The Community Association fact book

55+ Profile of

Condominium Unit Owners

Iowa

FOUNDATION FOR COMMUNITY ASSOCIATION research

2016
Community Association Fact Book *Part Six*

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

© 2017 Foundation for Community Association Research

All rights reserved. Reproduction in whole or in part is not permitted without the expressed, written consent of the Foundation for Community Association Research.

Foundation for Community Association Research
6402 Arlington Boulevard, Suite 500
Falls Church, VA 22042
(888) 224-4321
foundation.caionline.org

The **Foundation for Community Association Research** (FCAR) is a nonprofit 501(c)(3) organization devoted to common interest community research, development, and scholarship. Incorporated in 1975, the Foundation supports and conducts research in the community association industry.

FCAR 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 professional service providers, legislators, regulators and the media. Our work is made possible by your tax-deductible contributions. Your support is essential to our research.

This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold with the understanding that the publisher is not engaged in rendering legal, accounting, or other professional services. If legal advice or other expert assistance is required, the services of a competent professional should be sought.

—From *A Declaration of Principles*, jointly adopted by a Committee of the American Bar Association and a Committee of Publishers

Community Association Fact Book 2016

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

Table of Contents

Acknowledgement

Preface

Introduction

State Profile

Appendix A. Glossary

Appendix B. Data and Methods

Appendix C. Results and Discussion

Appendix D. Margin of Error

Appendix E. Map of Percent of U.S. Condominium Households

Acknowledgement

Author, State Profiles of 55+ Condominium Residents

Lynn Boergerhoff
Community Association Atlas
Lakeville, MN

The information in the *55+ Profile of Condominium Unit Owners Compared to 55+ Non-Condominium Owners* was developed by Lynn Boergerhoff. A former member of the Foundation for Community Association Research (FCAR) Board of Directors, Lynn is an important part of FCAR's research efforts.

General Editor

Clifford J. Treese, CIRMS
President, Association Data, Inc. (ADI)
Mountain House, CA

The information in the *Community Association Fact Book* was developed with significant assistance from Clifford J. Treese, CIRMS. A member of CAI almost since its inception, Treese is a past president of both CAI and FCAR. We express our gratitude for his invaluable contributions. He can be reached at clifford.treese@gmail.com.

Assistant Editors

FCAR Executive Director: David Jennings, SPHR, CAE, Falls Church, VA
FCAR Director of Programs: Jake Gold, CAE, Falls Church, VA

Foundation Board of Directors, 2017-2018

President: Elise V. Saadi, Esq.
President-Elect: Robert Riddick, CMCA
Vice President: Kathy Beaulne, AMS, PCAM
Treasurer: Caroline Record, Esq.
Secretary: Steven Y. Brumfield, CMCA, AMS, PCAM

Jim Baska, CMCA, AMS, PCAM
Michael D. Baum, PCAM
Joe Bunting CMCA, AMS, LSM, PCAM
Christine Danielson
Skip Daum
Robert A. Felix, CMCA, LSM, PCAM, RS
Paul D. Grucza, CMCA, AMS, PCAM
Heather J. Paton, CMCA, AMS, PCAM
Peter Santangelo, CMCA
Robert A. Travis, CIRMS

Past Presidents of the Foundation

CAI Board of Trustees, 2017

President: Greg Smith, CMCA, AMS, PCAM
President-Elect: John Hammersmith CMCA, AMS, PCAM
Immediate Past President: Kelly G. Richardson, Esquire
Chief Executive Officer: Thomas Skiba, CAE

Past Presidents of the Institute

Staff

Sr. Manager, Web Projects: Amy Adler
Sr. VP, G&PA: Dawn Bauman, CAE
Editor, *Common Ground*: Daniel Brannigan
Creative Director: Cori Canady
Director, State Affairs: Matthew Green
Director, Government Affairs: Colleen Willard, Esq.
Sr. Director, CAI Press: Debra Lewin
Education Manager: Shari Lewis
VP, Communications: Amy Repke
Chief Financial Officer: Bruce Townsend, CPA

Preface

Community Association Fact Book 2016
55+ Condominium Residents

Every day for the next 18 years, 10,000 people will celebrate their 65th 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 21st 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-in-place 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 walk-ability, 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 ***Community Association Fact Book*** 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
Past President and Research Committee Chair
Foundation for Community Association Research
July 2017

