findings:*

- Fifteen percent of farmworkers lived in property owned or administered by their current employer: 12 percent on the farm of the grower for whom they were working and 4 percent off the farm.
- Fifty-seven percent of workers lived in detached, single-family houses.
- One-third of farmworkers lived in a dwelling defined as “crowded” (33%).
- Seven in 10 workers lived fewer than 25 miles from their current farm job (70%) and 16 percent lived between 25 and 49 miles from work. Eleven percent of workers lived where they worked.
- Fifty-eight percent of workers drove a car to work, 15 percent rode with a “raitero”<sup>14</sup>, and 6 percent took a labor bus, truck, or van.

### *Location of Housing and Payment Arrangement*

Farmworkers provided information about their housing situation (arrangement, location, type, and occupancy) while working at their current farm job. Fifteen percent of farmworkers lived in employer-provided housing (i.e., property owned or administered by their current employer): 12 percent on the farm of the grower for whom they were working and 4 percent off the farm. The remaining 84 percent of workers lived in property not owned or administered by their current employer.

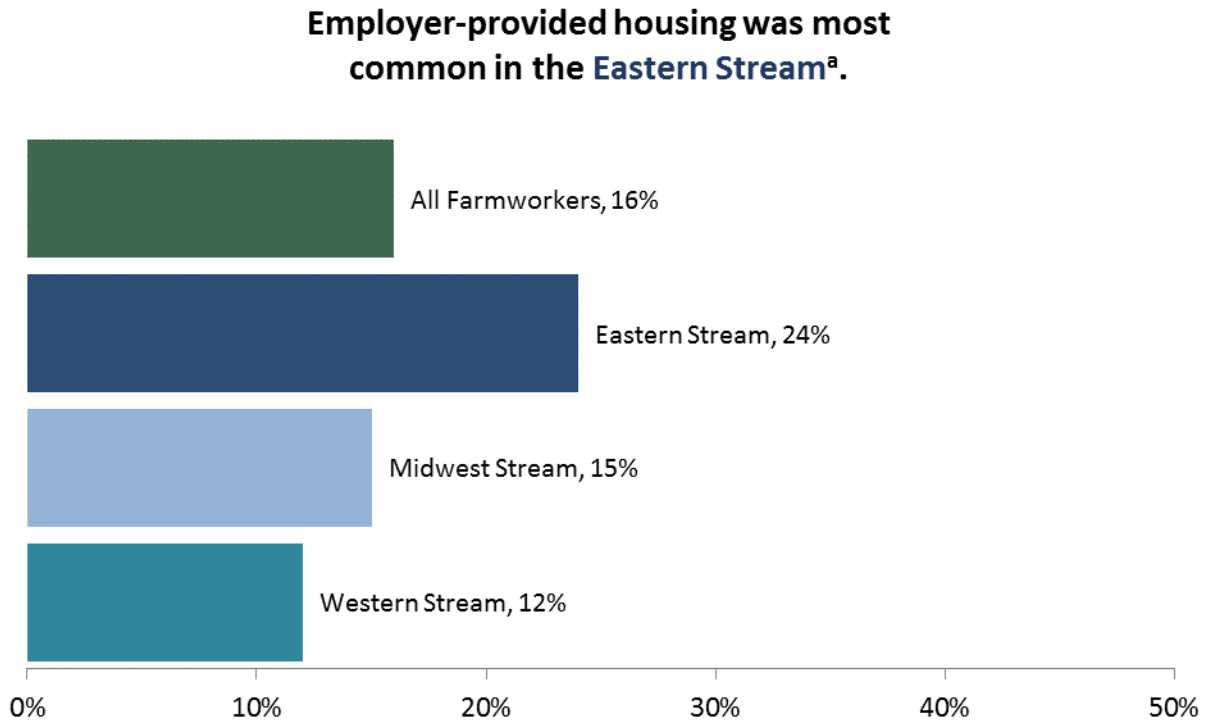
Employer-provided housing (either on or off the employer’s farm) was most common in the Eastern migrant stream<sup>15</sup>, with 24 percent of farmworkers interviewed in 2015-2016 reporting that they lived in employer-provided housing, compared to 15 percent of workers in the Midwest migrant stream and 12 percent in the Western migrant stream (figure 4.1).

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<sup>14</sup> “Raitero”, derived from “ride”, is the Spanish word for a person who charges a fee for providing a ride to work.

<sup>15</sup> Migrant streams are one way of showing usual patterns of migration and the linkages between downstream and upstream states that many migrants travel in search of farm work. While these patterns are typical, some migrants may cross streams in their search for work. A map of the NAWS migrant streams can be found in Appendix B.

**Figure 4.1: Percent of Farmworkers Who Lived in Employer-Provided Housing, 2015-2016**

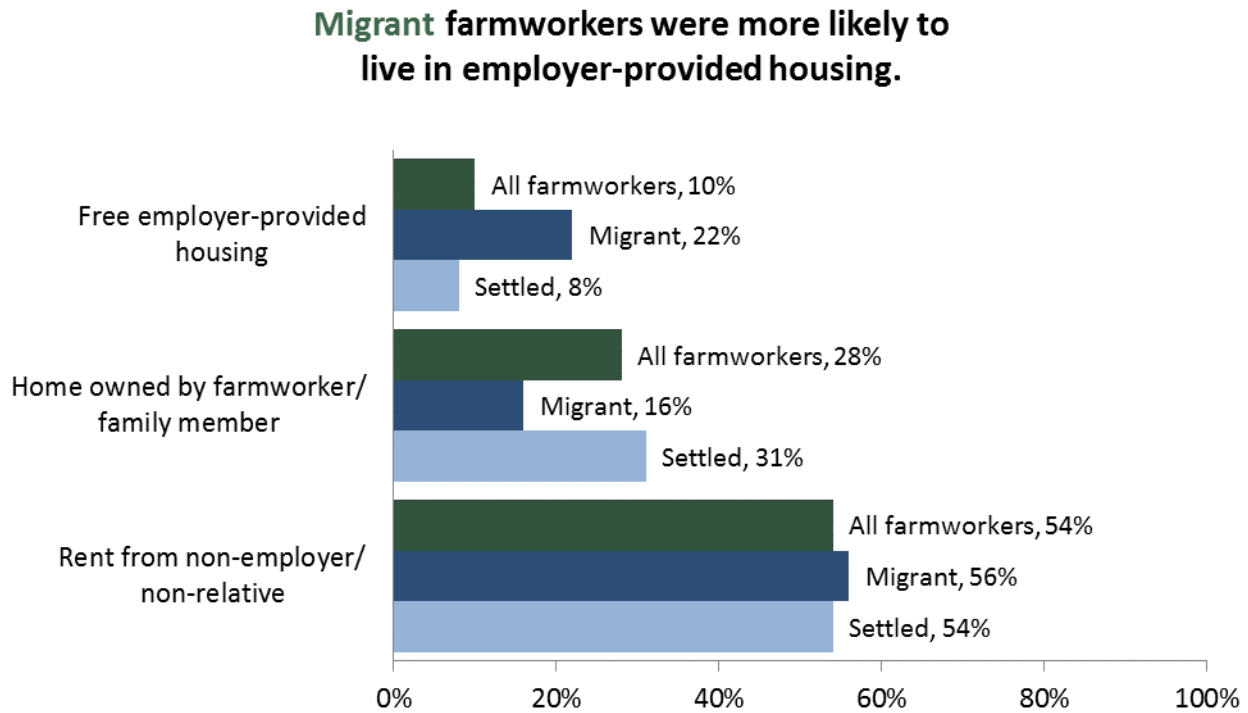


<sup>a</sup> A map of the NAWS migrant streams can be found in Appendix B.

In addition to information about the location of their housing, farmworkers provided information about the payment arrangements they had for their housing. In 2015-2016, more than half of all farmworkers reported that they lived in housing that they rented from someone other than their employer (54%), 28 percent of workers said they lived in a home owned by themselves or a family member, 1 percent said they paid rent for housing provided by the government, a charity, or other organization, and sixteen percent of workers lived in employer-provided housing. Among those living in employer-provided housing, 11 percent received it free of charge, 2 percent paid rent either directly or via payroll deduction, and 4 percent had other arrangements with their employers.

Migrant workers were nearly 3 times more likely than settled workers to live in employer-provided housing that they received free of charge (22% and 8% respectively) and far less likely than settled workers to live in a home that they or a family member owned (16% and 31% respectively). See figure 4.2.

Figure 4.2: Housing Arrangement, 2015-2016



Farmworkers who reported that they paid for their housing were asked how much they paid at their current residence, including for their family if their family lived with them. Nine percent reported that they paid less than 200 dollars per month, approximately a third said they paid 200-399 dollars per month (32%), 24 percent paid 400-599 dollars per month, and 35 percent paid 600 dollars or more per month.

### *Type of Housing*

In 2015-2016, more than half of farmworkers reported living in detached, single-family houses (57%), 20 percent said they lived in a mobile home, and another 20 percent lived in an apartment. The remaining four percent lived in various other types of housing.<sup>16</sup>

Migrant workers were slightly less likely than settled workers to report living in detached, single-family homes (54% and 57% respectively) or apartments (17% and 20% respectively), and slightly more likely than settled workers to live in mobile homes (22% and 19% respectively). Unauthorized workers were less likely than authorized workers to reside in single-family homes (47% and 66% respectively) and more likely to live in mobile homes (24% and 15% respectively) and apartments (25% and 15% respectively). See figure 4.3.

<sup>16</sup> Other types of housing in which farmworkers reporting living included a duplex or triplex, dormitory or barracks, motel or hotel, or “other”.

**Figure 4.3: Type of Housing, 2015-2016**

Type of Housing	All				
	Farmworkers	Migrant	Settled	Authorized	Unauthorized
<b>Single family home</b>	57%	54%	57%	66%	47%
<b>Mobile home</b>	20%	22%	19%	15%	24%
<b>Apartment</b>	20%	17%	20%	15%	25%
<b>Other</b>	4%	7%	4%	4%	5%

Among immigrant farmworkers, the proportion living in single-family homes increased with the number of years living in the United States. The majority of immigrant workers who had been in the United States at least 20 years resided in single-family homes (57%), and about half of immigrant workers living in the United States for fewer than 20 years lived in single family homes (49% of those in the United States for fewer than 10 years and 50% of those in the United States for 10-19 years). See figure 4.4.

**Figure 4.4: Type of Housing by Length of Time in the United States, 2015-2016**

Type of Housing	In United States		
	Less than 10 Years	10-19 Years	20 Years or More
<b>Single family home</b>	49%	50%	57%
<b>Mobile home</b>	21%	21%	24%
<b>Apartment</b>	26%	26%	16%
<b>Other</b>	4%	4%	4%

In 2015-2016, farmworkers reported an average of six rooms in the dwellings in which they lived: an average of three bedrooms, one bathroom, one kitchen, and one “other” room. Nearly all workers said there was at least one bathroom in their living unit (>99%) and at least one kitchen (99%).

### ***Household Crowding***

The measure of crowding used for this report is based on the one-person-per-room definition of the U.S. Census Bureau, Census of Housing<sup>17</sup>. Persons-per-room was calculated by summing the number of rooms (excluding bathrooms, but including kitchens) that respondents said they had in their current living quarters, then dividing the number of persons that respondents said slept in those rooms by the total number of rooms. Dwellings in which the number of persons per room was greater than one were considered crowded.

In 2015-2016, 33 percent of farmworkers lived in crowded dwellings. Migrant workers lived in crowded dwellings with greater frequency than settled workers (45% compared to 31%), and unauthorized workers were nearly twice as likely as authorized workers to live in crowded dwellings (44% and 23% respectively).

<sup>17</sup> U.S. Census Bureau, Housing and Household Economic Statistics Division. (2011, October 31). *Crowding* (<http://www.census.gov/hhes/www/housing/census/historic/crowding.html>).



### *Distance to Work and Transportation*

When asked how far their current farm job was from their current residence, 11 percent of farmworkers in 2015-2016 reported that they lived where they worked, 31 percent said they lived within 9 miles of their job location, 39 percent lived between 10 and 24 miles from work, 16 percent lived between 25 and 49 miles from work, and 3 percent<sup>18</sup> lived 50 or more miles from work.

Farmworkers used various modes of transportation to get to work. In 2015-2016, 58 percent of workers reported that they drove a car (63% of workers said they owned a car or truck, as discussed in chapter 8) and 8 percent said they walked or took public transit. Thirty-three percent of workers did not provide their own transportation but commuted via rides with others (13%), rides with a “raitero”<sup>19</sup> (15%), or rides on a labor bus, truck or van (6%<sup>20</sup>).

Among workers who did not provide their own transportation, seven percent reported that it was mandatory or obligatory for them to use their current mode of transportation. Twenty-eight percent of these workers reported having to pay a fee for these rides to work and 39 percent said they paid, but only for gas. Thirty-two percent said they paid no fee for their rides with the “raitero”, on the labor bus, or with others.

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<sup>18</sup> The estimate of 3 percent of farmworkers who reported living 50 or more miles from their current farm job should be interpreted with caution because it has a RSE of 31 percent to 50 percent.

<sup>19</sup> “Raitero”, derived from “ride”, is the Spanish word for a person who charges a fee for providing a ride to work.

<sup>20</sup> The estimate of 6 percent of farmworkers who reported that their mode of transportation to work was a labor bus, truck, or van should be interpreted with caution because it has a RSE of 31 percent to 50 percent.

## CHAPTER 5: Employment Patterns and Farm Job Characteristics

### *Summary of Findings:*

- Eight in 10 farmworkers were employed directly by growers (80%); 20 percent were employed by farm labor contractors.
- At the time of interview, 32 percent of farmworkers were working in fruit and nut crops, 37 percent in vegetable crops, and 19 percent in horticulture. Ten percent were working in field crops and three percent were working in mixed crops.
- At the time of interview, 30 percent of farmworkers were performing pre-harvest tasks, 17 percent were harvesting crops, 25 percent were performing post-harvest activities, and 29 percent were performing technical production tasks.
- The majority of farmworkers reported that their basis for pay was an hourly wage (88%). Workers reported earning an average of \$10.60 per hour at their current farm job.
- Forty-three percent of farmworkers reported that they were covered by Unemployment Insurance (UI) if they were to lose their current job, 62 percent said they would receive workers' compensation if they were injured at work or became ill as a result of their work, and 18 percent reported that their employer offered health insurance for injury or illness suffered while not on the job.

### *Type of Employer and Job Recruitment*

Most farmworkers in 2015-2016 were employed directly by growers<sup>21</sup> (80%); farm labor contractors employed the remaining 20 percent. Nearly 7 in 10 workers reported that they found their current job via references from friends or relatives (69%) and approximately one-quarter got their job after applying for it on their own (24%). Five percent of workers were recruited by a grower, foreman, or labor contractor, and the remaining two percent were referred to their job by an employment service, or welfare office, were hired under union-employer agreements, or found their job via some “other” means.

### *Primary Crops and Farm Job Tasks*

At the time they were interviewed in 2015-2016, 88 percent of farmworkers reported working in fruits, nuts, vegetables, and horticultural crops (32% in fruits and nuts, 37% in vegetables, and 19% in horticulture). Ten percent held jobs in field crops and three percent worked in mixed crops or other crops. Workers employed by farm labor contractors were nearly twice as likely as those employed directly by growers to work in vegetable crops (61% compared to 31%), and about equally as likely as directly-hired workers to work in fruit and nut crops (35% compared to 31%). Migrant farmworkers worked in vegetable crops with greater frequency than did settled workers (45% and 34% respectively), but were less likely than settled workers to have jobs in horticultural crops (14% and 20% respectively). See figure 5.1.

### **Figure 5.1: Primary Crop at Time of Interview, 2015-2016**

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<sup>21</sup> Growers include owners of establishments (i.e., farms, orchards, greenhouses, and nurseries) that engage primarily in growing crops, plants, or trees, but can also include other types of crop producers, such as packers, shippers, or distributors.

Crop at Time of Interview	All Farmworkers	Employed by Grower	Employed by Farm Labor Contractor	Migrant Farmworkers	Settled Farmworkers
<b>Fruits and Nuts</b>	32%	31%	35%	33%	32%
<b>Horticulture</b>	19%	23%	<sup>a</sup>	14%	20%
<b>Vegetables</b>	37%	31%	61%	45%	34%
<b>Field Crops</b>	10%	12%	1% <sup>b</sup>	7%	10%
<b>Miscellaneous</b>	3%	3%	1% <sup>b</sup>	1% <sup>b</sup>	3%

<sup>a</sup> Estimate is suppressed because it has a RSE greater than 50 percent.

