

Temporary migration: a case study of Florida

Stanley K. Smith · Mark House

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Abstract Most migration statistics in the United States focus on changes in permanent residence, thereby missing temporary moves such as the daily commute to work, business trips, vacations, and seasonal migration. In this paper, we analyze temporary migration streams in Florida, focusing on moves that include an extended stay. Using several types of survey data, we examine the characteristics of non-Floridians who spend part of the year in Florida and Floridians who spend part of the year elsewhere. We develop estimates of the number, timing, and duration of temporary moves and the origins, destinations, characteristics, and motivations of temporary migrants. This study presents the most comprehensive analysis yet of temporary migration in Florida and provides a model that can be used in other places. It also points to a serious shortcoming in the US statistical system, namely, the lack of information on temporary migration streams. We believe the American Community Survey provides an opportunity to remedy this problem.

Keywords American Community Survey · Population estimates · Seasonal migration · Temporary residents · Tourism

Introduction

America is a nation of movers, but many moves go unmeasured because official migration statistics focus on changes in place of usual residence, or the “living quarters where a person spends more nights during a year than any other place” (US Census Bureau 2002, p. C-24). As a result, most migration statistics miss temporary moves such as the daily commute to work, short business trips, weekend visits to

S. K. Smith (✉) · M. House
Bureau of Economic and Business Research, University of Florida, 221 Matherly Hall, Gainesville,
FL 32611-7145, USA
e-mail: sksmith@ufl.edu

grandma's house, 2-week vacations at the beach, and winters spent in Florida or Arizona. We refer to these moves as "temporary migration."

Although information on temporary migration is sparse, its impact on the populations of sending and receiving regions can be substantial. Retirement communities in areas with warm climates have more residents during the winter than the summer and resort communities in areas with cool climates have more residents during the summer than the winter; ski resorts often have both summer and winter seasons. College towns empty out during the summer and fill up again in the fall. Bedroom communities empty out during the day and fill up at night, whereas central business districts fill up during the day and empty out at night. The populations of agricultural areas rise and fall with fluctuations in the seasonal labor force and large tourist attractions draw ever-changing streams of short-term visitors.

These population fluctuations affect traffic patterns, housing prices, retail sales, and the use of public transportation, medical services, recreational facilities, and a wide variety of other publicly and privately provided goods and services (e.g., Happel and Hogan 2002; Monahan and Greene 1982; Rose and Kingma 1989). They often have a substantial impact on the demographic and socioeconomic characteristics of the population as well. For many businesses and government agencies, effective budgeting, planning, and analysis cannot be accomplished without an accurate accounting for the number, timing, and characteristics of temporary migrants.

Unfortunately, there are no data sources that provide complete, consistent coverage of temporary migration in the United States. Instead, estimates must be cobbled together from a variety of administrative records, business statistics, and sample surveys (e.g., Smith 1989). This severely limits our ability to analyze the determinants and consequences of temporary migration or even to determine the number and timing of temporary moves.

In this study, we examine temporary migration streams in Florida, the state with more temporary residents than any other state (Gober and Mings 1984). We focus on moves that include an extended stay; that is, we do not consider daytime population mobility or short-term overnight visits. We distinguish among several types of temporary migrants and examine the data and techniques that can be used to develop estimates of each. We develop a methodology for estimating the number, timing, and characteristics of temporary migrants entering and leaving Florida and compare the characteristics of various types of temporary migrants with each other and with the characteristics of permanent residents. We close with a discussion of the importance of studying temporary migration, a critique of the migration data currently collected through the US statistical system, and a suggestion for improving that system.

Data

The data used in this study were collected through telephone surveys conducted by the Bureau of Economic and Business Research (BEBR) at the University of Florida. Most of the data came from a series of monthly household surveys in which

the sample was selected using list-assisted random digit dialing. A database maintained by the Marketing Systems Group/GENESYS identified working telephone banks with at least one residential number (a bank consists of the area code, prefix, and first digit of the suffix). Random numbers were added to the banks and those numbers were called. The sample was limited to Florida by geo-coding phone banks at the census tract level.

The database excluded banks that had not been assigned or that had been assigned exclusively to commercial or government entities. Banks associated with cell phone numbers were also excluded because cell phones represent individuals rather than households. Excluding cell phone numbers had little impact on the representativeness of the sample because most households (including those with cell phone users) have a landline telephone. A recent survey found that cell phone-only households accounted for <4% of all households in the United States in 2003 (Blumberg et al. 2005).

