

# **The Need for Farmworker Housing in Florida**

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Prepared for Florida Housing Finance Corporation  
227 N. Bronough St., Suite 5000  
Tallahassee, Florida 32301-1329

Prepared by  
Anne Ray  
Shimberg Center for Affordable Housing  
University of Florida  
P. O. Box 115703  
Gainesville, Florida 32611-5703

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# The Need for Farmworker Housing in Florida

## EXECUTIVE SUMMARY

### Farmworker Population and Household Estimates

An estimated 117,981 farmworkers work in crop agriculture in Florida over the course of one year. These include greenhouse and nursery workers as well as field crop workers.<sup>1</sup>

Farmworkers may be migrant or seasonal. The National Agricultural Workers Survey (NAWS) defines a “migrant” as a person traveling more than 75 miles to find farm work. Seasonal workers also perform labor in crop agriculture but do not make this migration. Of the workers, 46 percent, or 54,271, are estimated to be migrant workers, and 54 percent, or 63,710, are estimated to be seasonal workers. This marks a change from the 2001 and 2004 rental market studies, which found that the majority of farmworkers were migrants.

Farmworkers may be classified as accompanied or unaccompanied. Accompanied farmworkers are those living with a spouse, children, or parents, or minor farmworkers living with a sibling. An estimated 13 percent of migrant farmworkers and 53 percent of seasonal farmworkers in Florida are accompanied. The average household size is 3.07 members for accompanied migrant workers and 3.71 members for accompanied seasonal workers. Households may contain more than one farmworker; an average of 1.82 farmworkers live in each household containing accompanied migrant workers and an average of 1.39 farmworkers live in each household containing accompanied seasonal workers. Therefore, Florida has a total of 105,328 farmworker households with 179,185 household members:

	Unaccompanied Worker Households	Accompanied Worker Households	Total Households	Unaccompanied Worker Household Members	Accompanied Worker Household Members	Total Household Members
<b>Migrant</b>	47,216	3,877	51,092	47,216	11,901	59,117
<b>Seasonal</b>	29,944	24,292	54,236	29,944	90,124	120,068
<b>TOTAL</b>	77,159	28,169	105,328	77,159	102,025	179,185

Sources: United States Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2005 and United States Department of Labor, *National Agricultural Workers Survey*, 2003-2006.

This analysis estimates the number of farmworkers and farmworker households by Florida county based on wage data from the Bureau of Labor Statistics. The following 13 counties have the largest farmworker populations: Hillsborough, Miami-Dade, Palm Beach, Collier, Manatee, Orange, Hendry, Volusia, Indian River, Gadsden, Lake, Polk, and De Soto. These counties combined contain 81 percent of the state’s farmworkers.

<sup>1</sup> The farmworker total includes workers in firms classified by the NAICS (North American Industry Classification, formerly SIC) in codes 111, “Crop Production,” and 11511, “Support Activities for Crop Production.” These classifications include farms, orchards, groves, greenhouses and nurseries.

## **Incomes and Affordable Rent Ranges for Farmworker Households**

Unaccompanied migrant farmworkers fall most frequently into the lowest income groups, with 77 percent earning less than \$10,000 per year. Unaccompanied seasonal workers have somewhat higher incomes, with 75 percent earning \$10,000-25,000 per year and an additional nine percent earning more than \$25,000 per year. Therefore, about half of unaccompanied farmworkers need single-person units or beds with rents below \$333 per month, with an additional 25 percent in need of units with rents below \$500 per month.

Accompanied farmworker households show more variation in their incomes. Accompanied migrant worker households generally have lower incomes than accompanied seasonal worker households, with 26 percent earning less than \$10,000 per year, 58 percent earning \$10,000-25,000 per year, and only 15 percent earning \$25,000 per year or more. Among accompanied seasonal worker households, only 7 percent earn less than \$10,000 per year, 54 percent earn \$10,000-25,000 per year, and 38 percent earn \$25,000 per year or more. Note that due to data limitations, this likely underestimates the number of accompanied worker households in the lowest income ranges and overestimates the number of households in the highest income ranges.

Many accompanied farmworker families also need housing units with rents well below the market rate, with more than one-third requiring units with rents of \$500 per month or less. However, half of accompanied farmworker families may be able to afford rents closer to market rates; i.e., in the \$668 and above range.

## **Farmworker Housing Supply**

While farmworkers may find a variety of types of housing arrangements, two types of government-licensed or subsidized housing are reserved specifically for farmworkers:

- Multifamily developments with funding from the U.S. Department of Agriculture Rural Development (RD) Section 514 and 516 programs, from Florida Housing-allocated SAIL, HOME, and tax credit resources, or both. Presently, there are 6,401 farmworker units with these types of financing in operation or under development.
- Florida Department of Health (DOH) permitted camps for unaccompanied workers. The current capacity of permitted camps is approximately 30,164 beds. Of these, 2,573 beds are located in RD or Florida Housing multifamily developments. Therefore, the DOH camps add 27,591 unduplicated beds to the supply.

Assuming that the Section 514/516 units and Florida Housing-assisted units can house an average of four persons, the farmworker housing supply can house a total of 53,195 farmworkers and their family members in Florida.

The 11 counties with the capacity to house 1,000 or more farmworkers are Collier, Palm Beach, Miami-Dade, Hillsborough, Hendry, De Soto, Manatee, Polk, Indian River, Highlands, and Gadsden. These counties contain 84 percent of the state's farmworker housing capacity.

All but one of these counties also appear in the list of the 13 counties with the most farmworkers. Therefore, while there is a substantial need for farmworker housing, the supply that does exist is largely concentrated in the areas with the most farmworkers.

### **Need Estimate: Comparison of Supply and Farmworker Households**

The total statewide gap between farmworker housing capacity and the number of farmworkers and their household members is 125,989. The total gap between the number of single worker beds needed and the number of unaccompanied farmworkers is 49,568 beds. Eleven counties have an unmet need for single worker housing exceeding 1,000 beds: Miami-Dade, Hillsborough, Palm Beach, Orange, Manatee, Volusia, Gadsden, Hendry, Indian River, Lake, and Lee. The total gap between the number of multifamily units and the number of accompanied farmworker households is 21,768 units. The seven counties with unmet need for multifamily farmworker units exceeding 1,000 units are Hillsborough, Palm Beach, Miami-Dade, Manatee, Orange, Collier, and Hendry.

# **The Need for Farmworker Housing in Florida**

## **INTRODUCTION**

This section of the housing needs assessment discusses the need for rental housing for migrant and seasonal farmworkers in Florida's counties. Farmworkers may or may not be accompanied by immediate family members, and unaccompanied farmworkers have different housing needs and incomes than accompanied farmworkers. Therefore, this analysis examines the number of accompanied and unaccompanied farmworker households, the incomes of each group, and the number of housing units appropriate to each group.

This analysis is divided into six sections:

- I. Methodology
- II. Farmworker Population and Household Estimates
- III. Incomes and Affordable Rent Ranges for Farmworker Households
- IV. Farmworker Housing Supply
- V. Need Estimate: Comparison of Supply and Households
- VI. Data Limitations

## I. METHODOLOGY

### Demand

#### *Estimating Farmworkers for State and Counties*

The total numbers of farmworkers in the state and in each county are derived from two sources: the Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW) and the Department of Labor's National Agricultural Workers Survey (NAWS).

- *QCEW*: The QCEW “produces a comprehensive tabulation of employment and wage information for workers covered by State unemployment insurance (UI) laws” by industry, including total annual wages and average weekly wages.<sup>2</sup> The QCEW records information for each “establishment,” defined as “the physical location of a certain economic activity--for example, a factory, mine, store, or office. A single establishment generally produces a single good or provides a single service.”<sup>3</sup>

QCEW data are available by state and county as well as by NAICS (North American Industry Classification, formerly SIC) industrial code. 2005 is the most recent year for which full data are publicly available. This analysis considers employment in two NAICS codes: 111, “Crop Production,” and 11511, “Support Activities for Crop Production.” These classifications include farms, orchards, groves, greenhouses and nurseries.

- *NAWS*: The NAWS “is an employment-based, random survey of the demographic and employment characteristics of the U.S. crop labor force” including information about the demographic characteristics of workers and their households, employment history, and migration patterns.<sup>4</sup> Susan Gabbard of Aguirre International, a subsidiary of JBS International, provided special tabulations of the NAWS data for this report.

We calculated the total number of farmworkers for the state of Florida and each county by a three-step process:

1. Use the QCEW data to calculate the total number of weeks worked by workers in NAICS codes 111 and 11511. For each code and geographic area,

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<sup>2</sup> United States Bureau of Labor Statistics. *QCEW Overview*. December 18, 2003. August 1, 2007. <<http://www.bls.gov/cew/cewover.htm>>.

<sup>3</sup> United States Bureau of Labor Statistics. *BLS Glossary*. May 6, 2005. August 1, 2007. <<http://www.bls.gov/bls/glossary.htm>>.

<sup>4</sup> United States Department of Labor Employment and Training Administration. *The National Agricultural Workers Survey*. March 27, 2004. August 1, 2007. <http://www.doleta.gov/agworker/naws.cfm>.

$$\text{Total number of weeks worked} = \frac{\text{Total annual wages}}{\text{Average weekly wage}}$$

For example, in Gadsden County in 2005, the total annual wages for NAICS code 111 were \$36,701,615. The average weekly wage for this industrial code was \$374. Dividing \$36,701,615 by \$374 yields 98,132 weeks worked in 2005 in NAICS code 111 for Gadsden County. In the same county, the total annual wages for code 11511 were \$3,632,030. The average weekly wage was \$493. Dividing \$3,632,030 by \$493 yields 7,367 weeks worked.

2. Use the NAWS data to calculate the number of workers required to work that number of weeks in one year.

The NAWS shows that farmworkers in Florida worked an average of 36 weeks during 2005. This allows us to translate the total number of weeks worked in a geographic area and NAICS code into an estimated number of workers:

$$\text{Workers} = \frac{\text{Total annual weeks worked}}{\text{Average weeks worked per year}} = \frac{\text{Total annual weeks worked}}{36}$$

In the Gadsden County example, for NAICS code 111, dividing 98,132 weeks worked by 36 weeks per worker yields 2,726 workers. For NAICS code 11511, dividing 7,367 weeks worked by 36 weeks per worker yields 204 workers.

3. Sum the total workers for the two industrial codes in each geographic area.

$$\text{Total farmworkers} = \text{Workers in code 111} + \text{Workers in code 11511}$$

$$\text{For Gadsden County, total farmworkers} = 2,726 + 204 = 2,930 \text{ workers.}$$

Unlike in past rental market studies, therefore, we used raw county-level data to distribute farmworkers among counties. In the past, we used each county's share of the state's agricultural labor expenses as reported in the USDA Census of Agriculture to distribute the state total of workers among the counties. However, the Census of Agriculture was last conducted in 2002 and does not reflect more recent changes in the industry, such as the effects of the 2004-05 hurricanes and the spread of citrus canker diseases in Florida.