<sup>b</sup> Estimate should be interpreted with caution because it has a RSE of 31 percent to 50 percent.

Crop work encompasses a wide variety of tasks. Thirty percent of the farmworkers interviewed in 2015-2016 performed pre-harvest tasks such as hoeing, thinning, and transplanting, 17 percent harvested crops and 25 percent performed post-harvest activities such as field packing, sorting, and grading. Another 29 percent of workers performed technical production tasks such as pruning, irrigating, and operating machinery. Workers employed by farm labor contractors were slightly more likely than directly-hired workers to perform pre-harvest tasks (32% compared to 29%), and migrant workers were more likely than settled workers to perform harvest tasks (22% compared to 15%) or post-harvest tasks (29% compared to 24%). Directly-hired workers were more likely than contracted workers (30% and 23% respectively), and settled workers were more likely than migrant workers (31% and 28% respectively), to perform technical production tasks. See figure 5.2.

**Figure 5.2: Primary Task at Time of Interview, 2015-2016**

Primary Task at Time of Interview	All Farmworkers	Employed by Grower	Employed by Farm Labor Contractor	Migrant Farmworkers	Settled Farmworkers
<b>Pre-harvest</b>	30%	29%	32%	30%	30%
<b>Harvest</b>	17%	17%	17%	22%	15%
<b>Post-harvest</b>	25%	24%	28% <sup>a</sup>	29%	24%
<b>Technical Production</b>	29%	30%	23%	18%	31%

<sup>a</sup> Estimate should be interpreted with caution because it has a RSE of 31 percent to 50 percent.

### *Basis for Pay and Hours Worked*

The vast majority of farmworkers in 2015-2016 reported that their basis for pay was an hourly wage (88%). Four percent of workers were paid a salary, seven percent were paid exclusively by the piece, and one percent were paid a combination of hourly wage and piece rate.

Respondents worked an average of 45 hours in the previous week at their current farm job. Agricultural employers' labor needs vary by season, crop, and task, and workers are sometimes needed for longer than normal hours over short periods of time. The data reflect the fluctuating nature of labor use. For example, workers who were harvesting field crops at the time they were

interviewed in 2015-2016 reported working an average of 54 hours in the previous week. Workers who performed pre-harvest tasks (such as thinning and transplanting) in horticulture, on the other hand, reported an average of 38 hours of work the previous week (figure 5.3).

**Figure 5.3: Average Number of Hours Worked in Week Prior to Interview by Crop and Task at Time of Interview, 2015-2016**

Crop	Pre-Harvest Tasks	Harvest Tasks	Post-Harvest Tasks	Technical Production Tasks
<b>Field Crops</b>	52	54	48	53
<b>Fruit and Nut Crops</b>	43	42	39	44
<b>Horticulture</b>	38	44	40	41
<b>Vegetable Crops</b>	44	50	44	53
<b>Miscellaneous Crops</b>	43	46	35	48

The average number of hours worked in the previous week also varied by workers’ age, gender, U.S. farm work experience, and whether they were paid hourly or by the piece. Respondents ages 14 to 17 reported the fewest, at an average of 35 hours, and workers ages 18 to 34 reported the most, at an average of 46 hours. Males reported working an average of 46 hours in the previous week and females reported an average of 40 hours. In terms of number of years of U.S. farm work experience, workers with fewer than 2 years of experience reported the fewest hours of work the previous week, at an average of 41 hours, and those with at least 5 years of experience reported the most, at an average of 45 hours. Farmworkers paid a salary reported the greatest number of hours the previous week, at an average of 47. Workers paid by the piece averaged 40 hours, those paid by the hour averaged 45 hours, and those paid a combination of hourly wage and piece rate averaged 39 hours of work the previous week (figure 5.4).

**Figure 5.4: Average Number of Hours Worked in Week Prior to Interview by Farmworker Characteristic, 2015-2016**

Farmworker Characteristic	Average Number of Hours Worked in Week Prior to Interview
<b>14-17 years old</b>	35
<b>18-21 years old</b>	46
<b>22-24 years old</b>	46
<b>25-34 years old</b>	46
<b>35-44 years old</b>	45
<b>45-50 years old</b>	45
<b>51-54 years old</b>	42
<b>55-64 years old</b>	43
<b>65 or more years old</b>	41
<b>Male</b>	46
<b>Female</b>	40
<b>Less than 2 years of farm work experience</b>	41

Farmworker Characteristic	Average Number of Hours Worked in Week Prior to Interview
<b>2-4 years farm work experience</b>	44
<b>5-10 years farm work experience</b>	45
<b>11-20 years farm work experience</b>	45
<b>21-30 years farm work experience</b>	45
<b>31 or more years farm work experience</b>	45
<b>Paid by the hour</b>	45
<b>Paid by the piece</b>	40
<b>Paid combination hourly wage and piece rate</b>	39
<b>Paid salary or other</b>	47

**Wages**

When asked how much they were earning per hour at their current farm job, farmworkers in 2015-2016 reported an average of \$10.60.<sup>22</sup> Workers who were being paid by the hour earned an average hourly wage of \$10.35 and those being paid by the piece earned an average of \$10.58 per hour.

Hourly wages increased with respondents’ number of years working for their current employer. Workers who had been with their current employer 1 to 2 years earned an average of \$9.89 per hour, those working for their current employer 3 to 5 years earned an average of \$10.64 per hour, and those working for their current employer 6 to 10 years earned an average of \$10.76 per hour. Workers who had worked for their current employer 11 years or more earned the highest hourly wage, averaging \$11.92 per hour.

Among the tasks respondents reported performing at the time they were interviewed, those who worked in harvest tasks earned the highest average hourly wage, at \$11.42. Pre-harvest workers earned an average of \$10.47 per hour, post-harvest workers earned an average of \$10.33 per hour, and those who worked in technical production tasks earned an average of \$10.51 per hour (figure 5.5).

**Figure 5.5: Average Hourly Wage by Farmworker Characteristic, 2015-2016**

Farmworker Characteristic	Average Hourly Wage
<b>All farmworkers</b>	\$10.60
<b>Paid by the hour</b>	\$10.35
<b>Paid by the piece</b>	\$10.58
<b>Paid combination hourly wage and piece rate</b>	\$16.93 <sup>a</sup>
<b>With current employer 1 to 2 years</b>	\$9.89
<b>With current employer 3 to 5 years</b>	\$10.64

<sup>22</sup> Piece rate and combination wages were converted to an hourly wage, then averaged with the wages of workers who were paid by the hour.

Farmworker Characteristic	Average Hourly Wage
<b>With current employer 6 to 10 years</b>	\$10.76
<b>With current employer 11 or more years</b>	\$11.92
<b>Performed pre-harvest tasks at time of interview</b>	\$10.47
<b>Performed harvest tasks at time of interview</b>	\$11.42
<b>Performed post-harvest tasks at time of interview</b>	\$10.33
<b>Performed technical production tasks at time of interview</b>	\$10.51

<sup>a</sup> One percent of farmworkers reported being paid a combination hourly wage and piece rate at their current farm job.

**Monetary Bonuses**

In 2015-2016, 27 percent of farmworkers reported receiving a cash bonus from their current farm employer as part of their compensation package, 63 percent said they received no cash bonus, and 10 percent did not know. Workers who reported being paid a bonus were asked to identify all the types of bonuses they received. Fifty-four percent said they received a holiday bonus, 30 percent received an end-of-season bonus, 12 percent received an incentive award, and 4 percent received a bonus contingent upon grower profits (figure 5.6). Workers employed directly by growers reported that they were paid a bonus nearly 5 times more frequently than those employed by farm labor contractors (32% and 7% respectively).

**Figure 5.6: Types of Cash Bonuses Farmworkers Received, 2015-2016**

Type of Bonus Received <sup>a</sup>	Percent of Farmworkers
<b>Holiday bonus</b>	54%
<b>End-of-season bonus</b>	30%
<b>Incentive bonus</b>	12%
<b>Bonus dependent on grower profit</b>	4%
<b>Other type of bonus</b>	1%

<sup>a</sup> Among workers who reported being paid a bonus. Multiple responses were allowed.

**Worksite Availability of Water and Toilets**

NAWS respondents were asked if their current farm employer provided the following items at the worksite every day: 1) drinking water and cups, 2) a toilet, and 3) water for washing hands. Eighty-nine percent of farmworkers in 2015-2016 reported that they were provided with drinking water and disposable cups every day, and five percent said they were provided water only. A notable share of workers said that their employer provided no water and no cups (6%). Nearly all workers affirmed that they were provided a toilet every day (97%) and with water for washing their hands (97%).

### *Pesticide Training*

The NAWS asks all respondents whether, at any time in the last 12 months, their current employer provided them with training or instruction in the safe use of pesticides. In 2015-2016, 57 percent of farmworkers reported that they did receive this type of training.

### *Insurance Benefits*

NAWS respondents were asked whether they were covered by UI if they were to lose their current job. Forty-three percent of farmworkers interviewed in 2015-2016 said “yes”, 52 percent said “no”, and 5 percent did not know.<sup>23</sup> Workers with authorization to work in the United States were far more likely than unauthorized workers to report that they would be covered by UI (80% and 5% respectively). Of the 43 percent of respondents who reported that they would not be covered by UI, 88 percent were unauthorized and would not qualify for the benefit.

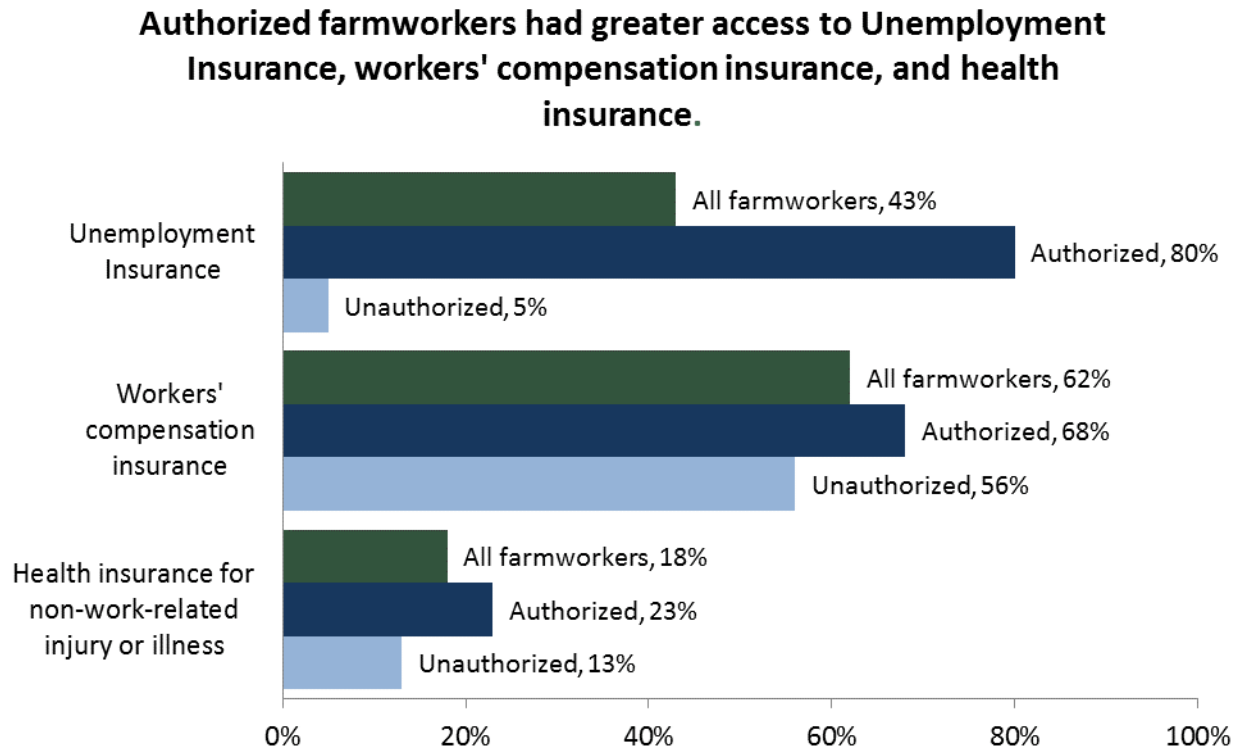
When asked if they would receive workers’ compensation if they were injured at work or got sick as a result of their work, approximately 6 in 10 farmworkers said “yes” (62%), 16 percent said “no”, and 22 percent did not know.<sup>24</sup> Furthermore, when asked whether their employer provided health insurance or paid for medical treatment for injury or illness suffered while off the job (regardless of whether or not the worker accepted or used the insurance), 18 percent confirmed that their employer offered such a benefit, 71 percent said their employer did not, and 11 percent were unsure. Authorized workers were more likely than unauthorized workers to report that they were covered by workers’ compensation insurance (68% and 56% respectively) and to say that their employer offered health insurance for non-work-related injury or illness (23% and 13% respectively). See figure 5.7. A discussion of farmworkers’ possession of health insurance coverage for themselves and their family members can be found in chapter 9.

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<sup>23</sup> UI coverage varies by state. For agricultural labor in the majority of states, employers are required to pay UI taxes if they paid wages in cash of \$20,000 or more for agricultural labor in any calendar quarter in the current or preceding calendar year, or who employed 10 or more workers on at least 1 day in each of 20 different weeks in the current or immediately preceding calendar year. U.S. Department of Labor, Employment and Training Administration. (2017). *Comparison of State Unemployment Insurance Laws* (<https://workforcesecurity.doleta.gov/unemploy/pdf/uilawcompar/2017/complete.pdf>, p. 1-2).

<sup>24</sup>The rules for workers’ compensation coverage for agricultural workers vary among states. In 14 states, Puerto Rico and the Virgin Islands, rules require employers to cover seasonal agricultural workers to the same extent as all other workers. In an additional 21 states, employers provide workers’ compensation but coverage is limited to certain classifications of agricultural employers or workers such as the number of full-time workers employed. Fifteen states have optional coverage, allowing employers to elect to provide workers’ compensation coverage to their employees, though the coverage is not required by law. In many of these states, workers’ compensation is required for employers in other industries but optional for agriculture. *A Guide to Workers' Compensation for Clinicians Serving Agricultural Workers* (<http://www.farmworkerjustice.org/sites/default/files/Workers%20Comp%20Guide%20FINAL%20%281%29.pdf>). Farmworker Justice and Migrant Clinicians Network (2015).

Figure 5.7: Percent of Farmworkers Whose Employer Offers Health Insurance, 2015-2016





## CHAPTER 6: Employment Experience

### *Summary of Findings:*

- Eighty percent of farmworkers worked for 1 farm employer in the previous 12 months, and workers had been employed with their current farm employer for an average of 7 years.
- Farmworkers worked an average of five days per week for their current employer and an average of 196 days in farm work in the previous 12 months.
- Farmworkers with a full year or more of farm work experience had an average of 16 years of U.S. farm work experience. Workers with more years of experience worked more days in the previous 12 months.
- Three-fourths of workers interviewed (76%) expected to continue doing farm work for at least 5 years.

### *Number of U.S. Farm Employers in Previous 12 Months*

Farmworkers in 2015-2016 worked for an average of 1 U.S. farm employer<sup>25</sup> in the 12 months prior to being interviewed. Eighty percent of workers reported having worked for only 1 farm employer, 13 percent worked for 2 employers, and 7 percent worked for 3 or more farm employers in the previous 12 months.

Unauthorized workers were more likely than authorized workers to have worked for more than 1 farm employer in the previous 12 months (27% compared to 14%), and migrant workers were more than twice as likely as settled workers to have had more than 1 farm employer in the previous 12 months (36% compared to 17%). See figure 6.1.