The survey reached ~500 Florida households each month between September 2000 and December 2003. All respondents were age 18 or older and were selected as the household member who most recently had a birthday. Each respondent was asked a series of questions regarding his or her demographic characteristics, residency status, and migration behavior. Most questions focused on the characteristics of the respondent (e.g., age, sex, and race), but several dealt with the household as a whole (e.g., income, household size, and number of visitors). Most of the results had a margin of error of <3%.

The monthly survey questionnaire followed Census Bureau guidelines regarding residency status. Respondents were asked if Florida was their usual place of residence, or the place they lived and slept most of the time. Most reported that it was, but 2.8% reported that Florida was not their usual place of residence. We refer to the first group as “permanent residents” and the second as “temporary residents.”

Many types of mobility could potentially be classified as temporary migration, ranging from the daily commute to work to short business trips, weekend getaways, 2-week vacations, and extended stays at a second residence (e.g., Smith 1989; Zelinsky 1971). All can be important for specific purposes, but our focus in this study is on extended stays. To remove the impact of short-term mobility, we restricted our analysis to moves that included a stay of 1 month or more; this reduced the number of temporary residents to 2.4% of all respondents. Making this restriction allows us to differentiate between shorter and longer stays and is consistent with measures used in other studies (e.g., Happel and Hogan 2002; Hogan and Steinnes 1996, 1998).

We also collected information on the travel patterns of Florida’s permanent residents and found that more than 22% spent more than 30 days away from home during the previous year. Given our emphasis on extended stays, we restricted the analysis to the 9% of permanent residents who reported that they spent more than 30 *consecutive* days away from home. We refer to this group as “travelers.” Temporary residents and travelers are the two types of temporary migrants considered in this study.

Because of the nature of the sampling frame, the survey did not include a potentially large number of temporary residents staying with permanent residents or in hotels, motels, campgrounds, and other types of lodging without direct outside telephone lines. We dealt with this problem in two ways. First, we used survey data on out-of-state visitors to develop an estimate of the number of temporary residents staying with permanent residents. Second, we conducted an additional survey of hotels and motels and developed an estimate of the number of temporary residents staying in this type of lodging. By adding together estimates from these three sources, we were able to construct an estimate of the total number of temporary residents in Florida.

Results

Number of temporary residents

The number of temporary residents counted in the survey fluctuated considerably over the course of the year (Table 1). Approximately 5% of respondents in January and February reported that they were temporary residents spending 1 month or more in Florida, compared to <1% in August and September. This is consistent with expectations that many temporary residents are “snowbirds” who spend winters in areas with warm climates and summers elsewhere (e.g., Happel and Hogan 2002; Longino and Marshall 1990; Smith 1989). Given Florida’s 2005 estimate of just over 7.1 million households and an average household size of 2.2 for temporary residents, these data imply that ~891,000 temporary residents were present in January but only 78,000 in August.

These estimates do not cover all temporary residents. Although one in six temporary residents reached in the survey reported that they were living with a

Table 1 Respondents by residency status and month of survey

Months	Permanent	%	Temporary	%	Total
January	1,520	94.6	86	5.4	1,606
February	1,572	95.4	76	4.6	1,648
March	1,494	96.7	51	3.3	1,545
April	1,440	96.0	60	4.0	1,500
May	1,502	99.0	15	1.0	1,517
June	1,569	98.9	17	1.1	1,586
July	1,515	98.5	23	1.5	1,538
August	1,509	99.5	8	0.5	1,517
September	2,083	99.2	16	0.8	2,099
October	1,982	98.9	22	1.1	2,004
November	1,947	97.5	50	2.5	1,997
December	2,046	96.8	67	3.2	2,113
Total	20,179	97.6	491	2.4	20,670

permanent Florida resident, not all temporary residents staying with permanent residents were covered by the survey. To remedy this problem, we asked permanent residents if they had any out-of-state visitors during the previous month and if so, how many and how long they stayed. We used these data to develop an estimate of the number of temporary residents staying with permanent residents.

More than 27% of Florida's permanent residents reported that they had out-of-state overnight visitors during the previous month. More than half stayed for <1 week, 38% stayed for 1–2 weeks, and 4% stayed for 2–4 weeks. Just over 5% stayed for more than a month. The average number of visitors staying for more than 1 month was 2.4 per household.

There was not a strong seasonal trend in the proportion of permanent residents with visitors staying for more than 1 month. The proportions averaged 1.6% for surveys conducted from January to March, 1.7% for surveys conducted from April to June, 1.4% for surveys conducted from July to September, and 1.2% for surveys conducted from October to December. Applying these proportions to the number of households in 2005 and multiplying by the average number of visitors per household (2.4) implies that ~273,000 temporary residents were staying with permanent residents during the winter, 290,000 during the spring, 239,000 during the summer, and 205,000 during the fall.

