Snowbirds Head South

by William J. Craig

Winter is about to strike Minnesota and the snowbirds are already migrating to warmer climates. As many as 73,000 people aged sixty and over may leave this winter for the likes of Arizona, California, Florida, and Texas. It is estimated that they will spend $110 million while they are away.

Surprisingly little is known about these seasonal migrants. The Census Bureau collects and publishes data on permanent migration, but not seasonal migration even though seasonal migration has a much larger impact on states like Minnesota. According to the latest figures, permanent out-of-state moves in the Midwest involve just over 1 percent of the population aged sixty-five or over. This study found over 16 percent of the elderly population spending at least five weeks outside of Minnesota each year, mostly in the winter. With an average of nearly eleven weeks out of the state, the impact of their extended travel amounts to over five times that of the permanent migration. And, the snowbirds we interviewed have been taking such trips, on average, for more than seven years.

This study is based on a telephone survey of people aged sixty years or more in 1,500 households across the state. The survey was conducted for the Wilder Research Center and its "Wilder Senior Needs and Resources Survey." The survey was conducted in the summer and early fall of

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1988. CURA sponsored the portion of the survey on seasonal migration. Over one-third of the interviews were conducted by the University's Minnesota Center for Survey Research, with Wilder Research Center conducting the rest. Surveys of this size have a sampling error of +2.5 percentage points. Subsets of the survey have a larger sampling error; the data on snowbirds, with a sample size of 138, have a sampling error of +8.4 percentage points. The results presented here are unweighted, with responses representing households, not individuals.

The Snowbird Experience

Just over 9 percent of the over-sixty-years-old households in Minnesota are snowbirds, living major portions of the Minnesota winter in some other part of the country or world. Snowbirds are defined as those who spend at least five weeks in a row out of the state and whose time away is largely in the winter months (November through March). Using an age specific 1990 population projection for the state and survey data on the number of persons per household, this extrapolates to 73,000 people, or 41,500 households, leaving Minnesota this winter for an extended stay in another state or country.

Figure 1 presents the travel pattern of all elderly who spend at least five weeks in a row outside of Minnesota; this includes snowbirds as well as those who take long summer trips or many short camping trips. It is quite clear that the winter months are their time to get away from Minnesota. February leads with 74 percent of travelers away, but March and January are close behind with 67 and 63 percent respectively. December finds only 40 percent of the travelers out, followed by November and April with 30 percent each.

The average time out of Minnesota is nearly eleven weeks, but the range is quite wide, going up to twenty-six weeks. Much of the variation is related to the time of departure from Minnesota. Figure 2 shows the month of departure and duration of absence for snowbirds (those gone during the winter months). Those leaving in the fall tend to be gone for long periods of time, up to seven months for those leaving in September and October. Those leaving in January are much more likely to be gone for only two to three months.

Figure 2 also shows the departure pattern seems to be connected to holidays and family, not just cold weather. January is the most popular month for departure, but November is second. This indicates that many stay home for Christmas and Hanukkah. The way we asked the question ("During which months were you out of Minnesota?") even allowed people to give November as their departure month though they stayed home for Thanksgiving.

Where do the snowbirds go? They go south, and especially to Arizona. Figure 3 answers the question in more detail. Nearly a third go to Arizona. Another third are evenly divided between Florida and California. Texas accounts for 14 percent and other southern states (including Hawaii) for another 10 percent. Six percent go to cold states, usually in the midwest or in the mountains. Four percent either go abroad or travel around the United States.

The Arizona connection is particularly fortuitous, because faculty at Arizona State University have been studying snowbirds for several years and have additional information to give us about the people who arrive there. Hogan found that Minnesotans are the largest single group of snowbirds in that state, accounting for 11 percent of seasonal residents. *In a computer model, Hin

gan found three strong predictors of which states send migrants to Arizona: January temperature, income level, and distance. Arizona is fairly close to Minnesota, its winters are much warmer than ours, and our income levels are high enough to afford the trip.

Perhaps more interesting is a pair of surveys reported by Fifield, Happel, and Hogan.* The two surveys interviewed Arizona snowbirds, asking questions about type of residence and monthly expenditures. They found that snowbirds favor mobile homes, travel trailers, and recreational vehicle parks, with 47 percent living there. Next came apartments (23 percent), single-family homes and condominiums (15 percent), hotels or motels (8 percent), and living with a friend or relative (7 percent).

