# Rental Housing Demand by Low-Income Commercial Fishing Workers 

## Introduction

This section of the needs assessment discusses the demand for affordable rental housing by commercial fishing workers. It includes discussions of the distribution of fishing worker households throughout the state and of the characteristics of low-income, rent-burdened fishing worker households.

We estimate that 1,255 households contained at least one fishing worker, had low incomes, and paid more than 30 percent of their incomes for rent in 2000. This analysis examines household sizes, income levels, and percentages of income paid for rent for these 1,255 households. Findings include the following:
?? Most fishing worker households in Florida facing a rental housing cost burden are small, with 57 percent containing one or two persons.
?? Nearly all of the rent-burdened households have incomes of 60 percent of the area median income or less. Forty-one percent have incomes of 30 percent of the area median income or less.
?? More than half of rent-burdened households pay more than 50 percent of their incomes for rent.
?? Generally, fishing worker households are concentrated in the southern, central Panhandle, and central eastern coastal counties. However, those fishing worker households with low incomes and rental cost burdens are concentrated in southeastern and southwestern coastal counties and, to a lesser extent, in the extreme northwestern counties.

Unlike discussions of other special-needs populations in the assessment, this section does not compare the demand for low-income rental housing by fishing workers to a particular supply of housing reserved for them. Outside of the FHFC-financed Mariner's Cove development in Monroe County, which reserves 32 units for low-income commercial fishing workers, there is no single type of housing designated for fishing workers. Instead, these households access the same supply of rental housing as the general population. This overall rental housing supply is already accounted for in the main section of the assessment.

## Methods

The most recent data available that combines occupational and housing information is the 1990 U.S. Census Public Use Microdata Sample (PUMS), which includes raw Census data for a five percent sample of U.S. households. The PUMS data permits the creation of a cross-tabulation of households for variables such as occupation of persons in the household, number of persons in the household, income as a percentage of the area median income (AMI), and percentage of income paid for rent.

To determine the total number of fishing worker households in Florida for 1990, their geographic distribution, and their division among home owners and renters, we extracted counts from the 1990 PUMS data of households with at least one person with a U.S. Census occupational code of 497, which includes "captains or other officers of fishing vessels," or 498, which includes "fishers." The PUMS data provides counts of the households meeting these conditions by Public Use Microdata Area (PUMA). Each PUMA represents a group of counties, a single county, or part of a single county.

To identify the main group of households with which this analysis is concerned-low-income fishing worker households with a rental cost burden-we furthered limited the households to those that met the following conditions:
?? Rent-burdened households, or those renter households paying more than 30 percent of income for gross rent;
?? Low-income households, or those with incomes at or below 80 percent of the AMI.

Within each PUMA, the PUMS data allowed the division of fishing worker households into categories based on the following variables:
?? Gross rent as a percentage of income (values included in this study: 30-49 percent of income, 50 percent of income or more);
?? Household income as a percentage of AMI (values included: 0-30 percent of AMI, 31-50 percent of AMI, 51-60 percent of AMI, 61-80 percent of AMI);
?? Number of persons residing in the household (values included: 1-2 persons, 3-4 persons, 5 or more persons).

Finally, to translate 1990 PUMS data by PUMA to year 2000 estimates by county, we assumed that the ratio of low-income, rent-burdened households with at least one fishing worker to the total number of renter households within a PUMA was the same in 2000 as in 1990. We calculated this ratio by dividing the 1990 PUMS counts of fishing worker households by the number of total renter households listed in the 1990 Census for each PUMA. We then multiplied this ratio by the number of renter households in each county from the 2000 U.S. Census to generate an estimate of the fishing worker
households for 2000. Where a PUMA contained more than one county, we assumed that each county's ratio of fishing worker households to total renter households was equal to the PUMA-wide ratio.

## Overview of Florida's Commercial Fishing Worker Households

According to the 1990 PUMS data, 8,871 Florida households contained at least one fishing worker in 1990. Households with a fishing worker appeared in nearly every Florida PUMA, with some concentration of fishing worker households in the southern coastal, central eastern coastal, and central Panhandle counties.

Map 1 and Table 1 on the following pages show the 1990 distribution of fishing worker households by the single counties or groups of counties that make up each PUMA. Note that in the table and map, the figures represent the total number of fishing worker households throughout a group of counties. Thus, for example, Escambia and Santa Rosa Counties combined had a total of 195 households containing a fishing worker.

