

55+ Profile of

# Condominium Unit Owners

Illinois



# 2016 Community Association Fact Book *Part Six*

# Comparison of Condominium and Non-Condominium Residents Age 55 and Over



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## **Community Association Fact Book 2016**

## Part Six: Comparison of Condominium and Non-Condominium Residents Age 55 and Over

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### **Preface**

## Community Association Fact Book 2016 55+ Condominium Residents

Every day for the next 18 years, 10,000 people will celebrate their 65<sup>th</sup> birthday and make decisions about where and how they will live for the next few decades. Dramatic growth in our older population creates challenges as people make choices related to their financial security, housing, health status, companionship, and long term care.

The Census Bureau reports there are 48 million men and women age 65 and over living in the United States, and this number will reach 79 million in 2035. By then, we will have 9.3 million one-person households, most headed by someone over age 65. We know that 9 out of 10 older Americans want to remain in their home and live as independently as possible. This trend, known as "aging-in-place," requires collaborative effort to ensure access to services needed by elders who live alone, have disabilities, or are unable to handle household activity.

A paradigm shift in how and where older Americans live is around the corner, and the Foundation for Community Association Research (FCAR) believes that community associations can lead the way in practical response. Community associations can encourage innovation and experimentation to address the "graying" of the American population and provide affordable housing with accessibility features and functionality.

But, why would community associations take on these new roles and responsibilities?

Managed communities already offer many of the features and services needed to age-in-place: security, amenities, maintenance, and camaraderie. In the 21<sup>st</sup> century, community associations should go back to their roots as places where people come together, and find ways to help older residents live in safety, comfort, and connectivity with neighbors. This will improve the sustainability and long-term value of community associations.

Judicial rulings confirm that community associations have responsibility for the safety and well-being of residents, and they must be proactive in this area. One way that community associations can demonstrate accountability is to encourage formal or informal networks that support residents who are aging-in-place. These support networks are known as Naturally Occurring Retirement Communities, or NORCs. They provide coordinated concierge-type services for older residents who have challenges with mobility, health, and cognitive conditions, household maintenance, and social interaction. Community associations already have the basis for hosting NORCs because property owners agree to shared governance, management, and services when they decide to live there.

A recent report by the Joint Center for Housing Studies at Harvard (JCHS) confirms that our aging demographics will increase demand for safe and affordable housing that is connected to services. Very little of this type of housing is available today. Older homes are not suited for aging-in-place, as this trend was unforeseen when most existing housing was built. Demand for remodeling, to accommodate aging and disabilities, will create work for builders, contractors, realtors, landlords, and community managers. At the same time, growth in the number of older and smaller households will stimulate jobs and economic growth as new businesses and services spring up to respond to aging activity.

As the Baby Boom generation ages, living in a managed community that encourages aging-inplace could become more desirable. Given Boomers' propensity to stay close to home, many will consider an urban condo or patio home in a nearby community for their retirement residence. Boomers value amenities, comfort, and convenience, and most have interest and financial resources to take on retirement projects. This makes updating an existing home an attractive option if the price is right and the community offers accessibility, amenities, and attractive surroundings.

Overlay this demographic implosion with changes in our economic and social infrastructure, and the logical conclusion is that we are quickly approaching a tipping point in housing. We see rising demand for affordable and accessible housing that is oriented toward neighborhood walkability, shop-ability, and meet-ability. However, there is limited supply of housing that meets these criteria in locations where older people currently live and want to stay.

To enable older Americans to achieve their goal to age-in-place, we need more flexible housing options that emphasize community living in every part of the country. Common interest ownership communities, and their community associations, can become the "fire starters" who rise up to meet this opportunity with new ideas and leadership over the next few decades.

FCAR is very interested in concepts and practices related to aging-in-place. We have reviewed studies and reports by leading organizations, we have surveyed community association managers and will conduct more industry research, and we will provide information on governance and managerial actions that encourage aging-in-place without burdening the association or other residents.

Most recently, we expanded our annual <u>Community Association Fact Book</u> to include information and analysis on age 55+ communities using data collected by the Census Bureau, the ACS, the AHS, and IPUMS, thanks to the work of Lynn Boergerhoff of Community Association Atlas. We hope this research fills some information gaps about community associations and stimulates interest in more research about the emerging "tomorrow land" of aging-in-place.

Christine Danielson Isham
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### Introduction

## Community Association Fact Book 2016 55+ Condominium Residents

## 1. Evidence-Based Information About Community Associations

Community associations generally include three types of housing: condominiums, cooperatives and planned communities. Estimates of the number and characteristics of these community associations have been collected from a number of data sources and published annually as the *Community Associations Fact Book* by the <u>Foundation for Community Associations Research</u>. Fact Book data are obtained from two types of sources. Public data sources include the U.S. Census Bureau, certain State agencies and related housing industries (e.g., the National Association of Realtors and the National Association of Homebuilders). The second group of data sources includes research by the Community Associations Institute (CAI) and its affiliates. See Notes at end of this section.

The public data lacks specificity to identify the three basic types of associations while other data sources may count certain association housing units but not the entities (the associations) themselves. CAI estimates that nationwide the number of community associations has grown from 10,000 in 1970 to 342,000 in 2016, reflecting the housing choice of an estimated 69 million persons.

Two recent reports prepared for the U.S. Census Bureau have shed some additional light on community association data sources and, in particular, condominiums. The first report, Review of Administrative Data Sources (Ruggles, 2015), was prepared by NORC at the University of Chicago. The researchers considered federal, state and local government administrative data records, private sector records and third-party data aggregators. The researchers concluded that no single comprehensive source of information about community associations is available. A subsequent review of available condominium data was conducted by the Center for Administrative Records Research and Applications (CARRA) in the U.S. Census Bureau. This report, Potential Data Sources to Replace or Enhance the Questions on Condominium Status on the American Community Survey (Flanagan-Doyle, 2015), affirmed that there was no comprehensive national dataset of condominium units in the United States. The report noted that federal agencies collect certain condominium information for a variety of purposes including mortgage loan guaranties, flood insurance coverage, and tax filings. The report found that ten states had some form of condominium registration and noted that data collection occurred in many states at the county level under provisions similar to the Uniform Condominium Act or the Uniform Common Interest Ownership Act. Third party data sources are generally real estate listings or transactions, home builder organizations and private data entrepreneurs that may have condominium data. Together these data sources either focus on the condominium association as a whole without data about individual homes or include only data about individual homes not aggregated by association. Few if any of the sources include data on the amount of condominium fee paid.

## 2. Aging and Housing

Since 2000, the number of older Americans has grown significantly and will grow even faster over the next two decades. Most older Americans express strong preference to remain in their home and live as independently as possible. This trend is known as "aging-in-place." At the same time, aging brings changes in physical and cognitive functioning that create challenges remaining at home, especially for those who live alone.

In addition, many Americans live in homes that were not designed or built to accommodate aging-in-place. These homes are not suited for older people who live alone, have functional disabilities and restricted mobility, or need live-in help and care services. Remodeling an older home to add safety and accessibility features can improve prospects for aging-in-place, but the cost may be prohibitive for many older owners, especially those with fixed incomes.

Older residents in community associations face the same dilemmas about housing costs, safety and accessibility, and they may encounter additional barriers from community covenants and rules that are not conducive making changes to support aging-in-place.

The research described below provides examination of several characteristics that may affect aging-in-place and identified important differences between condominium and non-condominium residents and households which FCAR will continue to track and analyze.

## 3. Goals of the Age 55 and Over Condominium Residents Research

The purpose of this research is to expand the statistical evidence research base regarding persons age 55 and over that live in condominium associations, with a particular focus on those who wish to age-in-place, using publicly available data.

The goals of this research are to:

- 1. Estimate the state-level distribution of persons age 55 and over and their households living in a condominium.
- 2. Compare selected characteristic that may influence the ability to age-in-place for persons age 55 and over living in a condominium with those of persons age 55 and over not living in a condominium. The characteristics of interest are: demographics (age, sex, race and ethnic origin); dwelling age and type of the housing structure; the number of persons in the household and householders living alone; household mortgage status and housing cost burden; and the presence of a serious physical, memory or sensory difficulty.

### 4. Data and methods

Data from the 2011 - 2105 5-year Integrated Public Use Microdata Series (IPUMS) of the <u>American Community Survey</u> (ACS) was used in this research. The IPUMS data were obtained from the <u>Minnesota Population Center</u> at the University of Minnesota, one of 25 Federal Statistical Research Data Centers. Details of the data selection, preparation and analysis and the use of the margin of error can be found in Appendix C.

Data and Methods. SPSS (v22, IBM) statistical software was used to perform two types of analysis.

In the first analysis, estimates of the count and percentages of persons and households in a condominium compared to persons and households not in a condominium for each variable of interest the U.S. as a whole, for each of the 50 states and for the District of Columbia. The results are reported in Tables 1 through 13 that comprise each of the reports found in Appendix D. Tables 2, 3, 4, 12, and 13 contain the person-level estimates. Tables 7 through 11 contain household-level estimates. Table 1 contains both household- and person-level estimates. Accompanying each table is a brief note of the table's comparison percentages and any pertinent descriptive notes to assist with interpretation.

### The tables are listed below:

- Table 1. Condominium Status of Persons Age 55 and Over and Their Households
- Table 2. Persons Age 55 and Over by Sex and Condominium Status
- **Table 3.** Ten-Year Age Group of Persons Age 55 and Over by Sex and Condominium Status
- Table 4. Race of Persons Age 55 and Over by Sex and Condominium Status
- **Table 5.** Hispanic Origin of Persons Age 55 and Over by Sex and Condominium Status
- Table 6. Decade Structure Built of Households of Persons Age 55 and Over Condominium Status
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- Table 9. Housing Cost Burden of Households of Persons Age 55 and Over by Mortgage and Condominium Status
- Table 10. Size of Households of Persons Age 55 and Over by Condominium Status
- Table 11. Householders Age 55 and Over Living Alone by Sex and Condominium Status
- Table 12. Physical, Memory or Sensory Difficulty of Persons Age 55 and Over by Condominium Status
- **Table 13.** Physical, Memory or Sensory Difficulty of Persons Age 55 and Over by Sex and Condominium Status.

The reader may compare either the estimated counts or the percentages in each table to identify difference in the variables by condominium status. Readers may also reference margin of error tables in Appendix E for each geographic area to help interpret the observed differences. The margin of error is used to calculate a 90% confidence interval around the estimate within which the true population number is expected to lie.

In the second analysis, the individual state-and District of Columbia estimates were combined for each variable to obtain a mean estimate for both those living condominiums and those not living in condominiums. The difference between some condominium and non-condominium mean percentage estimates may appear to be

large while the difference between others may not appear to be as large. To determine whether a statistically significant difference existed an independent t-test was performed in SPSS. For example, from table 2 the mean percentage of females age 55 and over was calculated from all state-level condominium estimates and compared to the mean percentage of females age 55 and over from all state-level non-condominium households. The difference between these two means was then tested for statistical significance. If the test revealed a statistically significant difference, the effect or magnitude of that difference was statistically estimated as small, medium or large.

### 5. Results

 An estimated 5.1% of the U.S. population age 55 and over and 5.6% of their households live in a condominium, representing an estimated 3.9 million persons in 2.6 million condominium households in the U.S. The percentage of condominium housing varied geographically and ranged from 0.6% in Mississippi to 15.7% in Florida (see map in Appendix F).