Using the QCEW to distribute farmworkers among counties introduces an error into the distribution. In this report, the sum of the number of farmworkers in all counties is lower than the statewide total. This is also true for the numbers of farmworker households and household members, which are derived directly from the number of farmworkers. This disparity has two causes. First, the QCEW includes a category of employment establishments for which counties cannot be identified based on data submitted by employers. We determined that 3,768 farmworkers in Florida fall in the "County Unknown" category. For Tables 5-7, which list farmworkers, farmworker households, and farmworker household members, these farmworkers



and their associated household and household members are counted in a “County Unknown” row. However, these workers, households and household members are not included in the county lists for Tables 12-13, which identify housing need by comparing demand and supply, or in any of the maps.

Second, the Bureau of Labor Statistics suppresses wage data for establishments in some counties in order to protect confidentiality, but includes the data in statewide totals. In these counties, the number of farmworkers is actually higher than the figures reported in this report. Statewide, this results in 14,526 farmworkers (12 percent) included in the state total that are not attributed to any county or to the “County Unknown” category. To account for those workers, we redistributed the 14,526 workers among the counties and the “County Unknown” category based on the counties’ share of the 103,455 workers for whom a county (or “County Unknown”) designation could be identified using the QCEW and NAWS data. For example, the QCEW/NAWS method resulted in an estimate of 2,931 workers for Gadsden County, which equals 2.83 percent of 103,455. We added 411 workers ( $14,526 * .0283$ ) to Gadsden County’s total as that county’s portion of the state total that had been suppressed in the county-level data, for a total of 3,342 workers. However, this likely results in an underestimate of workers in some counties and an overestimate in others, since the wages and therefore workers at the suppressed establishments are unlikely to match the county-level distribution of wages and workers at other establishments.

Because the QCEW does list the number of establishments in a county even if the wage data for those establishments are suppressed, we can identify the counties with establishments in NAICS codes 111 and 11511 whose wages (and therefore workers) are not included in this report. While we cannot tell how many workers an establishment has, it is plausible that those counties with the most suppressed establishments are those for which the underestimates are the most acute:

**Table i. Establishments with Suppressed Total Annual Wage Data for NAICS Codes 111 and 11511, 2005**

County	Number of Establishments with Suppressed Wage Data
Polk	151
Highlands	95
St. Lucie	58
Hardee	56
Lee	15
Levy	14
Okeechobee	13
Martin	11
St. Johns	9
Marion	9
Santa Rosa	5
Citrus	5
Baker	5
Pinellas	4
Lafayette	4
Taylor	3

County	Number of Establishments with Suppressed Wage Data
Bay	3
Osceola	3
Madison	3
Walton	2
Wakulla	2
Volusia	2
Flagler	2
Dixie	2
Suwannee	2
Okaloosa	2
Escambia	2
Alachua	2
Liberty	1
Jefferson	1
Hernando	1
Gilchrist	1
Leon	1
Sumter	1
Duval	1
Nassau	1
Union	1
Monroe	1
Holmes	1

Source: United States Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2005.

To correct this, we recommend amending the rental market study to revise the distribution of workers by county using data from the 2007 Census of Agriculture when they become available. In the past, data from the Census of Agriculture were released two years after the census year, suggesting that this update can occur in 2009.

#### *Farmworker Demographic and Household Characteristics*

We used data from the NAWS to identify characteristics of farmworkers and their households. Because the annual NAWS sample size is small, we used the interviews with individuals collected over a four-year period (fiscal years 2003-2006). Therefore, results reflect interviews with 419 individuals regarding these characteristics:

- *Migrant vs. seasonal workers*: The NAWS defines a “migrant” as a person traveling more than 75 miles to find farm work. “Seasonal” workers also perform labor in crop agriculture but do not make this migration.
- *Accompanied vs. unaccompanied workers*: Accompanied farmworkers are those living with a spouse, children, or parents, or minor farmworkers living with a sibling. Unaccompanied farmworkers are those who do not live with immediate family.

- *Household size and number of farmworkers in household for accompanied workers:* By definition, accompanied worker households include more than one person. They may also include more than one farmworker.
- *Annual household income:* We used the NAWS to determine income distributions for unaccompanied migrant worker households, unaccompanied seasonal worker households, accompanied migrant worker households and accompanied seasonal worker households. For accompanied worker households, household income may include contributions from more than one farmworker, and it may also include income from family members engaged in types of work other than agriculture.

The estimates of household income were complicated in two ways as a result of NAWS data collection practices. The NAWS survey asks farmworkers, “What was your family’s total income *last year* in USA dollars?” (emphasis added). First, for two percent of workers surveyed, data are missing. To account for these workers, we have assumed that they would be distributed among the different income categories in proportion to each category’s share of total workers. For example, if 15 percent of workers other than the missing workers reported incomes between \$7,500 and \$9,999, we added 15 percent of the missing workers to that category. Second, approximately 20 percent of workers surveyed—including 47 percent of unaccompanied migrant workers—responded that their family incomes were below \$1,000, with most of these responding that their incomes were below \$500. It is unlikely that most of these answers actually represent family incomes earned while the workers were performing farm work in Florida. More likely, these workers are new to the U.S. or to farm work and are reporting previous years’ incomes that do not include farm work. Therefore, we made the assumption that these amounts did not reflect a full year’s income. We redistributed these workers to the other income categories based on the other categories’ share of the state total, the same method by which we redistributed the workers with missing data.

## Supply

This report tallies two sources of farmworker housing: state- and federally-assisted housing units and Department of Health-permitted camps.

First, a number of multifamily developments in the state receive state subsidies, federal subsidies, or both in order to serve low-income farmworker households. The Florida Housing Finance Corporation (Florida Housing) allocates some of its SAIL, HOME, and housing tax credit resources to multifamily developments designed to house farmworkers. In addition, a number of multifamily housing complexes receive development subsidies from the U.S. Department of Agriculture’s Rural Development (RD) program to provide housing for farmworker families under the Section 514 and 516 programs. Data on properties subsidized by these programs come from the Shimberg Center’s Assisted Housing Inventory (AHI). The AHI receives data from Florida Housing and the RD program and records all units for which farmworkers are the target population. In parts of the report that evaluate the capacity of the supply to house individual farmworker household members, we assume that each multifamily unit can house four individuals.

Second, the Florida Department of Health (DOH) issues permits for camps to house unaccompanied migrant and seasonal farmworkers. These “camps” may consist of single-family homes, mobile homes, motels, multifamily units, or dormitory-style arrangements. The camps are inspected by county departments of public health, which report the camps’ occupancy levels annually to DOH. We received records from DOH that include county location and occupancy for each camp. Therefore, as the figures in this report reflect a snapshot of camps’ occupancy rather than their potential capacity, it is possible that there is additional unused camp capacity available in some counties.

Seven developments were listed in both the RD/Florida Housing multifamily developments inventory and the DOH camp list. In these cases, we subtracted the developments and their bed capacity from the DOH supply figures but continued to include them in the multifamily supply. Therefore, in all tables and maps, we subtracted a total capacity of 2,573 beds from the DOH supply figure, representing three camps in Collier County, capacity 635; Miami-Dade County’s sole DOH-permitted camp, capacity 1,276; one camp in Hillsborough County, capacity 65; one camp in Palm Beach County, capacity 95; and one camp in Pasco County, capacity 502.

## II. FARMWORKER POPULATION AND HOUSEHOLD ESTIMATES

To determine the number of farmworker housing units needed and the number of people they must accommodate, this section makes estimates of the following:

- *Farmworkers*: individuals performing farm work in Florida or living in Florida when not migrating to other states to perform farm work.
- *Farmworker households*: individuals or family groups living together including at least one farmworker; many farmworker households include more than one farmworker.
- *Farmworker household members*: all of the individuals living in a farmworker household, regardless of whether they themselves perform farm work.

As described in the following section, farmworkers may be migrant or seasonal, with the National Agricultural Workers Survey (NAWS) defining a “migrant” as a person traveling more than 75 miles to find farm work. Seasonal workers also perform labor in crop agriculture but do not make this migration. Because migrant and seasonal workers have different household characteristics, we make separate estimates of the numbers of farmworkers, households, and household members in each of these categories.

### Total Migrant and Seasonal Farmworkers in Florida

An estimated 117,981 farmworkers worked in crop agriculture in Florida in 2005, the most recent year for which full data are available. These include greenhouse and nursery workers as well as field crop workers. This total represents a drop from the number of farmworkers in previous rental market studies. The lower number of farmworkers reflects a recent decline in citrus crop activity. The citrus industry is facing a long-term decline due to the spread of citrus canker disease in Florida, and the 2004-05 hurricanes both spread the disease and caused other, more temporary damage to citrus groves.<sup>5</sup>

In the NAWS, 46 percent of farmworkers surveyed in Florida fit the definition of migrant workers. This represents a change from the previous rental market study, which found that migrants made up the majority of workers (58 percent). The estimated numbers of migrant and seasonal farmworkers in the state of Florida are summarized in Table 1.

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<sup>5</sup> Robert Emerson and Robert Williams. Telephone interview. June 22, 2007. Dr. Robert Emerson is a Professor in the University of Florida’s Food and Resource Economics Department, College of Agriculture and Life Sciences. Robert Williams is a staff attorney with Florida Legal Services and Director of the Migrant Farmworker Justice Project.

**Table 1. Migrant and Seasonal Workers in Florida, 2005**

<b>Migrant Workers</b>	<b>Seasonal Workers</b>	<b>Total</b>
54,271	63,710	117,981

Sources: United States Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2005 and United States Department of Labor, *National Agricultural Workers Survey*, 2003-2006.

Accompanied vs. Unaccompanied Farmworkers

In addition to the migrant/seasonal distinction, farmworkers may be accompanied or unaccompanied. Accompanied farmworkers are those living with a spouse, children, or parents, or minor farmworkers living with a sibling. Unaccompanied farmworkers are those who do not live with immediate family. According to the NAWS, a small number of migrant farmworkers (13 percent) and a much larger portion of seasonal farmworkers (53 percent) in Florida are accompanied by immediate family. Applying these percentages to the estimate of total farmworkers yields the estimates for Florida as listed in Table 2.

