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The Illinois Institute for Rural Affairs (IIRA) works to improve the quality of life for rural residents by partnering with public and private agencies on local development and enhancement efforts.



**Western Illinois
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The Living Conditions of Elderly in Nonmetro Illinois and East North Central Division of the Midwest Region

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Abstract

This paper describes the attributes of elderly housing in the metro and the nonmetro. Paucity of housing data at the nonmetro level motivated the research. Data analysis suggests that a majority of elderly in the nonmetro own their homes, 64%, compared to 48% of home ownership for the metro. More than two-out-of-five nonmetro residents expressed interest in having an Accessory Dwelling Unit; other changes that are required to continue living in the home include easier access into the home and bathroom modifications such as handrails and no-step shower.

Introduction

Housing is a salient issue in health and long-term care policy². Yet, I could find only 22 references with the term “elderly housing” in the document title in *Policy Commons*³ and none if we add the modifier Illinois to the search.

One reason for this dearth of ‘academic’ research on elderly housing in Illinois could be lack of data on the subject; for example, the most recent data on elderly housing in nonmetro Illinois is from the Illinois Rural Life Poll conducted more than 20 years ago⁴.

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² For information on environmental determinants of health, see <https://iris.paho.org/handle/10665.2/51686>.

³ Policy Commons is a digital platform that provides researchers access to more than 30 million pages of policy reports, briefs, analyses, and working papers; see <https://coherentdigital.net/policycommons>.

⁴ Struthers, C. (2001). Perceptions of Housing in Rural Illinois: Report from the Illinois Life Panel. *Rural Research Report*, 12(4), 1-8.

Microdata from ACS could be mined to gain insights into the topic by aggregating PUMA⁵ regions to derive nonmetro indicators⁶, but residents' perceptions about housing needs are unavailable from the ACS. What is needed is data from multiple sources to inform the status of elderly housing in the state, which includes housing needs. This is the approach adapted in this study; it uses microdata from the ACS, a 2018 survey sponsored by the AARP⁷, and AHS⁸ to gain insights into the housing condition of elderly in the nonmetro.

Profile of Elderly Illinoisans

Table 1 profiles the elderly population in Illinois, both for the metro and the nonmetro. While both regions have majority females in the age category '65 and older', the metro region is the preferred living space for the non-Whites. A majority of residents in the nonmetro own their homes, 64%, compared to 48% of home ownership for the metro. Overall, almost one-in-four Illinoisans aged 65 and older report ambulatory difficulties; ideally, they should be offered help with ADL⁹.

⁵ PUMA stands for public use microdata area; see <https://www.census.gov/geographies/reference-maps/2010/geo/2010-pumas/illinois.html>.

⁶ PUMA regions that were combined to derive rural Illinois data include 104, 202, 300, 501, 600, 700, 800, 1001, 1602, 2501, and 2700.

⁷ The survey was conducted by NORC, University of Chicago, during 2018. Titled,

"2018 Home and Community Preferences: A National Survey", the microdata of the survey was available through the Roper Center, Cornell University.

⁸ 2021 American Housing Survey; see <https://www.huduser.gov/portal/datasets/ahs.html>.

⁹ ADL stands for Activities of Daily Living

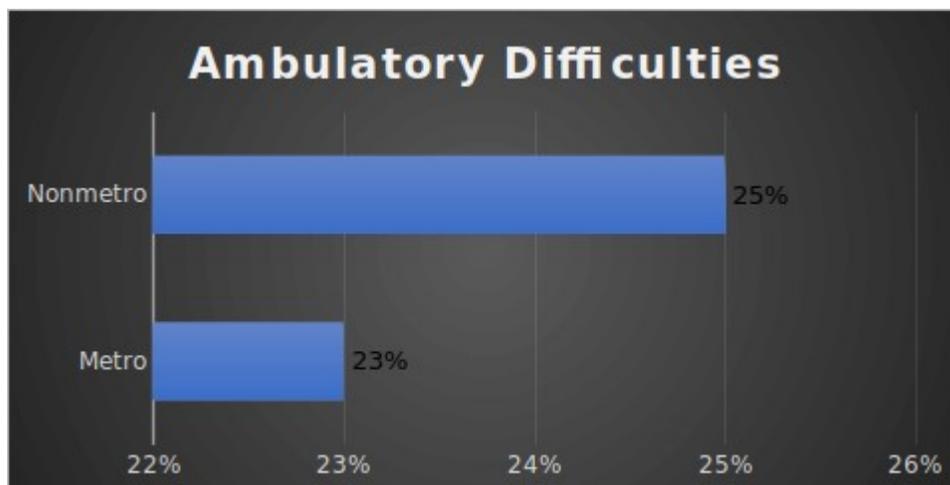
Table 1: Profile of Illinoisans Aged 65 and Older