**Figure 6.1: Percentage Distribution of Number of Farm Work Employers in Previous 12 Months by Farmworker Characteristic, 2015-2016**

Number of Farm Employers	All Farmworkers	Migrant	Settled	Authorized	Unauthorized
<b>One</b>	80%	64%	83%	73%	86%
<b>Two</b>	13%	21%	11%	17%	10%
<b>Three or more</b>	7%	15%	5%	10%	4%

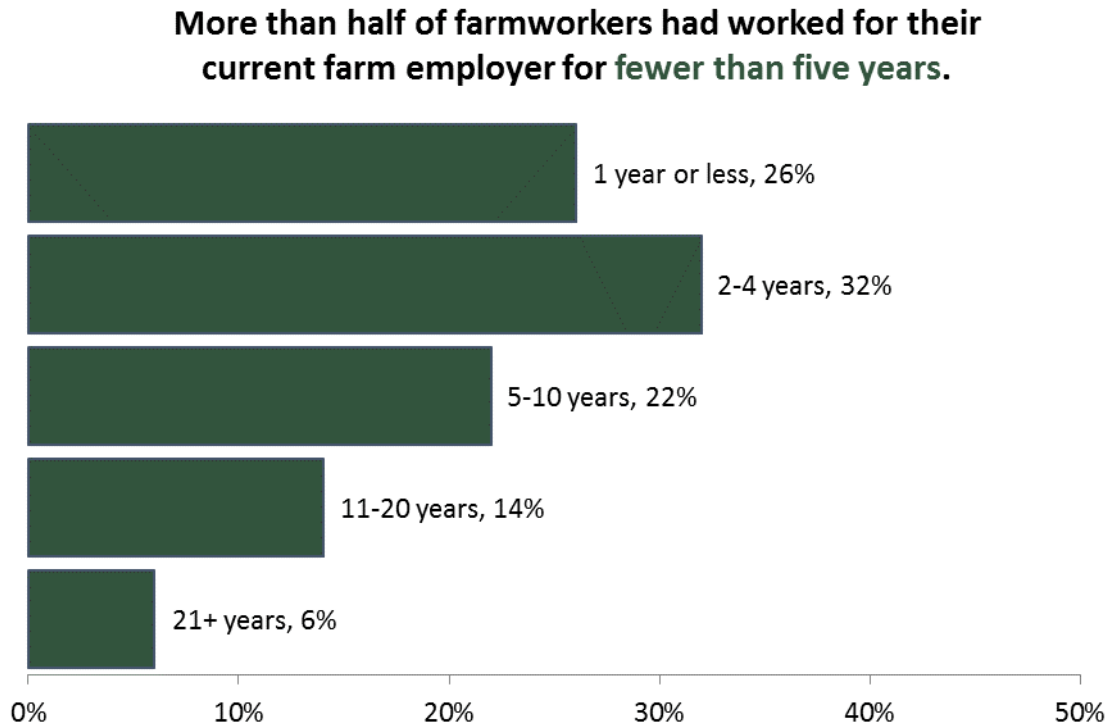
### *Number of Years with Current Farm Employer*

In 2015-2016, farmworkers reported working for their current farm employer for an average of 7 years.<sup>26</sup> Nearly 6 in 10 stated that they had been with their current employer for fewer than 5 years (58%) and 2 in 10 said that they had been with their current farm employer for 11 years or more (20%). See figure 6.2.

<sup>25</sup> An employer can be either a farm owner or a farm labor contractor. While a worker employed by a farm labor contractor may work on more than one farm in a year, a single labor contractor is counted as one employer.

<sup>26</sup> Any employment for at least one day in the year qualifies as one year.

**Figure 6.2: Percentage Distribution of Number of Years with Current Farm Employer, 2015-2016**



### *Weeks and Days of Farm Work in Previous 12 Months*

During the previous year, farmworkers spent an average of 33 weeks (63% of the year) employed in U.S. farm work, with farm work participation varying depending on workers' legal status, migrant status, and place of birth. Authorized workers, migrant workers, and U.S.-born workers worked fewer weeks in farm work (averages of 30, 24, and 28 weeks respectively) than unauthorized workers, settled workers, and foreign-born workers (averages of 36, 36, and 35 weeks respectively). Youth farmworkers, between the age of 14 and 17, were employed the fewest weeks in farm jobs, averaging 13 weeks of farm work in the previous 12 months, and workers aged 25 to 50 worked the most, averaging 36 weeks in the previous 12 months (figure 6.3).

**Figure 6.3: Average Number of Weeks of Farm Work in Previous 12 Months, by Farmworker Characteristic, 2015-2016**

Farmworker Characteristic	Average Weeks of Farm Work in Previous 12 Months
<b>All farmworkers</b>	33
<b>Migrant</b>	24
<b>Settled</b>	36
<b>Authorized</b>	30
<b>Unauthorized</b>	36
<b>U.S.-born</b>	28

Farmworker Characteristic	Average Weeks of Farm Work in Previous 12 Months
<b>Foreign-born</b>	35
<b>14-17 years old</b>	13
<b>18-24 years old</b>	23
<b>25-50 years old</b>	36
<b>Over 50 years old</b>	35

Farmworkers' approximate number of work days was calculated using employment dates and average weeks per employer as recorded in the 12-month retrospective work history. For their employer at the time of interview, farmworkers reported working an average of five days per week. Over the previous 12 months, they worked an average of 196 days in farm work, with averages varying depending upon workers' legal status, migrant status, and place of birth. Unauthorized workers, settled workers, and foreign-born workers averaged a greater number of days than did their counterparts: Unauthorized workers worked an average of 215 days and authorized workers an average of 178 days; settled workers averaged 210 days while migrant workers averaged of 144 days; foreign-born workers worked an average of 209 days and U.S.-born workers and average of 158 days (figure 6.4).

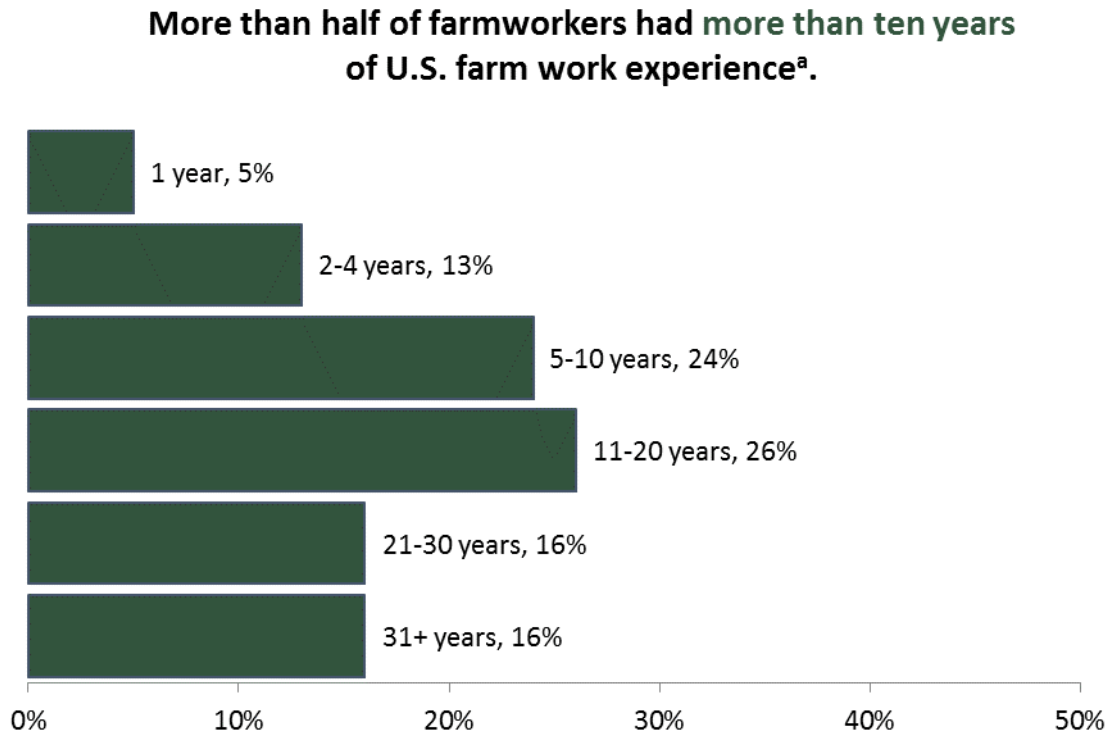
**Figure 6.4: Average Number of Days Worked Per Week and Average Number of Days of Farm Work in Previous 12 Months by Farmworker Characteristic, 2015-2016**

Farmworker Characteristic	Average Days Worked Per Week	Average Days of Farm Work in Previous 12 Months
<b>All farmworkers</b>	5	196
<b>Migrant</b>	5	144
<b>Settled</b>	5	210
<b>Authorized</b>	5	178
<b>Unauthorized</b>	5	215
<b>U.S.-born</b>	5	158
<b>Foreign-born</b>	5	209

#### *Years of U.S. Farm Work Experience*

Farmworkers with at full year or more of farm work experience had an average of 16 years of U.S. farm work experience. Forty-two percent of farmworkers with a full year or more of farm work experience had worked 1 to 10 years in farm jobs, another 42 percent had worked 11 to 30 years in farm jobs, and 16 percent had worked more than 30 years in farm jobs (figure 6.5).

Figure 6.5: Years U.S. Farm Work Experience, 2015-2016



<sup>a</sup> Among workers with at least one year of U.S. farm work experience.

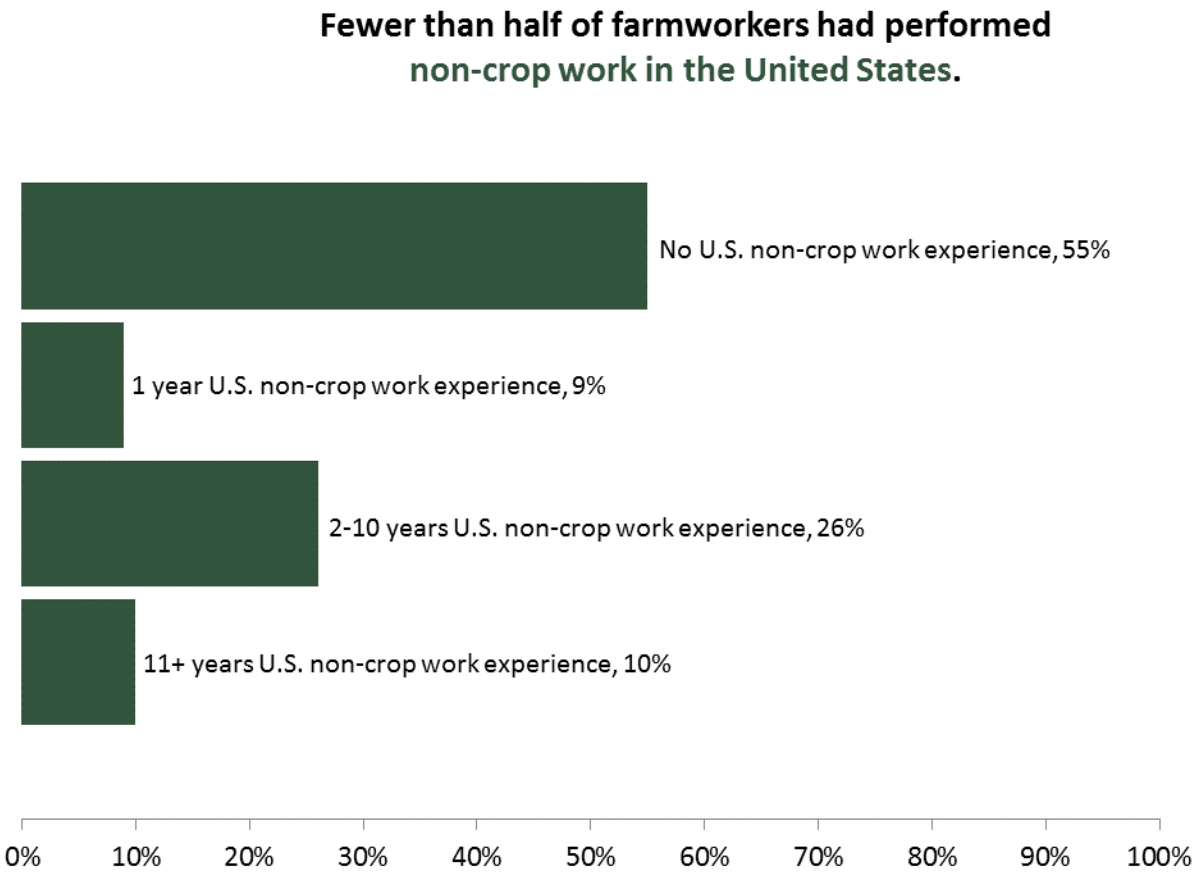
Farmworkers with more years of experience were more likely to have authorization to work in the United States; 52 percent of workers with 10 years or more of farm work experience were work-authorized, while 46 percent of those with one to nine years of experience had work authorization. Additionally, farmworkers with more years of experience performed more days of farm work during the previous year. Respondents who had between 1 and 5 years of farm work experience worked an average of 166 days in farm work in the previous 12 months, while those with 11 years or more of experience averaged 232 days of farm work.

### ***Other Work History***

Farmworkers were asked to report the approximate number of years they had done non-crop work in the United States. Forty-five percent of farmworkers in 2015-2016 reported at least 1 year of non-crop work<sup>27</sup> (figure 6.6), and they had an average of 8 years of non-crop work experience.

<sup>27</sup> Any year in which 15 days of non-crop work were performed counts as one year of non-crop work.

Figure 6.6: U.S. Non-Crop Work Experience, 2015-2016



Farmworkers were also asked to indicate the last time their parents did hired farm work in the United States. Fifty-four percent of workers said “never”, 15 percent reported that their parents were doing U.S. farm work “now” or within the last year, 3 percent said their parents last did U.S. farm work 1 to 5 years ago, 4 percent said their parents last did U.S. farm work 6 to 10 years ago, and 23 percent reported that their parents last did U.S. farm work 11 or more years ago. U.S.-born farmworkers reported with much greater frequency than foreign-born farmworkers that their parents did hired farm work in the United States at some time (61% and 40% respectively). See figure 6.7.

Figure 6.7: Last Time Parents Did Hired Farm Work in United States, 2015-2016

Last Time Parents Did U.S. Farm Work	All Farmworkers	U.S.-Born	Foreign-Born
<b>Never</b>	54%	37%	59%
<b>Now/within last year</b>	15%	24%	12%
<b>1 to 5 years ago</b>	3%	3%	3%
<b>6 to 10 years ago</b>	4%	2%	4%
<b>More than 10 years ago</b>	23%	32%	21%
<b>Don't know</b>	1% <sup>a</sup>	2% <sup>a</sup>	<1%

<sup>a</sup> Estimates should be interpreted with caution because they have RSEs of 31 percent to 50 percent.

***Plans to Remain in Farm Work***

When asked how long they expected to continue to do farm work, 76 percent of workers interviewed in 2015-2016 believed they would continue for more than 5 years, most of whom indicated further that they would continue as long as they are able to do the work (74%). Four percent of respondents stated that they would continue working in agriculture for less than one year, 12 percent planned to remain in farm work for 1 to 3 years, 4 percent stated that they would continue in farm work for 4 to 5 years, and 3 percent were unsure.

## CHAPTER 7: Non-Crop Work Activities During the Year

### *Summary of Findings:*

- During the previous year, farmworkers spent an average of 11 weeks living in the United States but not working and 3 weeks abroad.
- Twenty-four percent of farmworkers said they held at least one U.S. non-crop job during the previous year. The most common types of non-crop jobs held were mechanic, repair, or maintenance jobs (36%) and non-crop agriculture jobs (24%).
- Nearly 7 in 10 farmworker respondents reported at least 1 period in the 12 months prior to their interview during which they did not work (69%), and these workers averaged 20 weeks without employment. Fifteen percent of these respondents said they received UI during at least one of their periods of unemployment.

### *Time Spent Not Employed or Abroad in Previous 12 Months*

During the previous year, farmworkers lived in the United States but did not work for approximately 11 weeks (21% of the year) and were abroad for an average of 3 weeks (6% of the year). Number of weeks of not working and time spent abroad varied depending on workers' legal status, migrant status, and place of birth. Unauthorized, migrant, and foreign-born farmworkers spent, on average, fewer weeks in the United States not working (9, 10, and 10 weeks respectively) than authorized, settled, and U.S.-born farmworkers (13, 11, and 14 weeks respectively). Migrant workers spent more than four times as much time abroad during the previous year (14 weeks) than farmworkers as a whole (3 weeks).

Youth farmworkers between the ages of 14 and 17 had the greatest number of weeks not working while in the United States: 36, or more than two-thirds of the year. Respondents ages 18 to 24 spent an average of 14 weeks not working and 6 weeks abroad, and respondents aged 25 years and older averaged 9 to 10 weeks in the United States but not working and 2 to 3 weeks abroad (figure 7.1).