**Table 2. Unaccompanied and Accompanied Farmworkers in Florida, 2005**

	<b>Unaccompanied Workers</b>	<b>Accompanied Workers</b>
<b>Migrant</b>	47,216	7,055
<b>Seasonal</b>	29,944	33,766
<b>TOTAL</b>	77,159	40,822

Sources: United States Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2005 and United States Department of Labor, *National Agricultural Workers Survey*, 2003-2006.

An analysis of farmworker housing needs must also take into account the needs of family members living with the farmworker. According to the NAWS, the average household size is 3.07 members for accompanied migrant workers and 3.71 members for accompanied seasonal workers. Moreover, a household may contain more than one farmworker. The NAWS found that an average of 1.82 farmworkers lived in each household containing accompanied migrant workers and an average of 1.39 farmworkers lived in each household containing accompanied seasonal workers. Table 3 displays the estimated numbers of accompanied farmworker households and household members.

**Table 3. Accompanied Farmworkers and Their Households in Florida, 2005**

	Accompanied Workers	Households (Workers/Average Workers per Household)	Household Members (Households * Average Members per Household)
<b>Migrant</b>	7,055	3,877	11,901
<b>Seasonal</b>	33,766	24,292	90,124
<b>TOTAL</b>	40,822	28,169	102,025

Sources: United States Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2005 and United States Department of Labor, *National Agricultural Workers Survey*, 2003-2006.

Since unaccompanied workers do not have other members of their immediate families living with them, each worker forms a household of one. Thus, the number of unaccompanied worker households equals the number of unaccompanied workers. Combining the number of unaccompanied workers in Table 2 and the numbers of accompanied worker households and household members in Table 3 yields the total number of farmworker households and household members in Florida in Table 4.

**Table 4. Farmworker Households and Household Members in Florida, 2005**

	Unaccompanied Worker Households	Accompanied Worker Households	Total Households	Unaccompanied Worker Household Members	Accompanied Worker Household Members	Total Household Members
<b>Migrant</b>	47,216	3,877	51,092	47,216	11,901	59,117
<b>Seasonal</b>	29,944	24,292	54,236	29,944	90,124	120,068
<b>TOTAL</b>	77,159	28,169	105,328	77,159	102,025	179,185

Sources: United States Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2005 and United States Department of Labor, *National Agricultural Workers Survey*, 2003-2006.

In sum, Florida has 105,328 farmworker households with 179,185 household members.

#### Estimating Farmworker Population, Households, and Household Members by County

Table 5 shows the numbers of unaccompanied migrant and seasonal workers by county. As noted above, these also represent the number of unaccompanied households and household members, since each unaccompanied worker forms a household of one. Table 6 shows the number of accompanied workers, accompanied worker households, and accompanied worker household members for migrant and seasonal workers by county. Table 7 shows the total numbers of farmworkers, farmworker households, and farmworker household members by county, regardless of migrant/seasonal status. Figure 1 is a map showing the distribution of all farmworkers by county. See Appendix 1 for a reference map with Florida county names.

The counties with more than 2,500 farmworkers are Hillsborough, Miami-Dade, Palm Beach, Collier, Manatee, Orange, Hendry, Volusia, Indian River, Gadsden, Lake, Polk, and De Soto. These counties combined contain 81 percent of the state's farmworkers.

**Table 5. Unaccompanied Farmworkers by County, 2005**

<b>County</b>	<b>Unaccompanied Migrant Workers</b>	<b>Unaccompanied Seasonal Workers</b>	<b>Total Unaccompanied Workers</b>
Alachua	233	148	380
Baker	0	0	0
Bay	0	0	0
Bradford	0	0	0
Brevard	102	65	166
Broward	500	317	816
Calhoun	94	60	154
Charlotte	341	216	557
Citrus	47	30	77
Clay	32	20	52
Collier	4,142	2,627	6,769
Columbia	35	22	57
De Soto	1,029	652	1,681
Dixie	0	0	0
Duval	168	107	275
Escambia	0	0	0
Flagler	181	115	295
Franklin	0	0	0
Gadsden	1,337	848	2,186
Gilchrist	11	7	17
Glades	68	43	112
Gulf	0	0	0
Hamilton	34	22	56
Hardee	469	297	767
Hendry	2,435	1,544	3,980
Hernando	56	36	92
Highlands	739	469	1,208
Hillsborough	7,891	5,004	12,895
Holmes	0	0	0
Indian River	1,365	866	2,231
Jackson	71	45	116
Jefferson	100	64	164
Lafayette	0	0	0
Lake	1,138	721	1,859
Lee	882	560	1,442
Leon	65	41	107
Levy	0	0	0
Liberty	0	0	0
Madison	61	39	100
Manatee	3,132	1,987	5,119
Marion	183	116	299
Martin	381	242	623
Miami0Dade	5,612	3,559	9,170
Monroe	0	0	0
Nassau	0	0	0



<b>County</b>	<b>Unaccompanied Migrant Workers</b>	<b>Unaccompanied Seasonal Workers</b>	<b>Total Unaccompanied Workers</b>
Okaloosa	0	0	0
Okeechobee	195	124	318
Orange	2,807	1,780	4,587
Osceola	177	112	289
Palm Beach	4,998	3,170	8,168
Pasco	351	223	574
Pinellas	39	25	63
Polk	1,094	694	1,788
Putnam	325	206	532
Santa Rosa	66	42	109
Sarasota	175	111	286
Seminole	220	139	359
St. Johns	330	209	540
St. Lucie	373	237	610
Sumter	165	105	270
Suwannee	76	48	124
Taylor	0	0	0
Union	0	0	0
Volusia	1,370	869	2,239
Wakulla	0	0	0
Walton	0	0	0
Washington	9	6	15
County Unknown	1,508	956	2,464
<b>State of Florida Total</b>	<b>47,216</b>	<b>29,944</b>	<b>77,159</b>

Sources: United States Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2005 and United States Department of Labor, *National Agricultural Workers Survey*, 2003-2006.

**Table 6. Accompanied Farmworkers, Households, and Household Members by County, 2005**

<b>County</b>	<b>Accompanied Migrant Workers</b>	<b>Accompanied Seasonal Workers</b>	<b>Total Accompanied Workers</b>	<b>Accompanied Migrant Households</b>	<b>Accompanied Seasonal Households</b>	<b>Total Accompanied Households</b>	<b>Accompanied Migrant Household Members</b>	<b>Accompanied Seasonal Household Members</b>	<b>Total Accompanied Household Members</b>
Alachua	35	166	201	19	120	139	59	444	503
Baker	0	0	0	0	0	0	0	0	0
Bay	0	0	0	0	0	0	0	0	0
Bradford	0	0	0	0	0	0	0	0	0
Brevard	15	73	88	8	52	61	26	194	220
Broward	75	357	432	41	257	298	126	953	1,079
Calhoun	14	67	81	8	48	56	24	180	203
Charlotte	51	244	295	28	175	204	86	651	737
Citrus	7	34	41	4	24	28	12	90	102
Clay	5	23	28	3	16	19	8	61	69
Collier	619	2,962	3,581	340	2,131	2,471	1,044	7,906	8,950
Columbia	5	25	30	3	18	21	9	67	76
De Soto	154	736	889	84	529	614	259	1,964	2,223
Dixie	0	0	0	0	0	0	0	0	0
Duval	25	120	145	14	86	100	42	321	363
Escambia	0	0	0	0	0	0	0	0	0
Flagler	27	129	156	15	93	108	46	345	391
Franklin	0	0	0	0	0	0	0	0	0
Gadsden	200	956	1,156	110	688	798	337	2,553	2,890
Gilchrist	2	8	9	1	5	6	3	20	23
Glades	10	49	59	6	35	41	17	130	148
Gulf	0	0	0	0	0	0	0	0	0
Hamilton	5	25	30	3	18	21	9	66	74
Hardee	70	335	406	39	241	280	118	895	1,014

<b>County</b>	<b>Accompanied Migrant Workers</b>	<b>Accompanied Seasonal Workers</b>	<b>Total Accompanied Workers</b>	<b>Accompanied Migrant Households</b>	<b>Accompanied Seasonal Households</b>	<b>Total Accompanied Households</b>	<b>Accompanied Migrant Household Members</b>	<b>Accompanied Seasonal Household Members</b>	<b>Total Accompanied Household Members</b>
Hendry	364	1,742	2,105	200	1,253	1,453	614	4,648	5,262
Hernando	8	40	49	5	29	34	14	107	122
Highlands	110	529	639	61	380	441	186	1,412	1,598
Hillsborough	1,179	5,643	6,822	648	4,060	4,708	1,989	15,062	17,051
Holmes	0	0	0	0	0	0	0	0	0
Indian River	204	976	1,181	112	702	815	344	2,606	2,950
Jackson	11	51	61	6	37	42	18	136	154
Jefferson	15	72	87	8	52	60	25	191	216
Lafayette	0	0	0	0	0	0	0	0	0
Lake	170	814	984	93	585	679	287	2,171	2,458
Lee	132	631	763	72	454	526	222	1,684	1,907
Leon	10	47	57	5	34	39	16	125	141
Levy	0	0	0	0	0	0	0	0	0
Liberty	0	0	0	0	0	0	0	0	0
Madison	9	44	53	5	32	37	15	117	133
Manatee	468	2,240	2,708	257	1,612	1,869	790	5,979	6,769
Marion	27	131	158	15	94	109	46	349	395
Martin	57	273	330	31	196	228	96	728	824
Miami0Dade	839	4,013	4,852	461	2,887	3,348	1,414	10,711	12,126
Monroe	0	0	0	0	0	0	0	0	0
Nassau	0	0	0	0	0	0	0	0	0
Okaloosa	0	0	0	0	0	0	0	0	0
Okeechobee	29	139	168	16	100	116	49	372	421
Orange	419	2,007	2,427	230	1,444	1,675	707	5,358	6,065
Osceola	26	126	153	15	91	106	45	338	382
Palm Beach	747	3,575	4,321	410	2,572	2,982	1,260	9,541	10,801

County	Accompanied Migrant Workers	Accompanied Seasonal Workers	Total Accompanied Workers	Accompanied Migrant Households	Accompanied Seasonal Households	Total Accompanied Households	Accompanied Migrant Household Members	Accompanied Seasonal Household Members	Total Accompanied Household Members
Pasco	52	251	303	29	181	209	88	670	758
Pinellas	6	28	34	3	20	23	10	74	84
Polk	164	783	946	90	563	653	276	2,089	2,364
Putnam	49	233	281	27	167	194	82	621	703
Santa Rosa	10	48	57	5	34	40	17	127	144
Sarasota	26	125	151	14	90	104	44	334	378
Seminole	33	157	190	18	113	131	55	419	475
St. Johns	49	236	285	27	170	197	83	630	714
St. Lucie	56	267	323	31	192	223	94	713	807
Sumter	25	118	143	14	85	99	42	315	357
Suwannee	11	54	65	6	39	45	19	144	163
Taylor	0	0	0	0	0	0	0	0	0
Union	0	0	0	0	0	0	0	0	0
Volusia	205	980	1,185	113	705	818	345	2,616	2,961
Wakulla	0	0	0	0	0	0	0	0	0
Walton	0	0	0	0	0	0	0	0	0
Washington	1	7	8	1	5	6	2	18	20
County Unknown	225	1,078	1,304	124	776	900	380	2,878	3,258
<b>State of Florida Total</b>	<b>7,055</b>	<b>33,766</b>	<b>40,821</b>	<b>3,877</b>	<b>24,292</b>	<b>28,169</b>	<b>11,901</b>	<b>90,124</b>	<b>102,025</b>

Sources: United States Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2005 and United States Department of Labor, *National Agricultural Workers Survey*, 2003-2006.

