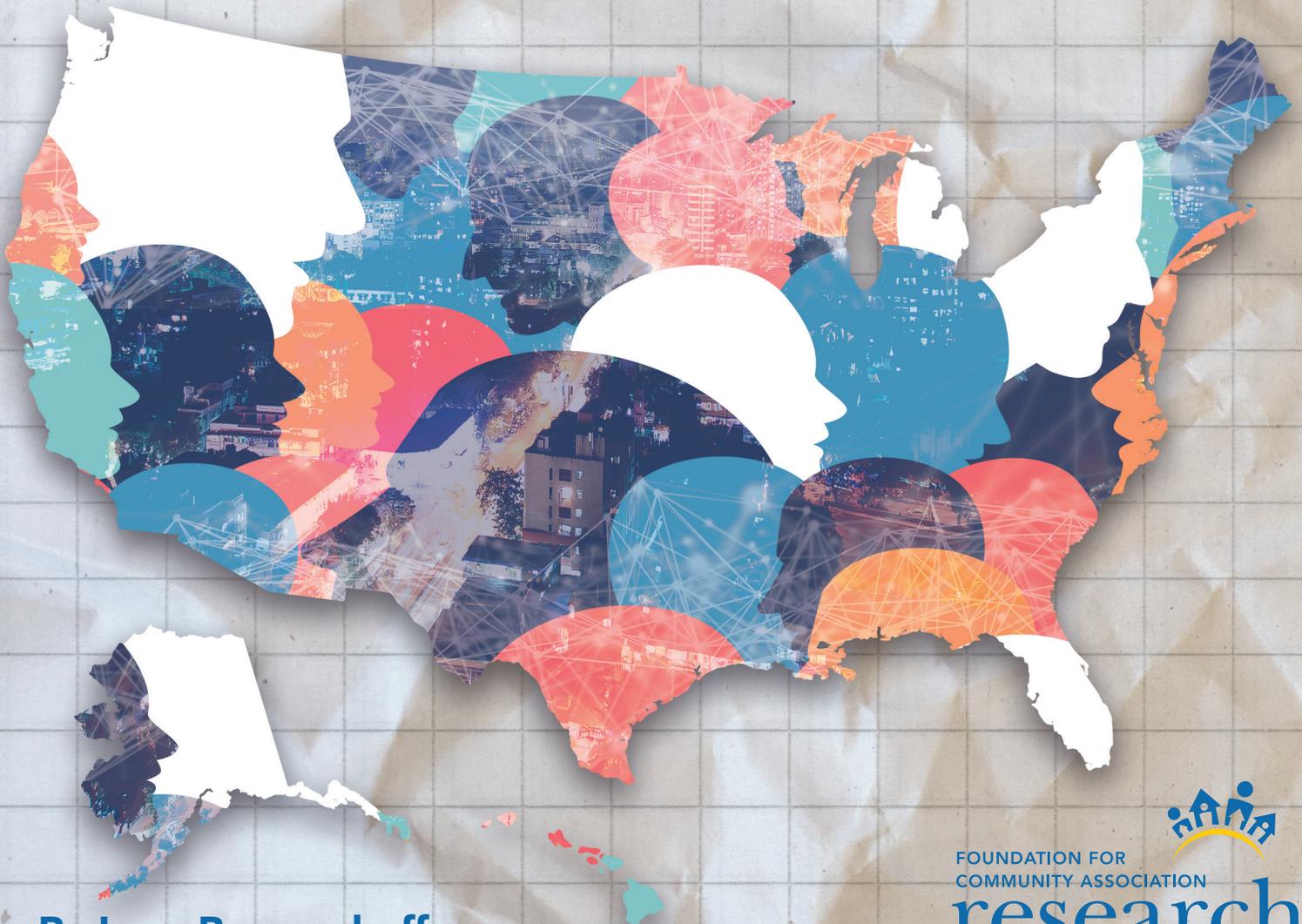


Dakota County Minnesota:

Mapping Common Interest Communities

with County Tax Parcel Records
Using GIS Technology



By Lynn Boergerhoff, MPH

2018

Community Association

Fact Book - *Part Eight*

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Steven Y. Brumfield, CMCA, AMS, PCAM

President, 2019 - 2020

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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. Each year for the past several years, the Foundation has expanded its efforts to bring important community association data to a wider audience. For the recently published [Community Association Fact Book 2018](#), the Foundation has sponsored a new **Part Eight, Dakota County Minnesota: Mapping Common Interest Communities with County Tax Parcel Records Using GIS Technology**. Please join the Foundation and help us with our goals.