Foundation Research Committee

Christine Danielson Isham, Chair
Tyler P. Berding, Esq.
Lynn Boergerhoff
Robert W. Browning, PCAM, RS
Joe Bunting, CMCA, AMS, LSM, PCAM
David H. Coe, CMCA, AMS, PCAM
John Connors
Skip Daum
Matthew C. Dozier, CMCA, AMS, PCAM
Dorothy Firsching
Mitchell Frumkin, RS
Brenda Harrington
Jonathan Katz, Esq.
Marc D. Markel, Esq.
Sandra Matteson, LSM, PCAM
Jeremy R. Moss, Esq.
Wendy W. Taylor, CMCA, AMS, LSM, PCAM
Clifford J. Treese, CIRMS

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 Foundation for Community Associations Research. *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 55and 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 **American Community Survey** (ACS) was used in this research. The IPUMS data were obtained from the **Minnesota Population Center** 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
- **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 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 non-condominium 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 non-condominium 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 non-condominium 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 non-condominium 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 non-condominium 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: www.caionline.org and foundation.caionline.org.

Community Associations Fact Book 2016: IOWA

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: Iowa 2011 - 2015

		Persons		Households	
		Count	Percent	Count	Percent
Condominium Status	Condominium	29,000	3.5%	20,629	4.0%
	Not Condominium	793,467	96.5%	495,729	96.0%
	Total	822,467	100.0%	516,358	100.0%

3.5% of persons age 55+ lived in a condominium.

4.0% of households of persons 55+ were in a condominium.

Table 2.

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

			Sex		
			Male	Female	Total
Condominium Status	Condominium	Count	10,477	18,523	29,000
		Percent	36.1%	63.9%	100.0%
	Not Condominium	Count	374,502	418,965	793,467
		Percent	47.2%	52.8%	100.0%
Total		Count	384,979	437,488	822,467
		Percent	46.8%	53.2%	100.0%

63.9% of condominium residents age 55+ were female compared to 52.8% 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: Iowa 2011 - 2015

				Age Group					
Condominium Status				55-64	65-74	75-84	85-94	95 and older	Total
Condominium	Sex	Male	Count	3,050	3,658	2,554	1,171	44	10,477
			Percent	29.1%	34.9%	24.4%	11.2%	.4%	100.0%
		Female	Count	5,625	5,833	4,788	2,075	202	18,523
			Percent	30.4%	31.5%	25.8%	11.2%	1.1%	100.0%
	Total		Count	8,675	9,491	7,342	3,246	246	29,000
			Percent	29.9%	32.7%	25.3%	11.2%	.8%	100.0%
Not Condominium	Sex	Male	Count	187,876	108,357	57,758	19,487	1,024	374,502
			Percent	50.2%	28.9%	15.4%	5.2%	.3%	100.0%
		Female	Count	187,600	117,706	75,533	34,665	3,461	418,965
			Percent	44.8%	28.1%	18.0%	8.3%	.8%	100.0%
	Total		Count	375,476	226,063	133,291	54,152	4,485	793,467
			Percent	47.3%	28.5%	16.8%	6.8%	.6%	100.0%
Total	Sex	Male	Count	190,926	112,015	60,312	20,658	1,068	384,979
			Percent	49.6%	29.1%	15.7%	5.4%	.3%	100.0%
		Female	Count	193,225	123,539	80,321	36,740	3,663	437,488
			Percent	44.2%	28.2%	18.4%	8.4%	.8%	100.0%
	Total		Count	384,151	235,554	140,633	57,398	4,731	822,467
			Percent	46.7%	28.6%	17.1%	7.0%	.6%	100.0%

70.1% (calculated separately) of condominium residents age 55+ were age 65 and over compared to 52.7% of non-condominium residents age 55+ who were age 65 and over.

Community Associations Fact Book 2016: IOWA

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: Iowa 2011 - 2015

				Race*							
Condominium Status				White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Two or More Races	Other Race (NEC)	Total
Condominium	Sex	Male	Count	10,167	96		171		43		10,477
			Percent	97.0%	.9%		1.6%		.4%		100.0%
		Female	Count	18,175	140		208		0		18,523
			Percent	98.1%	.8%		1.1%		0.0%		100.0%
	Total		Count	28,342	236		379		43		29,000
			Percent	97.7%	.8%		1.3%		.1%		100.0%
Not Condominium	Sex	Male	Count	362,765	5,593	644	2,326	142	1,443	1,589	374,502
			Percent	96.9%	1.5%	.2%	.6%	.0%	.4%	.4%	100.0%
		Female	Count	405,552	6,212	926	3,749	103	1,615	808	418,965
			Percent	96.8%	1.5%	.2%	.9%	.0%	.4%	.2%	100.0%
	Total		Count	768,317	11,805	1,570	6,075	245	3,058	2,397	793,467
			Percent	96.8%	1.5%	.2%	.8%	.0%	.4%	.3%	100.0%
Total	Sex	Male	Count	372,932	5,689	644	2,497	142	1,486	1,589	384,979
			Percent	96.9%	1.5%	.2%	.6%	.0%	.4%	.4%	100.0%
		Female	Count	423,727	6,352	926	3,957	103	1,615	808	437,488
			Percent	96.9%	1.5%	.2%	.9%	.0%	.4%	.2%	100.0%
	Total		Count	796,659	12,041	1,570	6,454	245	3,101	2,397	822,467
			Percent	96.9%	1.5%	.2%	.8%	.0%	.4%	.3%	100.0%

*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 (97.7%) and Asian (1.3%) compared to White (96.8%) and Black or African American (1.5%) for non-condominium residents age 55+.