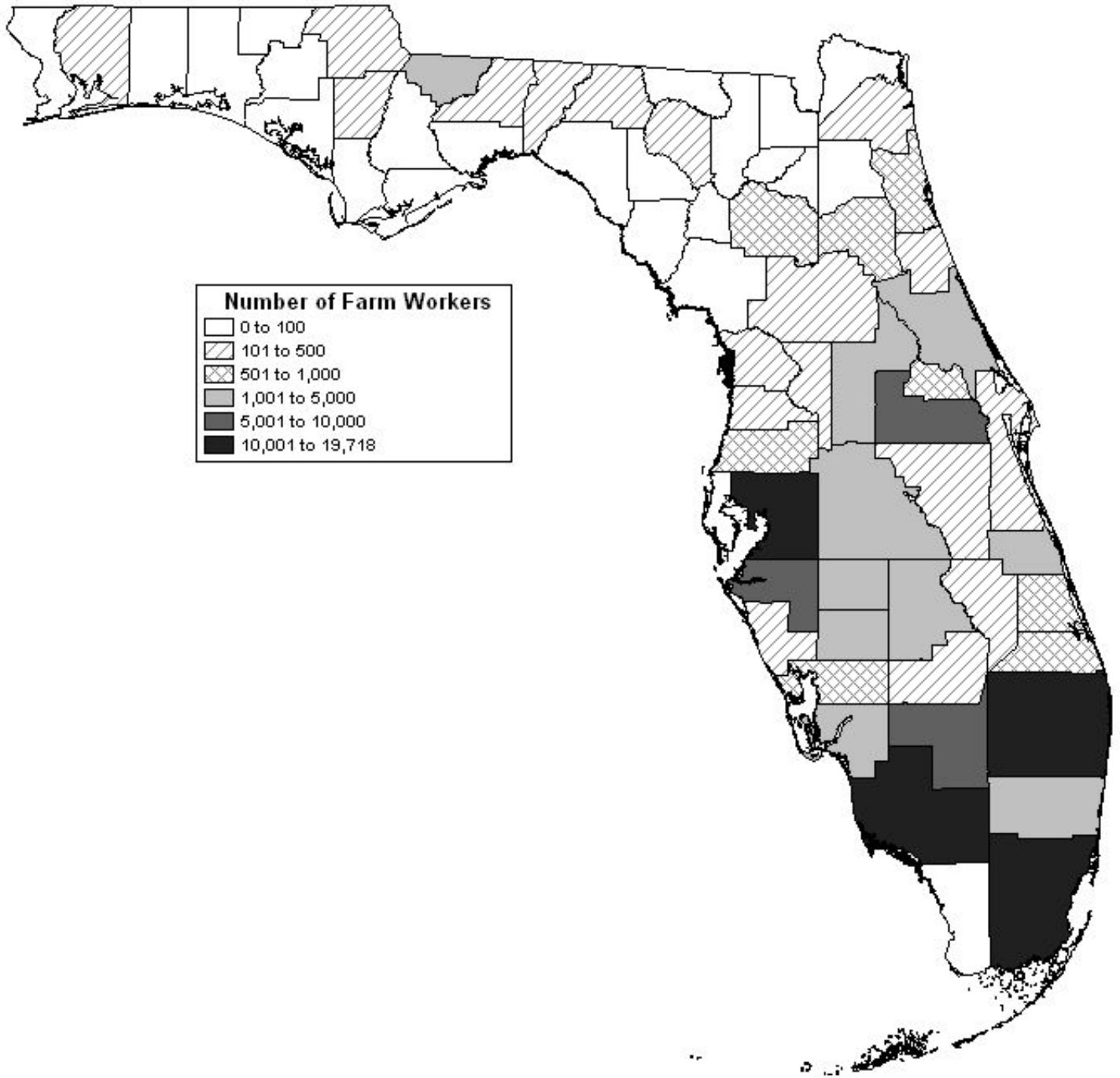
**Table 7. Total Farmworkers, Households, and Household Members by County, 2005**

<b>County</b>	<b>Percentage of State's Farmworkers</b>	<b>Total Farmworkers</b>	<b>Total Farmworker Households</b>	<b>Total Farmworker Household Members</b>
Alachua	0.49%	582	519	884
Baker	0.00%	0	0	0
Bay	0.00%	0	0	0
Bradford	0.00%	0	0	0
Brevard	0.22%	254	227	386
Broward	1.06%	1,248	1,114	1,896
Calhoun	0.20%	235	210	357
Charlotte	0.72%	852	761	1,294
Citrus	0.10%	118	105	179
Clay	0.07%	80	71	121
Collier	8.77%	10,350	9,240	15,719
Columbia	0.07%	88	78	133
De Soto	2.18%	2,571	2,295	3,904
Dixie	0.00%	0	0	0
Duval	0.36%	420	375	638
Escambia	0.00%	0	0	0
Flagler	0.38%	452	403	686
Franklin	0.00%	0	0	0
Gadsden	2.83%	3,342	2,984	5,076
Gilchrist	0.02%	26	24	40
Glades	0.14%	171	152	259
Gulf	0.00%	0	0	0
Hamilton	0.07%	86	77	131
Hardee	0.99%	1,172	1,046	1,780
Hendry	5.16%	6,085	5,433	9,242
Hernando	0.12%	141	125	213
Highlands	1.57%	1,848	1,650	2,806
Hillsborough	16.71%	19,718	17,603	29,946
Holmes	0.00%	0	0	0
Indian River	2.89%	3,412	3,046	5,182
Jackson	0.15%	178	159	270
Jefferson	0.21%	250	223	380
Lafayette	0.00%	0	0	0
Lake	2.41%	2,842	2,538	4,317
Lee	1.87%	2,205	1,968	3,349
Leon	0.14%	163	146	248
Levy	0.00%	0	0	0
Liberty	0.00%	0	0	0
Madison	0.13%	153	137	233
Manatee	6.63%	7,827	6,988	11,887
Marion	0.39%	457	408	694
Martin	0.81%	953	851	1,448

County	Percentage of State's Farmworkers	Total Farmworkers	Total Farmworker Households	Total Farmworker Household Members
Miami0Dade	11.88%	14,022	12,518	21,296
Monroe	0.00%	0	0	0
Nassau	0.00%	0	0	0
Okaloosa	0.00%	0	0	0
Okeechobee	0.41%	487	435	739
Orange	5.94%	7,014	6,261	10,652
Osceola	0.37%	442	395	671
Palm Beach	10.59%	12,490	11,150	18,969
Pasco	0.74%	877	783	1,332
Pinellas	0.08%	97	86	147
Polk	2.32%	2,734	2,441	4,153
Putnam	0.69%	813	726	1,235
Santa Rosa	0.14%	166	148	252
Sarasota	0.37%	437	390	664
Seminole	0.47%	549	490	834
St. Johns	0.70%	825	737	1,253
St. Lucie	0.79%	933	833	1,417
Sumter	0.35%	413	368	627
Suwannee	0.16%	189	169	287
Taylor	0.00%	0	0	0
Union	0.00%	0	0	0
Volusia	2.90%	3,424	3,057	5,200
Wakulla	0.00%	0	0	0
Walton	0.00%	0	0	0
Washington	0.02%	23	21	35
County Unknown	3.19%	3,768	3,364	5,722
<b>State of Florida Total</b>		<b>117,981</b>	<b>105,328</b>	<b>179,184</b>

Sources: United States Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2005 and United States Department of Labor, *National Agricultural Workers Survey*, 2003-2006.

**Figure 1. Farmworkers by County, 2005**



Sources: United States Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2005 and United States Department of Labor, *National Agricultural Workers Survey*, 2003-2006.

### III. INCOMES AND AFFORDABLE RENT RANGES FOR FARMWORKER HOUSEHOLDS

We used NAWS data to estimate the breakdown of farmworker households by family income range to determine how much the households can afford to pay in rent. In general, unaccompanied farmworker households tend to have lower incomes than accompanied farmworker households. Accompanied farmworkers may have several workers living in their households and earning farm income, or they may have family members contributing income from other types of work.

Even with the workers reporting incomes below \$1,000 redistributed to other categories (see “Methodology”), unaccompanied migrant farmworkers fall most frequently into the lowest income groups, with 77 percent earning less than \$10,000 per year and only four percent with incomes of \$25,000 or greater. Unaccompanied seasonal workers have somewhat higher incomes, with 75 percent earning \$10,000-25,000 per year and an additional nine percent earning more than \$25,000 per year. Table 8 below shows the distribution of unaccompanied migrant and seasonal workers within income ranges. Assuming that households can pay no more than 40 percent of gross income for rent, Table 8 also shows the rent that would be considered “affordable” for each income range.<sup>6</sup>

**Table 8. Incomes and Affordable Rents for Unaccompanied Farmworkers, 2005**

Annual Family Income	Affordable Monthly Rent Range	Unaccompanied Migrant Worker Households	Unaccompanied Seasonal Worker Households	Total Unaccompanied Worker Households
\$1,000 to \$2,499	\$33 to \$83	3,744	12	3,756
\$2,500 to \$4,999	\$84 to \$167	6,067	450	6,517
\$5,000 to \$7,499	\$168 to \$250	13,024	1,273	14,297
\$7,500 to \$9,999	\$251 to \$333	13,278	3,158	16,437
\$10,000 to \$12,499	\$334 to \$417	6,131	3,793	9,924
\$12,500 to \$14,999	\$418 to \$500	1,843	7,348	9,190
\$15,000 to \$17,499	\$501 to \$583	349	6,472	6,821
\$17,500 to \$19,999	\$584 to \$667	28	1,973	2,001
\$20,000 to \$24,999	\$668 to \$833	282	3,077	3,359
\$25,000 to \$29,999	\$834 to \$1,000	0	1,504	1,504
\$30,000 to \$34,999	\$1,001 to \$1,167	1,899	150	2,049
\$35,000 to \$39,999	\$1,168 to \$1,333	0	182	182
Over \$40,000	\$1,334 and above	0	891	891
<b>Total Households</b>		46,646	30,282	76,928

Sources: United States Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2005 and United States Department of Labor, *National Agricultural Workers Survey*, 2003-2006.

