

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

Inmigrants to the Northern Great Plains Survey Results from Nebraska and North Dakota

F. Larry Leistritz Sam Cordes Randall S. Sell John C. Allen Rebecca Filkins

opulation change is a major issue for rural decisionmakers. Migration underpins local population change, and yet it is difficult to predict. It transforms public infrastructure and service needs, labor supply, and housing requirements in both origin and destination communities. During the 1980's, much of the Great Plains suffered vast outmigration, with attendant hardship in rural communities. However, recent employment growth associated with successful economic development has reversed migration in some areas. Understanding the characteristics of these inmigrants, their motivations for moving, and their expectations of and satisfaction with their new community helps decisionmakers plan for

New arrivals to Nebraska and North Dakota had higher educational levels than did the States' populations overall, but few fit the "lone eagle" profile—individuals engaged in high-paying, knowledge-based industries who telecommute to work or service distant clients. Migrants appeared to move for quality of life rather than economic incentives. Most often cited was a desire to be closer to relatives, a safer place to live, and quality of the natural environment. These promising new residents would augment the population lost by the outmigration of the 1980's.

future needs and, perhaps, influence the size and character of the inmigration stream.

In this article, we identify the salient characteristics of recent inmigrants to the Northern Great Plains (specifically Nebraska and North Dakota) and how they compare with existing residents. We examine the socioeconomic/demographic profile of recent inmigrants, what motivates them to move, how satisfied they are with living in Great Plains communities, and what their employment and workforce characteristics are.

New Residents: Who Are They?

About 42 percent of new residents in North Dakota and 41 percent in Nebraska came from adjacent States or provinces. Among nonadjacent States, the Southwestern States were the leading points of origin for Nebraska inmigrants, with about 10 percent coming from California, 5 percent from Arizona, and 4 percent from Texas.

The origin of North Dakota's inmigrants was more varied; nonadjacent States included California (4.6 percent of new residents), Washington (4.5 percent), Texas (3.4 percent), Nebraska (3.2 percent), Wisconsin (3.0 percent), Colorado (2.9 percent), Illinois (2.7 percent), and Arizona (2.6 percent).

More than three respondents in four lived within the city limits of a city or town, while most others lived within 15 minutes of the nearest town. Only 4 percent of the new residents lived more than 15 minutes from town. Just over half (51 percent) of the new residents owned their current home, 38 percent rented, and the remainder reported other housing (e.g., military base).

Respondents were generally younger than Nebraska's and North Dakota's populations overall. Only 5 percent of North Dakota inmigrants and 13 percent of Nebraska's were 60 or older (table 1), compared with 19 and 18 percent of

F. Larry Leistritz is a professor and Randall S. Sell is a research scientist in the Department of Agricultural Economics, North Dakota State University, Fargo. Sam Cordes and John C. Allen are professors, and Rebecca Filkins is a program manager in the Center for Rural Community Revitalization and Development, University of Nebraska-Lincoln. Partial financial support for this research was provided by USDA as part of the Regional Center for Rural Development in North Dakota, by the Partnership for Rural Nebraska, and by the Nebraska and North Dakota Agricultural Experiment Stations.



the State residents. The racial/ethnic background of the new residents was similar to that of the States' resident populations. Most respondents were married—70 percent for Nebraska and 68 percent for North Dakota, much higher rates than for the resident populations. Inmigrants were more likely to be divorced or separated, and less likely to be widowed or never married. The lower percentage widowed is likely related to their younger age generally.

The educational level of the new residents was substantially higher than that of the resident populations of the respective States. About 51 percent of inmigrants to North Dakota and 44 percent to Nebraska were college graduates, compared with 28 percent of North Dakota's residents and 24 percent of Nebraska's (table 1). An additional 33 percent of North Dakota's inmigrants and 34 percent of Nebraska's reported some college or vocational/technical school attendance, compared with 21 percent and 24 percent of the resident population.