Table 5.

Hispanic Origin of Persons Age 55 and Over by Sex and Condominium Status: Iowa 2011 - 2015

				Hispanic Origin		
Condominium Status				Hispanic	Not Hispanic	Total
Condominium	Sex	Male	Count	72	10,405	10,477
			Percent	.7%	99.3%	100.0%
		Female	Count	197	18,326	18,523
			Percent	1.1%	98.9%	100.0%
	Total		Count	269	28,731	29,000
			Percent	.9%	99.1%	100.0%
Not Condominium	Sex	Male	Count	5,974	368,528	374,502
			Percent	1.6%	98.4%	100.0%
		Female	Count	5,281	413,684	418,965
			Percent	1.3%	98.7%	100.0%
	Total		Count	11,255	782,212	793,467
			Percent	1.4%	98.6%	100.0%
Total	Sex	Male	Count	6,046	378,933	384,979
			Percent	1.6%	98.4%	100.0%
		Female	Count	5,478	432,010	437,488
			Percent	1.3%	98.7%	100.0%
	Total		Count	11,524	810,943	822,467
			Percent	1.4%	98.6%	100.0%

0.9% of condominium *residents age 55+ were of Hispanic origin compared to 1.3% of non-condominium residents age 55+.*

Community Associations Fact Book 2016: IOWA

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: Iowa 2011 - 2015

			Decade Structure Built									
			1939 and earlier	1940-1949	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999	2000-2009	2010 and later	Total
Condominium Status	Condominium	Count	533	131	180	556	2,155	2,730	5,687	7,710	947	20,629
		Percent	2.6%	.6%	.9%	2.7%	10.4%	13.2%	27.6%	37.4%	4.6%	100.0%
	Not Condominium	Count	138,490	32,326	60,936	60,592	77,343	34,477	44,731	41,652	5,182	495,729
		Percent	27.9%	6.5%	12.3%	12.2%	15.6%	7.0%	9.0%	8.4%	1.0%	100.0%
Total		Count	139,023	32,457	61,116	61,148	79,498	37,207	50,418	49,362	6,129	516,358
		Percent	26.9%	6.3%	11.8%	11.8%	15.4%	7.2%	9.8%	9.6%	1.2%	100.0%

93.2% (calculated separately) of condominium housing of persons age 55+ was constructed after 1970 compared to 41.0% 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: Iowa 2011 - 2015

			Type of Housing Structure								
			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	Total
Condominium Status	Condominium	Count	1,378	11,219	487	1,721	1,532	1,593	1,836	863	20,629
		Percent	6.7%	54.4%	2.4%	8.3%	7.4%	7.7%	8.9%	4.2%	100.0%
	Not Condominium	Count	417,893	11,196	7,608	14,260	8,514	8,226	14,711	13,321	495,729
		Percent	84.3%	2.3%	1.5%	2.9%	1.7%	1.7%	3.0%	2.7%	100.0%
Total		Count	419,271	22,415	8,095	15,981	10,046	9,819	16,547	14,184	516,358
		Percent	81.2%	4.3%	1.6%	3.1%	1.9%	1.9%	3.2%	2.7%	100.0%

The most common type of housing structure of condominium residents age 55+ was 1-family house attached (54.4%) while the most common type of housing structure of non-condominium residents age 55+ was 1-family house detached (84.3%).

Table 8.

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

			Mortgage Status*		
			Mortgage	No Mortgage	Total
Condominium Status	Condominium	Count	8,305	12,324	20,629
		Percent	40.3%	59.7%	100.0%
	Not Condominium	Count	161,229	241,662	402,891
		Percent	40.0%	60.0%	100.0%
Total		Count	169,534	253,986	423,520
		Percent	40.0%	60.0%	100.0%

40.3% of condominium households of persons age 55+ held a mortgage compared to 40.0% of non-condominium households of persons age 55+ with a mortgage.

*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.

Table 9.