Table 1. 1990 Fishing Worker Households in Florida

| County or Group of Counties | Fishing Worker Households |
| :---: | :---: |
| Escambia-Santa Rosa | 195 |
| Clay-Nassau-Baker | 210 |
| Okaloosa-Walton | 204 |
| Bay-Holmes-Washington | 544 |
| Gadsden-Calhoun-Franklin-Gulf-Jackson-Liberty | 498 |
| Leon-Jefferson-Wakulla | 130 |
| Alachua | 79 |
| Bradford-Columbia-Dixie-Gilchrist-Hamilton-Lafayette-Madison-Suwannee-Taylor-Union | 173 |
| Volusia | 335 |
| Duval | 290 |
| Flagler-Putnam-St. Johns | 206 |
| Brevard | 265 |
| Lake | 41 |
| Orange | 73 |
| Osceola | 0 |
| Seminole | 29 |
| Collier-Monroe | 1,564 |
| Charlotte | 29 |
| DeSoto-Glades-Hardee-Hendry-Highlands | 165 |
| St. Lucie | 310 |
| Martin | 140 |
| Palm Beach | 232 |
| Lee | 494 |
| Sarasota | 113 |
| Broward | 281 |
| Miami-Dade | 481 |
| Citrus-Levy-Sumter | 464 |
| Marion | 142 |
| Hernando | 91 |
| Pasco | 128 |
| Pinellas | 369 |
| Hillsborough | 94 |
| Polk | 132 |
| Manatee | 208 |
| Indian River-Okeechobee | 162 |
| State of Florida Total | 8,871 |

## Map 1. $\quad 1990$ Fishing Worker Households in Florida



|  | 1990 Fishing Worker Households |
| :---: | :---: |
|  | $\therefore 1$ to 100 |
|  | (1) 101 to 250 |
|  | 251 to 500 |
|  |  |
|  | 1,001 to 10,000 |
|  | $\square$ Other |

## Characteristics of Low-Income, Rent-burdened Fishing Worker Households

In 2000, an estimated 1,255 low-income Florida households containing at least one fishing worker paid more than 30 percent of income for rent. Table 2 below shows the income ranges and number of persons in these households.

Table 2. Low-Income, Rent-Burdened Fishing Worker Households in Florida by Income Range and Number of Persons

|  | $\mathbf{1 - 2}$ persons | $\mathbf{3 - 4}$ persons | 5 or more persons | Total |
| :--- | ---: | ---: | ---: | ---: |
| $\mathbf{3 0 \%}$ AMI or less | 318 | 163 | 36 | 518 |
| $\mathbf{3 1 - 5 0 \%}$ AMI | 220 | 139 | 64 | 423 |
| $\mathbf{5 1 - 6 0 \%}$ AMI | 162 | 47 | 31 | 240 |
| $\mathbf{6 1 - 8 0 \%}$ AMI | 18 | 24 | 32 | 74 |
| Total | 718 | 373 | 164 | 1,255 |

Thus, most of the fishing worker households facing a rental housing cost burden are small, with 57 percent containing one or two persons. Nearly all ( 94 percent) of the rent-burdened households have incomes of 60 percent of AMI or less. Forty-one percent of the rent-burdened households have incomes of 30 percent of AMI or less.

More than half ( 52 percent) of the fishing worker households counted above, particularly those in the lower income categories, pay more than 50 percent of their incomes for rent. Table 3 below shows the income ranges and household sizes for households experiencing this cost burden.

Table 3. Low-Income, Fishing Worker Households Paying More than 50\% of Income for Rent by Income Range and Persons in Household

|  | $\mathbf{1 - 2}$ persons | $\mathbf{3 - 4}$ persons | 5 or more persons | Total |
| :--- | ---: | ---: | ---: | ---: |
| $\mathbf{3 0 \%}$ AMI or less | 277 | 163 | 36 | 477 |
| $\mathbf{3 1 - 5 0 \%}$ AMI | 82 | 18 | 64 | 164 |
| $\mathbf{5 1 - 6 0 \%}$ AMI | 13 | 0 | 0 | 13 |
| $\mathbf{6 1 - 8 0 \%}$ AMI | 0 | 0 | 0 | 0 |
| Total | 371 | 182 | 101 | 654 |

Table 3 shows that nearly all households with this greater cost burden have incomes below 50 percent of AMI. Those with incomes below 30 percent of AMI make up the bulk of the households paying more than 50 percent of income for rent; in fact, all rent-burdened fishing worker households with three or more persons face this higher burden.

## County-By-County Data

Rent-burdened fishing worker households are found in 44 of Florida's 67 counties. Table 4 shows the breakdown of these households by county, percentage of income spent on rent, income range, and household size.