The household survey did not include temporary residents staying in hotels, motels, campgrounds, and other types of lodging without direct outside telephone lines (it should be noted that many temporary residents staying in mobile home and RV parks have direct outside telephone lines and were therefore subject to being included in the monthly household survey). To develop an estimate of this group, we conducted a statewide survey of 267 hotels and motels in Florida. This survey asked hotel and motel managers how many rooms they had, how many rooms were occupied by guests staying for at least 30 consecutive nights, and how many guests were staying in those rooms.

The hotel/motel survey was conducted in June and July, 2005. It collected data on guests at the time of the survey as well as guests staying at the hotel or motel during January and February, 2005. Approximately 90% of the managers were able to provide information for June and July and 77% were able to provide information for January and February.

Survey results were weighted to correspond to the statewide distribution of hotels and motels by number of rooms (<100, 100–299, 300 or more). According to the survey, 52% of hotels and motels had guests staying at least 30 consecutive nights in January and February, compared to 36% in June and July. The average number of guests was 30.6 per hotel/motel with such guests in January and February and 38.6 in June and July. Applying these results to Florida's 4,714 licensed hotels and motels implies that there were ~75,000 temporary residents staying in hotels and motels in January and February and 66,000 in June and July. Although hotels and motels accommodate millions of tourists and business travelers to Florida each year, they apparently do not provide lodging for many temporary residents as defined in this study.

By adding together the three estimates described above, we get a total of more than 1.2 million temporary residents in Florida at the peak of the 2005 winter season

and <400,000 during the late summer. Clearly, temporary migration has a substantial impact on the number of people residing in Florida at any given time.

It should be noted that estimates of temporary residents living in hotels and motels are less reliable than estimates of other temporary residents because they rely more heavily on indirect estimation techniques and are more likely to be affected by respondent error. However, since they account for a fairly small proportion of Florida's temporary residents during the peak season, it is not likely that those errors have a large impact on the peak estimate.

It should also be noted that the estimates do not include temporary residents staying in bed-and-breakfasts, campgrounds, and other types of lodging not covered by our sampling frame. Given the relatively small number of temporary residents staying in hotels and motels, we doubt that this omission has much impact on our overall estimate.

Characteristics of temporary residents

How do temporary residents compare to permanent residents of Florida? Not surprisingly, temporary residents were considerably older (Table 2). More than 68% of temporary residents were age 55 and older, compared to only 32% of permanent residents. However, temporary residents also had a higher proportion age 18–24 than permanent residents; we explain this apparent anomaly later in the paper.

Table 3 summarizes several other characteristics. Temporary residents had a mean age of 56, compared to 46 for permanent residents. Females accounted for 47% of temporary residents and 53% of permanent residents. More than 65% of temporary residents were married, compared to 54% of permanent residents. Temporary residents had a higher proportion white and lower proportions black and Hispanic than permanent residents. They had slightly higher educational levels and considerably higher incomes. Temporary residents were much less likely to be employed than permanent residents.

Temporary residents are not all alike, however. When asked how many months they intended to spend in Florida during their current visit, 28% reported 3 months or less, 50% reported 4–6 months, and 22% reported 7 months or more; indeed, 14% said they would be in Florida for the entire year (Table 4). Clearly, some

Table 2 Respondents by residency status and age

Age	Permanent	%	Temporary	%	Total	%
≤ 25	1,944	9.8	53	11.1	1,997	9.9
25–34	3,267	16.6	39	8.1	3,306	16.4
35–44	4,128	20.9	26	5.4	4,154	20.5
45–54	4,069	20.6	34	7.1	4,103	20.3
55–64	2,274	11.5	91	19.0	2,365	11.7
65–74	2,251	11.4	139	29.0	2,390	11.8
75+	1,806	9.1	97	20.3	1,903	9.4
Total	19,739	100.0	479	100.0	20,218	100.0

Table 3 Selected characteristics of respondents by residency status

<i>Characteristic</i>	Permanent	<i>N</i>	Temporary	<i>N</i>
Mean age	46.4	20,181	56.4	491
% Age 65+	20.6	20,181	46.1	491
% Female	53.1	20,181	47.1	491
% Married	53.6	19,554	65.3	485
% White	80.2	19,858	84.1	479
% Black	9.9	19,858	5.2	479
% Hispanic	13.6	20,022	6.3	456
Mean education	13.9	19,739	14.4	491
Mean income (\$)	53,464	17,042	62,857	438
% Employed	60.1	19,662	28.0	485

Table 4 Number of months spent in Florida by temporary residents

Number of months	Respondents	%
1	46	9.4
2	32	6.5
3	61	12.4
4	61	12.4
5	88	17.9
6	97	19.8
7	13	2.6
8	13	2.6
9	4	0.8
10	4	0.8
11	2	0.4
12	70	14.3
Total	491	100.0

respondents interpreted “place of usual residence” in a manner inconsistent with Census Bureau guidelines.