Our survey asked snowbirds if they stayed at a place they owned and over one-quarter (26 percent) said “yes.” In fact, 36 percent of those spending their winters in Arizona owned a home there. This level of ownership appears higher than what the Arizona State University researchers found, but “ownership” could include a recreational vehicle as well as a condominium.

The Arizona researchers also asked about monthly expenditures. The two surveys reported each give slightly different results, but it is clear that the typical household spends at least $1,000 per month while in Arizona. Using this figure and the eleven-week average duration, we calculate that Minnesota snowbirds are spending about $110 million each year outside of Minnesota. This is a significant amount of money,


but a small portion of the Gross State Product, only 0.15 percent.

Who Are the Snowbirds?

Fifty-two percent of Minnesota’s elderly households travel outside the state. Nine percent qualify as “snowbirds” based on our definition. What is it about these snowbirds that makes them different from other travelers and from those who never leave the state?

It is no major surprise that snowbirds (and other travelers) are more likely to be married couples, younger, wealthier, and in better health than their sedentary counterparts. Other aspects of the snowbird profile show differences that are more profound. Conventional wisdom and casual observations say that people travel while they are with their life-companion, while they are younger, and while they are more fit, and that they stop traveling later in life. This holds true in this study. Three-fourths of the snowbirds are married, compared to just over half of the other travelers and half of sedentary Minnesotans. Roughly 80 percent of elderly Minnesotans who travel are under age seventy-five, compared to just 57 percent of the non-travelers.

Only one-fourth of our snowbirds and one-third of other travelers have annual incomes of $12,000 or less, compared to two-thirds of the sedentary population (this income figure combines the income of the respondent and spouse, if any). But being a snowbird does not require large amounts of money. Nearly three-quarters have an annual income of under $25,000 and most (72 percent) receive most of their income from either a pension or Social Security. In an article in the Star Tribune, Paul Klauda says “...snowbirds generally defy the image of wealthy retirees. Most have set aside money for recreation vehicles (RV) and trailers, but are noted for clipping coupons and using senior citizens’ discounts offered by local drugstores, supermarkets, and restaurants.”

Three-fourths of elderly Minnesotans who travel count their own health as good or

excellent and roughly 60 percent participate in a vigorous activity two to three times a week. Compared to this, among the sedentary Minnesotans only 61 percent say that their health is good or excellent and only 41 percent participate in vigorous activity. Ninety percent of the snowbirds and other travelers own and drive a car, compared to just 71 percent of the non-travelers.

But the snowbirds and other travelers are not just younger versions of the sedentary group waiting to run out of steam and money. Snowbirds and travelers are better educated and have worked in jobs that would tend to inspire more interest in the outside world. While half of the sedentary elderly have less than a high school education, three-quarters of the snowbirds and other travelers have a high school degree or more. Roughly 60 percent of the traveling elderly worked in white collar jobs, compared to only 41 percent for the non-travelers.

Where do snowbirds live? Perhaps the biggest surprise in the survey is that there are more snowbirds in outstate Minnesota than in the Twin Cities metropolitan area. Snowbirds favor the northwestern part of the state (Economic Development Regions 1, 2, and 4) and the southeastern part of the state (Regions 9 and 10). The surprise comes from the fact that people in the metropolitan area generally have higher incomes and would be more able to afford travelling to a winter home. The Twin Cities do, in fact, lead the state in non-snowbird travel. Perhaps the wide variety of cultural, sports, and other activities in the Twin Cities are enticing the elderly to stay here and forego extended trips away from Minnesota.

A quick look at the size of the city where these elderly citizens live supports this supposition, at least circumstantially. Snowbirds are most likely to live in the open country or in cities of under 2,500. Other travelers are more likely to live in cities of 2,500 or more, and especially in cities of over 10,000. The sedentary elderly live mostly in cities of under 10,000 or in the open country.

Three-quarters of all three elderly groups live in single-family homes as opposed to apartments or other quarters. This can present problems for those who travel since they must find someone to look after their house while they are gone. A disproportionately large portion of the snowbirds (17 percent) has solved this problem by living in non-standard quarters, such as mobile homes, townhouses, and condominiums. Snowbirds (90 percent) and other travelers (85 percent) are more likely to own their homes than non-travelers (77 percent). But this is not surprising given the higher income of the first two groups.

Fifteen percent of the snowbirds already own a second home in Minnesota, nearly twice as high a percentage as any other group and twice the state average for this age group. It is as if owning a second home had prepared them for a life of living away from home.