From the difference in means tests, we see that:

- Condominium residents were significantly more likely to be female than male and older (age 65+) than non-condominium residents.
- While most condominium and non-condominium residents were White, there was
  a significantly larger percentage of White condominium residents than White noncondominium residents. There was no significant difference among persons of
  Hispanic origin between condominium and non-condominium residents.
- Condominium housing structures were significantly more likely to have been built in 1970 or after than were non-condominium housing structures.
- Condominium housing structures were significantly more likely to be attached one-family housing than the detached one-family housing type typical of noncondominium housing structures.
- While there was no significant difference in mortgage status between condominium and non-condominium households, condominium households were significantly more likely to have a housing cost burden than were noncondominium households. Households that spend 30% or more of their total household income on housing are considered to have housing cost burden.
- Condominium households were significantly more likely to contain just one
  person than were non-condominium households. The one-person condominium
  households were significantly more likely to be female than the one-person noncondominium households.
- Unexpectedly, a significantly smaller percentage of persons age 55 and over in condominiums reported a serious physical, memory or sensory difficulty compared to persons age 55 and over in non-condominium households.

Details of the results of the difference in means tests are found in Appendix C Results of Significance Tests, Discussion and Conclusions and are summarized in Table 1.

## 6. Map Showing Percent of U.S. Condominium Households

Appendix F contains a map of the United States showing the estimated percentage of condominium households in each state and the District of Columbia. The map shows geographic variation in the percentage of condominium housing from 0.6% in Mississippi to 15.7% in Florida. States in the south central region of the U.S. from New Mexico eastward to Alabama, together with Wyoming and West Virginia have the lowest percentage of condominium housing. The states with the highest percentage of condominium housing were Florida at 15.7% and Hawaii at 13.3%, followed by the District of Columbia with 11.0%.

## 7. Discussion

Community associations, including condominiums, cooperatives and planned communities, are a growing and important part of U.S. housing resources. Aging residents of community associations indicate their preference to remain in their current homes with accommodations and supportive services, which is known as aging-in-place.

Community associations and industry leaders recognize the need for evidence-based information about characteristics of older residents and their households that may affect aging-in-place to help inform their actions to support aging residents. Efforts to compile information about community associations in the Community Associations *Fact Book* and other published reports have found no single reliable and comprehensive data source about this aspect of community associations nationwide.

The American Community Survey (ACS), administered by the U.S. Census Bureau, collects monthly data on demographic, social, economic and housing characteristics from a statistically representative sample of U.S. persons and their households. IPUMS USA data derived from the ACS was selected for this research because it has several strengths, including the ability to identify condominium households and data on several personal and household characteristics that may influence aging in place.

Differences were found in the state-level geographic distribution of condominium households. Condominium housing was found to be associated with: a) older age of residents, especially females; b) being built in 1970 or later as single-family attached housing; c) higher incidence of one-person households, especially among female householders; d) greater likelihood of housing cost burden on residents; and e) lesser likelihood of residents reporting serious physical, memory or sensory difficulty. Statistically significant differences were found between condominium and noncondominium persons and households in demographics, dwelling, social isolation, housing cost burden and disability characteristics.

The higher percentage of older adults, especially females, among condominium residents may reflect the historical lower cost of condominium housing and the attraction for older adults because of the amenities and services of association living. Despite the difference in age and structural housing type, both condominium and non-condominium single-family housing are usually built for independent living and require remodeling to be accessible to persons with mobility difficulties. Importantly, housing in condominiums,

cooperatives and planned communities are subject to covenants, conditions and restrictions that may restrict or inhibit accommodations such as accessible entries, width of halls and doors, handicap parking, lighting, and landscaping that non-condominium households can more easily undertake.

Condominium residents, especially females, were more likely than non-condominium residents to live alone. Living alone may contribute to social isolation and increase the risk for persons with disabilities to age in place. While serious physical, memory or sensory difficulty increases with age, older adults living in condominiums were significantly less likely to report these disabilities than non-condominium residents age 55 and over.

Building community is one of the three core functions of community associations. Best practices for associations, as identified by CAI and the Foundation for Community Association Research (FCAR) include encouraging community-building through interaction among neighbors, regular and multi-platform communication, and sponsoring community activities. Beneficial social relations in community associations may help older residents age in place.

This research demonstrates the potential usefulness of American Community Survey data to expand the evidence base regarding characteristics of condominium residents and households that may affect ability to age in place. Because the ACS data is continuously collected each year from sources throughout the U.S., both geographic and temporal comparisons are possible. In addition, the ACS includes data on several other characteristics important to aging-in-place. Further research is needed to describe other characteristics of condominium residents and households that may affect aging in place and to better understand the role of community associations in the lives of their older residents.

## Notes:

The Community Associations Institute (CAI) is an international membership organization that provides information, education and resources to the professionals and volunteers who govern, manage and support common interest ownership communities and their community associations. CAI has 35,000 members, with 63 chapters worldwide in the United States, Canada, the Middle East, South Africa, Australia and United Kingdom.

The Foundation for Community Association Research (FCAR) is a nonprofit organization affiliated with CAI that conducts and commissions research and issues reports on topics and trends affecting the community association industry.

For more information, go to: <a href="https://www.caionline.org">www.caionline.org</a> and <a href="mailto:foundation.caionline.org">foundation.caionline.org</a>.

## Comparison of U.S. Condominium and Non-Condominium Residents Age 55 and Over

Table 1.

Condominium Status of Persons Age 55 and Over and Their Households: Illinois 2011 - 2015

	_	Pers	ons	Housel	holds
		Count	Percent	Count	Percent
Condominium	Condominium	240,575	7.6%	167,170	8.6%
Status	Not Condominium	2,918,766	92.4%	1,771,436	91.4%
	Total	3,159,341	100.0%	1,938,606	100.0%

7.6% of persons age 55+ lived in a condominium.

8.6% of households of persons 55+ were in a condominium.

Table 2.

Persons Age 55 and Over by Sex and Condominium Status: Illinois 2011 - 2015

			 Se	X	
			Male	Female	Total
Condominium	Condominium	Count	94,458	146,117	240,575
Status		Percent	39.3%	60.7%	100.0%
	Not Condominium	Count	1,345,837	1,572,929	2,918,766
		Percent	46.1%	53.9%	100.0%
Total		Count	1,440,295	1,719,046	3,159,341
		Percent	45.6%	54.4%	100.0%

60.7% of condominium residents age 55+ were female compared to 53.9% of non-condominium residents age 55+ who were female.

Table 3.

Ten-Year Age Group of Persons Age 55 and Over by Sex and Condominium Status: Illinois 2011 - 2015

					Age G	oup		
Condominium	Status			55-64	65-74	75-84	85-94	Total
Condominium	Sex	Male	Count	40,807	30,009	17,401	6,241	94,458
			Percent	43.2%	31.8%	18.4%	6.6%	100.0%
		Female	Count	56,031	45,627	30,158	14,301	146,117
			Percent	38.3%	31.2%	20.6%	9.8%	100.0%
	Total		Count	96,838	75,636	47,559	20,542	240,575
			Percent	40.3%	31.4%	19.8%	8.5%	100.0%
Not	Sex	Male	Count	694,353	396,604	190,613	64,267	1,345,837
Condominium			Percent	51.6%	29.5%	14.2%	4.8%	100.0%
		Female	Count	741,356	448,621	259,465	123,487	1,572,929
			Percent	47.1%	28.5%	16.5%	7.9%	100.0%
	Total		Count	1,435,709	845,225	450,078	187,754	2,918,766
			Percent	49.2%	29.0%	15.4%	6.4%	100.0%
Total	Sex	Male	Count	735,160	426,613	208,014	70,508	1,440,295
			Percent	51.0%	29.6%	14.4%	4.9%	100.0%
		Female	Count	797,387	494,248	289,623	137,788	1,719,046
			Percent	46.4%	28.8%	16.8%	8.0%	100.0%
	Total		Count	1,532,547	920,861	497,637	208,296	3,159,341
			Percent	48.5%	29.1%	15.8%	6.6%	100.0%

59.7% (calculated separately) of condominium residents age 55+ were age 65 and over compared to 50.8% of non-condominium residents age 55+ who were age 65 and over.

## Comparison of U.S. Condominium and Non-Condominium Residents Age 55 and Over

Table 4.

Race of Persons Age 55 and Over by Sex and Condominium Status: Illinois 2011 - 2015

							Race*				
								Native			
						American		Hawaiian			
					Black or	Indian and		and Other			
					African	Alaska		Pacific	Two or	Other Race	
Condominium	Status			White	American	Native	Asian	Islander	More Races	(NEC)	Total
Condominium	Sex	Male	Count	80,685	5,743	16	6,229		660	1,125	94,458
			Percent	85.4%	6.1%	.0%	6.6%		.7%	1.2%	100.0%
		Female	Count	124,549	9,666	63	9,099		1,209	1,531	146,117
			Percent	85.2%	6.6%	.0%	6.2%		.8%	1.0%	100.0%
	Total		Count	205,234	15,409	79	15,328		1,869	2,656	240,575
			Percent	85.3%	6.4%	.0%	6.4%		.8%	1.1%	100.0%
Not	Sex	Male	Count	1,092,022	151,017	2,742	53,599	260	10,824	35,373	1,345,837
Condominium			Percent	81.1%	11.2%	.2%	4.0%	.0%	.8%	2.6%	100.0%
		Female	Count	1,238,941	218,765	2,886	63,435	246	12,137	36,519	1,572,929
			Percent	78.8%	13.9%	.2%	4.0%	.0%	.8%	2.3%	100.0%
	Total		Count	2,330,963	369,782	5,628	117,034	506	22,961	71,892	2,918,766
			Percent	79.9%	12.7%	.2%	4.0%	.0%	.8%	2.5%	100.0%
Total	Sex	Male	Count	1,172,707	156,760	2,758	59,828	260	11,484	36,498	1,440,295
			Percent	81.4%	10.9%	.2%	4.2%	.0%	.8%	2.5%	100.0%
		Female	Count	1,363,490	228,431	2,949	72,534	246	13,346	38,050	1,719,046
			Percent	79.3%	13.3%	.2%	4.2%	.0%	.8%	2.2%	100.0%
	Total		Count	2,536,197	385,191	5,707	132,362	506	24,830	74,548	3,159,341
			Percent	80.3%	12.2%	.2%	4.2%	.0%	.8%	2.4%	100.0%
		·				·	·				

<sup>\*</sup>The American Community Survey race categories were recalculated to match the US Census 2010 race categories.

The top two race categories of condominium residents age 55+ were White (85.3%) and both Black or African American and Asian (6.4%) compared to White (79.9%) and Black or African American (12.7%) for non-condominium residents age 55+.

Table 5. Hispanic Origin of Persons Age 55 and Over by Sex and Condominium Status: Illinois 2011 - 2015

Hispanic Origin						
					Not	
Condominium	Status			Hispanic	Hispanic	Total
Condominium	Sex	Male	Count	4,639	89,819	94,458
			Percent	4.9%	95.1%	100.0%
		Female	Count	5,944	140,173	146,117
			Percent	4.1%	95.9%	100.0%
	Total		Count	10,583	229,992	240,575
			Percent	4.4%	95.6%	100.0%
Not	Sex	Male	Count	108,915	1,236,922	1,345,837
Condominium			Percent	8.1%	91.9%	100.0%
		Female	Count	115,890	1,457,039	1,572,929
			Percent	7.4%	92.6%	100.0%
	Total		Count	224,805	2,693,961	2,918,766
			Percent	7.7%	92.3%	100.0%
Total	Sex	Male	Count	113,554	1,326,741	1,440,295
			Percent	7.9%	92.1%	100.0%
		Female	Count	121,834	1,597,212	1,719,046
			Percent	7.1%	92.9%	100.0%
	Total		Count	235,388	2,923,953	3,159,341
			Percent	7.5%	92.5%	100.0%

4.4% of condominium residents age 55+ were of Hispanic origin compared to 7.7% of non-condominium residents age 55+ who were of Hispanic origin.

## Comparison of U.S. Condominium and Non-Condominium Residents Age 55 and Over

Table 6.