Caroline Record, Esq.

President-Elect & Chair of the Research Committee, 2019 - 2020

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The new **Part Eight** that President Brumfield mentioned is a demonstration project funded by a grant from the [Foundation for Community Association Research](#). In this report, Lynn Boergerhoff, MPH, describes a systematic method using Geographic Information System (GIS) software to identify and map townhomes, condominiums and cooperatives using parcel data found in the land records from Dakota County, Minnesota. The result is a first look at how parcel data might be used to explore the geography of community associations and their spatial relation to community services and resources important to Aging-in-Place. FCAR has several research projects underway. Check us out. Contact FCAR staff: [Dave Jennings or Jake Gold](#).

Lynn Boergerhoff, MPH

Lynn Boergerhoff, MPH, conducts research on Common Interest Communities (CICs) as Community Association Atlas, LLC., in Lakeville, Minnesota. Lynn has managed research projects from design and methods through data collection, analysis and reporting. His research interests include the geography of CICs and their spatial relation to community services and resources as well as characteristics of CIC housing and households. He has worked with data from the American Community Survey, the American Housing Survey and local parcel data found in land records. He has presented his work at a Community Associations Institute conference, in the CAI *Fact Book* and in CAI-MN *Community Living*. Lynn has 9 year's experience in CIC Board leadership.

Dakota County Minnesota: Mapping Common Interest Communities with County Tax Parcel Records Using GIS Technology

This Report is in four Parts

1. Introduction
2. Method
3. Results
4. Discussion

1. Introduction

1.1 Community Association Data

1.1.1 Common Interest Communities

In Minnesota, community associations also are called Common Interest Communities (or CICs). Common interest communities are discussed in #1.3 below. Community Associations in general have been challenging to:

- Identify and count,
- Locate spatially among surrounding community features, and
- Describe housing and resident characteristics.

1.1.2 ACS & AHS

Previous work by this author has explored use of two major population-level surveys to achieve these goals;

- the [American Community Survey \(ACS\)](#) as prepared in the [Integrated Public Use Microdata Sample \(IPUMS-USA\)](#)
- the [American Housing Survey \(AHS\)](#).

State-level data from the 2011 – 2015 5-year ACS on condominium housing units and their residents age 60 and over can be found in Part 6 the 2017 [Community Association Fact Book](#). Initial analysis of data in the 2015 American Housing Survey identified homeowner association and condominiums housing units in the Public Use File sample. Both the ACS and the AHS can provide statistical estimates of the number of CIC housing units in the population and they are rich in detail about housing units, individual persons and households. Yet both the ACS and the AHS lack the ability to identify and count individual Community Association housing units, to place them at known geographic locations for mapping and spatial analysis and to identify the Community Associations as an entity (association). In contrast, local parcel data found in the land records can identify individual Common Interest Community parcel housing units,

geographically locate the CIC parcels among surrounding community features, aggregate the individual parcels into their respective CIC entity and enable visualization and analysis at the CIC entity (association) level.

1.2 The Minneapolis-St. Paul 7-county Metropolitan Region

1.2.1 Seven Counties & Metropolitan Council

The seven-county Minneapolis-St. Paul Metropolitan Region is centered around the cities of Minneapolis in Hennepin County and St. Paul in Ramsey County. The remaining counties are Anoka, Carver, Dakota, Scott and Washington. Together, the Metropolitan Council estimates that the region is home to an estimated 2017 population of 2,849,567.

The Metropolitan Council, a Metropolitan Planning Organization (MPO), is the region's policy-making body, planning agency, and provider of essential services including public transportation, water resources, regional parks, affordable housing and others. The Metropolitan Council ranks 17th by 2010 US Census population size among [405 MPOs](#) in the US. The Council also collects, generates, manages and provides a variety of data resources for public use, including the Dakota County tax parcel datasets used in these analyses.