About 34 percent of the inmigrants lived in the metro counties of their respective States. The new residents in metro counties of both States were younger and better

Table 1 Selected characteristics of inmigrants to Nebraska and North Dakota, 1996-97

Most inmigrants are younger than 40 years

	Nebraska		No	North Dakota		
Characteristic	Metro	Non- metro	Total	Metro	Non- metro	Total
			N	umber		
Total sample	183	681	864	355	371	726
			P	ercent		
Respondent age:						
Under 40	62	54	56	73	66	69
40 to 59	31	31	31	22	29	26
60 and over	7	15	13	5	5	5
Respondent education:						
High school or less	14	27	22	11	21	16
Some college or vocational	31	35	34	33	34	33
College graduate	55	38	44	55	45	51
Annual income before move:						
Less than \$20,000	24	33	28	28	30	29
\$20,000 to \$50,000	43	48	46	42	47	45
Over \$50,000	32	19	26	30	22	26
Annual income after move:						
Less than \$20,000	20	41	30	24	36	30
\$20,000 to \$50,000	48	47	47	48	47	48
Over \$50,000	33	13	23	29	16	22

Note: Totals may not add to 100 percent due to rounding.

Source: Great Plains New Residents Survey.

educated than nonmetro immigrants (table 1). For example, about 46 percent of inmigrants in nonmetro Nebraska counties were 40 or older, compared with 38 percent in the State's metro counties. About 55 percent of the inmigrants to North Dakota metro counties were college graduates, compared with 45 percent for nonmetro counties. Metro inmigrants also had higher income levels both before and after their moves. About 33 percent of inmigrants to Nebraska's metro counties had incomes over \$50,000 after their move, compared with 13 percent for nonmetro counties; the corresponding figures for North Dakota were 29 percent for metro inmigrants and 16 percent for nonmetro.

Why Do New Residents Move?

About 59 percent of inmigrants to Nebraska and 63 percent to North Dakota were first-time residents with no clear metro/nonmetro pattern. In Nebraska, metro areas had a higher percentage of first-time residents, while in North Dakota the percentage of first-time residents was slightly higher in nonmetro areas. In general, the return migrants were older than the first-time residents and were more likely to be divorced, separated, or widowed.

When asked whether they would move to Nebraska (or North Dakota) if they had it to do over again, more than two-thirds of the respondents in each State said definitely or probably yes. Fifteen percent of Nebraska and 20 percent of North Dakota residents replied probably or definitely no, and these shares were similar between metro and nonmetro areas.

New residents most often cited the desire to find a safer place to



Table 2

Reasons for moving, by State and place of residence

Family and safety are most important reasons for moving to I

Family and safety are most important reasons for moving to North Dakota and Nebraska

	Sta	ite	Place of r	esidence	
Item	Nebraska	North Dakota	Metro	Non- metro	Overall
			Percent		
Looking for a safer place					
to live	57	59	53	61	581
To be closer to relatives	58	50	49	57	54 ^{1,2}
To lower cost of living	47	48	44	49	48 ³
Quality of the natural					
environment	45	49	44	49	47 ³
Quality of local grade/high					•
schools	37	34	33	37	36 ³
Outdoor recreational					
opportunities	34	38	34	37	36
Desirable climate	26	17	16	26	22
To obtain training/education	20	23	27	18	21 ^{3,4}
More cultural opportunities	16	16	16	16	16
To get more affordable heal	th				
care	15	15	15	15	15
To lower cost of operating a	ı				
business	7	6	4	8	6 ²

¹Metro and nonmetro respondents are significantly different at 1-percent level based on Chi Square test.

Source: Great Plains New Residents Survey.

live and to be closer to relatives as reasons for moving to the Northern Great Plains (table 2). A lower cost of living and the quality of the natural environment also charted with at least 40 percent of all respondents. With a few exceptions—proximity to relatives and desirable climate—Nebraska and North Dakota respondents cited similar reasons for moving. Metro and nonmetro responses were also similar.