Decade Structure Built of Households of Persons Age 55 and Over by Condominium Status: Illinois 2011 - 2015

						Deca	ade Structure I	Built				
			1939 and								2010 and	
			earlier	1940-1949	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999	2000-2009	later	Total
Condominium	Condominium	Count	11,650	2,216	6,897	16,034	35,833	27,728	33,689	32,410	713	167,170
Status		Percent	7.0%	1.3%	4.1%	9.6%	21.4%	16.6%	20.2%	19.4%	.4%	100.0%
	Not Condominium	Count	393,019	128,965	283,985	237,037	256,389	159,217	170,553	132,165	10,106	1,771,436
		Percent	22.2%	7.3%	16.0%	13.4%	14.5%	9.0%	9.6%	7.5%	.6%	100.0%
Total		Count	404,669	131,181	290,882	253,071	292,222	186,945	204,242	164,575	10,819	1,938,606
		Percent	20.9%	6.8%	15.0%	13.1%	15.1%	9.6%	10.5%	8.5%	.6%	100.0%

<sup>78.0% (</sup>calculated separately) of condominium housing of persons age 55+ was constructed after 1970 compared to 41.1% of non-condominium housing of persons age 55+.

Table 7.

Type of Housing Structure of Households of Persons Age 55 and Over by Condominium Status: Illinois 2011 - 2015

						Units in s	tructure				
			1-family	1-family							
			house,	house,	2-family	3-4 family	5-9 family	10-19 family	20-49 family	50+ family	
			detached	attached	building	building	building	building	building	building	Total
Condominium	Condominium	Count	7,997	56,353	1,631	14,563	14,221	13,977	21,482	36,946	167,170
Status		Percent	4.8%	33.7%	1.0%	8.7%	8.5%	8.4%	12.9%	22.1%	100.0%
	Not Condominium	Count	1,318,822	68,092	85,493	67,858	53,051	32,567	37,510	108,043	1,771,436
		Percent	74.4%	3.8%	4.8%	3.8%	3.0%	1.8%	2.1%	6.1%	100.0%
Total		Count	1,326,819	124,445	87,124	82,421	67,272	46,544	58,992	144,989	1,938,606
		Percent	68.4%	6.4%	4.5%	4.3%	3.5%	2.4%	3.0%	7.5%	100.0%

The most common type of housing structure of condominium residents age 55+ was 1-family house attached (33.7%) while the most common type of housing structure of non-condominium residents age 55+ was 1-family house detached (74.4%).

## Comparison of U.S. Condominium and Non-Condominium Residents Age 55 and Over

Table 8.

Mortgage Status of Households of Persons Age 55 and Over by Condominium Status: Illinois 2011 - 2015

			Mortgage	e Status*	
			Mortgage	No Mortgage	Total
Condominium	Condominium	Count	86,817	80,353	167,170
Status		Percent	51.9%	48.1%	100.0%
	Not Condominium	Count	653,915	701,657	1,355,572
		Percent	48.2%	51.8%	100.0%
Total		Count	740,732	782,010	1,522,742
		Percent	48.6%	51.4%	100.0%

<sup>51.9%</sup> of condominium households of persons age 55+ held a mortgage compared to 48.2% of non-condominium households of persons age 55+ with a mortgage.

Table 9.

Housing Cost Burden of Households of Persons Age 55 and Over by Mortgage and Condominium Status: Illinois 2011 - 2015

	ost Burden*					
				Housing	Not Housing	
Condominium	Status			Cost Burden	Cost Burden	Total
Condominium	Mortgage Status*	Mortgage	Count	41,208	44,904	86,112
			Percent	47.9%	52.1%	100.0%
		No Mortgage	Count	23,521	55,777	79,298
			Percent	29.7%	70.3%	100.0%
	Total		Count	64,729	100,681	165,410
			Percent	39.1%	60.9%	100.0%
Not	Mortgage Status*	Mortgage	Count	242,940	407,720	650,660
Condominium			Percent	37.3%	62.7%	100.0%
		No Mortgage	Count	107,295	587,679	694,974
			Percent	15.4%	84.6%	100.0%
	Total		Count	350,235	995,399	1,345,634
			Percent	26.0%	74.0%	100.0%
Total	Mortgage Status*	Mortgage	Count	284,148	452,624	736,772
			Percent	38.6%	61.4%	100.0%
		No Mortgage	Count	130,816	643,456	774,272
			Percent	16.9%	83.1%	100.0%
	Total		Count	414,964	1,096,080	1,511,044
			Percent	27.5%	72.5%	100.0%

47.9% of condominium households of persons age 55+ with a mortgage had a housing cost burden compared to 37.3% of non-condominium households of persons age 55+ with a mortgage that had a housing cost burden.

<sup>\*</sup>The American Community Survey defines mortgage as "the regular monthly amount required to be paid to the lender for the first mortgage (deed of trust, contract to purchase, or similar debt) on the property." This table excludes cases where the mortgage status was not available.

<sup>\*</sup>Housing cost burden is the Selected Monthly Owner Cost (SMOC) divided by total household income. Housing costs of 30% or more of household income is considered a housing cost burden. The American Community Survey defines SMOC as the derived sum of payments for mortgages, deeds of trust, contracts to purchase, or similar debts on the property (including payments for the first mortgage, second mortgages, home equity loans, and other junior mortgages); real estate taxes; fire, hazard, and flood insurance on the property; utilities (electricity, gas, and water and sewer); and fuels (oil, coal, kerosene, wood, etc.) and, where appropriate, the monthly condominium fee for condominiums. This table excludes cases where the housing cost burden could not be calculated because either the SMOC or household income was missing.

## Comparison of U.S. Condominium and Non-Condominium Residents Age 55 and Over

Table 10.
Size of Households of Persons 55 and Over by Condominium Status: Illinois 2011 - 2015

				Number of	Persons in H	ousehold		
							5 or more	
			1 Person	2 Persons	3 Persons	4 Persons	Persons	Total
Condominium	Condominium	Count	93,509	61,775	8,379	2,066	1,441	167,170
Status		Percent	55.9%	37.0%	5.0%	1.2%	.9%	100.0%
	Not Condominium	Count	643,980	779,560	194,524	87,161	66,211	1,771,436
		Percent	36.4%	44.0%	11.0%	4.9%	3.7%	100.0%
Total		Count	737,489	841,335	202,903	89,227	67,652	1,938,606
		Percent	38.0%	43.4%	10.5%	4.6%	3.5%	100.0%

<sup>55.9%</sup> of condominium households of persons age 55+ were 1- person households compared to 36.4% of non-condominium households of persons age 55+ that were 1- person households.

Table 11.

Householders Age 55 and Over Living Alone by Sex and Condominium Status: Illinois 2011 - 2015

				Household	er Status Not Live	
Condominium	Status			Live Alone	Alone	Total
Condominium	Sex	Male	Count	24,207	44,710	68,917
			Percent	25.9%	60.7%	41.2%
		Female	Count	69,302	28,951	98,253
			Percent	74.1%	39.3%	58.8%
	Total		Count	93,509	73,661	167,170
			Percent	100.0%	100.0%	100.0%
Not	Sex	Male	Count	229,608	710,644	940,252
Condominium			Percent	35.7%	63.0%	53.1%
		Female	Count	414,372	416,812	831,184
			Percent	64.3%	37.0%	46.9%
	Total		Count	643,980	1,127,456	1,771,436
			Percent	100.0%	100.0%	100.0%
Total	Sex	Male	Count	253,815	755,354	1,009,169
			Percent	34.4%	62.9%	52.1%
		Female	Count	483,674	445,763	929,437
			Percent	65.6%	37.1%	47.9%
	Total		Count	737,489	1,201,117	1,938,606
			Percent	100.0%	100.0%	100.0%

Of condominium households of persons age 55+ who lived alone, 74.1% were female compared to 64.3% of non-condominium households of persons age 55+ who were female and lived alone.

The American Community Survey defines householder as: "One person in each household is designated as the householder. In most cases, this is the person or one of the people in whose name the home is owned, being bought, or rented and who is listed on line one of the survey questionnaire. If there is no such person in the household, any adult household member 15 years old and over could be designated as the householder."

## Comparison of U.S. Condominium and Non-Condominium Residents Age 55 and Over

Table 12.

Physical, Memory or Sensory Difficulty of Persons Age 55 and Over by Condominium Status: Illinois 2011 - 2015

			Physical, sensory		
			Difficulty	No Difficulty	Total
Condominium	Condominium	Count	55,122	185,453	240,575
Status		Percent	22.9%	77.1%	100.0%
	Not Condominium	Count	746,358	2,172,408	2,918,766
		Percent	25.6%	74.4%	100.0%
Total		Count	801,480	2,357,861	3,159,341
		Percent	25.4%	74.6%	100.0%

22.9% of condominium residents age 55+ had a physical, memory or sensory difficulty compared to 25.6% of non-condominium residents age 55+ who had a physical, memory or sensory difficulty.

Table 13.

Physical, Memory or Sensory Difficulty of Persons Age 55 and Over by Sex and Condominium Status: Illinois 2011 - 2015

				Physical, memory or sensory difficulty*		Total
Condominium	Status		Difficulty	No Difficulty		
Condominium	Sex	Male	Count	21,358	73,100	94,458
			Percent	38.7%	39.4%	39.3%
		Female	Count	33,764	112,353	146,117
			Percent	61.3%	60.6%	60.7%
	Total		Count	55,122	185,453	240,575
			Percent	100.0%	100.0%	100.0%
Not Condominium	Sex	Male	Count	327,960	1,017,877	1,345,837
			Percent	43.9%	46.9%	46.1%
		Female	Count	418,398	1,154,531	1,572,929
			Percent	56.1%	53.1%	53.9%
	Total		Count	746,358	2,172,408	2,918,766
			Percent	100.0%	100.0%	100.0%
Total	Sex	Male	Count	349,318	1,090,977	1,440,295
			Percent	43.6%	46.3%	45.6%
		Female	Count	452,162	1,266,884	1,719,046
			Percent	56.4%	53.7%	54.4%
	Total		Count	801,480	2,357,861	3,159,341
			Percent	100.0%	100.0%	100.0%

Of condominium residents age 55+ who had a physical, memory or sensory difficulty, 61.3% were female compared to 56.1% of non-condominium residents age 55+ who were female and had a physical, memory or sensory difficulty.

Data source for all tables: Steven Ruggles, Katie Genadek, Ronald Goeken, Josiah Grover, and Matthew Sobek. *Integrated Public Use Microdata Series: Version 6.0* [dataset]. Minneapolis: University of Minnesota, 2015. http://doi.org/10.18128/D010.V6.0.

For more information contact Community Association Atlas: Lynn Boergerhoff at lynnab7@gmail.com or 651 308-1461.

<sup>\*</sup>Having a physical, memory or sensory difficulty includes having difficulty with one or more of the following: walking or using stairs, dressing or bathing, doing errands in the community, concentrating or remembering, or with vision or hearing.

<sup>\*</sup>Having a physical, memory or sensory difficulty includes having difficulty with one or more of the following: walking or using stairs, dressing or bathing, doing errands in the community, concentrating or remembering, or with vision or hearing.