The seven-county region is a continuum of community development and land use, from the densely developed urban center cities of Minneapolis and St. Paul to farm-based townships farthest from the urban centers. The Metropolitan Council, in its Thrive MSP 2040 plan, uses nine [Community Designations](#) to characterize communities with similar stages in development. Community designations are a useful context to consider where CICs have developed. Dakota County's Community Designations include a transition from Urban Center to Agricultural. See **Figure 1 in the Appendix** for a map of the 7-county metropolitan region with its Community Designations.

1.2.2 Dakota County

Dakota County is comprised of 34 cities and townships. In 2017, the Metropolitan Council estimated that Dakota County was home to 422,580 persons in 162,422 households. See **Table 1 in the Appendix** for the 2017 Dakota County population and household estimates. Data from the 2013 – 2017 American Community Survey Table [DP04](#) reports these housing characteristics of Dakota County:

- Units in Structure
 - 57.7% were 1-unit detached
 - 18.2% were 1-unit attached
 - 21.8% were 2 to 20 or more units
 - 2.3% were mobile home and other
- 61.9% of structures were built after 1980

- 74.4% of units were owner-occupied
- 64.2% on owner-occupied unit were valued at \$200,000 or more
- 74% of owner-occupied units had a mortgage
- 21.1% of units had a Selected Monthly Owner Cost as a Percentage of Household Income of 30% or more (a measure of housing cost burden).

1.3 Common Interest Communities or CICs in Minnesota Statute

1.3.1 CIC Governance

In Minnesota, townhomes, condominiums, cooperatives are typically part of what is called a Common Interest Community, or CIC. A CIC is organized as a non-profit entity under state corporation.

CICs are generally controlled by the Minnesota Common Interest Ownership Act (MCIOA), chapter 515B of Minnesota Statutes. Depending on when a particular CIC was formed and its governing documents, chapters 515 or 515A of the Minnesota Statutes may also apply.

1.3.2 CIC Important Definitions

From the MCIOA Statute definitions page:

"Common interest community" or "CIC" means contiguous or noncontiguous real estate within Minnesota that is subject to an instrument which obligates persons owning a separately described parcel of the real estate, or occupying a part of the real estate pursuant to a proprietary lease, by reason of their ownership or occupancy, to pay for:

- (i) real estate taxes levied against;
- (ii) insurance premiums payable with respect to;
- (iii) maintenance of; or
- (iv) construction, maintenance, repair or replacement of improvements located on, one or more parcels or parts of the real estate other than the parcel or part that the person owns or occupies.

Real estate which satisfies the definition of a common interest community is a common interest community whether or not it is subject to this chapter. Real estate subject to a master declaration, regardless of when the master declaration was recorded, shall not collectively constitute a separate common interest community unless so stated in the master declaration.

"Condominium" means a common interest community in which (i) portions of the real estate are designated as units, (ii) the remainder of the real estate is designated for common ownership solely by the owners of the units, and (iii) undivided interests in the common elements are vested in the unit owners.

"*Cooperative*" means a common interest community in which the real estate is owned by an association, each of whose members is entitled to a proprietary lease by virtue of the member's ownership interest in the association.

"*Planned community*" means a common interest community that is not a condominium or a cooperative. A condominium or cooperative may be a part of a planned community.

"Townhouse" is an architectural style which could be organized as a condominium, cooperative or planned community or simply units joined together by party-wall agreements. The term "Townhouse" is not defined in MN Statutes 515, 515A or 515B. Townhouse is used by the County Assessor to identify a parcel that may or may not be in a CIC and does not have another unit above or below it (Dakota County Assessor's Office telephone contact 6-25-2019). The terms "townhouse", "condominium" and "cooperative" used in this report were assigned to the individual tax parcels by the Dakota County Assessor.

For a more complete understanding of CICs see the [Community Association Fact Book 2018](#).

1.4 Aging-in-Place and Naturally Occurring Retirement Communities (NORCs)

1.4.1 Aging in Place

Like most older adults throughout the US, older residents of Common Interest Communities will likely choose to remain living in their homes if they can safely do so. This is termed Aging-in-Place. This housing preference, however, may require access to a variety of supporting community services and resources.