<sup>6</sup> The 2007 Rental Market Study defines “cost burden” as paying more than 40 percent of income for rent, as requested by the Florida Housing Finance Corporation. The “Affordable Monthly Rent Range” column shows the range between 40 percent of the lowest income level and 40 percent of the highest income level in the corresponding “Annual Family Income” range.



Accompanied migrant worker households generally have lower incomes than accompanied seasonal worker households, with 26 percent earning less than \$10,000 per year, 58 percent earning \$10,000-25,000 per year, and only 15 percent earning \$25,000 per year or more. Among accompanied seasonal worker households, only 7 percent earn less than \$10,000 per year, 54 percent earn \$10,000-25,000 per year, and 38 percent earn \$25,000 per year or more.

Table 9 shows the income distribution and affordable rents for accompanied farmworker households. Note that we extrapolated from the number of accompanied workers to the number of households by dividing the number of workers in each category by the overall average number of accompanied workers per household (1.82 workers for migrant households, 1.39 workers for seasonal worker households). In fact, however, it is likely that some households with higher incomes contain more farmworkers than those with lower incomes, since households can aggregate the income of several workers to reach a higher income level. Therefore, these numbers likely underestimate the number of accompanied worker households in the lowest income ranges and overestimate the number of households in the highest income ranges. However, it is impossible to estimate the extent to which higher-income households contain more farmworkers, in part because accompanied farmworker households with higher family incomes may derive some of that income from family members in occupations other than farm work.

**Table 9. Incomes and Affordable Rents for Accompanied Farmworker Households, 2005**

Annual Family Income	Affordable Monthly Rent Range	Accompanied Migrant Worker Households	Accompanied Seasonal Worker Households	Total Accompanied Worker Households
\$1,000 to \$2,499	\$33 to \$83	0	68	68
\$2,500 to \$4,999	\$84 to \$167	275	894	1,170
\$5,000 to \$7,499	\$168 to \$250	166	244	410
\$7,500 to \$9,999	\$251 to \$333	592	596	1,189
\$10,000 to \$12,499	\$334 to \$417	848	2,905	3,753
\$12,500 to \$14,999	\$418 to \$500	263	3,220	3,482
\$15,000 to \$17,499	\$501 to \$583	148	2,321	2,469
\$17,500 to \$19,999	\$584 to \$667	39	1,610	1,648
\$20,000 to \$24,999	\$668 to \$833	976	3,247	4,223
\$25,000 to \$29,999	\$834 to \$1,000	119	3,851	3,970
\$30,000 to \$34,999	\$1,001 to \$1,167	98	938	1,036
\$35,000 to \$39,999	\$1,168 to \$1,333	99	1,439	1,539
Over \$40,000	\$1,334 and above	289	3,076	3,365
<b>Total Households</b>		3,912	24,410	28,322

Sources: United States Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2005 and United States Department of Labor, *National Agricultural Workers Survey*, 2003-2006.

These income and rent ranges show that about half of unaccompanied farmworkers need single-person units or beds with rents below \$333 per month, with an additional 25 percent needing units with rents below \$500 per month. Many accompanied farmworker families also need housing units with rents well below the market rate, with more than one-third requiring

units with rents of \$500 per month or less. However, half of accompanied farmworker families may be able to afford rents closer to market rates; i.e., in the \$668 and above range.

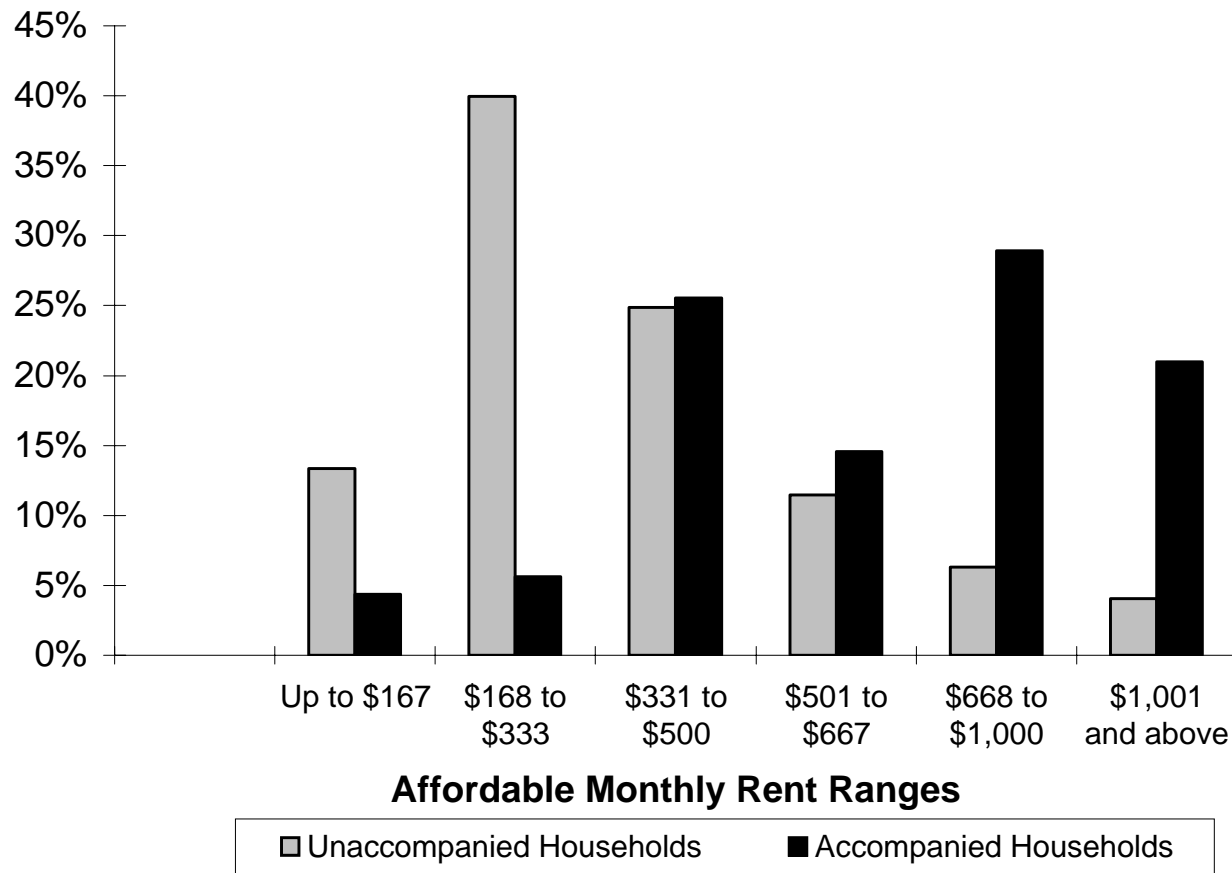
Table 10 and Figure 2 below show the percentages of unaccompanied and accompanied farmworker households that are able to afford rents at various levels. Again, note that these numbers likely underestimate the number of accompanied worker households in need of housing in the lowest rent ranges and overestimate the number that can afford housing at higher rents.

**Table 10. Percentages of Unaccompanied and Accompanied Farmworker Households by Affordable Rent Range, 2005**

<b>Affordable Monthly Rent Range</b>	<b>Unaccompanied Worker Households</b>	<b>Accompanied Worker Households</b>
Up to \$167	13%	4%
\$168 to \$333	40%	6%
\$331 to \$500	25%	26%
\$501 to \$667	11%	15%
\$668 to \$1,000	6%	29%
\$1,001 and above	4%	21%

Source: United States Department of Labor, *National Agricultural Workers Survey*, 2003-2006.

**Figure 2. Percentages of Unaccompanied and Accompanied Farmworker Households by Affordable Rent Range, 2005**



Source: United States Department of Labor, *National Agricultural Workers Survey*, 2003-2006.

#### IV. FARMWORKER HOUSING SUPPLY

While farmworkers may find a variety of types of housing arrangements, two types of government-licensed or subsidized housing are reserved specifically for farmworkers:

- State- and federally-subsidized multifamily housing: The Florida Housing Finance Corporation (Florida Housing) allocates some of its SAIL, HOME, and housing tax credit resources to multifamily developments designed to house farmworkers. In addition, a number of multifamily housing complexes receive development subsidies from the U.S. Department of Agriculture's Rural Development (RD) program to provide housing for farmworker families under the Section 514 and 516 programs. Presently, there are 6,401 farmworker units with these types of financing in operation or under development.
- Department of Health-permitted camps: The Florida Department of Health (DOH) issues permits for camps to house unaccompanied migrant and seasonal farmworkers. The current occupancy of DOH-permitted camps is 30,164 beds. This represents a drop of more than 5,000 beds since the previous rental market study. Like the drop in the number of farmworkers, the reduction in the occupancy appears to be caused by reduced citrus crop activity due to the 2004-05 hurricanes, and long-term damage from the spread of citrus canker disease.<sup>7</sup>

Of the DOH-permitted beds, 2,573 are located in RD or Florida Housing multifamily developments. Therefore, the DOH camps add 27,591 unduplicated beds to the supply. The tables and maps below reflect this unduplicated capacity.

Assuming that the Section 514/516 units and Florida Housing-assisted units can house an average of four persons, the farmworker housing supply can house a total of 53,195 farmworkers and their family members in Florida.

Table 11 lists the supply of these two types of farmworker housing by Florida county. The term "capacity" in this table and the following map refers to the number of individual farmworkers and their household members who can be housed. The term "unit" in this and later tables refers to an apartment in a Section 514/516 or Florida Housing development. A single unit may have the capacity to house several farmworkers and family members. Figure 3 maps the total capacity of beds for farmworkers and their family members by county. See Appendix 1 for a reference map with Florida county names.

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<sup>7</sup> Sharon Saulter, Migrant Program Coordinator, Florida Department of Health. E-mail to Anne Ray. June 21, 2007.