## Appendix A.

## **Glossary**

## Community Association Fact Book 2016

## Comparison of Condominium and Non-Condominium Residents Age 55 and Over



## Appendix A. Glossary

## Community Association Fact Book 2016 55+ Condominium Residents

Following are terms as defined by the **American Community Survey** Subject **Definitions 2015**:

- Condominium. A condominium is a type of ownership that enables a person to
  own an apartment or house in a development of similarly owned units and to hold
  a common or joint ownership in some or all of the common areas and facilities
  such as land, roof, hallways, entrances, elevators, swimming pool, etc.
  Condominiums may be single-family houses as well as units in apartment
  buildings.
- Condominium fee. A condominium fee normally is charged monthly to the owners of the individual condominium units by the condominium owners' association to cover operating, maintenance, administrative, and improvement costs of the common property (grounds, halls, lobby, parking areas, laundry rooms, swimming pool, etc.). The costs for utilities and/or fuels may be included in the condominium fee if the units do not have separate meters. Data on condominium fees may include real estate taxes and/or insurance payments for the common property, but do not include real estate taxes or fire, hazard, and flood insurance reported in Housing Questions 20 and 21 (in the 2015ACS) for the individual unit. Amounts reported were the regular monthly payment, even if paid by someone outside the household or remain unpaid. Costs were estimated as closely as possible when exact costs were not known.
- Disability Status (Physical, memory or sensory difficulty). In an attempt to capture a variety of characteristics that encompass the definition of disability, the ACS identifies serious difficulty with four basic areas of functioning hearing, vision, cognition, and ambulation. These functional limitations are supplemented by questions about difficulties with selected activities from the Katz Activities of Daily Living (ADL) and Lawton Instrumental Activities of Daily Living (IADL) scales, namely difficulty bathing and dressing, and difficulty performing errands such as shopping. Overall, the ACS attempts to capture six aspects of disability, which can be used together to create an overall disability measure, or independently to identify populations with specific disability types. Disability status is determined from the answers from these six types of difficulty. For people aged 15 years and older, they are considered to have a disability if they have difficulty with any one of the six difficulty types.
  - Ambulatory difficulty was derived from question 18b, which asked respondents if they had "serious difficulty walking or climbing stairs."
  - 2. Self-care difficulty was derived from question 18c, which asked respondents if they had "difficulty dressing or bathing." Difficulty with these activities are two of six specific Activities of Daily Living (ADLs) often used by health care providers to assess patients' self-care needs.

- 3. Independent living difficulty was derived from question 19, which asked respondents if due to a physical, mental, or emotional condition, they had difficulty "doing errands alone such as visiting a doctor's office or shopping." Difficulty with this activity is one of several Instrumental Activities of Daily Living (IADL) used by health care providers in making care decisions.
- 4. Cognitive difficulty was derived from question 18a, which asked respondents if due to physical, mental, or emotional condition, they had "serious difficulty concentrating, remembering, or making decisions."
- 5. Hearing difficulty was derived from question 17a, which asked respondents if they were "deaf or ... [had] serious difficulty hearing."
- 6. Vision difficulty was derived from question 17b, which asked respondents if they were "blind or ... [had] serious difficulty seeing even when wearing glasses."
- **Estimate.** An estimate is a numerical value of a characteristic obtained from a statistical sample of a larger population. The sample estimate is then used to obtain a numerical value that estimates the characteristic in the larger population.
- Group Quarters. Group Quarters (GQs) are places where people live or stay in
  a group living arrangement that is owned or managed by an entity or organization
  providing housing and/or services for the residents. These services may include
  custodial or medical care, as well as other types of assistance, and residency is
  commonly restricted to those receiving these services. People living in GQs
  usually are not related to each other. GQs include such places as college
  residence halls, residential treatment centers, skilled nursing facilities, group
  homes, military barracks, correctional facilities, workers' dormitories, and facilities
  for people experiencing homelessness.
- Housing Unit. A housing unit may be a house, an apartment, a mobile home, a
  group of rooms or a single room that is occupied (or, if vacant, intended for
  occupancy) as separate living quarters.
- Household. A household includes all the people who occupy a housing unit.
- Householder. One person in each household is designated as the householder.
  In most cases, this is the person or one of the people in whose name the home is
  owned, being bought, or rented and who is listed on line one of the survey
  questionnaire. If there is no such person in the household, any adult household
  member 15 years old and over could be designated as the householder.
- Living Quarters. Living quarters are classified as either housing units or group quarters. Living quarters are usually found in structures intended for residential use, but also may be found in structures intended for nonresidential use as well as in places such as tents, vans, and emergency and transitional shelters.

- Selected Monthly Owner Cost. Selected monthly owner costs are the sum of payments or mortgages, deeds of trust, contracts to purchase, or similar debts on the property (including payments for the first mortgage, second mortgages, home equity loans, and other junior mortgages); real estate taxes; fire, hazard, and flood insurance on the property; utilities (electricity, gas, and water and sewer); and fuels (oil, coal, kerosene, wood, etc.). It also includes, where appropriate, the monthly condominium fee for condominiums.
- Mortgage. Mortgage refers to all forms of debt where the property is pledged as security for repayment of the debt, including deeds of trust; trust deeds; contracts to purchase; land contracts; junior mortgages; and home equity loans.
- Units in Structure. The data on units in structure (also referred to as "type of structure") were obtained from Housing Question 1 in the 2015 American Community Survey (ACS). The question was asked at occupied and vacant housing units. A structure is a separate building that either has open spaces on all sides or is separated from other structures by dividing walls that extend from ground to roof. In determining the number of units in a structure, all housing units, both 39 occupied and vacant, are counted. Stores and office space are excluded. The data are presented for the number of housing units in structures of specified type and size, not for the number of residential buildings.
- Year Structure Built. The data on year structure built were obtained from Housing Question 2 in the 2015 American Community Survey (ACS). Year structure built refers to when the building was first constructed and provides information on the age of housing units.

### Terms related to Aging in Place

- Accessible design. Accessible design has focused on compliance with state or
  local building codes intended to eliminate certain physical barriers that limit the
  usability of environments for people with disabilities. These typically were based
  on the American National Standards Institute's requirements and on the passage
  of the Americans with Disabilities Act (ADA) in 1990 and the subsequent
  development of the ADA Accessibility Guidelines. The two important concepts
  have arisen to help focus research, education and advocacy to support
  affordable and safe housing options.
- Aging in Place. The U.S. Centers for Disease Control and Prevention defines aging in place as "the ability to live in one's own home and community safely, independently, and comfortably, regardless of age, income, or ability level."

- Home Modification. The U.S. Department of Health and Human Services
  describes home modification as "changes made to adapt living spaces to meet
  the needs of people with physical limitations so that they can continue to live
  independently and safely. These modifications may include adding assistive
  technology or making structural changes to a home. Modifications can range
  from something as simple as replacing cabinet doorknobs with pull handles to
  full-scale construction projects that require installing wheelchair ramps and
  widening doorways.
- Universal Design. Universal design is a broader concept defined by The Center for Universal Design at North Carolina State University as "the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design."

## Appendix B.

## **Data and Methods**

## Community Association Fact Book 2016

## Comparison of Condominium and Non-Condominium Residents Age 55 and Over



## **Appendix B. Data and Methods**

## Community Association Fact Book 2016 55+ Condominium Residents

## 1. The American Community Survey

The original data source for this research is the American Community Survey administered by the U.S. Census Bureau during the 5-year period from January 1, 2011 through December 31, 2105.

The American Community Survey (ACS) is an ongoing statistical survey of a representative sample of the entire U.S. population. Starting in 2010 the ACS has replaced the data previously collected once per decade on the decennial census long form. The ACS reports reliable and timely demographic, social, economic and housing data every year. The ACS is sent to of approximately 295,000 addresses monthly, or about 3.5 million per year, selected from all U.S. counties and county-equivalents. The data are collected online and by mail with follow-up by telephone and personal visit. The completed response rate is about 95 percent. Visit the American Community Survey website for more information. See ACS Multiyear Accuracy of Data (2011 – 2015)

Because the American Community Survey is a continuous monthly survey, the estimates produced are period estimates that describe the average characteristics of persons and households over the period of data collection. The monthly survey responses are combined into 1- year reporting periods (e.g., 2011) release each year, and further combined into 5-year reporting periods (e.g., 2011 - 2015) also released every year. The Census Bureau analyzes the data and produces numerous reports, pre-tabulated data tables and maps with topics and geographies available on the <u>American FactFinder</u>.

## 1.1. Strengths of the American Community Survey

The American Community Survey was selected for this research because the ACS:

- Is a statistically representative sample of U.S. persons and their households that can be used to estimate characteristics of persons and households in the entire U.S. population.
- Collects data throughout each year so that the data is current is reported each year and can be compared over time.
- Aggregates data from multiple years so that smaller geographic areas and population groups can be studied.
- Includes a data variable to identify households that pay a monthly condominium fee and may be considered as living in a condominium.
- Includes data on several characteristics that may affect aging in place.
- Provides detailed data from individual survey responses as Public Use Microdata Samples (PUMS) that enable researchers to study specific geographic areas and population groups.

## 1.2. Limitations, error and uncertainty in the American Community Survey

The American Community Survey is a probability survey, asking questions of a representative sample of the U.S. population to estimate characteristics of the total U.S. population. Like all such surveys, the ACS has limitations and sources of error that lead to uncertainty when interpreting and using the data.

Two important limitations of the ACS concern confidentiality and geography. The U.S. Census Bureau takes several steps to assure the confidentiality of survey respondents. The names and other personal identifying information are removed so that individual respondents cannot be identified. Certain individual records are modified to remove unusual responses that may identify an individual person. The U.S. Census Bureau also limits data availability based on geographic area. To obtain a large enough sample size to report data from small geographic areas or about small subpopulations, the Census Bureau pools data collected over multiple years, as in the 2011 - 2105 5-year reporting period.

The ACS has two types of error that can lead to uncertainty when interpreting survey results. Non-sampling error can result from a mistake in how the data was recorded or coded, problems with the sampling method or the survey questions, interviewer bias and other causes. The Census Bureau tries to minimize these errors by using professional trained staff, carefully reviewing the survey methods and questionnaire design and by monitoring data processing techniques. Intentional or unintentional errors by the survey respondent are beyond the control of ACS administrators and staff.

Sampling error occurs because the data are based on questioning a sample of the population rather than asking the questions of the entire population. In general, the larger the sample size the greater the confidence in the accuracy and reliability of the survey results. To reduce sampling error, the Census Bureau uses complex sampling techniques to try to obtain an adequate sample size. For a description of ACS sampling and accuracy methods see *American Community Survey Multiyear Accuracy of the Data (5-year 2011-2015)*.

Because of the inherent uncertainty about the U.S. population's true characteristics obtained from ACS survey, ACS data reports usually contain a margin of error. The margin of error reflects the variability that could be expected if the same survey were repeated with different samples of the same population. The margin of error was calculated for each data table estimates for each geography and are available in Appendix E. To create a 90% confidence interval for an estimate, subtract the margin of error from the estimate to obtain the lower confidence limit and add the margin of error from the estimate to obtain the upper confidence limit. The 90% confidence interval represents a range of values within which the true population value is expected to lie.

## 2. The Integrated Public Use Microdata Sample (IPUMS)

The Public Use Microdata Sample (PUMS) is a subset of the 2011 - 2015 American Community Survey that contains individual person and household responses to the different survey questions that are numerically coded in separate variables. PUMS files covering a five-year period, such as 2011-2015, contain data on approximately five percent of the United States population. The PUMS data allows research into specific topics and geographies not included in the pre-tabulated tables and reports prepared by the U.S Census.

The data source for the *Community Associations Fact Book 2016* was a modified version of the ACS PUMS data called the Integrated Public Use Microdata Samples USA (IPUMS USA) available from the <u>Minnesota Population Center</u> at the University of Minnesota. The Minnesota Population Center is one of 25 Federal Statistical Research Data Centers located across the country. In the 2011-2015 IPUMS, persons are organized into households by putting the household information on the person records making it possible to study the characteristics of people in the context of their households. A data extraction system on the IPUMS website enables researchers to select and download only the samples and variables of interest.

### 3. Data selection and extraction

The IPUMS USA data were accessed on 02/17/2017. Three steps were used to prepare the data for extraction. First, the 2011 - 2015 5-year IPUMS sample for the United States was selected. Second, only records from housing units were included in the extraction, excluding records from group quarters (e.g., correctional facilities, group homes and health care facilities). In the third step, specific household and person variables were selected for extraction, as shown in Table 1.

Table 1.