Common Interest Communities exist in the context of their surrounding communities. The features surrounding the CIC have a significant influence on their older residents' ability to obtain the supportive services they may need as they grow older. Tax parcel data are useful to identify and map Common Interest Communities and to explore their relationships to supportive services and resources. Of interest in this report are those features thought to be important for Aging-in-Place represented by these themes:

- Retail and commercial
- Health care
- Transportation
- Public safety
- Social engagement and
- Recreation/fitness.

1.4.2 Naturally Occurring Retirement Communities (NORCs)

The author believes that many CICs are becoming [Naturally Occurring Retirement Communities](#) or NORCs. A Naturally Occurring Retirement Community is a multi-unit residential housing development or to a defined geographic area of housing units where

a significant proportion of residents are age 60 years old or older. NORCs were not initially planned or marketed only for older persons, but instead gradually evolved as their residents chose to Age-in-Place and through in-migration as older persons purchased homes in CICs.

1.5 Report Goals

This report will describe how Dakota County, Minnesota tax parcel data and other data were used to achieve four goals, to:

1. Identify Common Interest Communities (CICs) in Dakota County, Minnesota
2. Map the distribution of the Dakota County CICs and their spatial relationship to community features important to older residents Aging-in-Place
3. Describe selected characteristics of the Dakota County CICs
4. Compare the strengths and limitations of tax parcel data with data from the American Community Survey and the American Housing Survey.

The Appendix contains 16 maps (Figures 1 – 16) and 5 tables referenced in the Report.

2. Method

2.1 Data Sources

Parcel data from each of the seven Minneapolis-St Paul metro-area counties was submitted in digital format called [ESRI shapefiles](#) to [MetroGIS](#), an online forum to share public geospatial data. Shapefiles are a widely used digital vector storage format for geospatial data, that is, data with both a known geographic location and attribute data about that location. Shapefiles can be used to create maps with [Geographic Information System](#) (GIS) computer software. Collectively these datasets are called the [Metro Regional Parcel Dataset](#). Data from a standard set of variables is included with each dataset. The Metro Regional Parcel Dataset is accessible in digital form by the public at no charge and is published quarterly in January, April, July and October. The Dakota County tax parcel data used in this demonstration project was released in January 2019. See **Table 2 in the Appendix** for a list of the Dakota County parcel dataset variables and their definitions used in this report.

This MetroGIS Regional Parcel Dataset includes two datasets for each county. For Dakota County, the ParcelsDakota dataset includes parcel polygons that represent the shape and size of the parcel's land area and include attribute data for each parcel. The ParcelsDakotaPoints dataset includes points placed in the centroid of each parcel polygon and includes the same attribute data for each parcel. The point and polygon datasets are linked by a common parcel identifier. The points dataset is larger than the parcel polygon dataset because condominium, cooperative and some townhouse parcels associate multiple individual parcel points with a single parcel polygon. See **Figure 3 in the Appendix** showing a detail of the various configurations of parcel polygons and points found among Dakota County parcels.

2.2 Data Preparation

Data preparation included steps to obtain parcel and other shapefile data from several sources and to manipulate the data for mapping and analysis. The Dakota County tax parcel polygon and point datasets were downloaded into [QGIS v3.0 Noosa \(Quantum GIS\)](#) software as shapefile layers. The ParcelsDakota layer contained 143,353 parcels. The ParcelsDakotaPoints layer contained 157,103 points. QGIS was used to prepare the parcel data for mapping and analysis and to create the maps appearing as **Figures 1 - 16 in the Appendix**.

2.2.1

In QGIS the townhouse points were identified in the ParcelsDakotaPoints dataset using the variable USECLASS1 = "Residential-Townhouse" and the resulting points were saved as the Townhouse Points shapefile. Next, parcels were selected from the ParcelsDakota layer that contained the previously identified townhouse parcel points. The selected townhouse parcel polygons were then saved as the Townhouse Parcel shapefile. Likewise, the condominium points were selected using the variables USECLASS1 = "Residential-Condominium" and the resulting condominium points were used to select the corresponding condominium parcel polygons. Because the USECLASS1 = "Cooperative" attribute was not present in the ParcelsDakotaPoints dataset, an earlier data release of April, 2018 was used to identify the cooperative points and polygons.