## Table 4. Rent-burdened Fishing Worker Households by County

| County | Percentage of Income Spent on Gross Rent | Household Income as Percentage of Area Median Income | Household Size in Persons | Number of Households |
| :---: | :---: | :---: | :---: | :---: |
| Alachua | No fishing worker renter households |  |  |  |
| Baker | 30-49\% | 51-60\% | 1-2 | 3 |
| Bay | 50\%+ | 30\% or less | 3-4 | 15 |
| Bradford | No low-income or no rent-burdened fishing worker households |  |  |  |
| Brevard | 30-49\% | 31-50\% | 1-2 | 29 |
| Broward | 30-49\% | $30 \%$ or less | 1-2 | 25 |
| Calhoun | $\begin{aligned} & 30-49 \% \\ & 50 \%+ \end{aligned}$ | $\begin{aligned} & 31-50 \% \\ & 31-50 \% \end{aligned}$ | $\begin{array}{\|l\|} \hline 3-4 \\ 1-2 \end{array}$ | 2 |
| Charlotte | No low-income or no rent-burdened fishing worker households |  |  |  |
| Citrus | 30-49\% | 51-60\% | 1-2 | 19 |
| Clay | 30-49\% | 51-60\% | 1-2 | 25 |
| Collier | $\begin{aligned} & 30-49 \% \\ & 50 \%+ \\ & 50 \%+ \\ & 50 \%+ \\ & \hline \end{aligned}$ | $\begin{aligned} & 31-50 \% \\ & 30 \% \text { or less } \\ & 30 \% \text { or less } \\ & 30 \% \text { or less } \end{aligned}$ | $\begin{array}{\|l\|} \hline 3-4 \\ 1-2 \\ 3-4 \\ 5+ \\ \hline \end{array}$ | 37 37 59 10 |
| Columbia | No low-income or no rent-burdened fishing worker households |  |  |  |
| DeSoto | 50\%+ | $30 \%$ or less | 1-2 | 8 |
| Dixie | No low-income or no rent-burdened fishing worker households |  |  |  |
| Duval | No low-income or no rent-burdened fishing worker households |  |  |  |


| County | Percentage of Income Spent on Gross Rent | Household Income as Percentage of Area Median Income | Household Size in Persons | Number of Households |
| :---: | :---: | :---: | :---: | :---: |
| Escambia | 30-49\% | 31-50\% | 3-4 | 10 |
|  | 30-49\% | 51-60\% | 3-4 | 10 |
|  | 30-49\% | 51-60\% | 5+ | 25 |
| Flagler | No low-income or no rent-burdened fishing worker households |  |  |  |
| Franklin | 30-49\% | 31-50\% | 3-4 | 2 |
|  | 50\%+ | 31-50\% | 1-2 | 2 |
| Gadsden | 30-49\% | 31-50\% | 3-4 | 9 |
|  | 50\%+ | 31-50\% | 1-2 | 7 |
|  | 50\%+ | $30 \%$ or less | 1-2 | 1 |
|  | 50\%+ | $30 \%$ or less | 3-4 | 2 |
| Gilchrist | No low-income or no rent-burdened fishing worker households |  |  |  |
| Glades | 50\%+ | $30 \%$ or less | 1-2 | 2 |
| Gulf | 30-49\% | 31-50\% | 3-4 | 3 |
|  | 50\%+ | 31-50\% | 1-2 | 2 |
| Hamilton | No low-income or no rent-burdened fishing worker households |  |  |  |
| Hardee | 50\%+ | $30 \%$ or less | 1-2 | 6 |
| Hendry | 50\%+ | 30\% or less | 1-2 | 9 |
| Hernando | No low-income or no rent-burdened fishing worker households |  |  |  |
| Highlands | 50\%+ | $30 \%$ or less | 1-2 | 23 |
| Hillsborough | 50\%+ | $30 \%$ or less | 1-2 | 25 |
| Holmes | 50\%+ | $30 \%$ or less | 3-4 | 1 |
| Indian River | 30-49\% | 51-60\% | 1-2 | 15 |
| Jackson | 30-49\% | 31-50\% | 3-4 | 10 |
|  | 50\%+ | 31-50\% | 1-2 | 7 |
|  | 50\%+ | $30 \%$ or less | 1-2 | 1 |
|  | 50\%+ | $30 \%$ or less |  | 2 |
| Jefferson | No low-income or no rent-burdened fishing worker households |  |  |  |
| Lafayette | No low-income or no rent-burdened fishing worker households |  |  |  |
| Lake | No low-income or no rent-burdened fishing worker households |  |  |  |
| Lee | 30-49\% | 31-50\% | 1-2 | 11 |
|  | 50\%+ | $30 \%$ or less | 1-2 | 25 |
| Leon | No low-income or no rent-burdened fishing worker households |  |  |  |
| Levy | 30-49\% | 51-60\% | 1-2 | 6 |
| Liberty | 30-49\% | 31-50\% | 3-4 | 1 |
|  | 50\%+ | 31-50\% | 1-2 | 1 |
| Madison | No low-income or no rent-burdened fishing worker households |  |  |  |
| Manatee | 50\%+ | $30 \%$ or less | 1-2 | 27 |
| Marion | 50\%+ | $30 \%$ or less | 5+ | 22 |
| Martin | 30-49\% | 61-80\% | 5+ | 32 |
| Miami-Dade | 30-49\% | 51-60\% | 1-2 | 32 |
|  | 30-49\% | 51-60\% | 3-4 | 22 |
|  | 30-49\% | 61-80\% | 1-2 | 18 |
|  | 50\%+ | 31-50\% | 1-2 | 61 |
|  |  | $30 \%$ or less | 3-4 | 18 |
| Monroe | 30-49\% | 31-50\% | 3-4 | 20 |
|  | 50\%+ | $30 \%$ or less | 1-2 | 20 |