In order to investigate these differences, we divided temporary residents into two groups: those who spent 6 months or less in Florida and those who spent more than 6 months. Perhaps the most dramatic difference between the two groups is their age structures (Table 5). Almost 79% of those staying 6 months or less were age 55 or older, compared to only 31% of those staying more than 6 months. At the other end of the spectrum, almost 45% of those staying more than 6 months were less than age 35, compared to only 12% of those staying 6 months or less. It is the impact of those staying more than 6 months that caused temporary residents to have the relatively high proportion of young persons shown in Table 2.

Temporary residents staying 6 months or less had a mean age of 60, compared to 43 for those staying more than 6 months (Table 6). They had a slightly lower

Table 5 Temporary residents by age and length of stay

Age	≤ 6 months	%	>6 months	%	Total	%
≤ 25	27	7.2	26	24.8	53	11.1
25–34	18	4.8	21	20.0	39	8.1
35–44	12	3.2	14	13.3	26	5.4
45–55	23	6.1	11	10.5	34	7.1
55–64	80	21.4	11	10.5	91	19.0
65–74	125	33.4	14	13.3	139	29.0
75+	89	23.8	8	7.6	97	20.3
Total	374	100.0	105	100.0	479	100.0

Table 6 Selected characteristics of temporary residents by length of stay

Characteristic	≤ 6 months	<i>N</i>	>6 months	<i>N</i>
Mean age	60.2	385	42.5	106
% Age 65+	57.2	374	20.9	106
% Female	46.8	385	48.1	106
% Married	69.7	379	49.5	105
% White	89.3	375	65.4	104
% Black	3.2	375	12.5	104
% Hispanic	3.1	381	16.0	106
Mean education	14.4	385	14.2	106
Mean income (\$)	63,929	285	50,505	88
% Employed	21.0	381	51.9	106

proportion female, a substantially higher proportion married, and displayed considerably less racial and ethnic diversity. Those staying 6 months or less had slightly higher educational levels and much higher incomes than those staying more than 6 months, but were less likely to be employed.

The two groups also differed in their primary reasons for visiting Florida (Table 7). More than 73% of those staying 6 months or less came to Florida because

Table 7 Temporary residents by primary reason for visit and length of stay

Primary reason	≤ 6 months	%	>6 months	%	Total	%
Weather/climate	282	73.6	28	26.4	310	63.4
Health	11	2.9	2	1.9	13	2.7
Job/business	13	3.4	21	19.8	34	7.0
Visit family or friends	26	6.8	5	4.7	31	6.3
College/military	8	2.1	30	28.3	38	7.8
Recreation/vacation	23	6.0	5	4.7	28	5.7
Other	20	5.2	15	14.2	35	7.2
Total	383	100.0	106	100.0	489	100.0

of its climate, 3% for health reasons, 7% to visit family or friends, and 6% for a vacation. Combining these categories implies that 89% of this group came to Florida primarily for lifestyle or recreational purposes. For those staying more than 6 months, these four categories accounted for only 38% of all visits. For this group, almost half came to Florida for college, military, or employment-related reasons.

These two groups followed different timing patterns over the course of a year (Table 8). Those staying 6 months or less were much more likely to be in Florida during the winter than during the summer, accounting for 3–5% of survey respondents between January and April but 1% or less between May and October. Those staying more than 6 months were not nearly as seasonal, ranging only from 0.3 to 0.8% over the course of the year.

The two groups also differed in their places of usual residence (Table 9). Of those staying 6 months or less, about 35% each came from the Northeast and Midwest, 14% from other southern states, 3% from the West, 8% from Canada, and 4% from other foreign countries. For those staying more than 6 months, 29% came from other southern states, 26% from the Northeast, 19% from the West, and 16% from foreign countries. Only 11% came from the Midwest and none from Canada.