**Figure 7.1: Average Number of Weeks Not Employed and Abroad in Previous 12 Months, 2015-2016**

Farmworker Characteristic	Weeks in United States but Not Working	Weeks Abroad
<b>All farmworkers</b>	11	3
<b>Migrant</b>	10	14
<b>Settled</b>	11	<1 <sup>a</sup>
<b>Authorized</b>	13	3
<b>Unauthorized</b>	9	3
<b>U.S.-born</b>	14	1 <sup>a</sup>
<b>Foreign-born</b>	10	3
<b>14-17 years old</b>	36	<sup>b</sup>
<b>18-24 years old</b>	14	6
<b>25-50 years old</b>	9	2
<b>Over 50 years old</b>	10	3

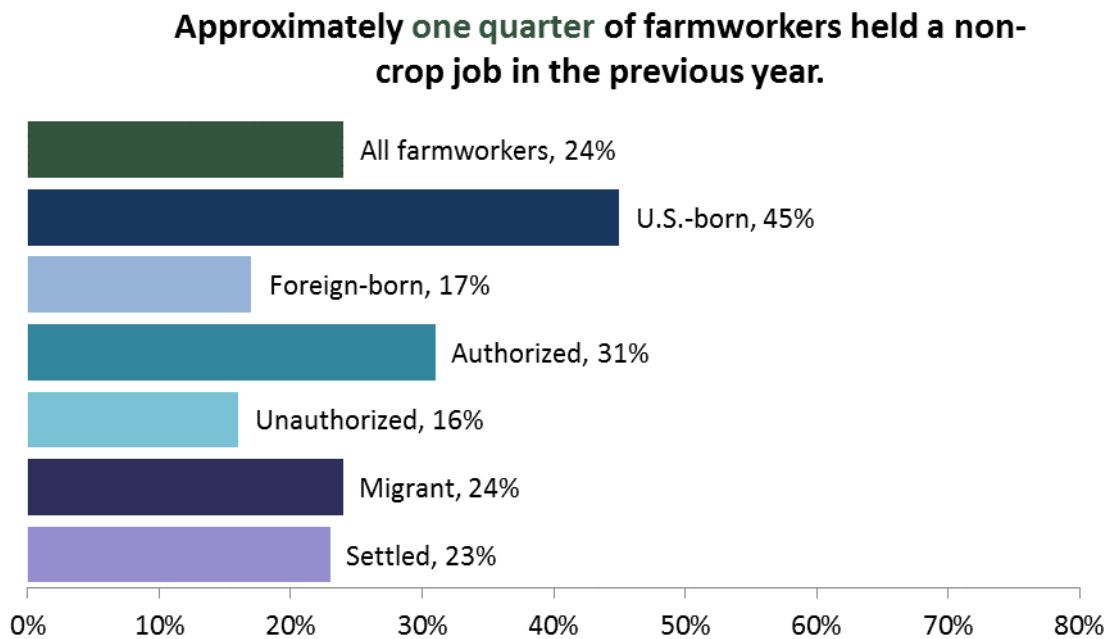
<sup>a</sup> Estimates should be interpreted with caution because they have RSEs of 31 percent to 50 percent.

<sup>b</sup> Estimate is suppressed because it has a RSE greater than 50 percent.

***Non-Crop Work in Previous 12 Months***

Twenty-four percent of farmworkers reported at least one non-crop job in the United States during the previous year. U.S.-born workers were nearly 3 times more likely than foreign-born workers to have had a non-crop job in the previous 12 months (45% compared to 17%) and authorized workers were twice as likely as unauthorized workers to have had a non-crop job (31% compared to 16%). See figure 7.2.

**Figure 7.2: Percent of Farmworkers Who Held a Non-Crop Job the Previous Year, 2015-2016**



The 24 percent of farmworkers who reported doing non-crop work during the previous year spent an average of 25 weeks in non-crop employment and they held an average of 2 non-crop jobs. The most common types of jobs they held were mechanic, repair, or maintenance jobs (36% of workers) and other types of non-crop agricultural jobs<sup>28</sup> such as livestock, forestry and fisheries (24%). Sixteen percent did structural or extractive work<sup>29</sup>, 14 percent held a sales, service, or production job in the food industry, 13 percent held a job sales, service, or manufacturing job in a non-food industry, 4 percent had a professional, technical, or managerial

28 Since the survey’s inception, crop workers have been asked about jobs they’ve had outside of crop agriculture. Some non-crop jobs are farm jobs in other types of agriculture.

29 Structural jobs, as coded in the NAWS, include working in construction. Extractive jobs involve the removal of raw materials from the earth. Examples of extractive processes include oil and gas extraction, mining, dredging and quarrying. <http://www.businessdictionary.com/definition/extractive-industry.html>



job, and 9 percent held other types of jobs, including clerical, government service, health, arts and entertainment, and transportation (figure 7.3).

**Figure 7.3: Types of Non-Crop Jobs Held in Previous 12 Months, 2015-2016**

Type of Non-Crop Job <sup>a</sup>	Percent of Workers Who Held At Least One Non-Crop Job
<b>Mechanic/Repair/Maintenance</b>	36%
<b>Non-Crop Agriculture</b>	24%
<b>Structural/Extractive Work</b>	16%
<b>Food Industry -- Sales/Service/Production</b>	14%
<b>Non-food Industry-- Sales/Service/Manufacturing</b>	13%
<b>Professional/Technical/Manager</b>	4%
<b>Other</b>	9%

<sup>a</sup> Respondents may have reported multiple types of jobs.

***Reasons for Leaving Non-Crop Work in Previous Year***

Fifty-six percent of workers who had non-crop employment during the previous year left at least one of their non-crop jobs. The NAWS sample includes only farmworkers actively employed in crop agriculture at the time of interview. However, some workers hold non-crop jobs and farm jobs simultaneously, and some perform non-crop work for their agricultural employers, thus changing jobs but not separating from the employer.

Whenever respondents reported separating from an employer, they were asked the reason why. Approximately six in ten workers (58%) who left a non-crop employer during the previous year reported leaving for voluntary reasons (“family responsibilities”, “school”, “moved”, “health reason”, “vacation”, “retired”, “quit”, or “changed jobs”). Another third of workers (33%) said that their leaves from non-crop work were involuntary in nature (“lay off/end of season” or “fired”).<sup>30</sup>

***Periods of Unemployment During the Year***

Nearly 7 in 10 farmworker respondents in 2015-2016 reported at least 1 period in the 12 months prior to their interview during which they did not work (69%), and these respondents averaged 20 weeks without employment. Each time a respondent reported a period of not working during the 12-month retrospective work history, the respondent was asked about receiving UI benefits during that time. Fifteen percent of these respondents said “yes”, that they received UI benefits during at least one of their periods of unemployment.

<sup>30</sup> The remaining workers reported both voluntary and involuntary leaves from non-crop work, but this estimate is suppressed because it has a RSE greater than 50 percent.

## CHAPTER 8: Income, Assets, and Use of Assistance Programs

### *Summary of Findings:*

- Farmworkers' mean and median personal incomes the previous year were in the range of \$17,500 to \$19,999. Fourteen percent of workers earned less than \$10,000; 14 percent earned \$30,000 or more.
- Workers' mean and median total family incomes the previous year were in the range of \$20,000 to \$24,999. Twenty-seven percent of farmworkers reported total family income of less than \$20,000, another 27 percent said their family income was \$20,000 to \$29,999, and 32 percent had a family income of \$30,000 or more.
- One-third of farmworkers had family incomes below poverty (33%).
- Sixty-eight percent of farmworkers stated that they owned or were buying at least one asset in the United States. The most common assets were a vehicle (reported by 63% of workers) or a house (18% of workers).
- Fourteen percent of farmworkers reported that they or someone in their household received some form of benefit from a contribution-based program in the previous two years; 54 percent said someone in their household received some form of benefit from a needs-based program in the previous two years.

### *Income*

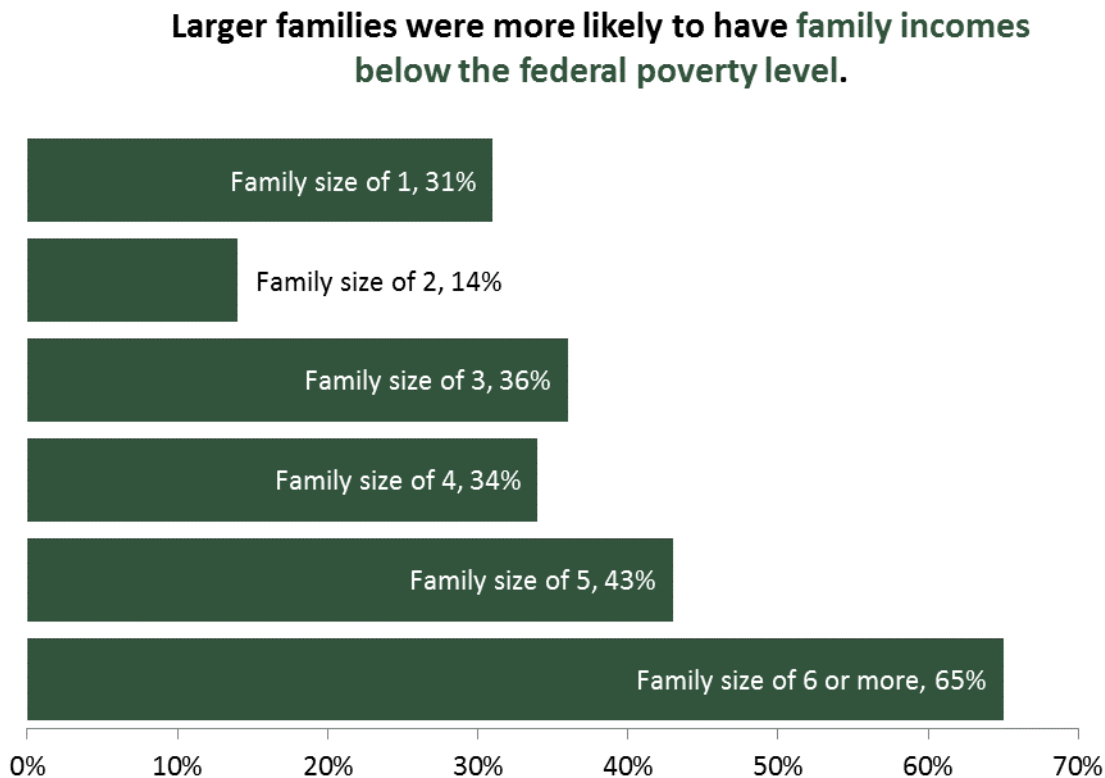
Farmworkers were asked to report their total personal income in the calendar year prior to the year in which they were interviewed. Rather than providing a specific sum, respondents answered the question by indicating a range in which their income fell. Farmworkers' mean and median personal incomes the previous year were in the range of \$17,500 to \$19,999. Nine percent of farmworkers interviewed in 2015-2016 reported that they did not work at all during the prior calendar year, 14 percent said their total personal income was less than \$10,000, 29 percent said they had personal incomes of \$10,000 to \$19,999, another 29 percent had personal incomes of \$20,000 to \$29,999, and 14 percent reported that their total personal income was \$30,000 or more. Five percent of farmworkers said they were unsure of what their personal income was the previous year.

In addition to the question about personal income, workers were asked to report their total family income in the previous calendar year. For this question as well, respondents answered by indicating a range in which their income fell. Workers' mean and median total family incomes the previous year were in the range of \$20,000 to \$24,999. Six percent of farmworkers reported that they/their family had no earned income during the previous calendar year. Eight percent of workers said that their total family income the prior year was less than \$10,000, 19 percent said their family income was \$10,000 to \$19,999, 27 percent had a family income of \$20,000 to \$29,999, and 32 percent had a family income of \$30,000 or more. Eight percent of farmworkers reported that they did not know their family's total income the previous year.

To determine farmworkers’ poverty status, a poverty threshold was calculated for each worker based on the worker’s family size<sup>31</sup> and the U.S. Department of Health and Human Services’ poverty guidelines<sup>32</sup> for the calendar year preceding the interview. The worker’s family income was then compared to this poverty threshold<sup>33</sup>. Using this method, 33 percent of farmworkers in 2015-2016 were found to have family incomes below the poverty threshold.

Below-poverty income was more common among farmworkers with larger families (see figure 8.1). Almost two-thirds of farmworkers with a family size of 6 or more had incomes below the poverty level (65%), compared to approximately one-third of farmworkers with a family size of 3 (36%) or 4 (34%). Likewise, migrant workers’ family incomes fell below poverty at a much greater rate than settled workers’ family incomes (52% compared to 28%), and unauthorized workers were more likely than authorized workers to have below-poverty household incomes (38% and 28% respectively). See figure 8.2.

**Figure 8.1: Percent of Farmworkers with Total Family Income Below Poverty Level by Family Size, 2015-2016**

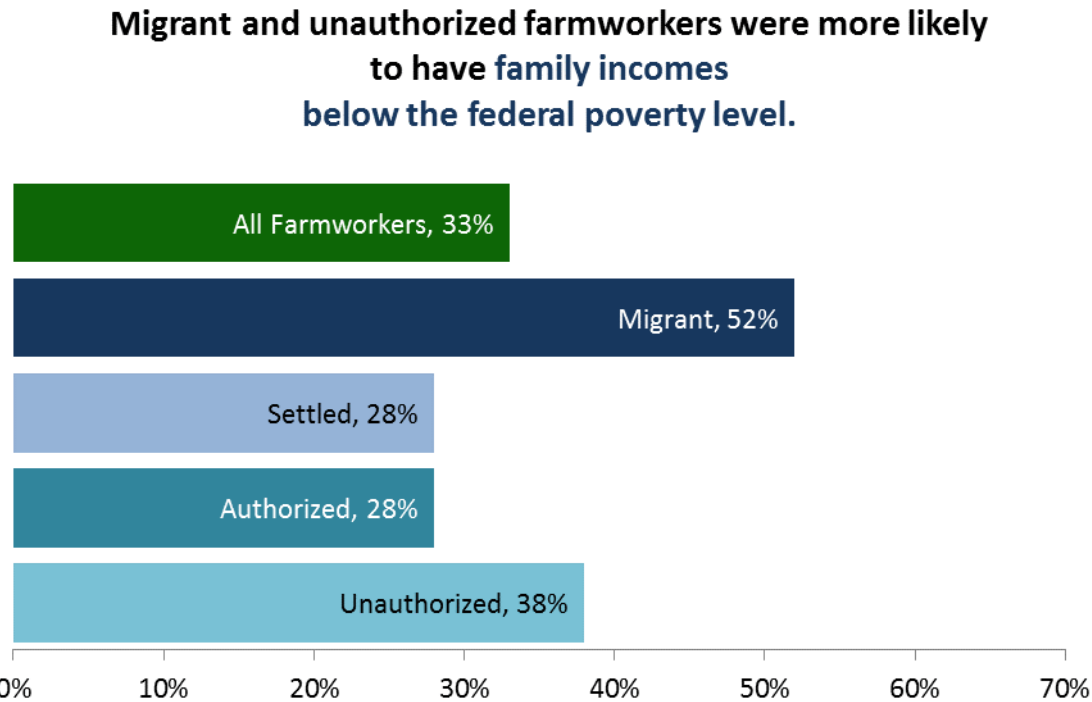


<sup>31</sup> Family size is defined as the number of family members who are living in the United States and who depend on the farmworker’s income.

<sup>32</sup> U.S. Department of Health and Human Services poverty guidelines (<https://aspe.hhs.gov/prior-hhs-poverty-guidelines-and-federal-register-references>).

<sup>33</sup> Workers’ family income and poverty levels were based on their income in the United States, but were not adjusted for time in the United States. For additional information on the limitations of using traditional poverty statistics with migrant populations please see Pena’s (2013) article on “Poverty Measurement for a Binational Population.”

**Figure 8.2: Percent of Farmworkers with Total Family Income Below Poverty Level by Farmworker Characteristic, 2015-2016**



***Assets in the United States and Abroad***

Respondents were asked about assets they own or are buying in the United States and, if foreign-born, in their home country. In 2015-2016, approximately two-thirds of all farmworkers stated that they owned or were buying at least one asset in the United States (68%). U.S.-born workers reported with greater frequency that they owned or were buying an asset in the United States (75%) than did foreign-born workers (66%). Among all workers, the most commonly held asset in the United States was a car or truck (63%), followed by a house (18%), and a mobile home (6%). See figure 8.3. U.S.-born workers were more likely to own or be buying a house in the United States (27%) than were foreign-born workers (15%).