| County | Percentage of Income Spent on Gross Rent | Household Income as Percentage of Area Median Income | Household Size in Persons | Number of Households |
| :---: | :---: | :---: | :---: | :---: |
|  | 50\%+ | $30 \%$ or less | 3-4 | 31 |
|  | 50\%+ | $30 \%$ or less | 5+ | 5 |
| Nassau | 30-49\% | 51-60\% | 1-2 | 10 |
| Okaloosa | 30-49\% | 31-50\% | 1-2 | 29 |
| Okeechobee | 30-49\% | 51-60\% | 1-2 | 4 |
| Orange | 50\%+ | 31-50\% | 5+ | 50 |
| Osceola | No fishing worker households |  |  |  |
| Palm Beach | 30-49\% | 51-60\% | 1-2 | 28 |
|  | 30-49\% | $30 \%$ or less | 1-2 | 16 |
| Pasco | 30-49\% | 31-50\% | 1-2 | 24 |
|  | 50\%+ | $30 \%$ or less | 1-2 | 32 |
| Pinellas | 30-49\% | 31-50\% | 1-2 | 20 |
|  | 30-49\% | 51-60\% | 3-4 | 13 |
|  | 50\%+ | 31-50\% | 5+ | 15 |
|  | 50\%+ | 51-60\% | 1-2 | 13 |
|  | 50\%+ | $30 \%$ or less | 1-2 | 32 |
| Polk | 30-49\% | 31-50\% | 3-4 | 23 |
|  | 30-49\% | 61-80\% | 3-4 | 24 |
| Putnam | No low-income or no rent-burdened fishing worker households |  |  |  |
| Saint Johns | No low-income or no rent-burdened fishing worker households |  |  |  |
| Saint Lucie | 30-49\% | 31-50\% | 1-2 | 20 |
| Santa Rosa | 30-49\% | 31-50\% | 3-4 | 2 |
|  | 30-49\% | 51-60\% | 3-4 | 2 |
|  | 30-49\% | 51-60\% | 5+ | 6 |
| Sarasota | 50\%+ | 30\% or less | 3-4 | 36 |
| Seminole | No fishing worker renter households |  |  |  |
| Sumter | 30-49\% | 51-60\% | 1-2 | 7 |
| Suwannee | No low-income or no rent-burdened fishing worker households |  |  |  |
| Taylor | No low-income or no rent-burdened fishing worker households |  |  |  |
| Union | No low-income or no rent-burdened fishing worker households |  |  |  |
| Volusia | 50\%+ | 31-50\% | 3-4 | 18 |
|  | 50\%+ | $30 \%$ or less | 1-2 | 29 |
| Wakulla | No low-income or no rent-burdened fishing worker households |  |  |  |
| Walton | 30-49\% | 31-50\% | 1-2 | 4 |
| Washington | 50\%+ | 30\% or less | 3-4 | 1 |
| State of Florida Total $\quad 1,255$ |  |  |  |  |

Map 2 on the following page shows the distribution of all rent-burdened fishing worker households by county throughout the state. Maps 3 and 4 show the distribution of rent-burdened households with the greatest needs: those paying 50 percent or more of their income for rent and those with incomes of 30 percent of AMI or less.