When asked about their reasons for leaving their previous location, respondents most often cited the fear of crime, high cost of living, unsafe place to live, and urban congestion (table 3). Nebraska respondents were less likely to identify high State and/or local taxes as a reason for leaving their previous location than were North Dakota respondents (25 percent vs. 33 percent).

About 21 percent of North Dakota's inmigrants and 14 percent of Nebraska's indicated that they definitely planned to move from their community within the next year. Of these, 77 percent (Nebraska) and 74 percent (North Dakota) expected to move out of State. Residents of nonmetro areas

in each State were slightly less likely to move and, if they did move, were more likely to relocate within the State.

Moves Often Employment Related

Job-related considerations often compel a move. Among the new North Dakota residents responding to the survey, 12 percent had been transferred by their current employer, 9 percent had received a military transfer, 27 percent had accepted new employment, and 6 percent had moved to start or take over a business (table 4). Including those who moved with a spouse or partner, about 65 percent of the households reported one or more job-related considerations as influencing their move. Nebraska's residents reported similar frequencies for most employment-related factors, except military transfers were less frequently reported by Nebraska's respondents (2 percent vs. 9 percent) and spouses (3 percent vs. 17 percent). The percentage of households that reported one or more job-related factors particularly military transfers—was substantially higher for first-time residents (67 percent) than for return migrants (53 percent).

Most new residents (65-67 percent) in both States were employed full-time at the time of the survey (table 5). Prior to their move, 66 percent of Nebraska's respondents and 69 percent of North Dakota's had been employed full-time. After moving, 4 percent of Nebraska's respondents and 6 percent of North Dakota's were unemployed. Similar percentages were reported for spouses in each State.

About 14 percent of inmigrants in Nebraska were retired, versus 6 percent in North Dakota. About 14 percent of the respondents in Nebraska were homemakers, com-



²Nebraska and North Dakota respondents are significantly different at 1-percent level based on Chi Square test.

³Metro and nonmetro respondents are significantly different at 10-percent level based on Chi Square test.

⁴Nebraska and North Dakota respondents are significantly different at 10-percent level based on Chi Square test.

pared with 16 percent in North Dakota. Six percent of respondents in Nebraska were full or part-time students, compared with 8 percent in North Dakota.

The recent emergence of telecommuting has attracted increasing attention from policymakers. Overall, about 6 percent of respondents reported that they were telecommuters, 2 percent full-time (table 5). Telecommuting was more common in metro areas (9 percent reported some telecommuting). In comparison, a recent study (Mokhtarian) estimates that 6 percent of the workforce nationwide is telecommuting.

In a related question, only 2 percent of Nebraska's respondents

and 4 percent of North Dakota's indicated that the availability of technologies—personal computers, fax machines, modems, and/or other telecommunications services—influenced their decision to move.

About 73 percent of new residents reported using a computer at work; 57 percent used fax machines, and 54 percent a voice mail/answering service (table 6). Rates of use for all types of equipment and services were lower in rural areas than in metro areas.

The prevalence of some types of equipment or services in homes appeared to be related to respondents' places of residence, while others were relatively uniform in their distribution. For example, touch-tone phones and VCR players were ubiquitous across both rural and metro households in the study. In contrast, the following telecommunication items were considerably more likely to be found among metro households: telephone answering machines, cable TV, personal computers and modems, electronic mail, and fax machines. About 10 percent of the respondents reported that the telephone service available to their home would limit their ability to use one or more of the services listed. This percentage was about twice as high among rural households (12 percent).