**Figure 8.3: Assets in the United States, 2015-2016**

Type of Asset in the United States	Percent of Farmworkers
<b>Any asset</b>	68%
<b>A car or truck</b>	63%
<b>A house</b>	18%
<b>A mobile home</b>	6%
<b>A plot of land</b>	2%

Thirty percent of foreign-born workers reported that they owned or were buying at least one asset abroad. The most frequently reported was a house (26%), followed by land (11%), and a car or truck (3%).

*Use of Contribution- and Need-Based Programs*

In 2015-2016, farmworkers were asked whether they or anyone in their household received assistance from either contribution- or need-based programs in the two-year period preceding the interview. Fourteen percent of the farmworkers reported that someone in their household received a benefit from at least one contribution-based program, including disability insurance, UI, or Social Security. Ten percent of farmworkers reported that they or a family member received payments from UI, three percent said that someone in their household received Social Security payments, and one percent reported that they or a family member received payments from disability insurance.

Need-based benefits include financial assistance through programs such as Temporary Assistance for Needy Families (TANF), general assistance or welfare, and publicly provided housing or medical and nutritional assistance such as Medicaid, Special Supplemental Nutrition Program for Women, Infants and Children (WIC), and Supplemental Nutrition Assistance Program (SNAP)<sup>34</sup>. In 2015-2016, 54 percent of the farmworkers reported that they or someone in their household used at least one type of public assistance program in the previous two years. The programs most commonly utilized were Medicaid (44%), SNAP (18%), WIC (17%), and public health clinics (10%). See figure 8.4.

**Figure 8.4: Percent of Farmworkers Who Reported That a Member of the Household Received Benefits from Contribution- or Needs-Based Programs in the Last Two Years, 2015-2016**

Contribution- and Need-Based Programs Utilized	Percent of Farmworkers
<b>Any contribution-based program</b>	14%
<b>UI</b>	10%
<b>Social Security</b>	3%
<b>Disability</b>	1%
<b>Any need-based program</b>	54%
<b>Medicaid</b>	44%
<b>SNAP</b>	18%
<b>WIC</b>	17%
<b>Public health clinic</b>	10%

<sup>34</sup> The Federal food stamps program was renamed to the Supplemental Nutrition Assistance Program or SNAP as of October 1, 2008.

## CHAPTER 9: Health Care in the United States

### *Summary of Findings:*

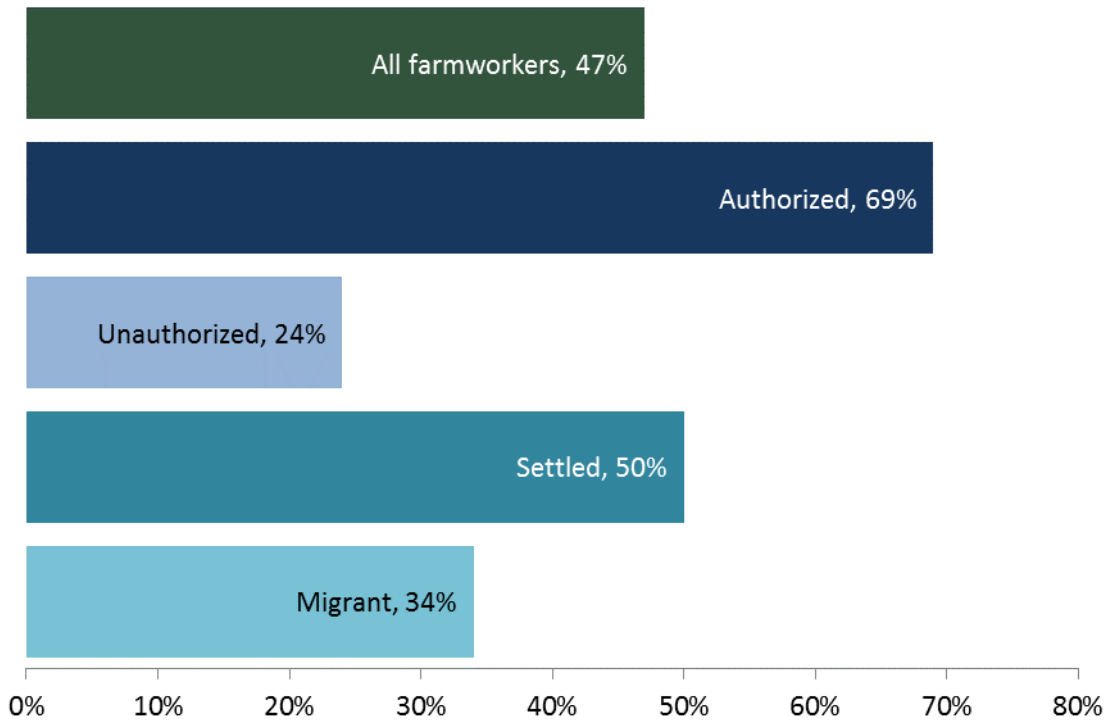
- Forty-seven percent of farmworkers reported that they had health insurance, 56 percent said their spouse had health insurance, and 93 percent reported that all (89%) or at least some (3%) of their children had health insurance.
- Sixty-three percent of farmworkers used a health care provider in the United States sometime in the last two years.
- The last time they visited a health care provider, 40 percent went to a private medical doctor's office or private clinic, 34 percent said they visited a community health center or migrant health clinic, 12 percent saw a dentist, 11 percent went to a hospital, and 3 percent visited other providers such as a healer, chiropractor, or emergency room.
- Approximately one-third of farmworkers paid for their last health care visit out of their own pockets (34%): 26 percent were uninsured so they had to pay the whole fee; 8 percent had insurance so their out-of-pocket expense was likely a co-payment.
- The most common difficulty farmworkers faced when they needed to access health care was that health care visits were too expensive (23%).

### *Health Insurance Coverage for Farmworkers and Family Members*

There were several questions on the survey about health insurance. One question asked workers to indicate who in their family had health insurance in the United States. Forty-seven percent of workers responded that they, themselves, had health insurance. Authorized workers and settled workers were much more likely to report having health insurance (69% and 50% respectively) than unauthorized workers and migrant workers (24% and 34% respectively). See figure 9.1.

**Figure 9.1: Percent of Farmworkers with Health Insurance, 2015-2016**

**Nearly half of farmworkers had health insurance.**



Farmworkers who reported having health insurance were asked to identify the source(s) that provided it (multiple sources could be reported). Forty-three percent reported that they had insurance provided by the government, 29 percent said their employer provided them with health insurance, 12 percent said that they or their spouse paid for insurance themselves, 6 percent reported that they had insurance under their spouse’s employer’s plan, another 6 percent reported that they were covered by their parents’ or family’s plan, and 7 percent indicated some other source<sup>35</sup> (figure 9.2).

**Figure 9.2: Sources of Farmworkers' Health Insurance, 2015-2016**

Source of Farmworker’s Health Insurance <sup>a,b</sup>	Percent of Farmworkers
Farmworker’s/Spouse’s self-purchased plan	12%
Farmworker’s employer	29%
Spouse’s employer	6%
Government program	43%
Parent’s/Family’s plan	6%
Other	7%

<sup>a</sup> Among the 47 percent of farmworkers who reported that they had health insurance.

<sup>35</sup> “Other” sources included the Affordable Care Act, private health insurance companies (e.g., Aetna, Blue Cross), charity, and retirement/pension plans.

<sup>b</sup> Farmworkers may have health insurance through more than one source.

Of the 59 percent of farmworkers who had a spouse, 56 percent reported that their spouse had health insurance. Among spouses with health insurance, 54 percent received the insurance through a government program, 9 percent were covered by a self-purchased plan, 19 percent were insured through the spouse’s own employer, 14 percent were covered by the farmworker’s employer plan, and 8 percent indicated some other source (figure 9.3). Authorized workers reported that their spouses had health insurance at nearly twice the frequency of unauthorized workers (74% and 38% respectively).

**Figure 9.3: Sources of Farmworkers' Spouses' Health Insurance, 2015-2016**

Source of Spouse’s Health Insurance <sup>a,b</sup>	Percent of Farmworkers
<b>Farmworker’s/Spouse’s self-purchased plan</b>	9%
<b>Farmworker’s employer</b>	14%
<b>Spouse’s employer</b>	19%
<b>Government program</b>	54%
<b>Other</b>	8%

<sup>a</sup> Among the 56 percent of farmworkers who reported that their spouse had health insurance.

<sup>b</sup> Spouses may have health insurance through more than one source.

Among the 44 percent of farmworkers with minor children, the vast majority reported that all of their children had health insurance (89%) while 3 percent reported that only some of their children had health insurance. The majority of these workers said their children’s health insurance was provided by government programs (86%). Ten percent of the workers reported that their children were insured through their employer or their spouse’s employer, and two percent said their children were covered by insurance that the worker and/or their spouse purchased on their own (figure 9.4). Nearly equal percentages of authorized and unauthorized workers reported that all or some of their children had health insurance (94% and 92% respectively).

**Figure 9.4: Sources of Farmworkers' Children’s Health Insurance, 2015-2016**

Source of Children’s Health Insurance <sup>a,b</sup>	Percent of Farmworkers
<b>Farmworker’s/Spouse’s self-purchased plan</b>	2%
<b>Farmworker’s/Spouse’s employer</b>	10%
<b>Government program</b>	86%
<b>Other</b>	2%

<sup>a</sup> Among the 93 percent of farmworkers who reported that all or some of their children had health insurance.

<sup>b</sup> Children may have health insurance through more than one source.

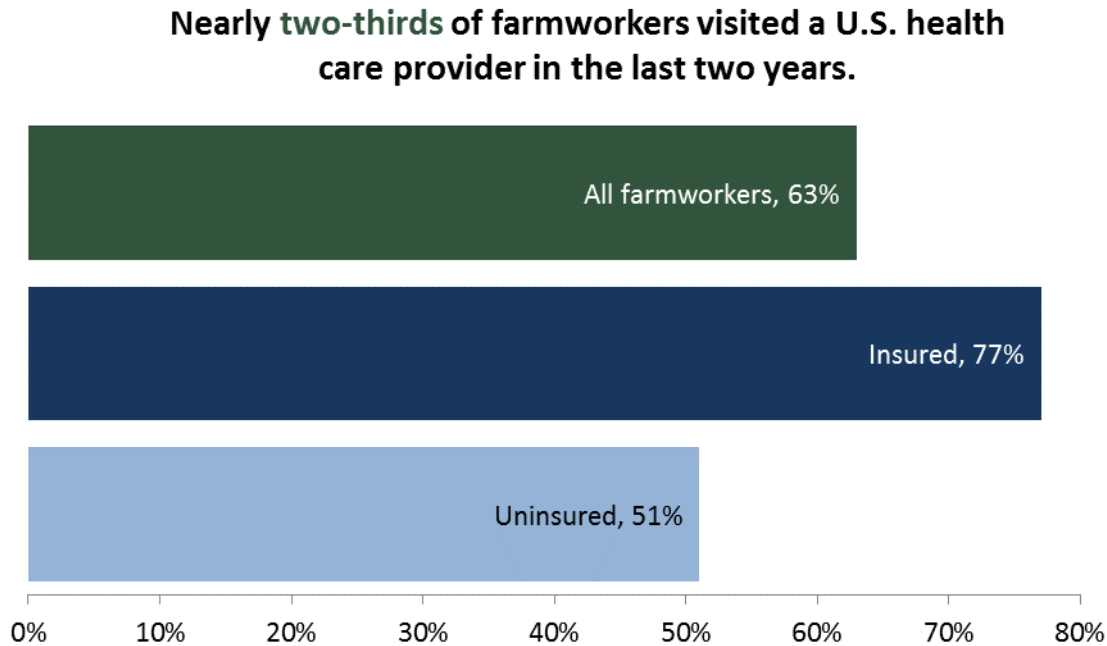
***Health Care Utilization and Barriers to Health Care***

In 2015-2016 farmworkers were asked whether, at any time in the 2 years prior to being interviewed, they had used any type of health care services from doctors, nurses, dentists, clinics, or hospitals in the United States. Sixty-three percent of farmworkers responded that they had.



Workers who had health insurance reported more frequently that they utilized health care services (77%) than did workers who did not have health insurance (51%). See figure 9.5.

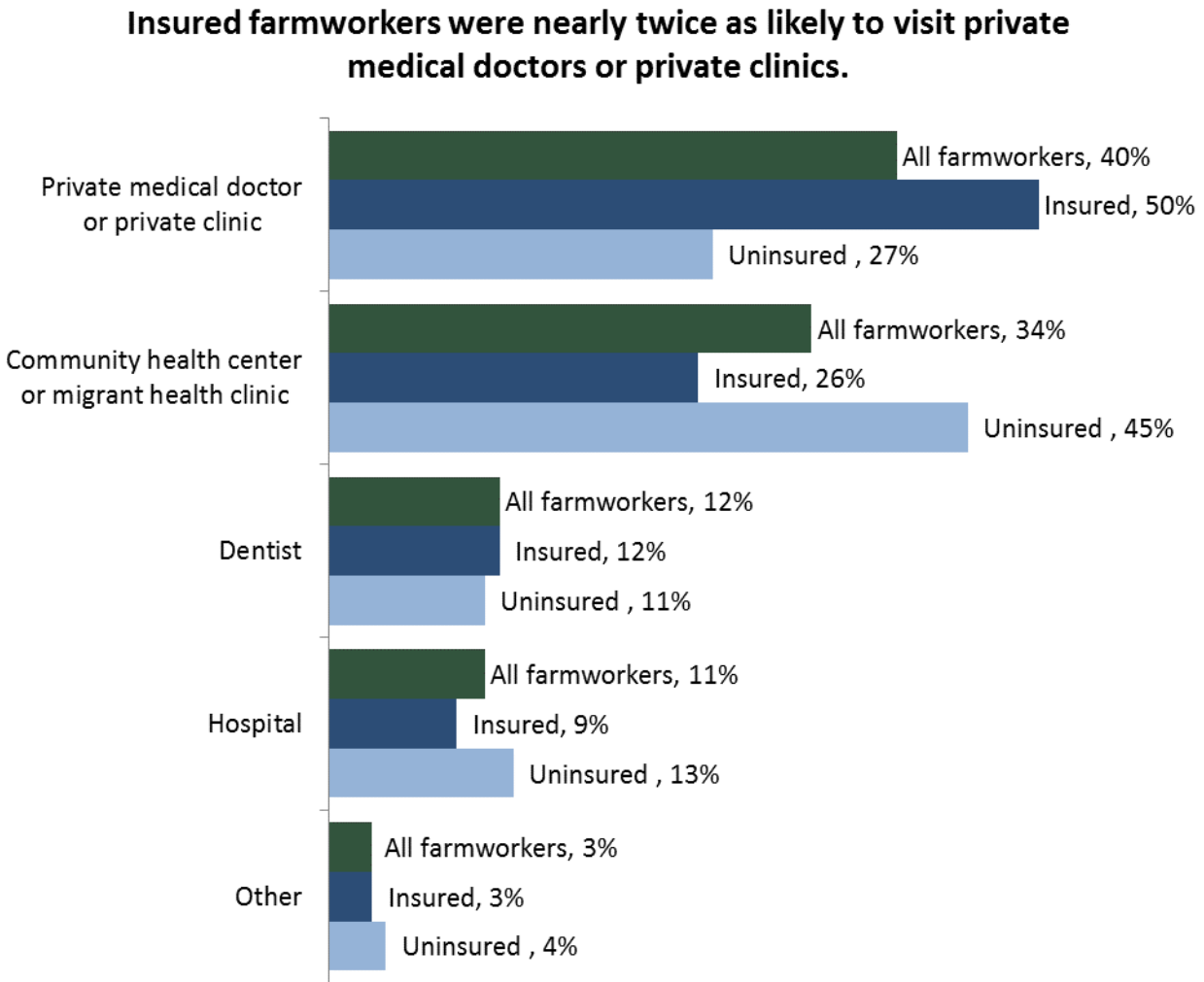
**Figure 9.5: Visited a U.S. Health Care Provider in the Last Two Years by Health Insurance Status, 2015-2016**



Farmworkers who reported seeking health care in the United States sometime in the last two years were asked what kind of health care provider they used the last time they saw one. Forty percent of workers who had a health care visit said that the last time they used a provider they went to a private medical doctor’s office or private clinic. Thirty-four percent said they visited a community health center or migrant health clinic, 12 percent saw a dentist, and 11 percent went to a hospital. The remaining three percent of workers reportedly used another type of provider, including a healer or “curandero”, an emergency room, a chiropractor, or a naturopath.