**Table 11. DOH-Permitted Camps and State- and Federally-Assisted Farmworker Housing by County, 2007**

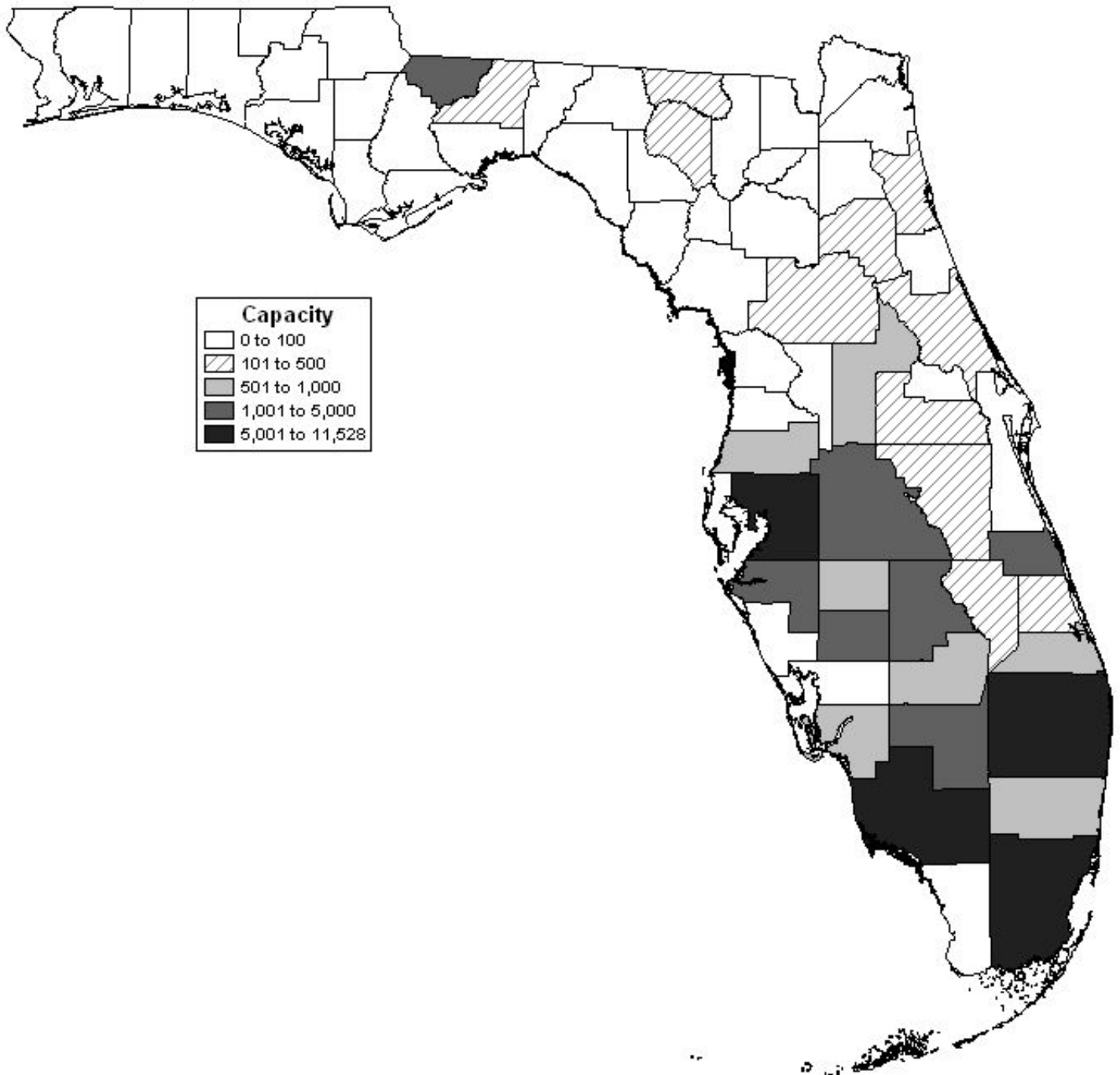
<u>County</u>	RD & Florida Housing Multifamily Housing		DOH Permitted Camps <sup>8</sup>	<u>Total Capacity</u>
	<u>Units</u>	<u>Capacity</u>	<u>Capacity</u>	
Alachua	0	0	0	0
Baker	0	0	0	0
Bay	0	0	0	0
Bradford	0	0	12	12
Brevard	0	0	0	0
Broward	176	704	0	704
Calhoun	0	0	0	0
Charlotte	0	0	0	0
Citrus	0	0	92	92
Clay	0	0	0	0
Collier	1,076	4,304	6,589	10,893
Columbia	0	0	0	0
DeSoto	92	368	2,211	2,579
Dixie	0	0	0	0
Duval	0	0	5	5
Escambia	0	0	0	0
Flagler	0	0	0	0
Franklin	0	0	0	0
Gadsden	243	972	70	1,042
Gilchrist	0	0	0	0
Glades	0	0	728	728
Gulf	0	0	0	0
Hamilton	0	0	294	294
Hardee	69	276	638	914
Hendry	331	1,324	2,046	3,370
Hernando	0	0	0	0
Highlands	66	264	1,465	1,729
Hillsborough	416	1,664	4,055	5,719
Holmes	0	0	0	0
Indian River	385	1,540	304	1,844
Jackson	0	0	0	0
Jefferson	0	0	0	0
Lafayette	0	0	0	0
Lake	136	544	100	644
Lee	100	400	414	814
Leon	0	0	344	344
Levy	0	0	0	0
Liberty	0	0	0	0

<sup>8</sup> To avoid double-counting, this column does not include capacity in camps that are also listed as multifamily housing with RD & Florida Housing. The overlap includes seven camps with a total capacity of 2,573 beds: three camps in Collier County, capacity 635; Miami-Dade County's sole DOH-permitted camp, capacity 1,276; one camp in Hillsborough County, capacity 65; one camp in Palm Beach County, capacity 95; and one camp in Pasco County, capacity 502.

<u>County</u>	RD & Florida Housing Multifamily Housing		DOH Permitted Camps <sup>8</sup>	<u>Total Capacity</u>
	<u>Units</u>	<u>Capacity</u>	<u>Capacity</u>	
Madison	0	0	22	22
Manatee	50	200	2,322	2,522
Marion	124	496	0	496
Martin	117	468	50	518
Miami-Dade	1,444	5,776	0	5,776
Monroe	6	24	0	24
Nassau	0	0	0	0
Okaloosa	0	0	0	0
Okeechobee	15	60	197	257
Orange	84	336	50	386
Osceola	0	0	160	160
Palm Beach	861	3,444	3,197	6,641
Pasco	102	408	216	624
Pinellas	0	0	0	0
Polk	301	1,204	1,314	2,518
Putnam	52	208	133	341
Saint Johns	0	0	243	243
Saint Lucie	104	416	0	416
Santa Rosa	0	0	0	0
Sarasota	0	0	0	0
Seminole	0	0	0	0
Sumter	0	0	0	0
Suwannee	0	0	308	308
Taylor	0	0	0	0
Union	0	0	0	0
Volusia	51	204	12	216
Wakulla	0	0	0	0
Walton	0	0	0	0
Washington	0	0	0	0
<b>State of Florida Total</b>	6,401	25,604	27,591	53,195

Sources: Florida Department of Health, 2007 and Shimberg Center for Affordable Housing, *Affordable Housing Inventory*, 2007.

**Figure 3. Farmworker Housing Capacity by County, 2005**



Sources: Florida Department of Health, 2007 and Shimberg Center for Affordable Housing, *Affordable Housing Inventory*, 2007.

The 11 counties with the capacity to house 1,000 or more farmworkers are Collier, Palm Beach, Miami-Dade, Hillsborough, Hendry, De Soto, Manatee, Polk, Indian River, Highlands, and Gadsden. These counties contain 84 percent of the state's farmworker housing capacity.

In most cases, the counties with the most farmworker housing supply also have the most farmworkers. Collier, Miami-Dade, Palm Beach, Hillsborough, Hendry, DeSoto, Manatee, Polk, Indian River, and Gadsden Counties appear on the lists of counties with highest number of farmworkers and the largest farmworker housing capacity. There are, however, some disparities between the lists: Orange County ranks sixth in the number of farmworkers, Volusia County ranks eighth, and Lake County ranks eleventh, but these counties have housing capacity below 1,000. Conversely, Highlands County ranks tenth in housing capacity but falls just short of the list of counties with the most farmworkers, ranking fifteenth in the number of workers.

It is important to note that many farmworkers meet their housing needs through the private market or through subsidized housing not specifically reserved for farmworkers. Thus, the supply described in this section does not represent the full extent of affordable housing that might be available to farmworkers. When compared with the number of farmworker households and household members, as in the following section, this constrained definition of supply yields a higher need for farmworker housing than what a true accounting of the full supply of housing available to farmworkers would yield.



## V. Need Estimate: Comparison of Supply and Households

The following estimate of the need for additional farmworker housing in Florida compares the supply of farmworker housing in each county to the number of farmworker households and household members. Table 12 estimates the need for total capacity—the number of individuals who need farmworker housing in each county—by comparing the capacity of DOH-permitted camps, Section 514/516 housing, and Florida Housing-assisted farmworker housing to the number of farmworkers and household members. Note that each Section 514/516 and Florida Housing-assisted unit adds a capacity of four to the supply.

Table 13 estimates the need for beds for single farmworkers and housing units for families by comparing the number of DOH-permitted units to the number of unaccompanied farmworkers and the number of multifamily Section 514/516 and Florida Housing-assisted units to the number of accompanied farmworker households. In this table, a single unit is counted once rather than as a capacity of four. Figures 4 and 5 are maps showing the need for beds for unaccompanied farmworkers and for multifamily units by county. See Appendix 1 for a reference map with Florida county names.

While we have compared the number of unaccompanied farmworkers to the number of DOH-permitted camp beds in Table 13, it is important to note that groups of unaccompanied farmworkers also may share units in state- and federally-subsidized multifamily developments. Therefore, some of the Florida Housing and Section 514/516 units that we have assigned to accompanied farmworker households may serve unaccompanied workers. Moreover, because unaccompanied workers may share housing, the numbers of *beds* needed for them do not necessarily translate to the number of individual *units* needed. Multifamily units may provide several beds; for example, a two-bedroom unit may provide four beds for unaccompanied farmworkers. Finally, note that any developments appearing in both the Florida Housing/RD multifamily list and the DOH camp list will be reflected in the multifamily category only.

Analysis of the numbers in Table 12 and 13 reveals that the total statewide gap between farmworker housing capacity and the number of farmworkers and their household members is 125,989 beds. The total gap between the number of single worker beds needed and the number of unaccompanied farmworkers is 49,568 beds. Eleven counties have an unmet need for single worker housing exceeding 1,000 beds: Miami-Dade, Hillsborough, Palm Beach, Orange, Manatee, Volusia, Gadsden, Hendry, Indian River, Lake, and Lee. The total gap between the number of multifamily units and the number of accompanied farmworker households is 21,768 units. The seven counties with unmet need for multifamily farmworker units exceeding 1,000 units are Hillsborough, Palm Beach, Miami-Dade, Manatee, Orange, Collier, and Hendry.