Variable Type	Variable Name	Variable Description
Household	STATEFIP	State Federal Information Processing Standards (FIPS) code for each state and the District of Columbia
Household	CONDOFEE	Amount of monthly condominium fee paid by the household
Household	UNITSSTR	Number of housing units in the structure containing the household (considered the type of housing structure)
Household	HHWT	Number of households in the U.S. population represented by a given household in the sample
Household	PERNUM	Numbers all persons within each household consecutively
Household	NUMPREC	Number of person records that are included in the housing unit
Household	MORTGAGE	Whether or not housing unit had mortgage, loan, or other debt

Variable	Variable	Variable Description
Туре	Name	
Household	OWNCOST	Selected monthly cost of home ownership including
		mortgage, insurance, real estate taxes, utilities, fuels
		and condominium fees if applicable
Household	HHINCOME	Total household income
Household	HHTYPE	Either family or non-family household, including male
		and female householders living alone
Household	BUILTYR2	Decade housing structure built
Person	PERWT	Number of persons in the U.S. population represented
		by a given person in the sample
Person	AGE	Age in years
Person	SEX	Male or female
Person	RACED	Detailed race codes
Person	HISPAN	Identifies persons of Hispanic/Spanish/Latino origin
Person	DIFFCARE	Difficulty bathing, dressing or moving inside house
Person	DIFFMOB	Difficulty with basic activities outside the home
Person	DIFFPHYS	Difficulty walking, climbing stairs, lifting or carrying
Person	DIFFREM	Difficulty learning, remembering or concentrating
Person	DIFFSENS	Difficulty with vision or hearing

A total of 13,984,133 records were extracted and imported into the SPSS statistical analysis software (Statistical Package for Social Science v22, IBM) for data preparation and analysis.

## 4. Data Preparation

First, the records of persons age 55 and over were selected and saved as a separate dataset containing 4,473,799 records. This became the working dataset for all subsequent analysis. The following IPUMS variables were modified in preparation analysis.

- 1. CONDOFEE is a four-digit number that recorded the amount of the condominium fee paid each month. If the CONDOFEE variable was greater than "0", the record was considered to be part of a condominium and recoded as such to a new variable. All other records were considered not to be in a condominium and were likewise coded as such to the new variable. This new variable was used to differentiate condominium from noncondominium persons and households.
- 2. The UNITSSRT response set describes the type of housing structure and included "N/A" and ten descriptive types of housing structure. "N/A" and two types of housing structure ("Mobile home or trailer" and "Boat, tent, van, other") were found to be absent among condominium households. Records from non-condominium households with these types of responses were removed from the analysis of the UNITSSTR variable. The following eight types of housing structure remained and were included in the analysis: "1-family house, detached," "1-family house, attached," "2-family building," "3-4 family building," "5-9 family building," "10-19 family building," "20 49 family building," "50+ family building."
- 3. The AGE response set recorded the person's age in years. The AGE variable was recoded into 10-year age groups: "55 64," "65 74," "75 84," "85 94," and "95 and over".

- 4. Detailed RACE codes were recoded to match the 2010 U.S. Census Bureau race codes: "White," "Black or African American," "American Indian and Alaska Native," "Asian," "Native Hawaiian and Other Pacific Islander," "Two or More Races," and "Other Race (NEC)."
- 5. The HISPAN response set included: "Not Hispanic," "Mexican," "Puerto Rican," "Cuban," "Other," and "Not Reported." The responses "Mexican," "Puerto Rican," "Cuban," and "Other" were recoded as "Hispanic." "Not Hispanic" and "Not Reported" were left unchanged.
- 6. The BUILTYR2 variable was left unchanged except to recode individual years 2010, 2011, 2012, 2013, 2014 and 2015 into a single category of "2010 and later."
- 7. The MORTGAGE response set included 5 items: "N/A," "Check mark on manuscript (probably yes)," "Yes, mortgage/deed of trust or similar debt," "Yes, contract to purchase," and "No, owned free and clear." The responses were was recoded to a new 3-item variable as follows: "N/A" and "Check mark on manuscript (probably yes)" was recoded to N/A; "Yes, mortgage/deed of trust or similar debt" and "Yes, contract to purchase" was recoded as Mortgage; and "No, owned free and clear" was recoded as No Mortgage. The recoded mortgage variable was used to identify households holding a mortgage and to analyze housing cost burden by mortgage status.
- 8. Several steps were required to calculate the Housing Cost Burden using the OWNCOST and the HHINCOME variables. The OWNCOST variable reported the combined monthly housing-related costs. The HHINCOME variable reported the total annual household income. First, the monthly OWNCOST variable was multiplied by 12 to obtain the annual OWNCOST. The annual OWNCOST was then divided by the HHINCOME, the annual household income. The result was the percentage of household income spent on housing costs. Households with 30% or greater of household income spent on housing costs were coded to a new variable as having a housing cost burden and households with less than 30% of household income spent on housing cost were coded as not having a housing cost burden.
- 9. The five disability-related variables (DIFFCARE, DIFFMOB, DIFFPHYS, DIFFREM and DIFFSENS) were collapsed into a new single composite variable. Each disability-related response set included: "N/A", "No" and "Yes". If the person responded "Yes" to one or more of the five disability-related items, that person was recoded to the new composite variable as having a physical, memory or sensory difficulty. If the person did not respond with "Yes" to one or more of the five disability related survey items, the person was recoded as not having a physical, memory or sensory difficulty to the new variable.
- 10. The HHWT is a 6-digit numeric variable that indicates how many households in the U.S. population are represented by a given household in an IPUMS sample. Prior to analysis, the HHWT was applied to the household variables to obtain population household estimates.
- 11. The PERWT is a 6-digit numeric variable that indicates how many persons in the U.S. population are represented by a given person in an IPUMS sample. Prior to analysis, the PERWT was applied to the person variables to obtain population estimates.
- 12. Monetary values from the individual survey years were adjusted by the Minnesota Population Center to the final survey year (2015).

## 5. Data Analysis

Two types of analysis were performed for each variable of interest. First, SPSS Crosstabs procedure was used to obtain the estimates of the count and percentages of persons age 55 and over and their households in a condominium compared to persons age 55 and over and their households not in a condominium for the U.S. as a whole, for each of the 50 states and for the District of Columbia. The results are reported in Tables 1 through 13 that comprise each of the reports found in Appendix D. Each table compares a one or more person or household characteristics by condominium status as follows:

- Table 1. Condominium Status of Persons Age 55 and Over and Their Households
- Table 2. Persons Age 55 and Over by Sex and Condominium Status
- Table 3. Ten-Year Age Group of Persons Age 55 and Over by Sex and Condominium Status
- Table 4. Race of Persons Age 55 and Over by Sex and Condominium Status
- Table 5. Hispanic Origin of Persons Age 55 and Over by Sex and Condominium Status
- Table 6. Decade Structure Built of Households of Persons Age 55 and Over Condominium Status
- Table 7. Type of Housing Structure of Households of Persons Age 55 and Over by Condominium Status
- Table 8. Mortgage Status of Households of Persons Age 55 and Over by Condominium Status
- **Table 9.** Housing Cost Burden of Households of Persons Age 55 and Over by Mortgage and Condominium Status
- Table 10. Size of Households of Persons Age 55 and Over by Condominium Status
- Table 11. Householders Age 55 and Over Living Alone by Sex and Condominium Status
- Table 12. Physical, Memory or Sensory Difficulty of Persons Age 55 and Over by Condominium Status
- Table 13. Physical, Memory or Sensory Difficulty of Persons Age 55 and Over by Sex and Condominium Status.

The reader may compare either the estimated counts or the percentages in each table to identify difference in the variables by condominium status. Readers may also reference margin of error tables in Appendix E for each geographic area help interpret the observed differences and to construct 90% confidence intervals around the estimates.

In the second analysis, the individual state-level and District of Columbia estimates were combined for each variable to obtain a mean estimate for both condominiums and non-condominiums. To determine whether a statistically significant difference existed between condominium and non-condominium estimates, an independent t-test was performed in SPSS. For example, from Table 2 the mean percentage of females age 55 and over was calculated from all state-level condominium estimates and compared to the mean percentage of females age 55 and over from all state-level non-condominium households. The difference between these two means was then tested for statistical significance. If the test revealed a statistically significant difference, the effect or magnitude of that difference was statistically estimated using the Cohen's *d* procedure as small, medium or large. The results of these significance tests appear in Appendix C. A summary test results appear in Table 1 of Appendix C.

## 6. Measuring Sampling Error

Data from the ACS, like all survey data, comes from a sample taken from a larger population. The estimates contain uncertainty from the use of probability sampling, which is necessary to ensure the integrity and representativeness of the survey results and for statistical analysis of the sample data. To help interpret the estimates, the U.S Census Bureau recommends reporting a 90% margin of error (MOE) for each estimate.

The margin of error represents the variation in the estimates that would be expected to occur if all possible samples were taken from the same population. The margin of error is used to construct a confidence interval, the range of values around the estimate that will contain the estimate with a 90% probability. Knowing an estimate's margin of error confidence interval helps the user draw conclusions from the survey results.

The MOE has been calculated for the estimates in each table in each geographic area using the Generalized Standard Errors with Design Factors method with formulas for totals and percentages described on page 17 and the Design Factors for each geography obtained from Table 5: Design Factors for Calculating PUMS Standard Errors - United States found in 2011 - 2015 PUMS Accuracy of the Data. The margin of error tables are found in Appendix E.

## Appendix C.

## **Results and Discussion**

## Community Association Fact Book 2016

## Comparison of Condominium and Non-Condominium Residents Age 55 and Over



## Appendix C. Results and Discussion

## Community Association Fact Book 2016 55+ Condominium Residents

Analysis of data from the 2011 - 2015 5-year American Community Survey IPUMS reveal several statistically significant differences between persons age 55 and over and their households living in a condominium and persons age 55 and over and their households not living in a condominium. In summary, at the national level:

- Females comprised a significantly larger percentage of persons age 55 and over in condominium households than do females age 55 and over in noncondominium households.
- A significantly larger percentage of persons in condominium households were older (age 65 and over) than were age 65 and older in non-condominium households.
- There was a significantly larger percentage of persons age 55 and older in condominium households who reported their race as White than did persons age 55 and older in non-condominium households.
- There was no significant difference in the percentage of persons age 55 and older of Hispanic origin in condominium and non-condominium households.
- A significantly larger percentage of condominium housing structures of persons age 55 and older were built in or after 1970 than were non-condominium housing structures of persons age 55 and older.
- A significantly larger percentage of condominium housing of persons age 55 and older was 1-family housing - attached than were non-condominium housing of persons age 55 and older. The most common type of non-condominium housing of persons age 55 and older was 1-family housing - detached.
- There was not a significant difference in the percentage of condominium households of persons age 55 and older that held a mortgage compared to noncondominium households of persons age 55 and older with a mortgage.
- Of households of persons age 55 and older with a mortgage, a significantly larger percentage of condominium household also had a housing cost burden than did non-condominium households of persons age 55 and older.
- A significantly larger percentage of condominium households of persons age 55 and older contained only one person than did non-condominium households persons age 55 and older.
- Of persons age 55 and older who lived alone, a significantly larger percentage of condominium residents were female than were females living alone in noncondominium households.
- A significantly smaller percentage of persons age 55 and over in condominium households reported having a serious physical, memory or sensory difficulty than did persons in non-condominium households. Of persons age 55 and older who reported having a serious physical, memory or sensory difficulty, a significantly larger percentage in a condominium were female than were female and not living in a condominium.

### Table 2. Sex

Among persons age 55 and over, females compose a larger percentage than males in both condominium and non-condominium households. An independent t-test was conducted to determine whether a significant difference existed between the mean percentage of females living in condominium (n=51, M=60.98 SD=2.76) and in non-condominium households (n=51, M=53.48, SD=1.33). The t-test revealed that there was a statistically significantly larger mean percentage of females than males among persons age 55 and over in condominium households than in non-condominium households of persons age 55 and over, t(72.14)=17.48, p<0.001, Mean Difference 7.51, 95% CI [6.65, 8.37]. The Cohen's d effect size was estimated to be 3.46, which is a large effect.