2.2.2

The individual townhouse parcel points and polygons were aggregated to form their respective Common Interest Community entity (association) using the PLAT_NAME variable. Here, the PLAT_NAME variable was a proxy for the name of the townhouse, condominium and cooperative CIC. Parcels with the same PLAT_NAME and those having related PLAT_NAMES were assigned to a new CorePLAT_NAME variable derived from the portion of the PLAT_NAME common to all the parcels. For example, parcels with the PLAT_NAME "Golden Pond", "Golden Pond 1st Addition" and "Golden Pond 2nd Addition" would receive a Core_PLAT_NAME of "Golden Pond". Aggregating the individual parcels into their respective CIC entity (association) was necessary to visually identify CIC entities (associations) and to enable data analysis of the CIC as an entity comprised of its several individual parcels.

2.2.3

Shapefiles of Dakota County cities and townships, roads and lakes, US Census block groups and the Dakota County Commissioner Districts were obtained from publicly available sources.

2.2.4

Data from the 2013 – 2017 American Community Survey was obtained to estimate the percent of households in Dakota County with a household member age 60 and over by US Census block group.

2.2.5

Community asset mapping was used to identify and locate those features of interest in Aging-in-Place. Here, community mapping is useful in both the literal, geographic sense of showing the location of features on a map and conceptually as an inventory of services and resources that may support older persons who are Aging-in-Place. Shapefiles of the various features were either obtained from public sources or created by geocoding, assigning geographic coordinates to street addresses so that the address can be geospatially located. The community asset features were grouped in the following themes: retail/commercial land use, health care facilities, public transportation, public safety, social engagement and recreation/fitness.

2.2.6

The townhouse point dataset was exported from QGIS to MS Excel and to SPSS for analysis of selected parcel variables including year(s) built, finished square footage, total and average property taxes paid, total and average estimated total market value, and homestead status. The townhouse point dataset was also used to explore the relationship of CICs to American Community Survey estimates of households with a member age 60 and over.

2.2.7

Selected variables of interest in Aging-in-Place were identified from the American Community Survey and the American Housing Survey to compare their strengths and limitations with those of the Dakota County tax parcel dataset regarding Common Interest Communities.

3. Results

3.1 Common Interest Community Parcels in Dakota County, Minnesota

A total of 28,497 townhouse, 7,154 condominium and 922 cooperative parcels were identified in Dakota County.

- **Figure 2 in the Appendix** is a map of the distribution of total 36,573 CIC parcels in Dakota County cities and townships with their Metropolitan Council Thrive MSP 2040 Community Designations. Nearly all CICs have been built in cities with urban or suburban Community Designations.

- **Table 3 in the Appendix** shows the count and percent of each type of CIC by city and township. Five cities were found to contain 75% of all CICs in Dakota County. These CIC-prevalent cities are Apple Valley, Burnsville, Eagan, Inver Grove Heights and Lakeville.

3.2 Common Interest Community Parcels in CIC-prevalent Dakota County cities

Figures 4 through 8 in the Appendix are maps showing the distribution of townhouse, condominium and cooperative parcels in the five most CIC-prevalent cities in Dakota County. At the city level, these maps show the general configuration and location of the CICs in relation to each other and to prominent land features and major transportation routes.

- **Figure 4** shows the geographic distribution of 65 CICs in the **city of Apple Valley**. These CICs include a total of 6,677 parcels comprised of 59 townhome CICs with 5,528 individual parcels, 9 condominiums with 1,079 individual parcels and 1 cooperative with 70 individual parcels. Apple Valley has an estimated 2017 total 20,149 households. Assuming that a parcel represents a housing unit, CICs would represent about 33.1% of Apple Valley housing units.
- The map in **Figure 5** shows the geographic distribution of 71 CICs in the **city of Burnsville**. These CICs include a total of 6,175 parcels comprised of 56 townhome CICs with 4,361 individual parcels, 13 condominiums with 1,467 individual parcels and 4 cooperatives with 347 individual parcels. With Burnsville having a 2017 estimated total 25,252 households, CICs would comprise about 24.5% of all households in Burnsville.
- The distribution of 81 CICs in the **city of Eagan** appears in **Figure 6**. These CICs include a total of 7,151 parcels comprised of 60 townhome CICs with 4,983 individual parcels, 21 condominium CICs with 2,073 individual parcels and 2 cooperatives with 95 individual parcels. CICs would comprise about 26.4% of all 27,043 households in Eagan.
- **Figure 7** shows the distribution of 50 CICs in the **city of Inver Grove Heights**. These CICs include a total of 3,594 parcels comprised of 40 townhome CICs with 2,891 individual parcels, 9 condominium CICs with 390 individual parcels and 2 cooperatives with 313 individual parcels. CICs would comprise about 25.4% of the total 14,154 households in Inver Grove Heights.
- Finally, **Figure 8** shows the distribution of 53 CICs in the **city of Lakeville**. These CICs include a total of 4,004 parcels comprised of 52 townhome CICs with 3,918 individual parcels, 1 condominium CIC with 86 individual parcels and no cooperatives. Lakeville has an 2017 estimated total population of 61,993 persons living in 21,004 households. CICs would comprise about 19.1% of all households in Lakeville.