New Residents Generally Satisfied With Services and New Neighbors

The new residents of Nebraska and North Dakota were generally quite satisfied with their communities. Ratings of the community were most favorable in the rural areas. About 90 percent of respondents in both Nebraska and North Dakota indicated that they felt welcome or very welcome by local residents. There was little difference between metro and nonmetro residents or between first-time residents and return migrants in this regard

The respondents also evaluated a variety of public services and community amenities. For each item that was available in their community, the respondents indicated their degree of satisfaction, ranging from very satisfied to very dissatisfied. Fire protection rated highest (96 percent of respondents were either very or somewhat satisfied), followed by church or civic activities (92 percent), and senior centers and sewage disposal (91 percent) (table 7). Least satisfactory were entertainment (54 percent),

Table 3 **Reasons for leaving former location, by State and place of residence** *Crime and cost of living provided impetus for leaving former location*

	State		Place of residence			
Item	Nebraska	North Dakota	Metro	Non- metro	Overall	
			Percent			
Fear of crime High cost of living Unsafe place to live Urban congestion High State and/or local taxe Poor schools Undesirable climate Long commute Quality of the natural	45 42 38 36 25 20 19 17	45 39 36 33 33 20 16	39 31 33 31 28 18 16 21	48 45 39 37 29 21 19	45 ¹ 41 ¹ 37 ² 35 ² 29 ³ 20 18 18 ²	
environment Lack of outdoor recreationa	19 I	17	16	19	18	
opportunities Too close to relatives Few cultural opportunities	11 10 11	12 11 10	10 9 10	12 11 11	11 10 10	
High cost of operating a business	9	7	5	9	81	

¹Metro and nonmetro respondents are significantly different at 1-percent level based on Chi Square test.

Source: Great Plains New Residents Survey.



²Metro and nonmetro respondents are significantly different at 10-percent level based on Chi Square test.

³Nebraska and North Dakota respondents are significantly different at 1-percent level based on Chi Square test.

Table 4 Job-related considerations for moving, by State and history of residence

Job is an important component of moving

Item	Nebraska	North Dakota	First-time residents	Return migrants	Overall
			Percent	t	
Respondent:					
Transferred by current					
employer	7	12	10	9	91
Accepted job with new					0
employer	31	27	20	29	29 ²
Start/take over business	8 2	6	6	8	7
Military transfer	2	9	8	2	51,3
Spouse:					
Transferred by current					
employer	8	10	11	7	94
Accepted job with new					
employer	24	23	24	23	24
Start/take over business	8 3	7	8	8	8
Military transfer	3	17	14	2	91,3
One or more job-related					
considerations (responde	nt				
or spouse)	58	65	67	53	61 ^{1,3}

¹Nebraska and North Dakota respondents are significantly different at 1-percent level based on Chi Square test.

Source: Great Plains New Residents Survey.

public transportation (59 percent), retail shopping (61 percent), streets and highways (63 percent), and restaurants (66 percent). Levels of satisfaction were higher among metro residents than for nonmetro respondents—except for streets and highways.

Some services were reported to be unavailable, especially by nonmetro residents. For example, 23 percent of respondents reported a lack of public transportation, ranging from 4 percent for metro residents to 32 percent for nonmetro residents. Similarly, Head Start programs were not available to 4 percent of metro respondents and 11 percent of rural residents.

Implications to Recruiters and Policymakers

Recent employment growth in the Northern Great Plains may be stimulating increased inmigration to some rural areas, as well as to the regions's larger cities, and additional inmigration would help to sustain the region's economic momentum. Understanding the characteristics of the new residents, their motivations for moving, and

their expectations about and satisfaction with their new community is important for State and local decisionmakers.

When asked why they moved to the Great Plains, new residents most often cited looking for a safer place to live (58 percent), a desire to be closer to relatives (54 percent), lower cost of living (48 percent), quality of the natural environment (47 percent), quality of local grade/high schools (36 percent), and outdoor recreational opportunities (36 percent). These attributes could be emphasized by those seeking to encourage individuals or businesses to relocate to the Northern Great Plains.

Inmigrants appeared more responsive to quality-of-life factors than to economic incentives. The incomes of inmigrants were very similar before and after moving. Rather, these persons appear willing to move to the Plains because of perceived quality-of-life benefits, provided job opportunities allow them to maintain their previous income level. These findings are consistent with other research indicating that lifestyle preferences, environmental amenities, and other noneconomic factors may be increasingly important as motivations for migration. Hence, it appears that Northern Great Plains States like Nebraska and North Dakota can attract new residents from many parts of the country.