**Table 12. Need for Total Farmworker Housing Capacity by County, 2005**

<b>County</b>	<b>Demand: Farmworkers &amp; Household Members</b>	<b>Capacity: Farmworker Housing</b>	<b>Need: Farmworker Household Members Minus Capacity</b>
Alachua	884	0	884
Baker	0	0	0
Bay	0	0	0
Bradford	0	12	012
Brevard	386	0	386
Broward	1,896	704	1,192
Calhoun	357	0	357
Charlotte	1,294	0	1,294
Citrus	179	92	87
Clay	121	0	121
Collier	15,719	10,893	4,826
Columbia	133	0	133
DeSoto	3,904	2,579	1,325
Dixie	0	0	0
Duval	638	5	633
Escambia	0	0	0
Flagler	686	0	686
Franklin	0	0	0
Gadsden	5,076	1,042	4,034
Gilchrist	40	0	40
Glades	259	728	0469
Gulf	0	0	0
Hamilton	131	294	0163
Hardee	1,780	914	866
Hendry	9,242	3,370	5,872
Hernando	213	0	213
Highlands	2,806	1,729	1,077
Hillsborough	29,946	5,719	24,227
Holmes	0	0	0
Indian River	5,182	1,844	3,338
Jackson	270	0	270
Jefferson	380	0	380
Lafayette	0	0	0
Lake	4,317	644	3,673
Lee	3,349	814	2,535
Leon	248	344	096
Levy	0	0	0
Liberty	0	0	0
Madison	233	22	211
Manatee	11,887	2,522	9,365
Marion	694	496	198
Martin	1,448	518	930
Miami-Dade	21,296	5,776	15,520
Monroe	0	24	024

<b>County</b>	<b>Demand: Farmworkers &amp; Household Members</b>	<b>Capacity: Farmworker Housing</b>	<b>Need: Farmworker Household Members Minus Capacity</b>
Nassau	0	0	0
Okaloosa	0	0	0
Okeechobee	739	257	482
Orange	10,652	386	10,266
Osceola	671	160	511
Palm Beach	18,969	6,641	12,328
Pasco	1,332	624	708
Pinellas	147	0	147
Polk	4,153	2,518	1,635
Putnam	1,235	341	894
St. Johns	1,253	243	1,010
St. Lucie	1,417	416	1,001
Santa Rosa	252	0	252
Sarasota	664	0	664
Seminole	834	0	834
Sumter	627	0	627
Suwannee	287	308	021
Taylor	0	0	0
Union	0	0	0
Volusia	5,200	216	4,984
Wakulla	0	0	0
Walton	0	0	0
Washington	35	0	35
<b>State of Florida Total</b>	<b>179,184</b>	<b>53,195</b>	<b>125,989</b>

Sources: United States Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2005; United States Department of Labor, *National Agricultural Workers Survey*, 2003-2006; Florida Department of Health, 2007; Shimberg Center for Affordable Housing, *Affordable Housing Inventory*, 2007.

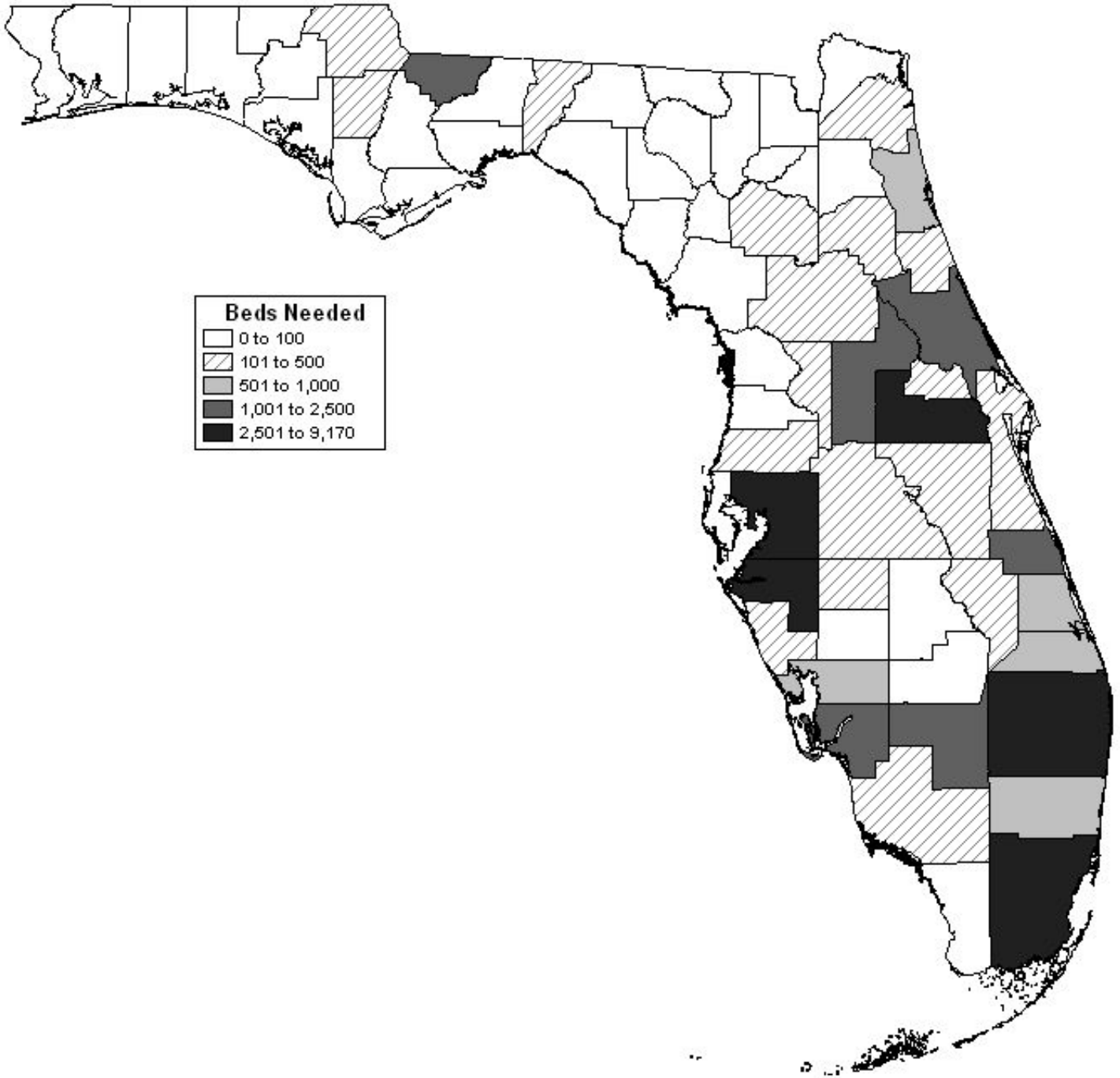
**Table 13. Need for Farmworker Housing Units by Type and County, 2005**

County	Unaccompanied Migrant & Seasonal Households	Supply: DOH Permitted Camps	Need for Single Person Beds	Accompanied Migrant & Seasonal Households	Supply: Section 514/516 and Florida Housing-Assisted Multifamily Units	Need for Multifamily Units
Alachua	380	0	380	139	0	139
Baker	0	0	0	0	0	0
Bay	0	0	0	0	0	0
Bradford	0	12	012	0	0	0
Brevard	166	0	166	61	0	61
Broward	816	0	816	298	176	122
Calhoun	154	0	154	56	0	56
Charlotte	557	0	557	204	0	204
Citrus	77	92	015	28	0	28
Clay	52	0	52	19	0	19
Collier	6,769	6,589	180	2,471	1,076	1,395
Columbia	57	0	57	21	0	21
DeSoto	1,681	2,211	0530	614	92	522
Dixie	0	0	0	0	0	0
Duval	275	5	270	100	0	100
Escambia	0	0	0	0	0	0
Flagler	295	0	295	108	0	108
Franklin	0	0	0	0	0	0
Gadsden	2,186	70	2,116	798	243	555
Gilchrist	17	0	17	6	0	6
Glades	112	728	0616	41	0	41
Gulf	0	0	0	0	0	0
Hamilton	56	294	0238	21	0	21
Hardee	767	638	129	280	69	211
Hendry	3,980	2,046	1,934	1,453	331	1,122
Hernando	92	0	92	34	0	34
Highlands	1,208	1,465	0257	441	66	375
Hillsborough	12,895	4,055	8,840	4,708	416	4,292
Holmes	0	0	0	0	0	0
Indian River	2,231	304	1,927	815	385	430
Jackson	116	0	116	42	0	42
Jefferson	164	0	164	60	0	60
Lafayette	0	0	0	0	0	0
Lake	1,859	100	1,759	679	136	543
Lee	1,442	414	1,028	526	100	426
Leon	107	344	0237	39	0	39
Levy	0	0	0	0	0	0
Liberty	0	0	0	0	0	0

County	Unaccompanied Migrant & Seasonal Households	Supply: DOH Permitted Camps	Need for Single Person Beds	Accompanied Migrant & Seasonal Households	Supply: Section 514/516 and Florida Housing-Assisted Multifamily Units	Need for Multifamily Units
Madison	100	22	78	37	0	37
Manatee	5,119	2,322	2,797	1,869	50	1,819
Marion	299	0	299	109	124	015
Martin	623	50	573	228	117	111
Miami-Dade	9,170	0	9,170	3,348	1,444	1,904
Monroe	0	0	0	0	6	06
Nassau	0	0	0	0	0	0
Okaloosa	0	0	0	0	0	0
Okeechobee	318	197	121	116	15	101
Orange	4,587	50	4,537	1,675	84	1,591
Osceola	289	160	129	106	0	106
Palm Beach	8,168	3,197	4,971	2,982	861	2,121
Pasco	574	216	358	209	102	107
Pinellas	63	0	63	23	0	23
Polk	1,788	1,314	474	653	301	352
Putnam	532	133	399	194	52	142
Santa Rosa	109	243	0134	40	0	40
Sarasota	286	0	286	104	104	0
Seminole	359	0	359	131	0	131
Saint Johns	540	0	540	197	0	197
Saint Lucie	610	0	610	223	0	223
Sumter	270	0	270	99	0	99
Suwannee	124	308	0184	45	0	45
Taylor	0	0	0	0	0	0
Union	0	0	0	0	0	0
Volusia	2,239	12	2,227	818	51	767
Wakulla	0	0	0	0	0	0
Walton	0	0	0	0	0	0
Washington	15	0	15	6	0	6
<b>State of Florida Total</b>	<b>77,159</b>	<b>27,591</b>	<b>49,568</b>	<b>28,169</b>	<b>6,401</b>	<b>21,768</b>