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

				Housing Cost Burden*		
Condominium Status				Housing Cost Burden	Not Housing Cost Burden	Total
Condominium	Mortgage Status*	Mortgage	Count	3,107	5,168	8,275
			Percent	37.5%	62.5%	100.0%
		No Mortgage	Count	2,099	10,088	12,187
			Percent	17.2%	82.8%	100.0%
	Total		Count	5,206	15,256	20,462
			Percent	25.4%	74.6%	100.0%
Not Condominium	Mortgage Status*	Mortgage	Count	42,700	117,985	160,685
			Percent	26.6%	73.4%	100.0%
		No Mortgage	Count	26,183	213,553	239,736
			Percent	10.9%	89.1%	100.0%
	Total		Count	68,883	331,538	400,421
			Percent	17.2%	82.8%	100.0%
Total	Mortgage Status*	Mortgage	Count	45,807	123,153	168,960
			Percent	27.1%	72.9%	100.0%
		No Mortgage	Count	28,282	223,641	251,923
			Percent	11.2%	88.8%	100.0%
	Total		Count	74,089	346,794	420,883
			Percent	17.6%	82.4%	100.0%

37.5% of condominium households of persons age 55+ with a mortgage had a housing cost burden compared to 26.6% of non-condominium households of persons age 55+ with a mortgage that had a housing cost burden.

*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.

Community Associations Fact Book 2016: IOWA

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: Iowa 2011 - 2015

			Number of Persons in Household					
			1 Person	2 Persons	3 Persons	4 Persons	5 or more Persons	Total
Condominium Status	Condominium	Count	11,862	8,002	486	215	64	20,629
		Percent	57.5%	38.8%	2.4%	1.0%	.3%	100.0%
	Not Condominium	Count	187,098	254,688	35,154	11,212	7,577	495,729
		Percent	37.7%	51.4%	7.1%	2.3%	1.5%	100.0%
Total		Count	198,960	262,690	35,640	11,427	7,641	516,358
		Percent	38.5%	50.9%	6.9%	2.2%	1.5%	100.0%

57.5% of condominium households of persons age 55+ were 1- person households compared to 37.7% 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: Iowa 2011 - 2015

				Householder Status		
Condominium Status				Live Alone	Not Live Alone	Total
Condominium	Sex	Male	Count	2,263	5,891	8,154
			Percent	19.1%	67.2%	39.5%
		Female	Count	9,599	2,876	12,475
			Percent	80.9%	32.8%	60.5%
	Total		Count	11,862	8,767	20,629
			Percent	100.0%	100.0%	100.0%
Not Condominium	Sex	Male	Count	64,790	204,717	269,507
			Percent	34.6%	66.3%	54.4%
		Female	Count	122,308	103,914	226,222
			Percent	65.4%	33.7%	45.6%
	Total		Count	187,098	308,631	495,729
			Percent	100.0%	100.0%	100.0%
Total	Sex	Male	Count	67,053	210,608	277,661
			Percent	33.7%	66.4%	53.8%
		Female	Count	131,907	106,790	238,697
			Percent	66.3%	33.6%	46.2%
	Total		Count	198,960	317,398	516,358
			Percent	100.0%	100.0%	100.0%

Of condominium households of persons age 55+ who lived alone, 80.9% were female compared to 65.4% 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."

Table 12.
Physical, Memory or Sensory Difficulty of Persons Age 55 and Over by Condominium Status: Iowa 2011 - 2015

			Physical, memory or sensory difficulty*		
			Difficulty	No Difficulty	Total
Condominium Status	Condominium	Count	6,308	22,692	29,000
		Percent	21.8%	78.2%	100.0%
	Not Condominium	Count	195,695	597,772	793,467
		Percent	24.7%	75.3%	100.0%
Total		Count	202,003	620,464	822,467
		Percent	24.6%	75.4%	100.0%

*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.

21.8% of condominium residents age 55+ had a physical, memory or sensory difficulty compared to 24.7% 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: Iowa 2011 - 2015

				Physical, memory or sensory difficulty*		
Condominium Status				Difficulty	No Difficulty	Total
Condominium	Sex	Male	Count	2,232	8,245	10,477
			Percent	35.4%	36.3%	36.1%
		Female	Count	4,076	14,447	18,523
			Percent	64.6%	63.7%	63.9%
	Total		Count	6,308	22,692	29,000
			Percent	100.0%	100.0%	100.0%
Not Condominium	Sex	Male	Count	92,890	281,612	374,502
			Percent	47.5%	47.1%	47.2%
		Female	Count	102,805	316,160	418,965
			Percent	52.5%	52.9%	52.8%
	Total		Count	195,695	597,772	793,467
			Percent	100.0%	100.0%	100.0%
Total	Sex	Male	Count	95,122	289,857	384,979
			Percent	47.1%	46.7%	46.8%
		Female	Count	106,881	330,607	437,488
			Percent	52.9%	53.3%	53.2%
	Total		Count	202,003	620,464	822,467
			Percent	100.0%	100.0%	100.0%

*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.