Despite their extensive use of modern telecommunications capabilities, few inmigrants appeared to fit the profile of the "lone eagle"—individuals engaged in high-paying, knowledge-based industries who telecommute to work or service distant clients via fiber optic networks and fax machines. When asked whether the availability of information technologies had any



²Nebraska and North Dakota respondents are significantly different at 10-percent level based on Chi Square test.

³Metro and nonmetro respondents are significantly different at 1-percent level based upon Chi Square test.

⁴Metro and nonmetro respondents are significantly different at 10-percent level based on Chi Square test.



Photo courtesy Economic Research Service, USDA.

GreatPlains New Residents Survey: Questionnaire Design and Survey Implementation

Results reported here are based on similar surveys conducted in Nebraska and North Dakota. In each State, questionnaires were mailed to individuals who had moved to the State from some other State or country, and had subsequently surrendered their previous driver's license for a Nebraska or North Dakota license. Because both States require new residents to obtain a new driver's license within a short time (30 to 90 days) of establishing residence, this appeared to be the most comprehensive sample frame available (Cordes et al., Leistritz and Sell).

The Nebraska sample consisted of persons who surrendered licenses between May 1994 and April 1995, while the North Dakota sample consisted of persons who surrendered licenses between January and May 1997. The Nebraska survey used a stratified sample, with sampling rates ranging from 1.7 percent in metro counties to 23.7 percent in the most sparsely populated rural counties. A total of 864 usable surveys were obtained, out of 2,061 mailed, for a response rate of 42 percent. Eliminating the surveys returned by the postal service as undeliverable, the effective response rate was over 50 percent. In North Dakota, a total of 2,640 persons had surrendered licenses between January and May 1997, and questionnaires were mailed to all persons in this group. A total of 726 usable surveys were obtained, a response rate of 27.5 percent. Because of the mail system used, it was not possible to determine how many of the questionnaires that were not returned might have been undeliverable because of incomplete addresses or because the addressee had moved, as opposed to representing refusals to participate. In the analysis presented here, all of the observations (1,590) from the two surveys were given equal weights.

The survey analysis included comparisons of many respondent attributes and observations by place of residence. The counties where respondents resided were categorized into two groups:

Metro—six Nebraska counties and four North Dakota counties that are part of metropolitan areas, Nonmetro—the remaining 87 counties in Nebraska and 49 counties in North Dakota.



Labor force and employment characteristics of inmigrants after moving, by State and place of residence 1 Telecommuting is not common among inmigrants

	Stat	State		Place of residence	
Labor force status	Nebraska	North Dakota	Metro	Non- metro	Overall
			Percent		
In labor force:					
Employed full-time	65	67	70	64	66 ^{2,3}
Employed part-time	15	12	13	14	14
Unemployed	4	6	4	5	5
Not in labor force:	16	14	13	17	15
Respondent or spouse					
operate a business out of					
the home	20	14	11	20	17 ^{2,3}
Is respondent a telecommuter?					
No, not at all	95	94	91	96	94 ⁴
Yes, 1 day or less per week	3	3	4	2	3
Yes, 2-3 days per week	2	1	2	1	1
Yes, full-time	1	2	2	1	2

Note: Totals may not add to 100 percent due to rounding.

Source: Great Plains New Residents Survey.

Table 6 Equipment and services used at work, by residence Three-quarters of new residents use computers at work

Equipment and services	Metro	Nonmetro	Overall
		Percent	
Computer with keyboard	84	67	731
Fax machine or fax modem	68	51	57 ¹
Answering service or voice			
mail	63	49	541
Overnight or courier delivery			
of products and supplies	47	38	411
Electronic mail	51	28	36 ¹ 33 ²
Cellular telephone	36	31	33 ²
Conference telephone			
capability	41	27	321
Internet	37	20	26 ¹

¹Metro and nonmetro respondents are significantly different at 1-percent level based on Chi Square test.