The picture that emerges, then, is that temporary residents spending half the year or less in Florida fit the stereotypical image of the “snowbird,” or the retiree who spends winters in Florida and summers elsewhere (typically in cooler climates). They are considerably older than permanent residents and other temporary residents, have higher proportions married, are less likely to be employed, and display less racial and ethnic diversity. They are well off financially and come to Florida primarily to enjoy the warm weather and for other recreational purposes. The characteristics of this group are generally consistent with those reported in other studies of elderly seasonal migration (e.g., Hogan and Steinnes 1998; Longino and Marshall 1990; Sullivan 1985).

Table 8 Respondents by detailed residency status and month

Months	Permanent	%	Temporary ≤ 6 months	%	Temporary >6 months	%
January	1,520	94.6	74	4.6	12	0.7
February	1,572	95.4	62	3.8	14	0.8
March	1,494	96.7	46	3.0	5	0.3
April	1,440	96.0	49	3.3	11	0.7
May	1,502	99.0	9	0.6	6	0.4
June	1,569	98.9	6	0.4	11	0.7
July	1,515	98.5	16	1.0	7	0.5
August	1,509	99.5	4	0.3	4	0.3
September	2,083	99.2	8	0.4	8	0.4
October	1,982	98.9	14	0.7	8	0.4
November	1,947	97.5	41	2.1	9	0.5
December	2,046	96.8	56	2.7	11	0.5
Total	20,179	97.6	385	1.9	106	0.5

Table 9 Place of usual residence of Florida's temporary residents by length of stay

Place of usual residence	≤ 6 months	%	>6 months	%	Total	%
Northeast	132	35.6	26	25.5	158	33.4
Midwest	131	35.3	11	10.8	142	30.0
South (not Florida)	51	13.7	30	29.4	81	17.1
West	12	3.2	19	18.6	31	6.6
Canada	30	8.1	0	0.0	30	6.3
Other foreign country	15	4.0	16	15.7	31	6.6
Total	371	100.0	102	100.0	473	100.0

The stereotypical snowbird is not the only type of temporary resident in Florida, however. Persons spending more than half the year in Florida have substantially different characteristics than those spending half the year or less. In fact, they are more nearly similar to permanent residents than to other temporary residents. They are younger than other temporary residents and display more racial and ethnic diversity. Their income, educational, and employment characteristics are roughly similar to those of permanent residents. They are more likely to come to Florida for college, military service, or work-related reasons than for the warm weather. Although they consider themselves to be temporary residents, by Census Bureau definitions they should be considered as permanent residents of the state. Their greater similarity to permanent residents than to other temporary residents is therefore not surprising.

Temporary migration of permanent residents

The movement of people who are not permanent residents of Florida—either by Census Bureau definitions or their own perceptions—accounts for one important type of temporary migration. It is not the only type, however; permanent residents of Florida may also be temporary migrants at one time or another. We refer to permanent residents spending more than 30 consecutive days away from home as “travelers.” As shown in Table 10, just over 9% of permanent residents were

Table 10 Travelers by age

Age	Permanent residents	Travelers	%
<25	1,940	316	16.3
25–34	3,257	266	8.2
35–44	4,122	211	5.1
45–54	3,716	232	6.2
55–64	2,612	247	9.5
65–74	2,246	334	14.9
75+	1,799	227	12.6
Total	19,692	1,833	9.3

travelers. Applying this proportion to Florida's total number of households and multiplying by the average size of the traveling household (2.3 persons) implies more than 1.5 million travelers.

The likelihood of spending more than 30 consecutive days away from home varied considerably by age, with the highest percentage for persons less than age 25, the second highest for persons above age 65, and the lowest for persons between the ages of 25 and 64. Percentages were highest at both ends of the age spectrum because those groups are the most likely to be unencumbered by ties to the labor market.

Travelers followed a seasonal pattern, but not nearly as strong as the pattern followed by temporary residents (Table 11). More than 35% reported being away from home during the summer months, compared to 20% or less during the winter months. Applying these proportions to the total number of travelers implies that more than 600,000 were away from home in the middle of the summer and <300,000 during the winter.

Table 12 summarizes a number of other characteristics of travelers. Travelers were older than other permanent residents but younger than temporary residents. The proportion female fell between that observed for the other two groups, but the proportion married was lower. The proportion Hispanic was the same as for permanent residents, but the proportion black was a bit lower. The mean educational level was higher than for the other two groups, but the mean income and proportion employed fell about halfway between those reported for the other groups.

Table 13 shows the primary reason for traveling, by age. Visiting family or friends was the primary reason for every age group, but its importance increased steadily with age for groups above age 55. College or military service was the second most important reason in the youngest group, but its importance declined rapidly with age. Job-related reasons accounted for about one-quarter of the extended travel for persons between the ages of 25 and 54, but <10% for persons above age 55.