3.3 Common Interest Community Parcels and Population Demographic Data

CIC parcel data can be mapped and analyzed in the context of socio-demographic estimates from population-level sample surveys like the American Community Survey and the American Housing Survey. **Figure 9 in the Appendix** shows the distribution of CICs among American Community Survey estimates of the percentage of households with a person age 60 and over by block group. Dakota County contains 232 census block groups. The researcher believes that many CICs are becoming Naturally Occurring Retirement Communities or NORCS. The parcels datasets do not contain demographic characteristics of persons or households. To investigate whether American Community Survey estimates could help describe the characteristics of CIC residents a Pearson Correlation procedure was run in SPSS between townhouse parcel points and the percentage of households with a member age 60 and over by block group. A scatterplot revealed a wide dispersal of data points with no apparent visual point pattern. The results showed no statistically significant correlation between the number of CICs and the percentage of households containing a member age 60 and over in Dakota County block groups ($r = -.045$, $n = 232$, $p < .001$).

3.4 Common Interest Community Parcels in a County Commissioner District

Tax parcels can be selected and analyzed that are within specific geographic boundaries, including user-defined areas for specific purposes. In this example, **Figure 10 in the Appendix** shows a map of 72 Common Interest Community entities (associations) comprised of 5,421 CIC tax parcels within the Dakota County 3rd Commissioner District. Summary data for these CIC parcels also appear with the map. **Table 4 in the Appendix** contains a portion of data from the CICs in the District.

3.5 Common Interest Community Parcels and Aging-in-Place

Aging-in-place is the recognized and widespread desire among older adults to remain living in their homes and communities as they age. Successful Aging-in-Place will require access to a variety of community goods and services that support independent living. Mapping CICs, as in **Figures 11 through 16 in the Appendix**, can help visualize their spatial relationships to supportive community features. Geospatial analysis can describe and measure access to these services using metrics like access to transportation services and travel times and distance.

Like all residents, older residents of CICs will continue to need a variety of common retail goods and services. The availability of a safe food supply, for example, is essential for good nutrition and health. **Figure 11** is a map showing the distribution of Common Interest Communities in relation to retail/commercial areas with grocery and convenience stores in Apple Valley. Other retail or commercial features could be mapped including hardware stores, restaurants, medical supply stores and shopping centers.

Figure 12 shows a map of Common Interest Communities among selected licensed health care facilities, pharmacies and medical clinics in Apple Valley. Medical clinics provide essential patient care and referral services. Pharmacies are an important source of drugs and health care supplies. Licensed health facilities here include home care and assisted living facilities that provide specialized personal care and household services that support the needs of daily living. Other health care facilities may include dental, vision and hearing service providers and rehabilitation and other specialty care centers.

Access to transportation, both private vehicles and public services, is a key component of successful Aging-in-Place. **Figure 13** is a map of Common Interest Communities with the public bus stops and a representative bus route serving Apple Valley. Other transportation services could be mapped including accessible transportation services, subways and commuter train routes.

Public safety is important to all residents. **Figure 14** shows a map of the Common Interest Communities and selected public safety sites in Apple Valley. Police and fire stations are important in times of emergency and as recognizable day-to-day resources for crime and fire prevention. Other public safety features may include ambulance service areas, flood plains, government service centers and emergency evacuation routes.