Source: Great Plains New Residents Survey.

effect on their decision to move. only 2 percent of Nebraska's inmigrants and 4 percent of North Dakota's responded yes. Similarly, when asked whether the potential to work "long distance" for the same employer or clients influenced the decision to move, only 3 percent of Nebraska's respondents and 5 percent of North Dakota's indicated this was a factor. Finally, when asked whether they considered themselves to be telecommuters in their present job, 94 percent reported they did not telecommute at all and only 3 percent telecommuted more than 1 day per week.



¹Full-time = employed at least 35 hours per week; Part-time = employed less than 35 hours per week; Unemployed = not employed and looking for work; Not in labor force = not employed and not looking for work.

²Nebraska and North Dakota respondents are significantly different at 10-percent level based on Chi Square test.

³Metro and nonmetro respondents are significantly different at 1-percent level based on Chi Square test.

⁴Metro and nonmetro respondents are significantly different at 10-percent level based on Chi Square test.

²Nebraska and North Dakota respondents are significantly different at 1-percent level based on Chi Square test.

Table 7

Satisfaction with public services and community amenities, by residence

Nonmetro inmigrants are not satisfied with entertainment opportunities

Services and amenities	Metro	Nonmetro	Overall
		Percent	
Fire protection Church or civic activities Senior centers Sewage disposal Emergency medical services Restaurants Streets and highways	98	94	961
	94	91	92 ²
	92	91	911
	95	89	911
	94	87	891
	84	55	661
	60	64	63
Retail shopping Public transportation Entertainment	80	50	61 ¹
	74	50	59 ¹
	72	43	54 ¹

Note: Respondents who indicated that they had "no opinion" or who indicated the service was "not available" were excluded. Figures shown are percentages of those who expressed that they were very or somewhat dissatisfied. The public services and community amenities shown are the top 5 and bottom 5 of a total list of 23 items.

¹Metro and nonmetro respondents are significantly different at 1-percent level based on Chi Square test.

²Metro and nonmetro respondents are significantly different at 1-percent level based on Chi Square test.

Source: Great Plains New Residents Survey.

For Further Reading . . .

Sam Cordes, John Allen, Rebecca Filkins, Amber Hamilton, and Matt Spilker, *New Residents to Nebraska: Who Are They and Why Are They Here?* Lincoln: University of Nebraska, Center for Rural Community Revitalization and Development, 1996.

Ernest Goss, "Future Growth Hinges on Migration," *Economic Trends*, Vol. 5, No. 1, 1998, pp. 1-2.

Timothy W. Kelsey, "New Residents and the Demand for Public Services in Growing Communities: Local Officials' Perceptions and Responses," *Economic Development Quarterly*, Vol. 12, No. 3, 1998, pp. 279-288.

Lorin D. Kusmin, "Computer Use by Rural Workers Is Rapidly Increasing," *Rural Development Perspectives*, Vol. 11, No. 3, 1996, pp. 11-16.

F. Larry Leistritz and Randall S. Sell, *Inmigrants to North Dakota: A Socioeconomic Profile*, Agr. Econ. Rpt. No. 387, Fargo: North Dakota State University, 1998.

Patricia L. Mokhtarian, "A Synthetic Approach to Estimating the Impacts of Telecommuting on Travel," *Urban Studies*, Vol. 35, No. 2, 1998, pp. 215-241.

Richard Rathge and Paula Highman, "Population Change in the Great Plains: A History of Prolonged Decline," *Rural Development Perspectives*, Vol. 13, No. 1, 1998, pp. 19-25.

John M. Wardwell and Corrine M. Lyle, "Reasons for Nonmetropolitan Moving to the Inland Northwest and North Central States," J. Wardwell and J. Copp, eds., in *Population Change in the Rural West, 1975-1990*, Lanham, MD: University Press of America, Inc., 1997, pp. 139-161.