## Table 3. Age

The percentage of persons age 65 and older living in a condominium was greater than the percentage of persons age 65 and older not living in a condominium. An independent t-test was conducted to determine whether a significant difference existed between the mean percentage of persons age 65 and over in a condominium (n=51, M=63.02, SD=5.32) and not in a condominium (n=51, M=51.53, SD=2.21). The t-test revealed that persons age 65 and over represent a statistically significantly larger mean percentage of persons living in a condominium than do persons age 65 and over not living in a condominium, t(66.67)=14.24, p<0.001, Mean Difference 11.49, 95% CI [9.88, 13.1]. Cohen's d effect size was estimated to be 2.82, which is a large effect.

### Table 4. Race

White is the most common race type reported by persons age 55 and over in both condominium and non-condominium households. An independent t-test was conducted to determine whether a significant difference existed between the mean percentage of persons of the White race living in a condominium (n=51, M=89.40 SD=10.58) and not living in a condominium (n=51, M=83.64, SD=14.03). The t-test revealed that there was a statistically significantly larger mean percentage of persons age 55 and over in a condominium who reported their race as White than not living in a condominium, t(100)=2.34, p=0.021, Mean Difference 5.76, 95% CI [0.88, 10.64]. Cohen's t0 effect size was estimated to be 0.46, which is a medium effect.

## Table 5. Hispanic origin

Persons of Hispanic origin compose a small percentage of persons age 55 and over in both condominium and non-condominium households. An independent t-test was conducted to determine if a significant difference existed between the mean percentage of persons of Hispanic origin living in a condominium (n=51, M=3.51 SD=3.68) and not living in a condominium (n=51, M=5.28, SD=6.51). The t-test revealed that there was not a statistically significant difference between the mean percentage of persons of Hispanic origin age 55 and over living in a condominium and persons of Hispanic origin age 55 and over not living in a condominium, t(78.91)=-1.69, p=0.096, Mean Difference -1.77, 95% CI [-3.85, 0.32].

## Table 6. Decade housing built

A larger percentage of condominium housing structures of persons age 55 were built in or after 1970 compared to non-condominium housing structures of persons age 55 and over. An independent t-test was conducted to determine whether a significant difference existed between the mean percentage of condominium structures built in or after 1970 (n=51, M=86.59, SD=9.91) and non-condominium structures built in or after 1970 (n=51, M=54.62, SD=13.20). The t-test revealed that a statistically significantly larger percentage of condominium housing structures were built in or after 1970 than were non-condominium households built in or after 1970, t(92.79)=13.83, p<0.001, Mean Difference 31.97, 95% CI 27.38, 36.56]. Cohen's t0 effect size was estimated to be 2.74, a large effect size.

## Table 7. Housing structure

One-family housing - attached was the most frequently reported type of housing structure among condominium households of persons age 55 and over. An independent t-test was conducted to determine whether a significant difference existed between the mean percentage one-family housing - attached in condominiums (n=51, M=43.38, SD=12.21) and non-condominiums (n=51, M=4.13 SD=5.05). The t-test revealed that a statistically significantly larger percentage of condominium households of persons age 55 and over lived in 1-family housing - attached structures than did households of persons age 55 and over in non-condominium housing structures, t(66.64)=21.22, p<0.001, Mean Difference 39.25, 95% CI[36.55, 42.94]. Cohen's t0 effect size was estimated to be 4.20, a large effect size.

## Table 8. Mortgage status

Approximately half of both condominium and non-condominium households of persons age 55 and over held a mortgage. An independent t-test was conducted to determine if a significant difference existed between the mean percentage of condominium households held a mortgage (n=51, M=50.94, SD=7.24) and non-condominium households that held a mortgage (n=51, M=48.65 SD=7.26). The t-test revealed that there was not a statistically significant difference in mortgage status between condominium and non-condominium households of persons age 55 and over, t(100)=1.59, p=0.114 Mean Difference 2.28, 95% CI [-0.56, 5.13].

## Table 9. Housing cost burden

A larger percentage of condominium households of persons age 55 and over reported a housing cost burden of 30% or more of total household income compared to non-condominium households of persons age 55 and over that reported a housing cost burden. An independent t-test was conducted to determine if a significant difference existed between the mean percentage of housing cost burdened condominium households (n=51, M=32.88, SD=6.33) and non-condominium households that reported a housing cost burden (n=51, M=23.67 SD=5.00). The t-test revealed that a statistically significantly larger percentage of condominium households of persons age 55 reported a housing cost burden than did non-condominium households of persons age 55 and over, t(100)=8.15, p<0.001, Mean Difference 9.21, 95% CI [6.97, 11.45]. Cohen's d effect size was estimated to be 1.61, a large effect size.

When comparing only households of persons age 55 and over that held a mortgage, a larger percentage of condominium households reported having a housing cost burden of 30% or more of total household income than non-condominium households. An independent t-test was conducted to determine if a significant difference existed between the mean percentage of condominium (n=51, M=42.93, SD=6.65) and non-condominium (n=51, M=34.43, SD=4.95) households with a mortgage and a housing cost burden. The t-test revealed that a significantly larger percentage of condominium households of persons age 55 and over with both a mortgage and a housing cost burden than did non-condominium households of persons age 55 and with both a mortgage and a housing cost burden, t(100)=7.32, p<0.001, Mean Difference 8.50, 95% CI [6.20, 10.80]. Cohen's t effect size was estimated to be 1.45, which is a large effect.

#### Table 10. 1-Person households

A larger percentage of condominium households of persons age 55 and over were 1-person households compared to 1-person non-condominium households of persons age 55 and over. An independent t-test was conducted to determine if a significant difference existed between the mean percentage of 1-person condominium households (n=51, M=54.56, SD=4.87) and non-condominium households (n=51, M=36.48, SD=3.13). The t-test revealed a statistically significantly larger mean percentage of 1-person condominium households of persons age 55 and over than 1-person non-condominium households of persons age 55 and over, t(85.26)=22.29, p<0.001, Mean Difference 18,08, 95% CI [16.47, 19.70]. Cohen's t0 effect size was estimated to be 4.41, which is a large effect.

#### Table 11. Female living alone

Of householders age 55 and over who lived alone, a larger percentage were female than were male in condominium households compared to the percentage of females and males living alone in non-condominium households. An independent t-test was conducted to determine if a significant difference existed between the mean percentage of females age 55 and over living alone in condominium households (n=51, M=63.77, SD=2.76). The t-test revealed a statistically significantly larger mean percentage of females age 55 and over living alone in condominium households than females age 55 and over living alone in non-condominium households, t(80.62)=14.82, p<0.001, Mean Difference 11.34, 95% CI [9.82, 12.86]. Cohen's t effect size was estimated to be 2.93, which is a large effect.

#### Table 12. Physical, memory or sensory difficulty

A smaller percentage of persons age 55 and over living in a condominium reported a serious physical, memory or sensory difficulty compared to the percentage of persons age 55 and over not living in a condominium who reported a serious physical, memory or sensory difficulty. An independent t-test was conducted to determine if a significant difference existed between the mean percentage of serious physical, memory or sensory difficulty among condominium residents (n=51, M=23.18, SD=3.74) and noncondominium residents (n=51, M=27.38, SD=3.26). The t-test revealed that there was a statistically significantly smaller percentage of persons age 55 and over living in a condominium who reported a serious physical, memory or sensory difficulty than reported by persons age 55 and over not living in a condominium, t(100)=-6.05, p<0.001,

Mean Difference -4.20, 95% CI [-5.58, -2.83]. Cohen's *d* effect size was estimated to be 1.20, which is a large effect.

#### Table 13. Female with a physical, memory or sensory difficulty

A larger percentage of females age 55 and over living in a condominium reported a serious physical, memory or sensory difficulty compared to the percentage of females age 55 and over not living in a condominium who reported serious physical, memory or sensory difficulty. An independent t-test was conducted to determine if a significant difference existed between the mean percentage of females age 55 and over living in a condominium with a serious physical, memory or sensory difficulty (n=51, M=59.68, SD=5.68) and females with such a difficulty not living in a condominium (n=51, M=53.94, SD=2.96). The t-test revealed that females age 55 and over living in a condominium reported a statistically significantly larger mean percentage of serious physical, memory or sensory difficulty than did females age 55 and over not living in a condominium, t(75.30)=6.40, p<0.001, Mean Difference , 95% CI [3.95, 7.52]. Cohen's d effect size was estimated to be 1.27, which is a large effect.

The results of the significance tests are summarized in Table 1.

#### Discussion

Data from the 2011 - 2015 5-year American Community Survey estimate that about 5.1% of the U.S. population age 55 and over and 5.6% of U.S. households were in a condominium, representing an estimated 3.9 million persons in 2.6 million condominium households. The prevalence of condominium housing varies geographically and ranges from 0.6% in Mississippi to 15.7% of total housing in Florida (see map in Appendix F).

Condominium residents were more likely to be age 65 and over and more likely to be female than were non-condominium residents. This may reflect the historical relatively lower cost of condominium housing and the attraction among older adults of condominium association living with its amenities and services.

While most condominium and non-condominium residents were White, there was a significantly larger percentage of White condominium residents than White non-condominium residents. The remaining race categories varied among the states. There was no significant difference in Hispanic origin between condominium and non-condominium residents.

Condominium dwelling structures were more likely to have been built in 1970 or later than were non-condominium structures though the percentages varied among states. Condominium housing structures were more likely to be attached 1-family housing type than the predominately detached 1-family housing type of non-condominium households. Only condominium housing structures in New York state were more likely to be a 50 and over family housing structure than any other type. Despite this difference in age and structural housing type, both condominium and non-condominium 1-family housing was likely built for independent living and will not be accessible to persons with mobility difficulties that challenge aging in place without remodeling. Importantly, condominiums (as well as cooperatives and planned communities) are subject to governing documents that largely shape its ability to accommodate their older residents' needs and expectations regarding aging in place, at least in terms of external

characteristics like accessible entries, parking, lighting, pathways and landscaping that non-community association households could undertake without these constraints.

There was no significant difference in significant difference in mortgage status between condominium and non-condominium households of persons age 55 and over. Households that pay more than 30 percent of their income for housing are widely considered cost burdened, meaning that they may have difficulty affording necessities such as food, clothing, transportation and medical care. Condominium households were significantly more likely to have a housing cost burden than were non-condominium households. This may reflect the higher percentage of single, older female households with limited financial resources in condominiums than in non-condominium housing. There may be geographic variation in condominium housing cost burden.

Condominium households were significantly more likely to be composed of just one person than were non-condominium households and the 1-person condominium households were significantly more likely to be female than were the non-condominium households. Given the significantly larger percentage of persons age 65 and older among condominium residents compared to non-condominium residents, an unexpectedly smaller percentage of persons in condominiums reported a serious physical, memory or sensory difficulty compared to non-condominium households. This pattern prevailed when the five types of difficulty were examined separately.

Many factors may contribute to social isolation (having minimal contact with other people), a recognized risk to physical and emotional health and safety among older adults. An important risk factor of social isolation is living alone. Serious physical, memory or sensory difficulty increases with age among older adults. Mobility difficulties (e.g., walking and climbing stairs) are particularly important with aging in place because their accommodation will likely require modifying the structural characteristics of the home.

Building community is one of the three core functions of community associations and has been promoted through the Community Associations Institute's best practices publications. Condominiums and other forms of community associations may promote beneficial social relations among residents through physical proximity, communications social events and other factors that sustain and grow social networks among residents. A sense of community among community association residents could help mitigate the detrimental affects of living alone and of a serious physical, mental or sensory difficulty.

Community associations, including condominiums, cooperatives and planned communities are an important and growing part of U.S. housing resources. Residents of community associations are aging and most prefer to age in place, that is to remain living in their current homes with needed accommodations and supportive services. Community associations and industry leaders seek evidence-based information about important characteristics of older residents and their households that may affect aging in place and help inform the response to and preparation for the needs and wishes of aging residents. Efforts to compile information about community associations in the Community Associations Institute *Fact Book* and in published reports have found no single reliable and comprehensive data source about community associations nationwide.