The type of health care provider visited depended on farmworkers’ health insurance status. Insured workers were more likely than uninsured workers to visit a private provider (50% compared to 27%) and less likely to visit a community health center or migrant health clinic (26% of insured workers compared to 45% of uninsured workers). See figure 9.6.

**Figure 9.6: Type of U.S. Health Care Provider Visited by Health Insurance Status, 2015-2016**



Farmworkers who reported seeking health care in the United States sometime in the last two years were also asked who paid the majority of the cost for their last health care visit. Thirty-four percent of workers responded that they paid out of their own pockets: 26 percent were uninsured so they had to pay the fee in whole out of pocket; 8 percent had insurance so their out-of-pocket expense was likely a co-payment. Twenty-two percent said that they had Medicaid or Medicare, 11 percent said the majority of the cost was covered by health insurance that they or their family had purchased themselves, and 13 percent of workers reported that the cost was covered by health insurance provided by their employer. Nine percent of the workers stated that they went to a public clinic that did not charge for the visit, three percent reported that they used some combination of sources to pay, they were covered by worker’s compensation, or that they were

billed for service but did not pay, and the remaining seven percent provided a variety of other responses<sup>36</sup>.

Regardless of whether they reported having used a U.S. health care provider sometime in the last two years, farmworkers were asked to name the types of difficulties they faced when they needed to access health care in the United States. The most common response, provided by 23 percent of all farmworkers interviewed in 2015-2016, was that health care visits were too expensive and they had no insurance to cover the costs. Also among the most common responses were language incompatibility between farmworkers and health care providers (indicated by 1% of workers) and distance from providers or transportation difficulties (also indicated by 1% of workers). Thirteen percent of the workers were unable to name any specific barriers because they reported they had never needed health care in the United States.

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<sup>36</sup> Farmworkers who responded with “other” when asked who paid the majority of the cost for their last health care visit specified their response in the following ways: low income program; insurance through a former employer, other employer, labor union, or pension plan; automobile insurance; coverage through the ACA; medical coupon; military insurance or the VA; and medical insurance with no specification about whether it was self-purchased or employer provided.

## APPENDIX A: Methodology

### *Overview*

The NAWS is a nationally representative, random sample of farmworkers. During 2015-2016, the NAWS used stratified multi-stage sampling to account for seasonal and regional fluctuations in the level of farm employment. The stratification included three interviewing cycles per year and 12 geographic regions, resulting in 36 time-by-space strata. For each interviewing cycle, NAWS staff drew a random sample of locations for each of the 12 regions. Together, the 12 regions have a universe of 497 Farm Labor Areas (FLAs). FLAs were single- or multi-county sampling units which form the survey's primary sampling units (PSUs). Counties were the secondary level sampling units, ZIP Code regions were the third, agricultural employers were the fourth, and workers were the fifth.

The number of interviews allocated to each region was based on regional farmworker employment data, the number of hired agricultural workers from the U.S. Department of Agriculture's (USDA) Farm Labor Survey (FLS) plus the number of contract workers from the Bureau of Labor Statistics' (BLS) Quarterly Census of Employment and Wages (QCEW). Similarly, the number of interviews allocated to each FLA was proportional to the number of hired and contract crop workers employed at that time of the year. The FLA size measure (farm labor) was obtained by multiplying a seasonality estimate, derived primarily from the QCEW, by local farm labor expenditure data, from USDA's Census of Agriculture (CoA). The interview allocations were thus proportional to stratum size.

In each FLA, county, and ZIP Code region, a simple random sample of agricultural employers was drawn from a universe list compiled mainly from public agency records. NAWS interviewers then contacted the sampled growers or farm labor contractors, arranged access to the work site, and drew a random sample of workers at the work site. Thus, the sample included only farmworkers actively employed in crop agriculture at the time of the interview.

### *Stratification*

#### **Interviewing Cycles**

To account for the seasonality of the industry, interviews were conducted 3 times each year, in cycles lasting 10 to 12 weeks. The cycles started in February, June and October. The number of interviews conducted in each cycle was proportional to the number of agricultural field workers employed at that time of the year. The USDA's National Agricultural Statistics Service (NASS) provided the Employment and Training Administration (ETA) with the agricultural employment figures for workers hired by agricultural producers, which came from the USDA's FLS. Figures for workers employed by farm labor contractors were obtained from the BLS QCEW. In FYs 2015 and 2016, the NAWS visited a total of 168 interviewing locations. The locations were similarly apportioned among the cycles using NASS data.

#### **Regions**

Regional stratification entailed defining 12 distinct agricultural regions based on the USDA's 17 agricultural regions. At the start of the survey in 1988, the 17 regions were collapsed into 12 by combining those regions that were most similar based on statistical analysis of cropping

patterns (e.g., Mountain I and Mountain II). In each cycle, all 12 agricultural regions were included in the sample. The number of interviews per region was proportional to the size of the seasonal farm labor force in that region at that time of the year, as determined by the NASS and BLS using information obtained from the FLS and QCEW.

### *Sampling within Strata*

#### **Farm Labor Areas**

Each region was composed of several single- or multi-county sampling units called FLAs. There are 497 FLAs that form a universe from which sampling locations were selected. These FLAs are aggregates of counties that have similar farm labor usage and are roughly similar in size. FLA size is more homogeneous within region than across regions.

The FLA size measure is an estimate of the amount of farm labor in the FLA during a particular cycle. In this case, the measure was based on the hired and contract labor expenses from the most recent CoA available at the time the sample was drawn. The CoA labor expenses were adjusted using seasonality estimates that identified the percentage of labor expenses that fell into each of the NAWS cycles, fall, spring and summer. The seasonality estimates were based on monthly data from the QCEW, and were constructed by aggregating the reported monthly employment for each month included in the corresponding NAWS cycle (e.g., June, July, August, and September for the summer cycle). The percentage of employment corresponding to each cycle became a FLA's seasonality estimate.

FLAs were selected in two stages. In the first stage, a roster of approximately 15 FLAs per cycle and region stratum was selected. In the second stage, all the FLAs on each stratum roster were assigned a random number and sorted in the order of the random numbers assigned.

#### **Counties**

To select counties, an iterative sampling procedure was used to ensure that an adequate number of counties was selected for each region. In most cases, interviews were completed in the first county and no additional counties were needed. However, because there was tremendous uncertainty about the number of workers in a county, additional counties were occasionally needed to complete the county allocation. Counties were selected one at a time, without replacement, using probabilities proportional to the size of each county's farm labor expenditures. Interviews began in the first selected county. If the work force within the county was depleted before all the allocated interviews in the FLA were completed, interviewing moved to the second randomly selected county on the list, and so forth, until all the allocated interviews were completed. In FLAs where farm work was sparse, interviewers may have had to travel to several counties to encounter sufficient workers to complete the FLA allocation.

#### **ZIP Code Regions**

Prior to generating lists of employers, sampled counties were divided into ZIP Code regions, which were smaller areas based on geographic proximity and the number of employers in the area. Some counties were comprised of a single ZIP Code region (for example, in the case of a small county) or multiple ZIP Code regions (for example, when a county is large). In a county with multiple ZIP Code regions, the regions were designed to be roughly equal in size.

When there were multiple ZIP Code regions in a county, the regions were randomly sorted to produce a list that determined the order in which the areas would be visited. Field staff contacted agricultural employers in the first ZIP Code region on the list and moved down the list, following the random order, until the interview allocation for the FLA was filled or the county's workforce was exhausted.

### **Employers**

Within each selected ZIP Code region, interviewers received a list of randomly sorted agricultural employers. The list was compiled from marketing and administrative lists of employers in crop agriculture. An important component of the list was employer names in selected North American Industrial Classification Codes that the BLS provided directly to the contractor per the terms of an interagency agreement between the ETA and the BLS.

### **Workers**

Once the randomly selected employer was located, the NAWS interviewer explained the purpose of the survey and obtained access to the work site to schedule interviews. If the employer was not familiar with his/her work force, the interviewer sought the name of the packinghouse manager, personnel manager, farm labor contractor, or crew leader who could help construct a sampling frame of the workers in the operation. Interviewers documented the number of workers employed on the day of worker selection in order to construct worker selection probabilities.

When the number of workers available for interview was greater than the number of interviews allocated, the selection of workers for interview followed specific sampling instructions designed by a sampling statistician to ensure selection of a random sample of workers at each selected employer. Only workers who were employed in agriculture at the time of the interview were included in the sample. Selected workers were usually interviewed at the worksite, either before or after work or during breaks. Respondents may have also been interviewed at another location if that was more convenient for them. Respondents received a \$20 honorarium for participating in the survey.

### **Weighting**

The NAWS used a variety of weighting factors to construct weights for calculating unbiased population estimates:

- Sampling weights were calculated based on each sample member's probability of selection at the FLA, county, ZIP Code region, employer and worker level.
- Non-response factors were used to correct sampling weights for deviations from the sampling plan, such as discrepancies in the number of interviews planned and collected in specific locations.
- Post-sampling adjustment factors were used to adjust the weights given to each interview in order to compute unbiased population estimates from the sample data.

A full explanation of how the weights were calculated can be found in the *Statistical Methods of the National Agricultural Workers Survey* available at the U.S. Department of Labor, Employment and Training Administration's National Agricultural Workers Survey website (<https://www.doleta.gov/agworker/naws.cfm>).

### Reliability of Estimates

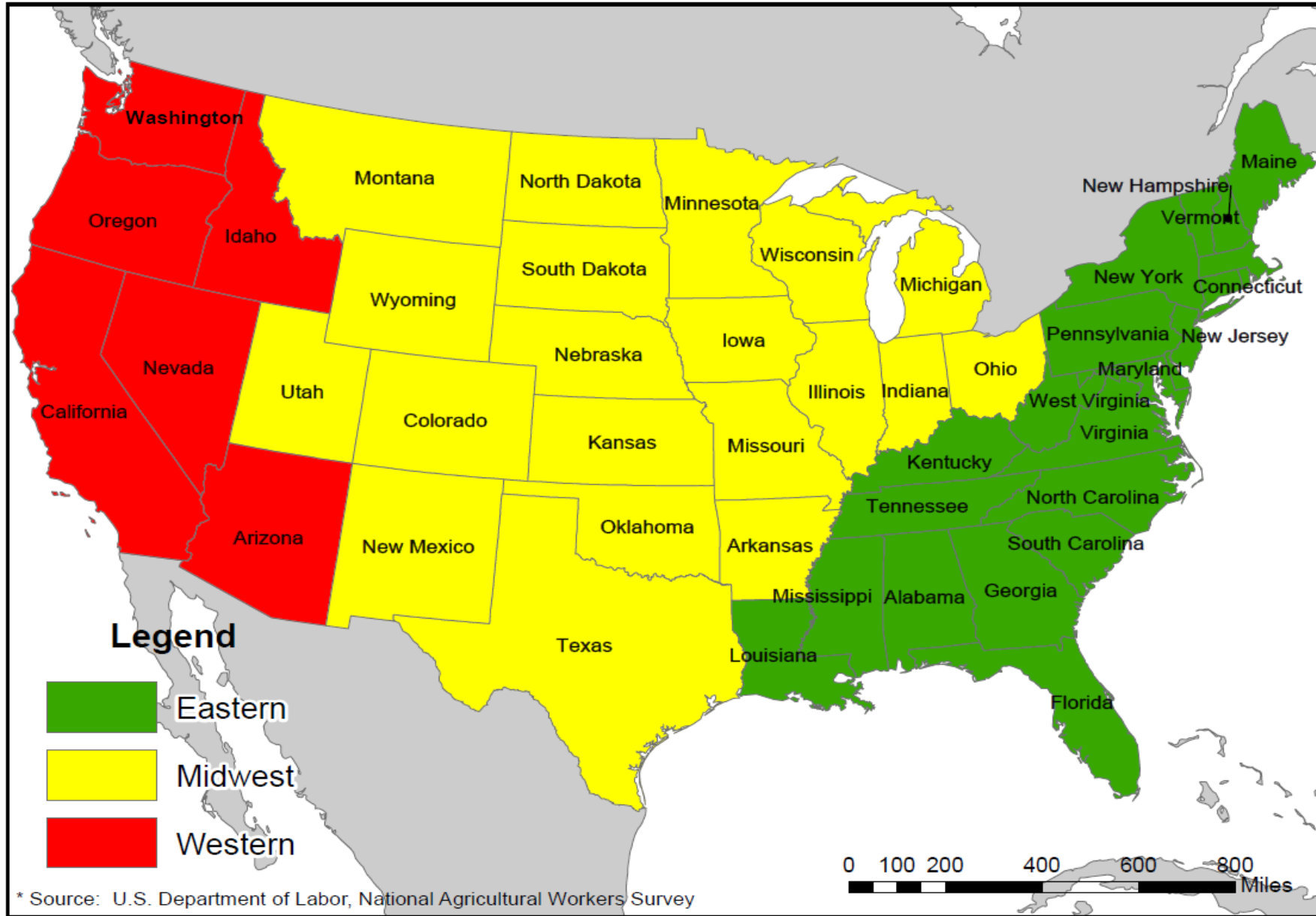
One measure of sampling error is the relative standard error (RSE), a measure of relative dispersion of the data. The RSE is calculated by dividing the standard error of the estimate (mean or percentage) by the estimate itself and reporting the result as a percentage. The higher the RSE, the less well the estimate represents individual items in the sample.<sup>37</sup>

For the purpose of reporting data, the NAWS has adopted the following data suppression rules:

- Estimates with RSEs greater than 30 percent but no more than 50 percent are published but should be used with caution.
- Estimates with RSEs greater than 50 percent are considered statistically unreliable and are suppressed.

<sup>37</sup> Sommer, J. E., Green, R., and Korb, P (1998). *Structural and Financial Characteristics of U.S. Farms, 1995: 20<sup>th</sup> Annual Family Farm Report to Congress* ([https://www.ers.usda.gov/webdocs/publications/42178/32556\\_aib746\\_002.pdf?v=42487](https://www.ers.usda.gov/webdocs/publications/42178/32556_aib746_002.pdf?v=42487)). Agriculture Information Bulletin No. (AIB-746), 118 pp, December 1998 (p. 62).

### APPENDIX B: Map of the NAWS Migrant Streams





## APPENDIX C: Index of Percentages and Means for Key Variables

The following tables list the names, descriptions, and categories of the key variables analyzed for this report, as well as the estimates (percentages or means) reported and the 95% confidence limits, standard errors, and relative standard errors (RSEs) of the estimates. Estimates with RSEs higher than 30 percent are identified throughout the tables. The RSE is calculated by dividing the standard error of the estimate by the estimate itself. Estimates with RSEs greater than 30 percent but no more than 50 percent are published but should be used with caution; these are identified with a superscript ‘a’. Estimates based on fewer than 4 observations or with RSEs greater than 50 percent are considered statistically unreliable and are suppressed from the tables. Suppressed statistics are indicated with a superscript ‘b’.