Non-residents came to Florida primarily for the warm weather, but residents traveled most frequently to visit family or friends. This suggests the existence of

Table 11 Months in which travelers were away from home

Months	Away	%	Not away	%	Total
January	253	18.2	1,138	81.1	1,391
February	242	17.5	1,142	82.5	1,384
March	246	17.8	1,137	82.2	1,383
April	266	19.3	1,116	80.7	1,382
May	341	24.7	1,042	75.3	1,383
June	489	35.4	894	64.6	1,383
July	565	40.9	817	59.1	1,382
August	505	36.5	877	63.3	1,382
September	386	27.9	996	72.1	1,382
October	322	23.3	1,060	76.7	1,382
November	280	20.3	1,102	79.7	1,382
December	276	20.0	1,106	80.0	1,382

Table 12 Selected characteristics of travelers

Characteristic	Value	N
Mean age	47.8	1,833
% Age 65+	30.6	1,833
% Female	46.1	1,815
% Married	48.9	1,815
% White	80.7	1,845
% Black	7.2	1,845
% Hispanic	13.6	1,857
Mean education	14.4	1,833
Mean income (\$)	58,253	1,565
% Employed	46.0	1,823

Table 13 Primary reason for traveling by age (percent distribution)

Primary reason	<25	25–34	35–44	45–54	55–64	65–74	75+	Total
Visit family or friends	32.2	30.7	33.2	33.6	38.3	50.6	55.0	39.3
Recreation/vacation	13.6	21.5	25.0	25.5	27.5	27.6	13.2	22.8
Weather/health	5.1	1.2	1.6	3.2	8.1	7.3	12.6	5.6
Job/business	13.0	22.7	26.1	24.5	10.4	3.8	5.3	14.7
College/military	23.2	8.6	2.2	0.9	0.5	0.0	0.0	4.5
Other	13.0	15.3	12.0	12.3	15.3	10.7	13.9	13.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

well-established ties between Florida travelers and their travel destinations. Indeed, for 48% of the travelers, the travel destination was once their usual place of residence. This finding confirms the oft-noted pattern of return migration (e.g., DaVanzo and Morrison 1981; Longino and Serow 1992; Newbold and Bell 2001), but in this case the pattern is reflected through temporary migration rather than through a change in permanent residence.

More than 17% of travelers went to another location in Florida, 22% to another southern state, 23% to the Northeast, 15% to the Midwest, 9% to the West, and 14% to a foreign country (Table 14). Again, the numbers varied considerably by age. The proportion going to another location in Florida was 35% for persons less than age 25; this proportion declined steadily with age, falling to <10% for persons age 55 and above. In contrast, the proportions going to the Northeast and Midwest were fairly small for the youngest groups but increased steadily with age. Since these two regions are the leading places of origin for persons moving permanently to Florida, this result is consistent with the return migration pattern noted previously.

Almost 69% of travelers spent 3 months or less at their secondary residence, 20% spent 4–6 months, and 11% spent more than 6 months (Table 15). These numbers imply an average stay of 2.7 months, considerably shorter than the average stay for temporary migrants coming to Florida. However, length of stay varied considerably

Table 14 Region of destination for travelers by age (percent distribution)

Region	<25	25–34	35–44	45–54	55–64	65–74	75+	Total
Northeast	11.6	14.5	13.6	13.1	28.1	36.4	41.4	23.3
Midwest	9.1	11.4	9.7	9.9	17.0	21.6	20.5	14.5
South (not Florida)	20.7	24.6	27.3	28.2	21.0	16.9	15.8	21.6
Florida	34.8	21.9	21.0	21.1	9.4	7.2	6.5	17.3
West	8.0	10.1	8.0	12.7	9.4	8.2	8.8	9.2
Canada	1.1	0.4	0.0	0.9	3.1	2.2	1.4	1.4
Other foreign country	14.9	17.1	20.5	14.1	12.1	7.5	5.6	12.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 15 Length of stay at secondary residence of travelers by age (percent distribution)

Length of stay	<25	25–34	35–44	45–54	55–64	65–74	75+	Total
<3 Months	58.9	67.6	75.6	74.4	70.3	68.9	72.0	68.9
3–6 Months	19.6	18.0	12.2	15.4	23.1	25.3	23.4	20.1
7+ months	21.6	14.4	12.2	10.3	6.6	5.8	4.6	10.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

by age. Almost 22% of travelers younger than age 25 spent more than 6 months at their secondary residence, compared to only 5% of travelers age 55 or older.