	White	Race Black	Asian	Other
Metro	77% (N = 1,313,615)	13% (N = 225,537)	5% (N = 89,916)	4% (N = 75,800)
Nonmetro	97% (276,199)	2% (N = 4,525)	< 1% (N = 933)	1% (N = 3,555)

	Gender	
	Female	Male
Metro	57% (N = 965,003)	43% (N = 739,915)
Nonmetro	55% (N = 156,657)	45% (N = 128,555)

	Level of Education		
	LT High School	Assoc. Degree	Bachelor's Degree +
Metro	30% (N = 240,628)	12% (N = 97,006)	58% (N = 473,311)
Nonmetro	35% (N = 35,780)	19% (N = 19,875)	46% (N = 46,794)

	Home Ownership			
	Rented Home	Paying Home Loan	Fully Owned Home	Occupied without Payment
Metro	17% (N = 287,656)	33% (N = 544,859)	48% (N = 795,948)	1% (N = 19,410)
Nonmetro	11% (N = 30,755)	23% (N = 61,967)	64% (N = 172,778)	2% (N = 5,339)



Source: ACS 5-year estimates, 2016-2020.

Housing Stock for Illinoisans Aged 65 and Older

Housing that is affordable, accessible, provides social connectivity, and support services is essential for quality of life¹⁰. In Illinois, a majority of the elderly live in one-family homes detached (Table 3)

with the average value of around \$225,000. The average household income of the focal population is \$74,932; the ratio of household income to home value, housing affordability ratio (HAR), is 0.33¹¹, a good outcome considering that California's HAR index is around 0.1.

Table 3: Characteristics of Elderly Housing

Attribute	Metro (N = 1,222,808)	Nonmetro (N = 197,513)
One family-house detached	63 %	81%
Year Built	On or before 1939 = 18%	On or before 1939 = 23%
	1950-1959 = 15%	1950-1959 = 11%
	1970-1979 = 15%	1970 – 1979 = 18%
No. of occupants	1 = 40%	1 = 42%
	2 = 41%	2 = 49%
No. of Rooms	5 = 20%	5 = 21%
	6 = 20%	6 = 23%
	7 = 14%	7 = 15%
No. of bedrooms	2 = 27%	2 = 28%
	3 = 39%	3 = 47%
	4 = 16%	4 = 12%
Equipped with complete kitchen ¹	Yes = 99%	Yes = 98%
Complete plumbing ²	Yes = 100%	Yes = 100%

Note: 1 = The unit has a stove or range, refrigerator, and a sink with faucet.

2 = The unit has running water and a bathtub or shower.

Source: ACS 5-year estimates, 2016-2020.

¹⁰ Same reference as footnote 2.

¹¹ The index is a ratio of average household income to average house price; the closer the index is to 0, the worse is housing affordability.

Metro and Nonmetro Differences in Housing, Attribute Possession

As shown in Table 3, differences exist between metro and nonmetro residences. For example, a higher proportion of nonmetro homes are older and larger. Furthermore, the HAR for the nonmetro is higher than that of the metro, 0.45 for the nonmetro versus 0.31 for the metro. Put simply, housing is more affordable for the nonmetro households¹².

Table 4 lists housing attributes that are salient for the elderly. Of the five attributes listed in the table, one-in-five rural homes lack easy access to a driveway or the street whereas only one-in-ten homes in the metro lack that feature¹³.

Table 4: Housing Attributes Salient for the Elderly: Attribute Possession

Thinking about your current home does it have ____	Metro (N = 327-338)	Nonmetro (N = 51)
A full bath on the main level	87%	86%
A half bath on the main level	47%	45%
A bedroom, or a room that could be used as one, on the main level	84%	86%
An entrance without steps	33%	43%
A sidewalk or walkway in front of home that allows easy access to a driveway and/or the street ¹	90%	80%

Note: ¹ Chi square = 4.03, p < .05. Source = NORC, see footnote 7.

Desired Modifications¹⁴

In response to a question about changes that are required to continue living in the home, a majority of nonmetro residents (53%) stated that they already have improved lighting inside the home including areas such as

hallways, stairs, bathroom, and living spaces. This feature may have motivated the majority nonmetro residents (80%) to believe that they don't have to install a medical emergency response system that notifies others in case of emergency (Table 5).

¹² HAR for metro = \$79,803 / \$255,056 = .31; HAR for nonmetro = \$57,741 / \$126,380 = .45.