### Chapter 1

Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
A07	Country of birth	US or Puerto Rico	1,239	25%	1.8%	21%	28%	7%
A07	Country of birth	Mexico	3,809	69%	1.8%	65%	72%	3%
A07	Country of birth	Central America	238	6%	0.8%	5%	8%	13%
A07	Country of birth	Other (South America, Caribbean, South East Asia, Pacific Islands, Asia)	56	1%	0.1%	<1%	1%	21%
HISP	Hispanic	Hispanic	4,447	83%	1.6%	80%	87%	2%
B01	Hispanic category	Mexican-American	464	9%	1.0%	8%	11%	10%
B01	Hispanic category	Mexican	3,581	65%	1.8%	61%	68%	3%
B01	Hispanic category	Chicano, Puerto Rican, or other Hispanic	402	9%	0.9%	7%	11%	10%
B01	Hispanic category	Not Hispanic or Latino	866	17%	1.6%	13%	20%	9%
B02	Race	White	1,337	24%	1.6%	20%	27%	7%
B02	Race	Black/African American	142	3% <sup>a</sup>	1.0%	1%	5%	34%
B02	Race	American Indian/Alaska Native	45	1%	0.2%	<1%	1%	29%
B02	Race	Other	3,794	73%	1.8%	69%	77%	3%
INDIGENOUS	Farmworker is indigenous	Farmworker is indigenous	388	6%	0.9%	5%	8%	14%
USSTAY	Years in US	Average	4,097	18	0.5	17	19	3%
USSTAY	Years in US	Less than 1 year (newcomer)	35	3% <sup>a</sup>	1.3%	1%	6%	38%
USSTAY	Years in US	1-4 years	217	6%	0.7%	4%	7%	11%
USSTAY	Years in US	5-9 years	454	13%	1.2%	11%	15%	9%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
USSTAY	Years in US	10-14 years	783	20%	1.5%	17%	23%	7%
USSTAY	Years in US	15-19 years	760	20%	2.2%	16%	24%	11%
USSTAY	Years in US	20-29 years	930	19%	1.1%	17%	21%	6%
USSTAY	Years in US	30-39 years	645	13%	1.0%	11%	15%	8%
USSTAY	Years in US	40+ years	273	6%	0.7%	5%	7%	12%
B18 (by A07)	State of birth (by country of birth)	Guanajuato (among country of birth is Mexico)	593	15%	1.2%	13%	17%	8%
B18 (by A07)	State of birth (by country of birth)	Guerrero (among country of birth is Mexico)	230	7%	1.0%	5%	8%	15%
B18 (by A07)	State of birth (by country of birth)	Jalisco (among country of birth is Mexico)	360	10%	1.5%	7%	13%	15%
B18 (by A07)	State of birth (by country of birth)	Michoacan (among country of birth is Mexico)	705	20%	1.5%	17%	23%	7%
B18 (by A07)	State of birth (by country of birth)	Oaxaca (among country of birth is Mexico)	376	7%	0.9%	6%	9%	12%
CURRSTAT	Current status	Citizen	1,554	29%	1.9%	26%	33%	6%
CURRSTAT	Current status	Legal permanent resident	1,085	21%	1.7%	18%	24%	8%
CURRSTAT	Current status	Other work authorized	50	1%	0.1%	<1%	1%	19%
CURRSTAT	Current status	Unauthorized	2,601	49%	1.9%	46%	53%	4%
MIGRANT	Migrant	Migrant	786	19%	1.9%	15%	23%	10%

Chapter 2

Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
GENDER	Gender	Male	4,206	68%	2.9%	62%	73%	4%
GENDER	Gender	Female	1,136	32%	2.9%	27%	38%	9%
AGE	Age	Average	5,338	38	0.5	37	39	1%
AGE	Age	14-19	205	7%	0.9%	5%	9%	13%
AGE	Age	20-24	498	11%	1.1%	9%	14%	10%
AGE	Age	25-34	1,358	26%	1.3%	23%	29%	5%
AGE	Age	35-44	1,276	23%	1.2%	20%	25%	5%
AGE	Age	45-54	1,104	19%	1.6%	16%	22%	9%
AGE	Age	55-64	693	11%	0.8%	9%	12%	7%
AGE	Age	65 and over	204	4%	0.6%	2%	5%	17%
MARRIED, FWPARENT	Farmworker is married, Farmworker is a parent	Married, parent	2,364	41%	1.6%	38%	44%	4%
MARRIED, FWPARENT	Farmworker is married, Farmworker is a parent	Married, no children	929	15%	1.1%	13%	17%	7%
MARRIED, FWPARENT	Farmworker is married, Farmworker is a parent	Unmarried, parent	558	13%	1.3%	11%	16%	10%
MARRIED, FWPARENT	Farmworker is married, Farmworker is a parent	Unmarried, no children	1,478	30%	1.5%	27%	33%	5%
HKIDLT18 (by FWPARENT)	Number of children under age 18 in the household (by farmworker is a parent)	Average (among farmworker parents)	2,232	2	0.04	2	2	2%
HKIDLT18 (by FWPARENT)	Number of children under age 18 in the household (by farmworker is a parent)	1 child (among farmworker parents)	732	29%	1.7%	25%	32%	6%
HKIDLT18 (by FWPARENT)	Number of children under age 18 in the household (by farmworker is a parent)	2 children (among farmworker parents)	793	38%	1.9%	35%	42%	5%
HKIDLT18 (by FWPARENT)	Number of children under age 18 in the household (by farmworker is a parent)	3 children (among farmworker parents)	476	23%	2.0%	19%	27%	9%
HKIDLT18 (by FWPARENT)	Number of children under age 18 in the household (by farmworker is a parent)	4 children (among farmworker parents)	177	7%	0.9%	6%	9%	13%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
HKIDLT18 (by FWPARENT)	Number of children under age 18 in the household (by farmworker is a parent)	5 or more children (among farmworker parents)	54	2%	0.4%	1%	3%	19%
ACCOMP	Nuclear family lives in household	Unaccompanied	2,038	40%	1.8%	37%	44%	5%
ACCOMP	Nuclear family lives in household	Accompanied	3,304	60%	1.8%	56%	63%	3%

Chapter 3

Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
PRIMLANG	Adult primary language	English	1,111	21%	1.7%	18%	25%	8%
PRIMLANG	Adult primary language	Spanish	4,094	77%	1.8%	74%	81%	2%
PRIMLANG	Adult primary language	Indigenous	109	1%	0.3%	1%	2%	20%
HIGHGRDE	Highest grade completed	Average	5,342	8	0.1	8	9	2%
HIGHGRDE	Highest grade completed	No schooling	207	4%	0.7%	3%	5%	16%
HIGHGRDE	Highest grade completed	K-6 <sup>th</sup> grade	2,152	37%	1.6%	33%	40%	4%
HIGHGRDE	Highest grade completed	7 <sup>th</sup> -9 <sup>th</sup> grade	1,042	19%	1.2%	17%	22%	6%
HIGHGRDE	Highest grade completed	10 <sup>th</sup> -12 <sup>th</sup> grade	1,421	30%	1.2%	28%	32%	4%
HIGHGRDE	Highest grade completed	13 grades or more	520	10%	1.0%	8%	12%	10%
ADULTED	Attended any adult education	No	3,356	65%	1.6%	62%	69%	2%
ADULTED	Attended any adult education	Yes	1,986	35%	1.6%	31%	38%	5%
B03a	Attended English/ESL	Yes	754	12%	0.9%	10%	14%	8%
B03b	Attended citizenship classes	Yes	138	2%	0.5%	1%	3%	21%
B03d	Attended job training	Yes	823	14%	1.5%	11%	17%	11%
B03e	Attended GED, high school equivalency	Yes	174	3%	0.5%	2%	4%	14%
B03f	Attended college/university	Yes	329	7%	1.0%	5%	9%	15%
B03j	Attended 'other'	Yes	134	2%	0.3%	1%	2%	16%
B07	Ability to speak English	Not at all	1,440	30%	1.9%	26%	33%	6%
B07	Ability to speak English	A little	1,841	32%	1.5%	29%	35%	5%
B07	Ability to speak English	Somewhat	597	9%	0.8%	8%	11%	9%
B07	Ability to speak English	Well	1,436	29%	1.9%	25%	33%	6%
B08	Ability to read English	Not at all	2,084	41%	2.1%	37%	45%	5%
B08	Ability to read English	A little	1,434	24%	1.3%	21%	26%	5%
B08	Ability to read English	Somewhat	407	7%	0.7%	5%	8%	10%
B08	Ability to read English	Well	1,383	28%	1.8%	25%	32%	6%

Chapter 4

Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
D35	Location of housing while at current farm job	Off farm, in property not owned by current employer	4,206	84%	1.3%	82%	87%	2%
D35	Location of housing while at current farm job	Off farm, in property owned by current employer	166	4%	0.8%	2%	5%	23%
D35	Location of housing while at current farm job	On farm of employer I currently work for	930	12%	1.0%	10%	14%	9%
D33a	Payment arrangement for living quarters	EMPLOYER-PROVIDED: I pay for housing provided by my employer	170	2%	0.4%	1%	3%	18%
D33a	Payment arrangement for living quarters	EMPLOYER-PROVIDED: I receive free housing from my employer	785	11%	1.1%	8%	13%	10%
D33a	Payment arrangement for living quarters	EMPLOYER-PROVIDED: Other arrangement	187	4%	0.8%	2%	5%	21%
D33a	Payment arrangement for living quarters	I pay for housing provided by govt, charity, other organization	49	1%	0.2%	<1%	1%	24%
D33a	Payment arrangement for living quarters	I (or family member) own the house	1,396	28%	1.7%	25%	32%	6%
D33a	Payment arrangement for living quarters	I rent from non-employer/non-relative	2,725	54%	1.8%	50%	57%	3%
D33a	Payment arrangement for living quarters	Other	23	1% <sup>a</sup>	0.2%	<1%	1%	30%
D50MTCOD	How much paid for housing per month (coded)	Under \$200	260	9%	1.1%	7%	11%	12%
D50MTCOD	How much paid for housing per month (coded)	\$200-299	422	18%	2.2%	13%	22%	12%
D50MTCOD	How much paid for housing per month (coded)	\$300-399	434	14%	1.2%	12%	16%	8%
D50MTCOD	How much paid for housing per month (coded)	\$400-499	341	13%	2.0%	9%	16%	16%
D50MTCOD	How much paid for housing per month (coded)	\$500-599	382	11%	1.4%	8%	14%	13%
D50MTCOD	How much paid for housing per month (coded)	\$600 or more	1,116	35%	2.2%	31%	40%	6%
D34a	Type of housing	Single-family home	2,930	57%	1.8%	53%	60%	3%
D34a	Type of housing	Mobile home	1,177	20%	1.4%	17%	22%	7%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
D34a	Type of housing	Apartment	963	20%	1.4%	17%	22%	7%
D34a	Type of housing	Other (includes duplex or triplex, dormitory or barracks, motel or hotel, and 'other')	265	4%	0.6%	3%	5%	14%
D54a	Number of bedrooms in current living quarters	Average	5,334	3	0.04	3	3	2%
D54b	Number of bathrooms in current living quarters	Average	5,328	1	0.02	1	2	1%
D54c	Number of kitchens in current living quarters	Average	5,331	1	0.01	1	1	1%
D54f	Number of other rooms in current living quarters	Average	5,318	1	0.05	1	1	6%
CROWDED1	Household is crowded, based on US Census Bureau definition of a crowded household as one in which the number of persons per room exceeds one	Crowded	1,687	33%	1.6%	30%	36%	5%
D37a	Distance of current farm job from current residence	I'm located at the job	878	11%	1.0%	9%	13%	9%
D37a	Distance of current farm job from current residence	Within 9 miles	1,723	31%	1.8%	28%	35%	6%
D37a	Distance of current farm job from current residence	10-24 miles	1,980	39%	1.9%	35%	43%	5%
D37a	Distance of current farm job from current residence	25-49 miles	661	16%	1.7%	13%	20%	11%
D37a	Distance of current farm job from current residence	50+ miles	93	3% <sup>a</sup>	1.2%	0%	5%	47%
D37	Mode of transportation to work	Drive car	3,305	58%	2.1%	54%	62%	4%
D37	Mode of transportation to work	Walk	543	7%	0.7%	5%	8%	10%
D37	Mode of transportation to work	Ride with others	565	13%	1.4%	10%	16%	11%
D37	Mode of transportation to work	Labor bus, truck, van	204	6% <sup>a</sup>	1.8%	2%	9%	33%
D37	Mode of transportation to work	Raitero	617	15%	1.6%	12%	18%	10%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
D37	Mode of transportation to work	Public transportation, other	71	1%	0.2%	1%	2%	20%
D38a	Transport is mandatory	Yes	69	7%	1.7%	3%	10%	25%
D38	Pay a fee for rides to work	No	437	32%	4.0%	25%	40%	12%
D38	Pay a fee for rides to work	Yes, a fee	383	28%	3.6%	21%	35%	13%
D38	Pay a fee for rides to work	Yes, just for gas	576	39%	3.9%	32%	47%	10%



Chapter 5

Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
FLC	Employer is a farm labor contractor	Employer: Grower, nursery, packing house	4,680	80%	3.1%	74%	86%	4%
FLC	Employer is a farm labor contractor	Employer: Farm labor contractor	662	20%	3.1%	14%	26%	15%
D30	How current job was obtained	Applied for the job on my own	1,226	24%	2.3%	20%	29%	9%
D30	How current job was obtained	Recruited by a grower/his foreman	286	4%	0.5%	3%	5%	12%
D30	How current job was obtained	Recruited by farm labor contractor/his foreman	79	1%	0.3%	1%	2%	23%
D30	How current job was obtained	Referred by the employment service, welfare office, labor union, other means	116	2%	0.3%	1%	3%	16%
D30	How current job was obtained	Referred by relative/friend/workmate	3,629	69%	2.1%	65%	73%	3%
CROP	Primary crop at time of interview	Field crops	654	10%	1.3%	7%	12%	14%
CROP	Primary crop at time of interview	Fruits and nuts	1,996	32%	2.9%	26%	38%	9%
CROP	Primary crop at time of interview	Horticulture	1,067	19%	2.1%	15%	23%	11%
CROP	Primary crop at time of interview	Vegetables	1,418	37%	3.3%	30%	43%	9%
CROP	Primary crop at time of interview	Miscellaneous crops	207	3%	0.5%	2%	4%	20%
TASK	Primary task at time of interview	Pre-harvest	1,635	30%	2.1%	25%	34%	7%
TASK	Primary task at time of interview	Harvest	930	17%	1.8%	13%	20%	11%
TASK	Primary task at time of interview	Post-harvest	819	25%	3.3%	18%	31%	13%
TASK	Primary task at time of interview	Semi-skilled	1,952	29%	2.4%	24%	33%	8%
D04	Number of hours worked the previous week at current farm job	Average	5,196	45	0.6	43	46	1%
D11	Basis of pay	By the hour	4,699	88%	1.7%	84%	91%	2%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
D11	Basis of pay	By the piece	268	7%	1.6%	4%	10%	23%
D11	Basis of pay	Combination hourly wage and piece rate	56	1%	0.3%	<1%	2%	29%
D11	Basis of pay	Salary or other	309	4%	0.6%	3%	6%	13%
WAGET1	Hourly wage for primary task	Average	5,215	\$10.60	\$0.13	\$10.35	\$10.86	1%
D20	In last 12 months, received money bonus from current employer	No	2,867	63%	2.0%	59%	67%	3%
D20	In last 12 months, received money bonus from current employer	Yes	2,258	27%	1.7%	24%	31%	6%
D20	In last 12 months, received money bonus from current employer	Don't know	212	10%	1.8%	7%	14%	18%
D21a	Holiday bonus	Yes	1,184	54%	2.5%	49%	59%	5%
D21b	Incentive bonus	Yes	238	12%	1.7%	9%	15%	15%
D21c	Dependent on grower profit	Yes	95	4%	0.9%	2%	6%	22%
D21d	End of season bonus	Yes	686	30%	2.3%	25%	34%	8%
D21f	Other bonus	Yes	33	1%	0.3%	1%	2%	22%
NS01	Employer provides clean drinking water and disposable cups every day	No water, no cups	322	6%	1.2%	3%	8%	21%
NS01	Employer provides clean drinking water and disposable cups every day	Yes, water only	297	5%	0.7%	4%	6%	14%
NS01	Employer provides clean drinking water and disposable cups every day	Yes, water and disposable cups	4,713	89%	1.4%	87%	92%	2%
NS04	Employer provides a toilet every day	Yes	5,163	97%	0.8%	95%	99%	1%
NS09	Employer provides water to wash hands every day	Yes	5,181	97%	0.8%	96%	99%	1%
NT02a	Current employer provided training in safe use of pesticides in last 12 months	Yes	3,575	57%	2.8%	51%	63%	5%
D26	Covered by Unemployment Insurance	No	2,817	52%	2.0%	48%	56%	4%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
D26	Covered by Unemployment Insurance	Yes	2,384	43%	1.8%	40%	47%	4%
D26	Covered by Unemployment Insurance	Don't know	128	5%	1.2%	3%	7%	23%
D23	Receive workers' compensation if injured at work or get sick as a result of work	No	773	16%	1.9%	12%	20%	12%
D23	Receive workers' compensation if injured at work or get sick as a result of work	Yes	3,541	62%	2.1%	58%	66%	3%
D23	Receive workers' compensation if injured at work or get sick as a result of work	Don't know	1,022	22%	1.6%	19%	26%	7%
D24	Employer provides health insurance or pays for health care for injuries or illness while off the job	No	3,930	71%	2.0%	67%	75%	3%
D24	Employer provides health insurance or pays for health care for injuries or illness while off the job	Yes	960	18%	1.6%	15%	21%	9%
D24	Employer provides health insurance or pays for health care for injuries or illness while off the job	Don't know	442	11%	1.4%	8%	13%	13%