The data shown in Tables 10–15 make it clear that temporary migration in Florida includes not only large numbers of non-Floridians who visit the state each year, but also large numbers of Floridians who leave the state (or travel to another location within the state) for extended periods of time. Similar patterns for “retirement” states have been noted before (e.g., Hogan and Steinnes 1996; McHugh et al. 1995; Sullivan 1985).

The similarities between travelers and temporary residents suggest that these groups reflect two different manifestations of the same basic phenomenon, namely, persons splitting time between two (or more) places of residence. It appears that some highly mobile people designate themselves as permanent residents of an area while others designate themselves as temporary residents. As noted previously, this designation is not always consistent with official residency guidelines.

Impact on local areas

The analysis thus far has focused on the state as a whole. However, it is likely that there are substantial differences in temporary migration streams among local areas within Florida. To investigate this possibility, we collected an additional sample of survey respondents in two counties. Sarasota County is located on the southwest coast of Florida and was home to 326,000 permanent residents in 2000. It has one of the oldest populations in the state and is a favored destination of wintertime temporary residents. Seminole County is located in the center of the state and had

365,000 permanent residents in 2000. It has one of the youngest populations in the state and does not appear to be the destination of many wintertime temporary residents.

The additional surveys were conducted between November 2000 and March 2001. Table 16 shows the distribution of survey respondents by residency status. More than 7% of the survey respondents in Sarasota County were temporary residents, compared to only 1% in Seminole County. Although there was no clear timing pattern in Seminole County, temporary residents in Sarasota County were most heavily concentrated in January and February. Based on these results, it appears that Sarasota County had approximately nine times as many temporary residents as Seminole County during the peak months of the 2000–2001 “snowbird” season (36,000 compared to 4,000). Furthermore, more than 7% of the permanent residents of Sarasota County reported that they spent more than 30 consecutive days away from home during the previous year, compared to <3% of the permanent residents of Seminole County (not shown here). Clearly, temporary migration patterns vary considerably from one local area to another, even in a state with large overall numbers of such migrants.

Discussion

Mortality and fertility are clearly defined demographic concepts with relatively well-established measurement rules. Such is not the case for migration. Migration can be defined and measured in many ways, differing according to the length of the time interval covered, the distance of the move, the crossing of geographic boundaries, the length of stay at the destination, the motivation for making the move, and a variety of other factors. Previous migration studies have differed on all

Table 16 Respondents by residency status and month: Sarasota and Seminole counties

Months	Permanent	%	Temporary	%	Total
<i>Sarasota County</i>					
November 2000	137	94.5	8	5.5	145
December 2000	239	95.2	12	4.8	251
January 2001	214	88.8	27	11.2	241
February 2001	199	90.0	22	10.0	221
March 2001	197	95.6	9	4.4	206
Total	986	92.7	78	7.3	1,064
<i>Seminole County</i>					
November 2000	138	97.9	3	2.1	141
December 2000	242	99.2	2	0.8	244
January 2001	206	100.0	0	0.0	206
February 2001	220	98.2	4	1.8	224
March 2001	188	99.5	1	0.5	189
Total	994	99.0	10	1.0	1,004

these dimensions, but most have shared one common characteristic, namely, a focus on moves that lead to changes in one's place of usual residence (e.g., Lee 1966; Long 1988; Longino and Serow 1992).

Although most migration statistics in the United States are based on changes in usual residence, the literature has identified several other types of mobility as well. Examples include the journey to work, business travel, tourism, cyclical labor migration, and seasonal streams of retirees into amenity-rich areas (e.g., Hogan and Steinnes 1996; McHugh et al. 1995; Schnore 1960; Smith 1989; Williams and Hall 2000; Zelinsky 1971). All these types of mobility can have a substantial impact on the number and characteristics of persons present in an area at any given time.

In this study, we documented the large numbers of temporary migrants entering and leaving Florida. However, Florida is not the only state with large numbers of such migrants. Large inflows have been reported at the state or local level in Arizona (e.g., Sullivan 1985; Happel and Hogan 2002), Texas (e.g., Martin et al. 1987), and Massachusetts (e.g., Cuba 1988). Large outflows have been reported in Arizona (e.g., McHugh et al. 1995), Minnesota (e.g., Hogan and Steinnes 1996), and New York (e.g., Krout 1983). Many other places undoubtedly have large numbers of temporary migrants as well, but they go undocumented because of a lack of data. These numbers are likely to increase over the next few decades as the aging of the baby boom generation raises the number of people unencumbered by ties to the labor market, as telecommuting makes it easier for people to float among several places of residence without changing jobs, and as higher incomes provide the financial wherewithal for people to maintain multiple residences.