The American Community Survey (ACS), administered by the U.S. Census Bureau obtains monthly data on the demographic, social, economic and housing characteristics from a statistically representative sample of U.S. persons and their households. The ACS was selected for this research because it includes a variable that defines a condominium and identifies condominium households and because the ACS collects data on several personal and household characteristics that may influence aging in place.

The purpose of this research was to enhance the evidence base of information about community association housing and in particular about condominiums. The goals of the research were to 1) describe the state-level distribution and characteristics of condominium residents age 55 and over and their households, and 3) compare selected characteristic that may influence aging in place of persons age 55 and over living in a condominium with those characteristics of persons age 55 and over living not in a condominium. Additional analysis estimated the significance of differences between condominium and non-condominium residents age 55 and over and their households regarding selected characteristics of that may affect aging in place.

This research has demonstrated the potential of American Community Survey data to expand the evidence base regarding characteristics of condominium residents and households that may affect aging in place. Because the ACS data is collected each year from throughout the U.S., both geographic and temporal comparisons are possible. In addition, the ACS includes data on several other characteristics important to aging in place. Further research is needed to further describe characteristics of condominium residents and households that affect aging in place and to better understand the role of community associations in the lives of their older residents.

Table 1. Significance tests of person age 55 and over by condominium status, 2011-2015 IPUMS

		Condominium Not-Condominium		Significance Test					
Table	Variable (Percent)	Mean	Std Dev	Mean	Std Dev	t (DF)	t-test	95% Sig	Effect*
2	Female	60.98	7.26	53.48	1.33	72.14	17.48	P<0.001	3.46
3	Age 65 and over	63.02	5.32	51.53	2.21	66.67	14.24	P<0.001	2.82
4	White race	89.40	10.58	83.64	14.03	100.00	2.34	0.021	0.46
5	Hispanic origin	3.51	3.68	5.28	6.51	78.91	1.69	0.096	NA
6	Built in or after 1970	86.59	9.91	54.62	13.20	92.79	13.83	P<0.001	2.74
7	1-family housing-attached	43.38	12.21	4.13	5.05	66.64	21.22	P<0.001	4.20
8	Mortgage status	50.94	7.24	48.65	7.26	100.00	1.59	0.114	NA
9	Housing Cost Burden	32.88	6.33	23.67	5.00	100.00	8.15	P<0.001	1.61
9	Mortgage and housing Cost Burden	42.93	6.65	34.43	4.95	100.00	7.32	P<0.001	1.45
10	1-person household	54.56	4.87	36.48	3.13	85.26	22.29	P<0.001	4.41
11	Female living alone	75.11	4.72	63.77	2.76	80.62	14.82	P<0.001	2.93
12	Physical, memory sensory difficulty	23.18	3.74	27.38	3.26	100.00	-6.05	P<0.001	1.20
13	Female physical, memory sensory difficulty	59.68	5.68	53.94	2.96	75.30	6.40	P<0.001	1.27

<sup>\*</sup>Calculated using Cohen's d (1988)

d = 0.2 is a small effect

d = 0.5 is a medium effect

d = 0.8 is a large effect

## Appendix D.

### Margin of Error

# Community Association Fact Book 2016

# Comparison of Condominium and Non-Condominium Residents Age 55 and Over



### Community Associations Fact Book 2016 Comparison of U.S. Condominium and Non-Condominium Residents Age 55 and Over, 2011 - 2015

Margin of Error (MOE)

#### ILLINOIS

ILLINOIS	То	In Condo	minium	Not In Condominium			
Table 1. Persons and Households	Estimate			MOE +/-	Estimate MOE +/-		
Persons	3,159,341	WIOE +/-	<b>Estimate</b> 240,575	4,733		4,733	
reisons	3,139,341		7.6%	0.15		0.15	
Households	1,938,606		167,170	3,923	1,771,436	3,923	
Tiodottolas	1,330,600		8.6%	0.20		0.20	
			0.070	0.20	31.470	0.20	
	То	tal	In Condominium		Not In Con	dominium	
Table 2. Sex	Estimate	MOE +/-	Estimate	MOE +/-	Estimate	MOE +/-	
Male	1,440,295	8,887	94,458	3,039		8,823	
Female	1,719,046	8,887	146,117	3,747	1,572,929	4,733	
Male	45.6%	0.28	39.3%	1.00		0.29	
Female	54.4%	0.28	60.7%	1.00		0.29	
	То	tal	In Condominium		Not In Con	ndominium	
Table 3. 10-year Age Group by Sex	Estimate	MOE +/-	Estimate	MOE +/-	Estimate	MOE +/-	
55 to 64 years	1,532,547	8,918	96,838	3,076	1,435,709	8,884	
65 to 74 years	920,861	8,109	75,636	2,728	845,225	7,899	
75 to 84 years	497,637	6,500	47,559	2,173	450,078	6,237	
85 to 94 years	208,296	4,428	20,542	1,434	187,754	4,219	
95 years and over	0	****	0	****	0	****	
55 to 64 years	48.5%	0.28	40.3%	1.00	49.2%	0.29	
65 to 74 years	29.1%	0.26	31.4%	0.95	29.0%	0.27	
75 to 84 years	15.8%	0.21	19.8%	0.82	15.4%	0.21	
85 to 94 years	6.6%	0.14	8.5%	0.57	6.4%	0.14	
95 years and over	0.0%	****	0.0%	****	0.0%	****	
Male							
55 to 64 years	735,160	7,540	40,807	2,015	694,353	7,389	
65 to 74 years	426,613	6,098	30,009	1,731	396,604	5,912	
75 to 84 years	208,014	4,425	17,401	1,321	190,613	4,248	
85 to 94 years	70,508	2,636	6,241	792	64,267	2,519	
95 years and over	0	****	0	****	0	****	
55 to 64 years	51.0%	0.42	43.2%	1.62	51.6%	0.43	

#### Community Associations Fact Book 2016

#### Comparison of U.S. Condominium and Non-Condominium Residents Age 55 and Over, 2011 - 2015 Margin of Error (MOE)

29.6%	0.38	31.8%	1.52	29.5%	0.39
14.4%	0.29	18.4%	1.27	14.2%	0.30
4.9%	0.18	6.6%	0.81	4.8%	0.18
.0%	****	.0%	****	.0%	****
797,387	7,751	56,031	2,355	741,356	7,562
494,248	6,482	45,627	2,129	448,621	6,228
289,623	5,149	30,158	1,735	259,465	4,899
137,788	3,644	14,301	1,198	123,487	3,458
0	****	0	****	0	****
46.4%	0.38	38.3%	1.28	47.1%	0.40
28.8%	0.35	31.2%	1.22	28.5%	0.36
16.8%	0.29	20.6%	1.06	16.5%	0.30
8.0%	0.21	9.8%	0.78	7.9%	0.22
.0%	****	.0%	****	.0%	****
To	tal	In Condo	minium	Not In Cond	dominium
Estimate	MOE +/-	Estimate	MOE +/-	Estimate	MOE +/-
2,536,197	7,100	205,234	4,398	2,330,963	7,848
385,191	5,838	15,409	1,243	369,782	5,736
5,707	758	79	89	5,628	752
132,362	3,575	15,328	1,240	117,034	3,370
506	226	0	0	506	226
24,830	1,576	1,869	434	22,961	1,516
74,548	2,708	2,656	517	71,892	2,661
80.3%	0.22	85.3%	0.72	79.9%	0.24
12.2%	0.18	6.4%	0.50	12.7%	0.20
.2%	0.02	.0%	0.04	.2%	0.03
4.2%	0.11	6.4%	0.50	4.0%	0.12
				00/	0.01
0.0%	0.01	.0%	0.00	.0%	0.01
0.0% 0.8%	0.01 0.05	.0% 0.8%	0.00	.0%	0.01
	14.4% 4.9% .0% 797,387 494,248 289,623 137,788 0 46.4% 28.8% 16.8% 8.0% .0%  To Estimate 2,536,197 385,191 5,707 132,362 506 24,830 74,548 80.3% 12.2% .2%	14.4% 0.29 4.9% 0.18 .0% ******  797,387 7,751 494,248 6,482 289,623 5,149 137,788 3,644 0 *****  46.4% 0.38 28.8% 0.35 16.8% 0.29 8.0% 0.21 .0% *****  Total Estimate MOE +/- 2,536,197 7,100 385,191 5,838 5,707 758 132,362 3,575 506 226 24,830 1,576 74,548 2,708 80.3% 0.22 12.2% 0.18 .2% 0.02	14.4%       0.29       18.4%         4.9%       0.18       6.6%         .0%       ******       .0%         797,387       7,751       56,031         494,248       6,482       45,627         289,623       5,149       30,158         137,788       3,644       14,301         0       ******       0         46.4%       0.38       38.3%         28.8%       0.35       31.2%         16.8%       0.29       20.6%         8.0%       0.21       9.8%         .0%       ******       .0%         Total       In Condo         Estimate         2,536,197       7,100       205,234         385,191       5,838       15,409         5,707       758       79         132,362       3,575       15,328         506       226       0         24,830       1,576       1,869         74,548       2,708       2,656         80.3%       0.22       85.3%         12.2%       0.18       6.4%         .2%       0.02       .0%	14.4%         0.29         18.4%         1.27           4.9%         0.18         6.6%         0.81           .0%         ******         .0%         ******           797,387         7,751         56,031         2,355           494,248         6,482         45,627         2,129           289,623         5,149         30,158         1,735           137,788         3,644         14,301         1,198           0         ******         0         ******           46.4%         0.38         38.3%         1.28           28.8%         0.35         31.2%         1.22           16.8%         0.29         20.6%         1.06           8.0%         0.21         9.8%         0.78           .0%         ******         .0%         ******           Total         In Condominium           Estimate         MOE +/-         Estimate         MOE +/-           2,536,197         7,100         205,234         4,398           385,191         5,838         15,409         1,243           5,707         758         79         89           132,362         3,575	14.4%         0.29         18.4%         1.27         14.2%           4.9%         0.18         6.6%         0.81         4.8%           .0%         ******         .0%         ******         .0%           797,387         7,751         56,031         2,355         741,356           494,248         6,482         45,627         2,129         448,621           289,623         5,149         30,158         1,735         259,465           137,788         3,644         14,301         1,198         123,487           0         ******         0         ******         0           46.4%         0.38         38.3%         1.28         47.1%           28.8%         0.35         31.2%         1.22         28.5%           16.8%         0.29         20.6%         1.06         16.5%           8.0%         0.21         9.8%         0.78         7.9%           .0%         ******         .0%         ******         .0%           ******         .0%         ******         .0%         ******           .0%         ******         .0%         ******         .0%           ******         .0

# Community Associations Fact Book 2016 Comparison of U.S. Condominium and Non-Condominium Residents Age 55 and Over, 2011 - 2015 Margin of Error (MOE)