Chapter 6

Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
NUMFEMPL	Number of farm employers in previous 12 months	Average	5,342	1	0.03	1	1	3%
NUMFEMPL	Number of farm employers in previous 12 months	1 employer	4,265	80%	1.6%	77%	83%	2%
NUMFEMPL	Number of farm employers in previous 12 months	2 employers	689	13%	1.0%	11%	15%	7%
NUMFEMPL	Number of farm employers in previous 12 months	3 or more employers	388	7%	0.9%	5%	9%	12%
D27	Number of years with current employer	Average	5,308	7	0.3	6	7	5%
D27	Number of years with current employer	1 year or less	817	26%	2.0%	22%	30%	8%
D27	Number of years with current employer	2-4 years	1,770	32%	1.4%	30%	35%	4%
D27	Number of years with current employer	5-10 years	1,319	22%	1.4%	19%	25%	6%
D27	Number of years with current employer	11-20 years	912	14%	1.2%	11%	16%	9%
D27	Number of years with current employer	21 or more years	490	6%	0.6%	5%	7%	9%
FWWEEKS	Number of weeks of farm work the previous year	Average	5,342	33	1.0	31	35	3%
C10	Number of work days per week	Average	5,339	5	0.1	5	5	1%
FWRDAYS	Number of farm work days the previous year	Average	5,341	196	6.0	185	208	3%
NUMYRSFW (by NEWFWKR)	Number of years since first did farm work (by new farmworker: less than 1 year, 1 year, more than 1 year)	Average (among one or more years of farm work)	5,126	16	0.4	16	17	3%
NUMYRSFW (by NEWFWKR)	Number of years since first did farm work (by new farmworker: less than 1 year, 1 year, more than 1 year)	1 year (among one or more years of farm work)	232	5%	0.6%	4%	7%	11%
NUMYRSFW (by NEWFWKR)	Number of years since first did farm work (by new farmworker: less than 1 year, 1 year, more than 1 year)	2-4 years (among one or more years of farm work)	506	13%	1.0%	11%	15%	8%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
	farmworker: less than 1 year, 1 year, more than 1 year)							
NUMYRSFW (by NEWFWKR)	Number of years since first did farm work (by new farmworker: less than 1 year, 1 year, more than 1 year)	5-10 years (among one or more years of farm work)	1,029	24%	1.5%	21%	27%	6%
NUMYRSFW (by NEWFWKR)	Number of years since first did farm work (by new farmworker: less than 1 year, 1 year, more than 1 year)	11-20 years (among one or more years of farm work)	1,489	26%	1.3%	23%	28%	5%
NUMYRSFW (by NEWFWKR)	Number of years since first did farm work (by new farmworker: less than 1 year, 1 year, more than 1 year)	21-30 years (among one or more years of farm work)	918	16%	1.2%	14%	18%	8%
NUMYRSFW (by NEWFWKR)	Number of years since first did farm work (by new farmworker: less than 1 year, 1 year, more than 1 year)	31 or more years (among one or more years of farm work)	952	16%	1.0%	14%	18%	6%
B12	Number of years of non-crop work in the US	None	2,629	55%	1.8%	51%	58%	3%
B12	Number of years of non-crop work in the US	1 year	545	9%	0.8%	7%	11%	9%
B12	Number of years of non-crop work in the US	2-10 years	1,314	26%	1.3%	24%	29%	5%
B12	Number of years of non-crop work in the US	11 or more years	503	10%	1.0%	8%	12%	10%
B12	Number of years of non-crop work in the US	Average, among those with at least 1 year on non-crop work in the US	2,362	8	0.5	7	9	7%
B13	Last time parents did hired farm work in the US	Never	2,724	54%	1.6%	51%	57%	3%
B13	Last time parents did hired farm work in the US	Now/within the last year	651	15%	1.0%	13%	17%	7%
B13	Last time parents did hired farm work in the US	1-5 years ago	187	3%	0.4%	2%	4%	13%
B13	Last time parents did hired farm work in the US	6-10 years ago	254	4%	0.5%	3%	5%	13%
B13	Last time parents did hired farm work in the US	11 or more years ago	1,420	23%	1.4%	21%	26%	6%

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<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
B13	Last time parents did hired farm work in the US	Don't know	38	1% <sup>a</sup>	0.3%	<1%	2%	33%
E02	How long expect to continue doing farm work	Less than one year	136	4%	0.7%	3%	5%	16%
E02	How long expect to continue doing farm work	1-3 years	593	12%	1.0%	10%	14%	8%
E02	How long expect to continue doing farm work	4-5 years	213	4%	0.5%	3%	5%	13%
E02	How long expect to continue doing farm work	Over 5 years	135	2%	0.4%	1%	3%	19%
E02	How long expect to continue doing farm work	Over 5 years/as long as I am able	4,111	74%	1.6%	71%	77%	2%
E02	How long expect to continue doing farm work	Other	139	3%	0.7%	2%	5%	21%

Chapter 7

Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
NWEEKS	Number of weeks living in the US but not working the previous year	Average	5,342	11	0.8	9	13	8%
ABWEEKS	Number of weeks abroad the previous year	Average	5,342	3	0.5	2	4	19%
NFWEEKS	Number of weeks of non-crop work the previous year	NFWEEKS>0	1,197	24%	1.4%	21%	26%	6%
NFWEEKS	Number of weeks of non-crop work the previous year	Average, among those with NFWEEKS>0	1,197	25	1.2	23	28	5%
NUMNFJOBS	Number of non-crop jobs the previous year	Average, among those with NFWEEKS>0	1,197	2	0.1	1	2	4%
HasNFLeave (by NFWEEKS)	Left at least one non-crop employer in the previous year (by number of weeks of non-crop work the previous year)	Left at least one non-crop employer in the previous year (among NFWEEKS>0)	547	56%	3.4%	50%	63%	6%
NFleaves (by HasNFLeave)	Type of leave from non-crop work (by left at least one non-crop employer in the previous year)	All leaves from non-crop work were involuntary (among left at least one non-crop employer in the previous year)	177	33%	4.1%	25%	41%	12%
NFleaves (by HasNFLeave)	Type of leave from non-crop work (by left at least one non-crop employer in the previous year)	All leaves from non-crop work were voluntary (among left at least one non-crop employer in the previous year)	347	58%	4.9%	48%	67%	8%
NFleaves (by HasNFLeave)	Type of leave from non-crop work (by left at least one non-crop employer in the previous year)	Both voluntary and involuntary leaves from non-crop work (among left at least one non-crop employer in the previous year)	23	b	b	b	b	55%
HadNW	Had at least one period of not working in previous year	Yes	3,376	69%	1.6%	66%	72%	2%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
WeeksNotWorking	Number of weeks not working in previous year	Average, among those who had at least one period of not working in previous year	3,376	20	1.1	17	22	6%
RecvdUI	Received unemployment during at least one period of not working	Yes (among those who had at least one period of not working in previous year)	540	15%	1.7%	12%	19%	11%

**Chapter 8**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
G01	Total personal income the previous year	Average	4,927	10 (\$17,500 to \$19,999)	0.1	10 (\$17,500 to \$19,999)	10 (\$17,500 to \$19,999)	1%
G01	Total personal income the previous year	Median	4,927	10 (\$17,500 to \$19,999)	0.2	10 (\$17,500 to \$19,999)	10 (\$17,500 to \$19,999)	2%
G01	Total personal income the previous year	Did not work at all the previous year	172	9%	1.5%	6%	12%	16%
G01	Total personal income the previous year	Less than \$10,000	445	14%	1.3%	12%	17%	9%
G01	Total personal income the previous year	\$10,000-\$19,999	1,586	29%	1.6%	25%	32%	6%
G01	Total personal income the previous year	\$20,000-\$29,999	1,906	29%	1.5%	26%	32%	5%
G01	Total personal income the previous year	\$30,000 or more	990	14%	1.0%	13%	16%	7%
G01	Total personal income the previous year	Don't remember (don't know)	206	5%	0.8%	3%	6%	19%
G03	Family's total income the previous year	Average	4,911	11 (\$20,000 to \$24,999)	0.1	11 (\$20,000 to \$24,999)	11 (\$20,000 to \$24,999)	1%
G03	Family's total income the previous year	Median	4,911	11 (\$20,000 to \$24,999)	0.1	11 (\$20,000 to \$24,999)	11 (\$20,000 to \$24,999)	1%
G03	Family's total income the previous year	Did not work at all the previous year	128	6%	1.1%	4%	8%	19%
G03	Family's total income the previous year	Less than \$10,000	275	8%	0.9%	6%	10%	11%
G03	Family's total income the previous year	\$10,000-\$19,999	1,082	19%	1.3%	17%	22%	7%



**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
G03	Family's total income the previous year	\$20,000-\$29,999	1,577	27%	1.4%	25%	30%	5%
G03	Family's total income the previous year	\$30,000 or more	1,977	32%	1.6%	28%	35%	5%
G03	Family's total income the previous year	Don't remember (don't know)	269	8%	1.8%	4%	11%	24%
FAMPOV	Family income below the poverty level	Below poverty level	1,242	33%	1.9%	29%	37%	6%
ASSETUS	Assets in US	Any US asset	3,885	68%	2.1%	64%	72%	3%
G06a	Type of US asset	Plot of land	137	2%	0.4%	1%	3%	18%
G06b	Type of US asset	House	1,001	18%	1.5%	15%	21%	8%
G06c	Type of US asset	Mobile home	382	6%	0.7%	5%	7%	11%
G06d	Type of US asset	Car or truck	3,645	63%	1.7%	60%	67%	3%
G04c	Type of contribution-based program household member utilized in the last 2 years	Disability insurance	81	1%	0.3%	1%	2%	21%
G04d	Type of contribution-based program household member utilized in the last 2 years	Unemployment Insurance	561	10%	1.3%	8%	13%	12%
G04e	Type of contribution-based program household member utilized in the last 2 years	Social Security	113	3%	0.6%	2%	4%	20%
G04b	Type of need-based program household member utilized in the last 2 years	Supplemental Nutrition Assistance Program	837	18%	1.4%	15%	21%	8%
G04i	Type of need-based program household member utilized in the last 2 years	Public health clinics	541	10%	1.5%	7%	13%	15%
G04j	Type of need-based program household member utilized in the last 2 years	Medicaid	2,262	44%	1.9%	41%	48%	4%
G04k	Type of need-based program household member utilized in the last 2 years	WIC	824	17%	1.3%	14%	19%	7%

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Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
A21a	Farmworker has health insurance	Yes	2,373	47%	2.0%	43%	51%	4%
A23a1	Who pays for farmworker's health insurance	Farmworker	268	10%	1.3%	8%	13%	12%
A23a2	Who pays for farmworker's health insurance	Farmworker's spouse	45	1%	0.2%	1%	2%	18%
A23a3	Who pays for farmworker's health insurance	Farmworker's employer	730	29%	2.9%	23%	34%	10%
A23a4	Who pays for farmworker's health insurance	Farmworker's spouse's employer	183	6%	1.2%	4%	9%	19%
A23a5	Who pays for farmworker's health insurance	Government	871	43%	3.3%	37%	50%	8%
A23a6	Who pays for farmworker's health insurance	Other	198	7%	0.9%	5%	8%	13%
A23a7	Who pays for farmworker's health insurance	Farmworker's parents'/family's plan	145	6%	1.1%	4%	9%	18%
A21b	Spouse has health insurance	Yes	1,728	56%	2.2%	52%	61%	4%
A23b1	Who pays for spouse's insurance	Farmworker	113	4%	0.6%	3%	6%	14%
A23b2	Who pays for spouse's insurance	Farmworker's spouse	76	4%	1.1%	2%	7%	26%
A23b3	Who pays for spouse's insurance	Farmworker's employer	203	14%	2.4%	9%	18%	17%
A23b4	Who pays for spouse's insurance	Farmworker's spouse's employer	369	19%	2.4%	14%	24%	12%
A23b5	Who pays for spouse's insurance	Government	861	54%	2.9%	48%	59%	5%
A23b6	Who pays for spouse's insurance	Other	136	8%	1.1%	6%	10%	14%
A21c2	Children have health insurance	Yes, all have it	2,036	89%	1.5%	87%	92%	2%
A21c2	Children have health insurance	Yes, only some have it	105	3%	0.6%	2%	4%	17%
A23c1	Who pays for children's insurance	Farmworker	49	1%	0.3%	1%	2%	22%
A23c2	Who pays for children's insurance	Farmworker's spouse	24	1% <sup>a</sup>	0.3%	<1%	2%	35%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
A23c3	Who pays for children's insurance	Farmworker's employer	73	5% <sup>a</sup>	1.7%	2%	9%	32%
A23c4	Who pays for children's insurance	Farmworker's spouse's employer	110	5%	0.8%	3%	6%	18%
A23c5	Who pays for children's insurance	Government	1,848	86%	1.9%	83%	90%	2%
A23c6	Who pays for children's insurance	Other	52	2%	0.7%	1%	4%	30%
NQ01	Utilized health care service in last 2 years	Yes	3,322	63%	1.7%	60%	66%	3%
NQ03b	Type of health care provider at last visit	Community health center	1,039	33%	2.1%	29%	37%	6%
NQ03b	Type of health care provider at last visit	Private doctor's office/private clinic	1,378	40%	1.7%	37%	44%	4%
NQ03b	Type of health care provider at last visit	Healer/curandero, ER, chiropractor/naturopath, other	115	3%	0.5%	2%	4%	15%
NQ03b	Type of health care provider at last visit	Hospital	320	11%	1.3%	8%	13%	12%
NQ03b	Type of health care provider at last visit	Migrant health clinic	72	1%	0.3%	1%	2%	21%
NQ03b	Type of health care provider at last visit	Dentist	396	12%	1.3%	9%	14%	11%
NQ05	Who paid majority of cost of last health care visit	Paid the bill out of own pocket	1,209	34%	1.7%	30%	37%	5%
NQ05	Who paid majority of cost of last health care visit	Medicaid/Medicare	534	22%	2.4%	18%	27%	11%
NQ05	Who paid majority of cost of last health care visit	Public clinic/did not charge	319	9%	1.0%	7%	11%	11%
NQ05	Who paid majority of cost of last health care visit	Employer provided health plan	498	13%	1.4%	10%	16%	10%
NQ05	Who paid majority of cost of last health care visit	Self or family bought individual health plan	389	11%	1.3%	9%	14%	12%
NQ05	Who paid majority of cost of last health care visit	Other	247	7%	1.0%	5%	9%	14%
NQ05	Who paid majority of cost of last health care visit	Billed but did not pay, workers' compensation, or combination of sources	134	3%	0.5%	2%	4%	14%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
NQ10a	Main difficulties faced when needing to access health care in the US	No transportation, too far away	44	1%	0.3%	<1%	1%	30%
NQ10b	Main difficulties faced when needing to access health care in the US	Don't know where services are available	26	<1% <sup>a</sup>	0.1%	<1%	1%	36%
NQ10e	Main difficulties faced when needing to access health care in the US	They don't speak my language	64	1%	0.3%	1%	2%	22%
NQ10f	Main difficulties faced when needing to access health care in the US	They don't treat me with respect	11	<1% <sup>a</sup>	0.1%	<1%	<1%	34%
NQ10g	Main difficulties faced when needing to access health care in the US	They don't understand my problems	14	<1% <sup>a</sup>	0.2%	<1%	1%	38%
NQ10h	Main difficulties faced when needing to access health care in the US	I'll lose my job	7	<1% <sup>a</sup>	0.03%	<1%	<1%	44%
NQ10i	Main difficulties faced when needing to access health care in the US	Too expensive/no insurance	1,415	23%	1.4%	21%	26%	6%
MQ10j	Main difficulties faced when needing to access health care in the US	Other	57	1%	0.2%	<1%	1%	29%
NQ10l	Main difficulties faced when needing to access health care in the US	I'm undocumented/no papers (that's why they don't treat me well)	48	<1% <sup>a</sup>	0.4%	<1%	2%	31%
NQ10m	Main difficulties faced when needing to access health care in the US	I don't know, I've never needed it	692	13%	1.3%	10%	16%	10%