¹³ χ^2 was used to test independence in contingency tables; statistically significant

associations are indexed at the "note" of the table.

¹⁴ Responses were collated from the NORC study, see footnote 7.

Table 5: Modifications Needed to Continue Living in the Home

Modification	Metro	Nonmetro
Easier access into the home (ramp, chairlift, elevator, wider doorways)	64%	79%
Bathroom modifications such as handrails, no-step shower, etc.	63%	70%
Putting a room on the first floor (bedroom, bathroom, kitchen, etc.)	19%	25%
Improving lighting inside in areas such as hallways and stairs ¹	25%	14%
Improving lighting around the outside of the home	22%	29%
Installing a medical emergency response system that notifies others in case of emergency ²	52%	20%
N	51	269-328

Note: 1 = $\chi^2 = 5.0$, $p < .10$; 2 = 6.87, $p < 0.05$. Source = NORC, see footnote 7.

Other Considerations, ADU

Accessory Dwelling Unit or ADU is a secondary house or living quarters that shares the grounds of a primary home; 14% of nonmetro residents report having one; this is in contrast to less than 6% of metro residents stating that

they have an ADU in their property, primary home. Of those without an ADU, 41% of nonmetro residents expressed interest in having an ADU; the same number for metro residents is 27% (Table 6).

Table 6: Accessory Dwelling Unit, Presence and Need

Question	Metro	Nonmetro
Do you currently have an ADU on your property?	Yes = 6%	Yes = 14%
If you had the space to create an ADU, would you consider doing that?	Yes = 27%	Yes = 41%
N	37 - 51	308 - 390

Note: All chi square statistics were significant at the conventional $p < .05$ level. Source = NORC, see footnote 7.

Environment

Figure 1 is a snake plot of environmental attributes that depict nonmetro living. Positive features of rural living include good schools and little or no serious crime. These positives have influenced the respondents to rate their nonmetro,

living environment as good, the average rating was 8.7 on a 1-10 scale where 1 = worst and 10 = best. Negatives features of the community such as abandoned buildings, unclean streets, and lack of public transportation had little or no impact on overall evaluation of the environment.

Figure 1: Residents' Cognitions about Rural Environment



Note: Data are from the 2021 American Housing Survey; 426 responses from people age 65 and above residing in nonmetro, East North Central Division were used to construct Figure 1.

Summary and Conclusion

This paper highlighted the attributes of elderly housing in the metro and the nonmetro. Paucity of housing data at the nonmetro level motivated the research. Data were sourced from three different sources: 2016-2020 ACS, PUMA data, survey data from Roper, and microdata from the 2021 American Housing Survey.

Results of data analysis suggest:

- i. that the metro region is the preferred living space for the non-Whites.
- ii. A majority of residents in the nonmetro own their homes, 64%, compared to 48% of home ownership for the metro.
- iii. A majority of the elderly live in one-family homes detached with an average value of around \$225,000.
- iv. Housing is more affordable for the nonmetro households; the ratio of household income to house price is more favorable for nonmetro residents.

- v. 41% of nonmetro residents expressed interest in having an Accessory Dwelling Unit; the same number for metro residents is 27%, and
- vi. Positive features of rural living include good schools and little or no serious crime. These positives have influenced nonmetro residents to rate their living environment as the “best”.

The findings of this research offer no simple conclusion; on the one hand, the elderly population in Illinois is declining at an ACGR of -2% for the metro and -1.18% for the nonmetro (Appendix 1); outmigration is a contributing factor for the negative ACGRs¹⁵. The negative ACGRs would suggest allocating resources to areas of much greater need other than elderly housing. However, the National Housing Act of 1949 established the goal of a decent home in a suitable living environment for all. This legislation demands that we provide elderly with ADL assistance, help make improvements to their present living arrangements. Positive externalities in both consumption and production of such ADL facilitators¹⁶ should ‘drive’ policymakers to act on the housing needs of the elderly.

¹⁵ Athiyaman, A. (2021). Explaining outmigration intentions of rural population. *Research Brief*, 3(17), October 24. Available: <http://www.iira.org/wp->

<content/uploads/2021/10/Explaining-Outmigration-Intentions.pdf>.

¹⁶ It is assumed that marginal social benefit (MSB) for ‘accessibility products’ is greater than marginal social cost (MSC).