Of condominium residents age 55+ who had a physical, memory or sensory difficulty, 64.6% were female compared to 52.5% 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.

Appendix A.

Glossary

Community Association Fact Book 2016

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

FOUNDATION FOR COMMUNITY ASSOCIATION research

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.

    1. 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

FOUNDATION FOR COMMUNITY ASSOCIATION research

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 American FactFinder.

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 Minnesota Population Center 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 Type	Variable Name	Variable Description
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 non-condominium 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 non-condominium 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 non-condominium 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 non-condominium 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 *d* 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 *d* 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 *d* 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 *d* 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 *d* 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*=75.11, *SD*=4.72) and in non-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 *d* 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 non-condominium 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

Table	Variable (Percent)	Condominium Mean	Condominium Std Dev	Not-Condominium Mean	Not-Condominium Std Dev	*t* (DF)	Significance Test t-test	Significance 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

*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

FOUNDATION FOR COMMUNITY ASSOCIATION research

Community Associations Fact Book 2016

Comparison of U.S. Condominium and Non-Condominium Residents Age 55 and Over, 2011 - 2015

Margin of Error (MOE)

IOWA

	Total		In Condominium		Not In Condominium	
Table 1. Persons and Households	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**
Persons	822,467		29,000	1,439	793,467	1,439
			3.5%	0.17	96.5%	0.17
Households	516,358		20,629	1,211	495,729	1,211
			4.0%	0.23	96.0%	0.23
	Total		**In Condominium**		**Not In Condominium**	
Table 2. Sex	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**
Male	384,979	3,894	10,477	875	374,502	3,886
Female	437,488	3,894	18,523	1,158	418,965	3,901
Male	46.8%	0.47	36.1%	2.43	47.2%	0.48
Female	53.2%	0.47	63.9%	2.43	52.8%	0.48
	Total		**In Condominium**		**Not In Condominium**	
Table 3. 10-year Age Group by Sex	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**
55 to 64 years	384,151	3,893	8,675	797	375,476	3,887
65 to 74 years	235,554	3,528	9,491	833	226,063	3,484
75 to 84 years	140,633	2,938	7,342	734	133,291	2,876
85 to 94 yeears	57,398	1,988	3,246	489	54,152	1,935
95 years and over	4,731	590	246	135	4,485	575
55 to 64 years	46.7%	0.47	29.9%	2.31	47.3%	0.48
65 to 74 years	28.6%	0.43	32.7%	2.37	28.5%	0.44
75 to 84 years	17.1%	0.36	25.3%	2.20	16.8%	0.36
85 to 94 years	7.0%	0.24	11.2%	1.59	6.8%	0.24
95 years and over	0.6%	0.07	0.8%	0.46	0.6%	0.07
Male						
55 to 64 years	190,926	3,295	3,050	474	187,876	3,276
65 to 74 years	112,015	2,677	3,658	519	108,357	2,639
75 to 84 years	60,312	2,034	2,554	434	57,758	1,994
85 to 94 yeears	20,658	1,221	1,171	294	19,487	1,187
95 years and over	1,068	281	44	57	1,024	275
55 to 64 years	49.6%	0.69	29.1%	3.82	50.2%	0.70

(c) Foundation for Community Association Research

65 to 74 years	29.1%	0.63	34.9%	4.01	28.9%	0.64
75 to 84 years	15.7%	0.50	24.4%	3.61	15.4%	0.51
85 to 94 yars	5.4%	0.31	11.2%	2.65	5.2%	0.31
95 years and over	.3%	0.07	.4%	0.54	.3%	0.07
Female						
55 to 64 years	193,225	3,308	5,625	643	187,600	3,274
65 to 74 years	123,539	2,788	5,833	655	117,706	2,733
75 to 84 years	80,321	2,316	4,788	594	75,533	2,254
85 to 94 yeears	36,740	1,612	2,075	391	34,665	1,568
95 years and over	3,663	520	202	122	3,461	505
55 to 64 years	44.2%	0.65	30.4%	2.91	44.8%	0.66
65 to 74 years	28.2%	0.59	31.5%	2.94	28.1%	0.60
75 to 84 years	18.4%	0.50	25.8%	2.77	18.0%	0.51
85 to 94 years	8.4%	0.36	11.2%	1.99	8.3%	0.37
95 years and over	.8%	0.12	1.1%	0.66	.8%	0.12
	Total		**In Condominium**		**Not In Condominium**	
Table 4. Race	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**
White	796,659	1,360	28,342	1,423	768,317	1,935
Black or African American	12,041	937	236	132	11,805	928
American Indian and Alaska Native	1,570	341	0	0	1,570	341
Asian	6,454	689	379	167	6,075	668
Native Hawaiian and Other Pacific Islander	245	135	0	0	245	135
Two or More Races	3,101	478	43	56	3,058	475
Other Race (NEC)	2,397	421	0	0	2,397	421
White	96.9%	0.17	97.7%	0.75	96.8%	0.17
Black or African American	1.5%	0.11	0.8%	0.45	1.5%	0.12
American Indian and Alaska Native	.2%	0.04	.0%	0.00	.2%	0.04
Asian	0.8%	0.08	1.3%	0.57	0.8%	0.08
Native Hawaiian and Other Pacific Islander	0.0%	0.02	.0%	0.00	.0%	0.02
Two or More Races	0.4%	0.06	0.1%	0.19	0.4%	0.06
Other Race (NEC)	0.3%	0.05	.0%	0.00	0.3%	0.05