	То	In Condo	minium	Not In Condominium		
Table 5. Hispanic Origin	Estimate	MOE +/-	Estimate	MOE +/-	Estimate	MOE +/-
Hispanic origin	235,388	4,685	10,583	1,031	224,805	4,587
Not Hispanic origin	2,923,953	4,685	229,992	4,636	2,693,961	6,324
Percent Hispanic origin	7.5%	0.15	4.4%	0.42	7.7%	0.16
Percent not Hispanic origin	92.5%	0.15	95.6%	0.42	92.3%	0.16
		. •				
		tal	In Condo		Not In Con	
Table 6. Decade Structure Built	Estimate	MOE +/-	Estimate	MOE +/-	Estimate	MOE +/-
1939 and earlier	404,669	5,680	11,650	1,080	393,019	5,619
1940-1949	131,181	3,511	2,216	472	128,965	3,483
1950-1959	290,882	4,991	6,897	832	283,985	4,942
1960-1969	253,071	4,709	16,034	1,266	237,037	4,579
1970-1979	292,222	5,001	35,833	1,883	256,389	4,735
1980-1989	186,945	4,126	27,728	1,660	159,217	3,838
1990-1999	204,242	4,291	33,689	1,826	170,553	3,959
2000-2009	164,575	3,896	32,410	1,792	132,165	3,523
2010 and later	10,819	1,041	713	268	10,106	1,007
1939 and earlier	20.9%	0.29	7.0%	0.63	22.2%	0.31
1940-1949	6.8%	0.18	1.3%	0.28	7.3%	0.20
1950-1959	15.0%	0.26	4.1%	0.49	16.0%	0.28
1960-1969	13.1%	0.24	9.6%	0.72	13.4%	0.26
1970-1979	15.1%	0.26	21.4%	1.01	14.5%	0.27
1980-1989	9.6%	0.21	16.6%	0.91	9.0%	0.22
1990-1999	10.5%	0.22	20.2%	0.98	9.6%	0.22
2000-2009	8.5%	0.20	19.4%	0.97	7.5%	0.20
2010 and later	0.6%	0.05	0.4%	0.16	0.6%	0.06
	Total		In Condominium		Not In Condominium	
Table 7. Type of Housing Structure	Estimate	MOE +/-	Estimate	MOE +/-	Estimate	MOE +/-
1-family house, detached	1,326,819	6,496	7,997	896	1,318,822	6,518
1-family house, attached	124,445	3,426	56,353	2,348	68,092	2,573
2-family building	87,124	2,896	1,631	405	85,493	2,870
3-4 family building	82,421	2,820	14,563	1,207	67,858	2,569

#### Community Associations Fact Book 2016

#### Comparison of U.S. Condominium and Non-Condominium Residents Age 55 and Over, 2011 - 2015 Margin of Error (MOE)

5-9 family building	67,272	2,558	14,221	1,193	53,051	2,280		
10-19 family building	46,544	2,140	13,977	1,183	32,567	1,796		
20-49 family building	58,992	2,401	21,482	1,463	37,510	1,925		
50+ family building	144,989	3,677	36,946	1,911	108,043	3,206		
1-family house, detached	68.4%	0.34	4.8%	0.52	74.4%	0.33		
1-family house, attached	6.4%	0.18	33.7%	1.16	3.8%	0.15		
2-family building	4.5%	0.15	1.0%	0.24	4.8%	0.16		
3-4 family building	4.3%	0.15	8.7%	0.69	3.8%	0.14		
5-9 family building	3.5%	0.13	8.5%	0.68	3.0%	0.13		
10-19 family building	2.4%	0.11	8.4%	0.68	1.8%	0.10		
20-49 family building	3.0%	0.12	12.9%	0.82	2.1%	0.11		
50+ family building	7.5%	0.19	22.1%	1.02	6.1%	0.18		
	Tot	tal	In Condominium		Not In Con	ominium		
Table 8. Household Mortgage Status Determined	Estimate	MOE +/-	Estimate	MOE +/-	Estimate	MOE +/-		
Mortgage	740,732	6,191	86,817	2,872	653,915	6,132		
No Mortgage	782,010	6,191	80,353	2,769	701,657	6,175		
Percent Mortgage	48.6%	0.41	51.9%	1.23	48.2%	0.43		
Percent No Mortgage	51.4%	0.41	48.1%	1.23	51.8%	0.43		
	Tot	Total		al In Condominium		Not In Condominium		
Table 9. Household Housing Cost Burden Determined	Estimate	MOE +/-	Estimate	MOE +/-	Estimate	MOE +/-		
Housing cost burden	414,964	5,508	64,729	2,499	350,235	5,207		
No housing cost burden	1,096,080	5,508	100,681	3,077	995,399	5,851		
Mortgage with housing cost burden	284,148	4,822	41,208	2,010	242,940	4,533		
Mortgage with no housing cost burden	452,624	5,652	44,904	2,095	407,720	5,477		
No mortgage with housing cost burden	130,816	3,470	23,521	1,528	107,295	3,169		
No mortgage with no housing cost burden	643,456	5,193	55,777	2,327	587,679	6,016		
Housing cost burden	27.5%	0.36	39.1%	1.20	26.0%	0.38		
No housing cost burden	72.5%	0.36	60.9%	1.20	74.0%	0.38		
Mortgage with housing cost burden	38.6%	0.57	47.9%	1.71	37.3%	0.60		
Mortgage with no housing cost burden	61.4%	0.57	52.1%	1.71	62.7%	0.60		
No mortgage with housing cost burden	16.9%	0.43	29.7%	1.63	15.4%	0.44		
No mortgage with no housing cost burden		0.43	70.3%	1.63				

# Community Associations Fact Book 2016 Comparison of U.S. Condominium and Non-Condominium Residents Age 55 and Over, 2011 - 2015 Margin of Error (MOE)

Tot Estimate 737,489 841,335 202,903 89,227 67,652	MOE +/- 7,270 7,422 4,584 3,138	In Condo Estimate 93,509 61,775 8,379	minium MOE +/- 3,209 2,630 982	Not In Cond Estimate 643,980 779,560	<b>MOE +/-</b> 7,053	
737,489 841,335 202,903 89,227 67,652	7,270 7,422 4,584 3,138	93,509 61,775 8,379	3,209 2,630	643,980	7,053	
841,335 202,903 89,227 67,652	7,422 4,584 3,138	61,775 8,379	2,630	,	,	
202,903 89,227 67,652	4,584 3,138	8,379		779,560	7 2 4 2	
89,227 67,652	3,138		982		7,343	
67,652	· · ·	0.000		194,524	4,499	
<del>' ' +</del>		2,066	489	87,161	3,103	
20.00/	2,748	1,441	408	66,211	2,720	
აგ.ე%	0.38	55.9%	1.31	36.4%	0.39	
43.4%	0.38	37.0%	1.27	44.0%	0.40	
10.5%	0.24	5.0%	0.57	11.0%	0.25	
4.6%	0.16	1.2%	0.29	4.9%	0.17	
3.5%	0.14	.9%	0.24	3.7%	0.15	
Tot	tal.	In Condo	minium	Not In Cond	lominium	
+					MOE +/-	
<del> </del>	i i				4,839	
		·	1		6,139	
· · · · · ·					0.64	
+					0.64	
33,2,2				3 110,70		
Tot	tal	In Condo	minium	Not In Cond	ndominium	
Estimate	MOE +/-	Estimate	MOE +/-	Estimate	MOE +/-	
801,480	7,764	55,122	2,336	746,358	7,579	
2,357,861	7,764	185,453	4,194	2,172,408	8,270	
25.4%	0.25	22.9%	0.86	25.6%	0.26	
74.6%	0.25	77.1%	0.86	74.4%	0.26	
Tot	to!	In Canda	minium	Not In Cond		
					MOE +/-	
<del></del>					5,442	
					6,048	
1			1		0,048	
					0.58	
	10.5% 4.6% 3.5%  Tot Estimate 253,815 483,674 34.4% 65.6%  Tot Estimate 801,480 2,357,861 25.4% 74.6%	43.4%   0.38   10.5%   0.24   4.6%   0.16   3.5%   0.14	43.4%   0.38   37.0%   10.5%   0.24   5.0%   4.6%   0.16   1.2%   3.5%   0.14   .9%	43.4%   0.38   37.0%   1.27   10.5%   0.24   5.0%   0.57   4.6%   0.16   1.2%   0.29   3.5%   0.14   .9%   0.24	Hard	

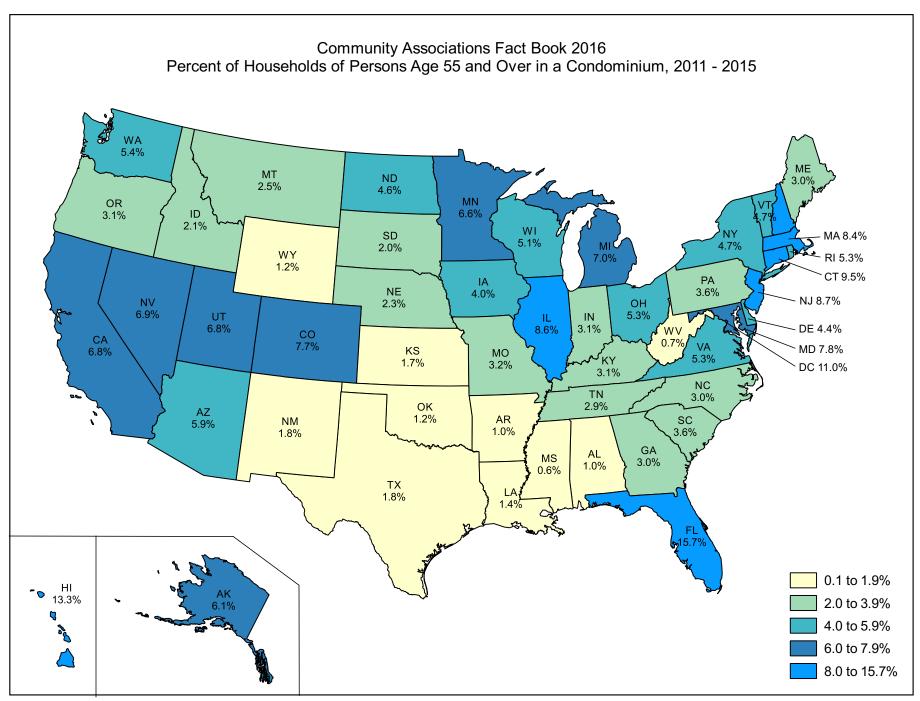
# Appendix E.

Map of Percent of Households of Persons Age 55 and Over in a Condominium, 2011-2015

Community Association Fact Book 2016

Comparison of Condominium and Non-Condominium Residents Age 55 and Over





Data source: Steven Ruggles, Katie Genadek, Ronald Goeken, Josiah Grover, and Matthew Sobek. Integrated Public Use Microdata Series: Version 6.0 [dataset]. Minneapolis: University of Minnesota, 2015. http://doi.org/10.18128/D010.V6.0.



#### **About Community Associations Institute (CAI)**

Since 1973, Community Associations Institute (CAI) has been the leading provider of resources and information for homeowners, volunteer board leaders, professional managers, and business professionals in nearly 350,000 community associations, condominiums, and co-ops in the

United States and millions of communities worldwide. With nearly 35,000 members, CAI works in partnership with 63 affiliated chapters within the U.S, Canada, United Arab Emirates, and South Africa, as well as with housing leaders in several other countries including Australia, Spain, Saudi Arabia, and the United Kingdom.

A global nonprofit 501(c)(6) organization, CAI is the foremost authority in community association management, governance, education, and advocacy. Our mission is to inspire professionalism, effective leadership, and responsible citizenship—ideals reflected in community associations that are preferred places to call home. Visit us at <a href="https://www.caionline.org">www.caionline.org</a> and follow us on Twitter and Facebook @CAISocial.

#### **About the Foundation for Community Association Research**

The Foundation provides authoritative research and analysis on community association trends, issues and operations. Our mission is to inspire successful and sustainable communities. We sponsor needs-driven research that informs and enlightens all community association stakeholders—community association residents, homeowner volunteer leaders, community managers and other professionals and service providers, legislators, regulators and the media. Our work is made possible by your tax-deductible contributions.

Your support is essential to our research. Visit <u>foundation.caionline.org</u> or e-mail foundation@caionline.org.

For suggestions, additions, or updates to this Profile of 55+ Condominium Residents, please email foundation@caionline.org.



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The statistical information in this report was developed by Clifford J. Treese, president of Association Data, Inc., in Mountain House, Calif. A member of CAI almost since its inception, Treese is a past president of CAI and the Foundation for Community Association Research. We are grateful for his continuing support of both organizations.

Additional statistical information published by the Foundation for Community Association Research is available at foundation.caionline.org.



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