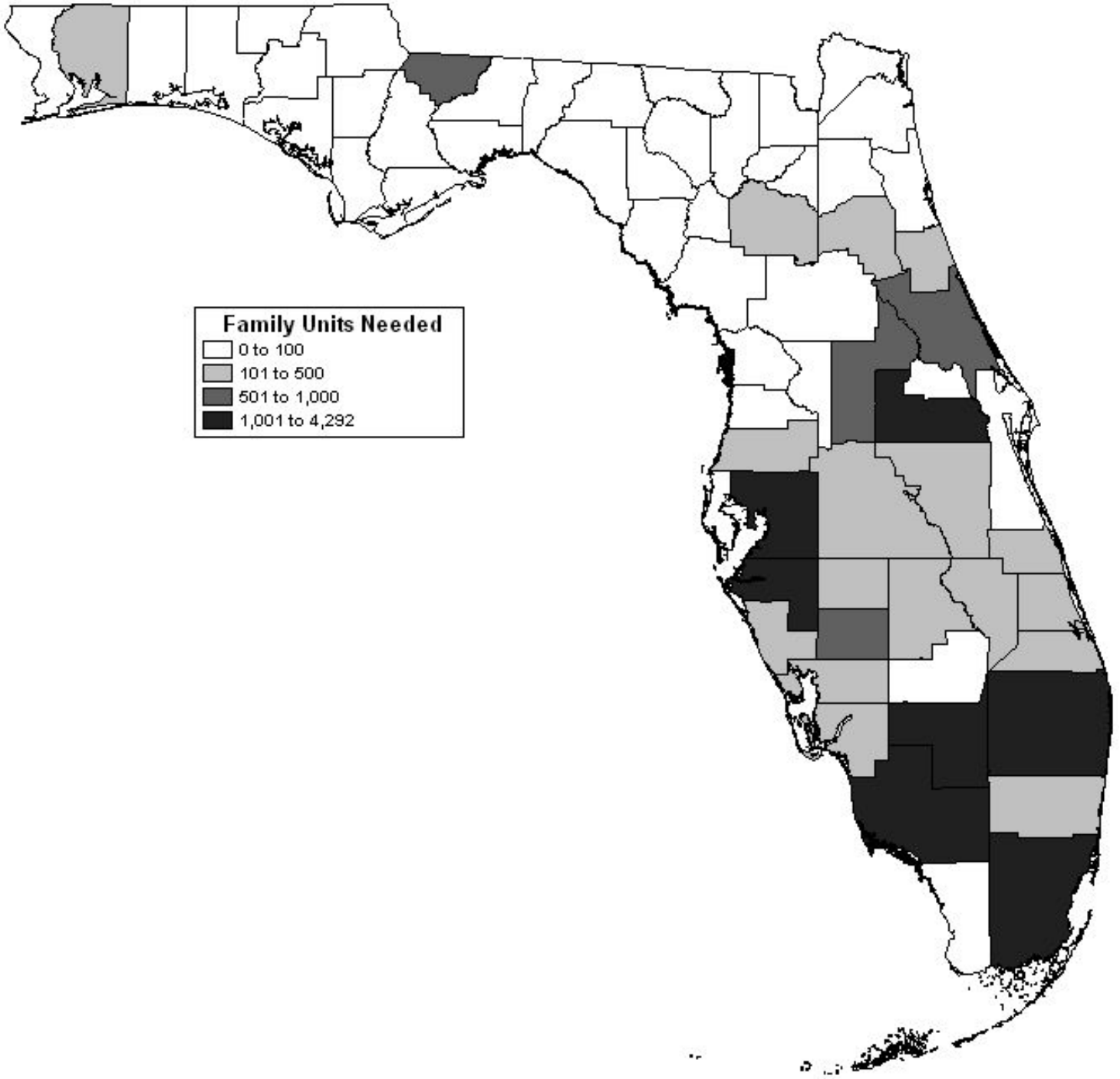
Sources: United States Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2005; United States Department of Labor, *National Agricultural Workers Survey*, 2003-2006; Florida Department of Health, 2007; Shimberg Center for Affordable Housing, *Affordable Housing Inventory*, 2007.

**Figure 4. Need for Single Farmworker Beds by County, 2005**



Sources: United States Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2005; United States Department of Labor, *National Agricultural Workers Survey*, 2003-2006; Florida Department of Health, 2007; Shimberg Center for Affordable Housing, *Affordable Housing Inventory*, 2007.

**Figure 5. Need for Farmworker Multifamily Units by County, 2005**



Sources: United States Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2005; United States Department of Labor, *National Agricultural Workers Survey*, 2003-2006; Florida Department of Health, 2007; Shimberg Center for Affordable Housing, *Affordable Housing Inventory*, 2007.

## **VI. DATA LIMITATIONS**

The numbers of farmworkers and housing units and the income numbers on which the analysis in this report is based should be used with caution due to several data limitations. First, as noted in the Methodology section, the method of using QCEW data on wages to estimate the number of farmworkers results in only 85 percent of farmworkers being assigned to specific counties. An additional three percent are designated as “County Unknown,” and the remaining 12 percent are distributed among counties based on those counties’ share of the 85 percent of workers already allocated. This will result in overestimates of workers in some counties, particularly those with the largest number of farmworkers, and underestimates of workers in some of the counties with fewer workers. As stated in the Methodology section, we recommend revising the distribution of farmworkers among counties when 2007 Census of Agriculture data become available.

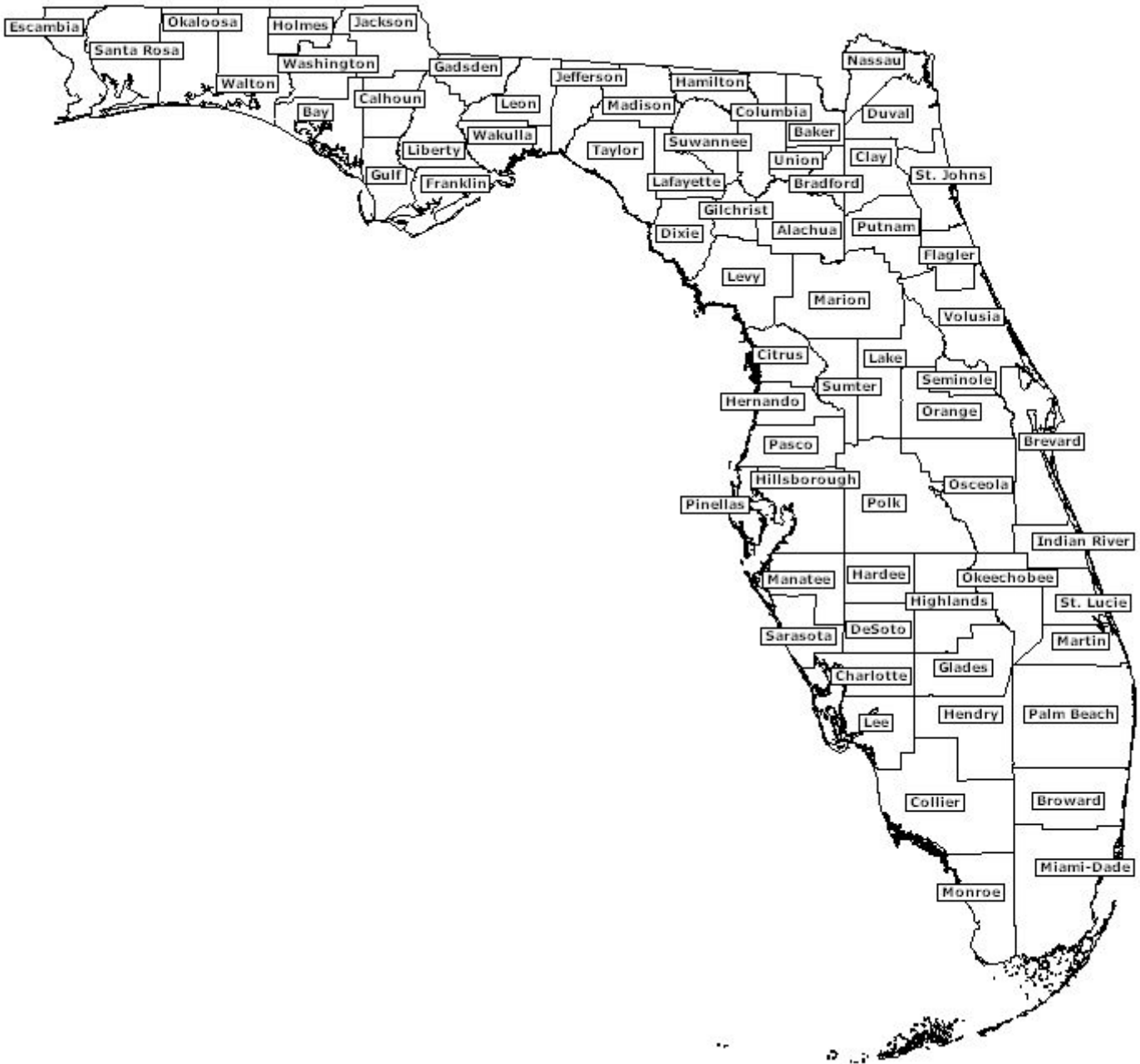
Second, the sample of workers questioned for the NAWS survey is small and may underrepresent people working on Florida citrus farms. Thus, the division between migrant and seasonal workers, the division between accompanied and unaccompanied workers, and the income numbers are subject to error.

Third, as noted in Section II, the lack of family income data by household led us to extrapolate the number of households in each income range from the number of workers in that range. This may have led to an overestimate of accompanied worker households at the higher income levels and an underestimate of accompanied worker households at the lower income levels.

Finally, as noted in Section III, the count of housing units for farmworkers and their families does not include farmworker housing that might be provided by the private market or local entities, other than those licensed as camps by the state. In some cases, the camps themselves may be able to house more workers, since the capacity recorded by DOH reflects point-in-time occupancy levels. Therefore, while the supply numbers do accurately reflect the stock of state- and federally-subsidized multifamily units reserved for farmworkers and likely account for the vast majority of beds in DOH camps, they do not reflect all of the housing choices that may be available to farmworkers.



**APPENDIX 1: COUNTY MAP FOR THE STATE OF FLORIDA**



## **REFERENCES**

United States Bureau of Labor Statistics. *2005 Quarterly Census of Employment and Wages*. Washington, DC.

United States Department of Labor. *2003 National Agricultural Workers Survey*. Washington, D.C.

United States Department of Labor. *2004 National Agricultural Workers Survey*. Washington, D.C.

United States Department of Labor. *2005 National Agricultural Workers Survey*. Washington, D.C.

United States Department of Labor. *2006 National Agricultural Workers Survey*. Washington, D.C.

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