(c) Foundation for Community Association Research

Community Associations Fact Book 2016

Comparison of U.S. Condominium and Non-Condominium Residents Age 55 and Over, 2011 - 2015

Margin of Error (MOE)

	Total		In Condominium		Not In Condominium	
Table 5. Hispanic Origin	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**
Hispanic origin	11,524	917	269	141	11,255	907
Not Hispanic origin	810,943	917	28,731	1,433	782,212	1,684
Percent Hispanic origin	1.4%	0.11	0.9%	0.48	1.4%	0.11
Percent not Hispanic origin	98.6%	0.11	99.1%	0.48	98.6%	0.11
	Total		**In Condominium**		**Not In Condominium**	
Table 6. Decade Structure Built	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**
1939 and earlier	139,023	2,971	533	215	138,490	2,967
1940-1949	32,457	1,626	131	107	32,326	1,623
1950-1959	61,116	2,164	180	125	60,936	2,161
1960-1969	61,148	2,164	556	220	60,592	2,156
1970-1979	79,498	2,417	2,155	432	77,343	2,390
1980-1989	37,207	1,732	2,730	486	34,477	1,672
1990-1999	50,418	1,988	5,687	699	44,731	1,884
2000-2009	49,362	1,970	7,710	812	41,652	1,824
2010 and later	6,129	725	947	287	5,182	668
1939 and earlier	26.9%	0.58	2.6%	1.03	27.9%	0.59
1940-1949	6.3%	0.31	0.6%	0.52	6.5%	0.33
1950-1959	11.8%	0.42	0.9%	0.60	12.3%	0.43
1960-1969	11.8%	0.42	2.7%	1.05	12.2%	0.43
1970-1979	15.4%	0.47	10.4%	1.99	15.6%	0.48
1980-1989	7.2%	0.34	13.2%	2.20	7.0%	0.34
1990-1999	9.8%	0.39	27.6%	2.90	9.0%	0.38
2000-2009	9.6%	0.38	37.4%	3.14	8.4%	0.37
2010 and later	1.2%	0.14	4.6%	1.36	1.0%	0.14
	Total		**In Condominium**		**Not In Condominium**	
Table 7. Type of Housing Structure	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**
1-family house, detached	419,271	2,819	1,378	372	417,893	2,834
1-family house, attached	22,415	1,470	11,219	1,052	11,196	1,051
2-family building	8,095	896	487	221	7,608	869
3-4 family building	15,981	1,249	1,721	416	14,260	1,182