One would think that close personal ties would influence whether or not a household would be willing to travel. In very disturbing ways, this proves to be untrue. We asked people how often they see friends or family members and found that the traveling elderly are more likely to have regular contact than the non-travelers. In fact, 88 percent of the snowbirds and 86 percent of the other travelers have contact with family and friends weekly or more often, while only 78 percent of the sedentary elderly have contact this often. While these findings add to the view that snowbirds and other travelers are interested in the outside world and gregarious, the view of isolation in the lives of the sedentary population is depressing.

We also asked questions about volunteer activities, either for individuals or for organizations, and found a continuing pattern of isolation among the sedentary elderly. Only 59 percent of the sedentary are involved in volunteer work, compared to 77 and 79 percent respectively of the snowbirds and other travelers. In fact these latter groups, the traveling elderly, are very active. Roughly 40 percent do volunteer work for both individuals and organizations. Their time out of Minnesota must be sorely missed by their communities.

Conclusions

This report has focused on factual information about Minnesota's snowbird population. It has shown that 9 percent of the elderly households in Minnesota (people aged sixty or over) spend major portions of the winter out of Minnesota, mostly in Arizona, California, Florida, and Texas. It has presented these travelers as younger, wealthier, and in better health than other elderly who stay home. We now turn to speculate on the personal motivations of these snowbirds, the possibility that their numbers will grow, and some policy implications and recommendations.

Snowbirds are not your typical older Minnesotans. By education and employment they have more understanding and appreciation of the world outside the state. By temperament they are more adventurous and gregarious. They choose to live in other places for part of the winter, not just because of the winter's cold, but perhaps because in warmer climates they can get out and do more things. It is hard to predict the future for snowbirds. To the extent that Minnesotans are becoming more educated and more often work in white collar jobs, we will be more aware of other places and more willing to live there. But it will be some time before the oldest of the baby boom generation reaches retirement age, 2010, and much will have changed by then. Fuel prices, the national economy, and changing tastes may make great changes and affect any trend we might predict.

Whether or not the snowbird phenomenon grows, there are numerous policy implications for Minnesota, and for the states accepting our winter migrants. The dollar loss is not large for the state as a whole, but may be substantial for some of our communities. The loss of volunteer workers may have an even larger impact. Programs that serve recreational and other needs of the elderly may have too little support and participation to be viable in some communities, making this a poorer place to live for the el-
Hydropower: Potential Energy for Minnesota?

by Robert J. Geisen

The transformation of water power into mechanical energy or electricity played a significant role in the early settlement of Minnesota. A number of communities formed along rivers where hydropower was used to operate flour and saw mills. In 1882, the world’s first central hydroelectric generating facility was installed in Appleton, Wisconsin. In Minnesota, hydroelectric plants were constructed as early as 1885. Since then, hydroelectric technologies have become well established.

Abundant and cheap fossil fuels brought about a decline in hydropower usage. Large steam generating plants produced electricity for less money and with higher reliability than small hydro facilities. By the early 1950s, many hydroelectric stations had closed down, though the larger, more cost effective plants survived. At present there are thirty-two hydropower plants operating within the state.

Minnesota has 853 existing dams with a structural height of six feet or more. Obviously, the thirty-two generating dams are not tapping all of the water power flowing within the state. But are they converting a majority of the available water power into electricity? How much water power is there available in the state? This study sought to develop an overall picture of Minnesota’s hydropower and to estimate the physical limits of hydropower in the state.

Power from Existing Dams

The hydropower potential from a dam is directly related to the hydraulic head and the stream flow rate by the following equation:

\[ P = \rho g Q H \]

where \( P \) is the potential power or power available; \( \rho \), the density of the water; \( g \), the acceleration due to gravity; \( Q \), the volumetric flow rate; and \( H \), the hydraulic head.

For this study, it was assumed that the hydraulic head was the same as the hydraulic height of the dam. In actuality, the net available head will often be less than this and can fluctuate with the season. The hydraulic heights listed in the National Dam Safety Inventory were used for all 849 Minnesota dams, since no record of net available heads has ever been compiled. Average annual flow rates were used in the computations. Again, flow varies with the season, so these numbers are only approximate, yet they will suffice for the purposes of this study.

The U.S. Geological Survey (USGS) maintains 105 gauging stations in Minnesota. The flow rate of a stream or river is measured by the volume of water flowing through the channel over a specific unit of time. Gauging stations are seldom near a dam; therefore, the flow rate at the dam must be correlated to data from the gauging station on the same stream. Dotan and Guil-