## Map 2. Low Income, Rent-Burdened Fishing Worker Households by County



## Map 3. Low-Income Fishing Worker Households Paying More than 50\% of Income for Rent by County



## Map 4. Rent-Burdened Fishing Worker Households with Incomes of 30\% AMI or Less by County



The largest numbers of rent-burdened fishing worker households are found in the following counties: Miami-Dade, Collier, Pinellas, Monroe, Pasco, Orange, Polk, Volusia, Escambia, and Palm Beach. Overall, rent-burdened households are concentrated primarily in Florida's southeastern and southwestern coastal counties, with smaller numbers in the more sparsely populated northwestern coastal counties. However, rentburdened fishing worker households may be found even in central Florida counties, with substantial numbers of households in Polk and Orange Counties. Those households with rent burdens greater than 50 percent of income are concentrated primarily in the southwestern coastal counties, while the households with incomes below 30 percent of the area median are concentrated in southwestern and southeastern counties.

Surprisingly, despite the general presence of fishing worker households in the area encompassing Gulf, Franklin, Wakulla, Jefferson, Taylor, and Dixie Counties, these counties do not contain rent-burdened fishing worker households. While these counties do contain renter fishing worker households, none paid more than 30 percent of their income for rent. This may be due to the relatively low rent levels for housing units in these counties. According to the 1990 Census, the median gross rent that year was $\$ 331$ in Wakulla County, $\$ 311$ in Jefferson County, $\$ 281$ in Taylor County, and $\$ 264$ in Dixie County, compared to $\$ 481$ for the State of Florida. Other nearby counties with general concentrations of fishing worker households but relatively few rent-burdened fishing worker households include Washington, Gulf, Calhoun, and Franklin Counties. Most of the fishing worker households in these counties own their homes; 1990 PUMS data indicate that 88 percent of fishing worker households in the PUMA including

Washington County and 77 percent of fishing worker households in the PUMA containing Gulf, Calhoun, and Franklin Counties are home owners.

## Conclusion and Data Limitations

This analysis shows that rent-burdened fishing worker households are concentrated in the more heavily populated southeastern and southwestern coastal counties, although they are also found in northwestern and even inland counties. Nearly all of the rent-burdened households have incomes below 60 percent of the area median, which could qualify them for housing developed under the Low-Income Housing Tax Credit program. Most of those with the lowest incomes currently face severe rent burdens, with rent exceeding 50 percent of household income.

The major data limitation in this study is the extrapolation of data from 1990, which predates the ban on entangling nets and restrictions on other types of fishing nets implemented in Florida in July 1995 (Adams et. al., 2000). The net ban may have had three effects that would change the results of this analysis. First, the total number of households with a member working in commercial fishing may have decreased. In a study of fishing worker families in eight Florida Gulf Coast and two Florida Atlantic Coast communities, Chuck Adams, Steve Jacob, and Suzanna Smith found that 25 percent of commercial fishing workers interviewed before the ban had left fishing by the time a second interview was conducted after the ban. Of those still fishing, 70 percent fished full-time after the ban, compared to 90 percent before the ban (Adams et. al., 2001). However, the results of this study cannot necessarily be generalized to all communities, and statewide statistics documenting the change in the number of commercial fishing workers since the implementation of the net ban are not available.

Second, the distribution of fishing workers among counties may have changed. As the net ban affects fishing for some species more than others, the population of fishing workers in some areas may have declined more steeply than in others depending on the species that predominate. Third, fishing workers' incomes may have fallen since the implementation of the net ban, which in turn could increase the number of households facing a rent burden. Adams et. al. found that among households interviewed, the percentage of household income derived from fishing dropped from 80 percent before the net ban to 55 percent after the ban (Adams et. al., 2000). The survey did not determine the change in total household income following the net ban.

The U.S. Census Bureau plans to release the PUMS data from the 2000 Census in 2003. We suggest that this section of the assessment be updated when this data becomes available so that the analysis will reflect the true changes in the number of fishing worker households, income, and rental housing cost burdens following the net ban.

A second data limitation stems from the assumption that all counties within a PUMA contain the same ratio of rent-burdened fishing worker households to total renter households. Some PUMAs contain both coastal and inland counties. For example, PUMA 4000 includes Sumter County as well as the coastal counties of Levy and Citrus. It is likely that the coastal counties within multi-county PUMAs actually contain more fishing worker households and that inland counties contain fewer.

## References

Adams, Chuck, Steve Jacob, and Suzanna Smith. What Happened After the Net Ban? January, 2000. August 22, 2001. http://edis.ifas.ufl.edu/BODY_FE123.