(c) Foundation for Community Association Research

5-9 family building	10,046	996	1,532	392	8,514	919
10-19 family building	9,819	985	1,593	400	8,226	903
20-49 family building	16,547	1,270	1,836	429	14,711	1,200
50+ family building	14,184	1,179	863	295	13,321	1,144
1-family house, detached	81.2%	0.55	6.7%	1.75	84.3%	0.52
1-family house, attached	4.3%	0.28	54.4%	3.48	2.3%	0.21
2-family building	1.6%	0.17	2.4%	1.06	1.5%	0.18
3-4 family building	3.1%	0.24	8.3%	1.93	2.9%	0.24
5-9 family building	1.9%	0.19	7.4%	1.83	1.7%	0.19
10-19 family building	1.9%	0.19	7.7%	1.87	1.7%	0.18
20-49 family building	3.2%	0.25	8.9%	1.99	3.0%	0.24
50+ family building	2.7%	0.23	4.2%	1.40	2.7%	0.23
	Total		**In Condominium**		**Not In Condominium**	
Table 8. Household Mortgage Status Determined	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**
Mortgage	169,534	2,744	8,305	776	161,229	2,719
No Mortgage	253,986	2,744	12,324	941	241,662	2,772
Percent Mortgage	40.0%	0.65	40.3%	2.94	40.0%	0.66
Percent No Mortgage	60.0%	0.65	59.7%	2.94	60.0%	0.66
	Total		**In Condominium**		**Not In Condominium**	
Table 9. Household Housing Cost Burden Determined	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**
Housing cost burden	74,089	2,126	5,206	617	68,883	2,065
No housing cost burden	346,794	2,126	15,256	1,043	331,538	2,283
Mortgage with housing cost burden	45,807	1,738	3,107	478	42,700	1,685
Mortgage with no housing cost burden	123,153	2,540	5,168	615	117,985	2,507
No mortgage with housing cost burden	28,282	1,398	2,099	393	26,183	1,348
No mortgage with no housing cost burden	223,641	2,032	10,088	854	213,553	2,791
Housing cost burden	17.6%	0.51	25.4%	2.62	17.2%	0.51
No housing cost burden	82.4%	0.51	74.6%	2.62	82.8%	0.51
Mortgage with housing cost burden	27.1%	0.93	37.5%	4.58	26.6%	0.95
Mortgage with no housing cost burden	72.9%	0.93	62.5%	4.58	73.4%	0.95
No mortgage with housing cost burden	11.2%	0.54	17.2%	2.94	10.9%	0.55
No mortgage with no housing cost burden	88.8%	0.54	82.8%	2.94	89.1%	0.55

(c) Foundation for Community Association Research

Community Associations Fact Book 2016

Comparison of U.S. Condominium and Non-Condominium Residents Age 55 and Over, 2011 - 2015

Margin of Error (MOE)

	Total		In Condominium		Not In Condominium	
Table 10. Number of Persons in Household	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**
1-person household	198,960	3,260	11,862	1,004	187,098	3,220
2-person household	262,690	3,349	8,002	827	254,688	3,349
3-person household	35,640	1,698	486	205	35,154	1,687
4-person household	11,427	985	215	137	11,212	976
5-or more person household	7,641	809	64	75	7,577	805
1-person household	38.5%	0.63	57.5%	3.21	37.7%	0.64
2-person household	50.9%	0.65	38.8%	3.16	51.4%	0.66
3-person household	6.9%	0.33	2.4%	0.98	7.1%	0.34
4-person household	2.2%	0.19	1.0%	0.66	2.3%	0.20
5-or more person household	1.5%	0.16	.3%	0.36	1.5%	0.16
	Total		**In Condominium**		**Not In Condominium**	
Table 11. Houseolder Live Alone by Sex	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**
Live alone - Male householder	67,053	2,252	2,263	442	64,790	2,219
Live alone - Female householder	131,907	2,921	9,599	905	122,308	2,848
Live alone - Male householder	33.7%	0.99	19.1%	3.36	34.6%	1.03
Live alone - Female householder	66.3%	0.99	80.9%	3.36	65.4%	1.03
	Total		**In Condominium**		**Not In Condominium**	
Table 12. Any Physical, Memory, Sensory Difficulty	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**
Any physical,memory or sensory difficulty	202,003	3,359	6,308	681	195,695	3,323
No physical,memory or sensory difficulty	620,464	3,359	22,692	1,278	597,772	3,477
Any physical,memory or sensory difficulty	24.6%	0.41	21.8%	2.08	24.7%	0.42
No physical,memory or sensory difficulty	75.4%	0.41	78.2%	2.08	75.3%	0.42
	Total		**In Condominium**		**Not In Condominium**	
Table 13. Any Physical, Memory, Sensory Difficulty by Sex	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**	**Estimate**	**MOE +/-**
Male any difficulty	95,122	2,496	2,232	406	92,890	2,470
Female any difficulty	106,881	2,624	4,076	548	102,805	2,581
Male any difficulty	47.1%	0.96	35.4%	5.18	47.5%	0.97
Female any difficulty	52.9%	0.96	64.6%	5.18	52.5%	0.97

(c) Foundation for Community Association Research

Appendix E.