Appendix 1: ACGRs of Elderly Population: Metro and Nonmetro Illinois

Metro County	Population 2020	Population 2010	ACGR
Alexander	1549	1352	1.36%
Bond	2656	3103	-1.56%
Boone	5848	8319	-3.52%
Calhoun	1008	1137	-1.20%
Champaign	19531	26858	-3.19%
Clinton	5504	6404	-1.51%
Cook	612269	757688	-2.13%
DeKalb	9897	13140	-2.83%
DuPage	100647	144024	-3.58%
Ford	2621	2506	0.45%
Grundy	5296	7080	-2.90%
Henry	8416	10087	-1.81%
Jackson	6665	8907	-2.90%
Jersey	3490	4213	-1.88%
Kane	45810	72886	-4.64%
Kankakee	14714	18357	-2.21%
Kendall	7474	13242	-5.72%
Lake	68948	99767	-3.69%
Macon	17866	20807	-1.52%
Macoupin	8127	9038	-1.06%
Madison	37601	45628	-1.93%
Marshall	2457	2673	-0.84%
McHenry	29462	44851	-4.20%
McLean	17044	22741	-2.88%
Menard	1931	2393	-2.15%
Mercer	2867	3325	-1.48%
Monroe	4486	6126	-3.12%
Peoria	25460	30877	-1.93%
Piatt	2689	3200	-1.74%
Rock Island	23460	27463	-1.58%
Sangamon	26690	34995	-2.71%
St. Clair	33244	41097	-2.12%
Stark	1165	1189	-0.20%
Tazewell	20587	24883	-1.90%
Vermilion	13115	14740	-1.17%
Will	58896	90093	-4.25%
Williamson	10606	12648	-1.76%
Winnebago	39226	49555	-2.34%
Woodford	5499	6838	-2.18%
Total Metro	1304821	1694230	-2.61%

Appendix 1: ACGRs of Elderly Population: Metro and Nonmetro Illinois (Continued)

Nonmetro County	Population 2020	Population 2010	ACGR
Adams	11699	13282	-1.27%
Brown	841	980	-1.53%
Bureau	6279	7231	-1.41%
Carroll	3274	3648	-1.08%
Cass	2111	2193	-0.38%
Christian	6058	6444	-0.62%
Clark	2954	3087	-0.44%
Clay	2492	2705	-0.82%
Coles	7397	8710	-1.63%
Crawford	3432	3580	-0.42%
Cumberland	1799	2145	-1.76%
Douglas	3097	3517	-1.27%
Edgar	3411	3859	-1.23%
Edwards	1198	1365	-1.31%
Effingham	5104	5973	-1.57%
Fayette	3510	4101	-1.56%
Franklin	7220	7958	-0.97%
Fulton	6666	7171	-0.73%
Gallatin	1156	1184	-0.24%
Greene	2385	2528	-0.58%
Hamilton	1648	1738	-0.53%
Hancock	3749	4214	-1.17%
Hardin	955	968	-0.14%
Henderson	1496	1733	-1.47%
Iroquois	5590	5896	-0.53%
Jasper	1648	1875	-1.29%
Jefferson	6188	7220	-1.54%
Jo Daviess	4743	5999	-2.35%
Johnson	2078	2655	-2.45%
Knox	9590	10689	-1.08%
LaSalle	18432	20533	-1.08%
Lawrence	2780	2772	0.03%
Lee	5564	6671	-1.81%
Livingston	6032	6940	-1.40%
Logan	4690	5254	-1.14%
Marion	6861	7413	-0.77%
Mason	2746	3025	-0.97%
Massac	2808	2915	-0.37%
McDonough	4570	5357	-1.59%
Montgomery	5184	5724	-0.99%

Appendix 1: ACRs of Elderly Population: Metro and Nonmetro Illinois (Continued)

<u>Nonmetro County</u>	<u>Population 2020</u>	<u>Population 2010</u>	<u>ACGR</u>
Morgan	5885	6809	-1.46%
Moultrie	2630	2772	-0.53%
Ogle	7843	9438	-1.85%
Perry	3521	3953	-1.16%
Pike	3139	3265	-0.39%
Pope	814	1280	-4.53%
Pulaski	1089	1206	-1.02%
Putnam	1016	1311	-2.55%
Randolph	5214	6043	-1.48%
Richland	3059	3237	-0.57%
Saline	4631	4714	-0.18%
Schuyler	1359	1593	-1.59%
Scott	943	1036	-0.94%
Shelby	4212	4862	-1.44%
Stephenson	8775	10266	-1.57%
Union	3184	3514	-0.99%
Wabash	2151	2380	-1.01%
Warren	2909	3243	-1.09%
Washington	2507	2920	-1.52%
Wayne	3255	3523	-0.79%
White	3039	3047	-0.03%
Whiteside	10060	11509	-1.35%
Total Nonmetro	260670	293173	-1.18%