Most temporary moves go unmeasured in the United States because population statistics are based on *de jure* rather than *de facto* population measures. The *de jure* population refers to persons for whom a particular area is the usual place of residence, whereas the *de facto* population refers to persons who are physically present in an area on a specific date (Siegel 2002, p. 538). As we have demonstrated, differences between these two measures can be substantial. Which geographic areas have large numbers of temporary migrants? When do they come (go) and how long do they stay (stay away)? How do their characteristics compare to those of permanent residents? What impact do they have on their areas of origin and destination? The lack of information on temporary migration prevents us from answering these and similar questions.

At any given time, there may be far more—or fewer—persons residing in an area than might be inferred from official population statistics. Why does this matter? It matters because statistics based on *de jure* definitions will not provide a solid foundation for planning and analysis when large numbers of temporary residents are present or large numbers of permanent residents are absent. Temporary residents use housing, roads, electricity, water, fire and police protection, golf courses, grocery stores, and countless other goods and services, but the magnitude and timing of their use often differs from that of permanent residents. In many places, then, the lack of information on temporary migration makes it difficult or impossible to plan adequately for the production of goods and the provision of services.

Furthermore, statistics based on the size and characteristics of the permanent population may give a misleading view of reality when temporary residents figure

prominently in the events under consideration (e.g., traffic accidents, alcohol consumption, or water use). For example, a study in Florida found that adjusting population estimates for the presence of temporary residents reduced crime rates by as much as 10% in some counties (Florida Statistical Analysis Center 1986). There are many circumstances in which failing to account for the impact of temporary migration could lead to inaccurate statistics and perhaps to misguided public policies; such errors have already been noted when estimates of the permanent resident population were found to be off the mark (e.g., Boscoe and Miller 2004).

Conclusions

In this study, we developed and applied a methodology for estimating the number, timing, and characteristics of temporary migrants in Florida. This methodology provides reasonable estimates and can be used anywhere. However, it is expensive and time-consuming and cannot provide data for small areas unless carried out on a massive scale.

Given the importance of temporary migration in many parts of the United States, the lack of data on this aspect of geographic mobility is a major shortcoming of the US statistical system. Population statistics based solely on traditional concepts of place of residence and measures of geographic mobility are no longer adequate for many purposes. The difficulty in estimating the number, characteristics, and areas of origin and destination of people forced from their homes by Hurricane Katrina in 2005 is an extreme example of this shortcoming. We believe it is imperative to explore new concepts of residency, develop measures that track temporary migration streams over time, and collect data that bring those measures to life.

The American Community Survey (ACS) may be a good place to start. The ACS is a large national survey conducted monthly by the US Census Bureau (US Census Bureau 2003). It covers some three million households each year and provides annual estimates of a variety of social, economic, demographic, and housing characteristics for states and local areas. If fully funded, it is expected to replace the long form of the decennial census in 2010.

We believe the ACS provides an excellent, cost-effective mechanism for collecting information on temporary migration. The ACS currently uses a 2-month residency rule; that is, a person is counted as a resident if he or she spends more than 2 months at a particular location (US Census Bureau 2003, p. 17). We believe it would be useful to explore several alternative residency rules. For example, the survey could ask respondents if their current address is their usual place of residence, using the same guidelines used in the decennial census. For those for whom the current address is the usual place of residence, additional questions could ask if the respondent had spent more than 1 month (or 2 months) at some other location during the previous year and if so, where that was, how long they stayed, and what specific months they were there (e.g., January, February, and March). For those for whom the current address is *not* the usual place of residence, respondents could be asked where their usual place of residence is, how many months they

intend to spend at their current address during their current visit, and what specific months those will be.

Other questions could be explored as well. Whatever their final form, the data collected would make it possible to classify respondents using a number of different residency rules and to develop a variety of population estimates that might be used for different purposes (e.g., *de facto* population, *de jure* population, or population weighted by length of stay in an area). These data would also provide a basis for constructing estimates of the number, timing, origins, destinations, and characteristics of temporary migrants at the state and local levels. Although these estimates would not cover all types of temporary migrants or all aspects of temporary migration streams, they would provide an extremely rich source of information, broadening the scope of the national statistical system and opening up many new opportunities for research and policy analysis. We believe these data would spur the production of useful new statistics and would add substantially to our understanding of migration and geographic mobility in the United States.

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