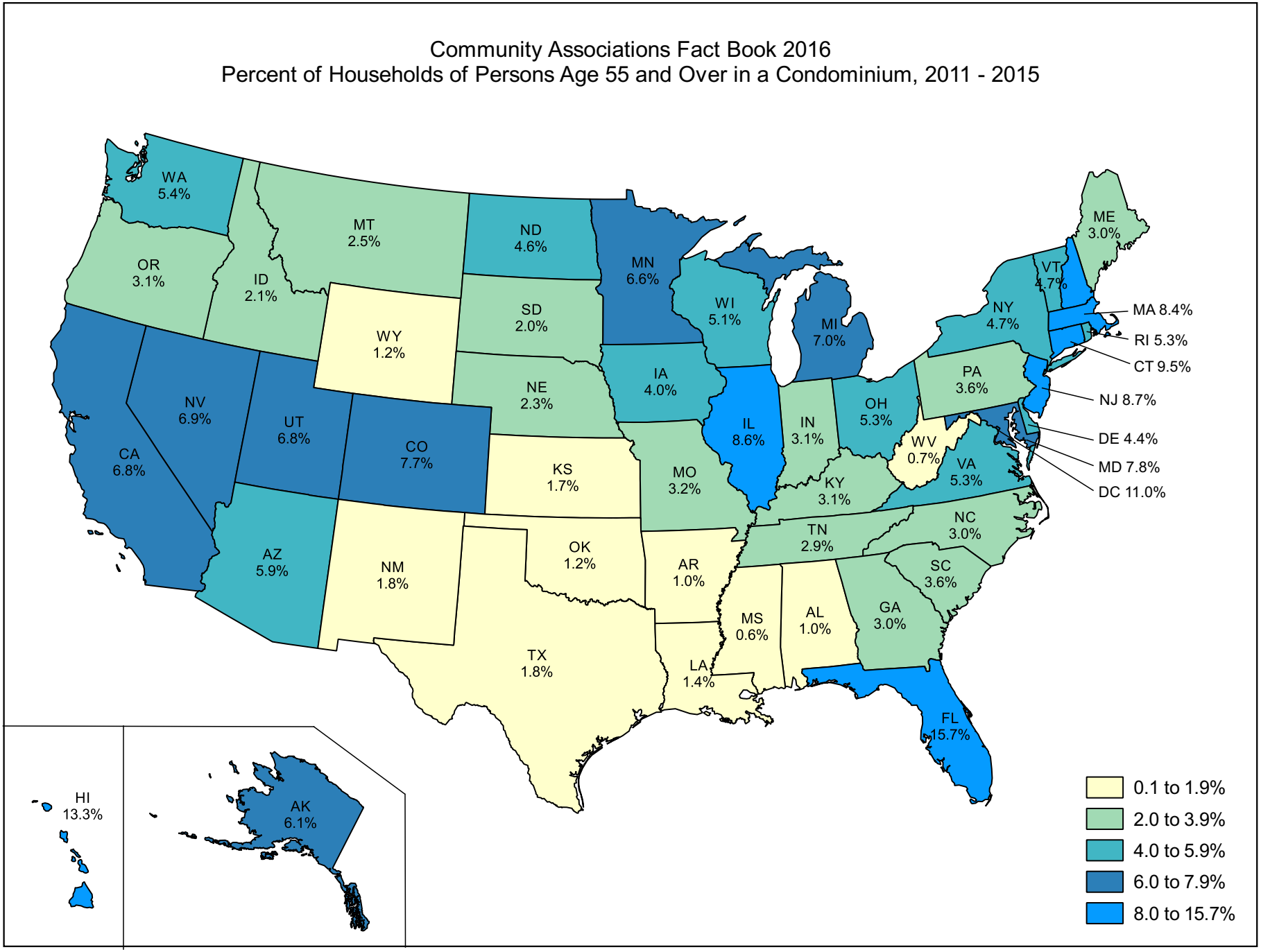
Map of Percent of Households of Persons Age 55 and Over in a Condominium, 2011-2015

Community Association Fact Book 2016

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

FOUNDATION FOR COMMUNITY ASSOCIATION research

Community Associations Fact Book 2016
Percent of Households of Persons Age 55 and Over in a Condominium, 2011 - 2015



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 www.caionline.org 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 foundation.caionline.org or e-mail foundation@caionline.org.

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

6402 Arlington Blvd., Suite 500
Falls Church, VA 22042
foundation.caionline.org

community
ASSOCIATIONS INSTITUTE

ABOUT 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 www.caionline.org and follow us on Twitter and Facebook @CAISocial.

FOUNDATION FOR
COMMUNITY ASSOCIATION
research

ABOUT THE FOUNDATION FOR COMMUNITY ASSOCIATION RESEARCH

Our mission—with your support—is to provide research-based information for homeowners, association board members, community managers, developers and other stakeholders. Since the Foundation's inception in 1975, we've built a solid reputation for producing accurate, insightful and timely information, and we continue to build on that legacy. Visit foundation.caionline.org.

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.

6402 Arlington Blvd., Suite 500 | Falls Church, VA 22042 | www.caionline.org

caisocial
Community Associations Institute
@caisocial and @caiadvocacy

Permission to reprint the data in this publication is granted provided no changes are made and the material is cited: "Reprinted with permission of Community Associations Institute. Learn more by visiting www.caionline.org, writing cai-info@caionline.org or calling (888) 224-4321."