Figure 15 shows a map of the Common Interest Communities and selected sites of social engagement including senior centers, places of worship, schools and libraries in Apple Valley. Collectively, these and similar features promote meetings, social activities, continued learning and religious observances as well as hosting community education, dinners, voting and volunteer programs. Other sites of social engagement may be service clubs, coffee shops, cultural centers and theaters.

Older residents benefit from easy access to safe and walkable features for both physical activity and social interaction. **Figure 16** shows a map of features that promote physical activity including sidewalks, trails and bikeways, parks and lakes in relation to Common Interest Communities in Apple Valley. Other similar features include YMCAs and other fitness clubs.

4. Discussion

4.1 Systematic Method

This report has demonstrated a systematic method to identify townhomes, condominiums and cooperatives, collectively called Common Interest Communities or CICs, using local parcel data found in the land records from Dakota County, Minnesota and a Geographic Information System (GIS). The individual CIC parcels were aggregated into their respective CIC entities (associations) and mapped to reveal their geospatial location among surrounding community features.

4.2 Data Uses and Geospatially Located CICs

Subsequent steps demonstrated three uses of the geospatially located CICs:

4.2.1 Aggregating and Analyzing: Selected characteristics of the CIC entities (associations) were compiled for a County Commissioner District, showing how parcel data can be aggregated and analyzed using existing or user-defined geographic areas. This type of mapping and data analysis may be useful to inform and promote advocacy on issues important to CICs and their residents.

4.2.2 Mapping and Relationships: The CICs were mapped to show their relationship to the estimated percentage of households with a resident age 60 and over with data from the American Community Survey. This map shows how CIC parcels can be explored in relation to socio-demographic data from population sample surveys. The results showing no correlation between sample estimates and actual CIC counts may be different in the Minneapolis – St. Paul urban centers where CICs are more concentrated and comprise a larger portion of block groups.

4.2.3 Focusing on CICs: The CICs were also mapped to reveal their spatial relationships to community features important to Aging-in-Place, including retail/commercial areas, health care facilities, public transportation, public safety, social engagement and recreation/fitness sites. Because the geographic location of both the CICs and the features is known, spatial analysis could evaluate CIC residents' access to these and other community resources.

4.3 Strengths of Parcel Data

Finally, important strengths and limitations of the parcel data were compared with those of two population level sample surveys conducted by the US Census, the American Community Survey and the American Housing Survey. See **Table 5 in the Appendix** for a detailed comparison of these data sources.

The parcel data's strengths include the ability to:

4.3.1 Identify and count individual CIC parcels. This is possible because each parcel record is uniquely identified and contains attribute data identifying the parcel as a townhouse, condominium or cooperative.

4.3.2 Geographically locate the individual CIC parcels. This is possible because the parcel datasets, in shapefile format, contain the parcel's known geographic location able to be mapped with Geographic Information System (GIS) software.

4.3.3 Aggregate the individual parcels into their respective CIC entities (associations), explore their spatial relationships to other community features and analyze data about the CIC as an entity (association) comprised of its individual parcels. This is possible with the assumption that the PLAT_NAME can be a proxy for the CIC name.

4.4 Limitations of Parcel Data

Use of parcel data to identify and quantify CICs revealed several limitations.

4.4.1 Comparability: The labels used to identify CIC parcels, “Residential-townhouse”, Residential-Condominium” and “Cooperative” are applied the Dakota County Assessor and may not be comparable to definitions used in other counties. This difference in terminology will limit comparison of CICs among different counties. The variable terminology may be overcome by working with county officials to develop special data queries or alternative terminology that would be useful across different datasets. Alternatively, parcel datasets assembled by private business interests may have taken this step. See the second note under Future Parcel Data Exploration.2

4.4.2 Useful Attributes: The variable and method used to aggregate the individual CIC parcels into their CIC entity or association did not always contain data useful to identify the CIC as an entity. In the case of the Dakota County parcel dataset, the variable PLAT_NAME was sometimes missing.

4.4.3 Detached Single Family Homes: The parcel dataset did not contain a variable(s) to identify detached single-family homes that were part of a Common Interest Community.

4.4.4 Describing the Person and Household: The parcel data do not contain variables that describe characteristics of individual persons or their households making it impossible to select parcels by age and other socio-demographic characteristics.

4.5 Future Common Interest Community Data Exploration

Following this demonstration project, exploration of parcel data to identify Common Interest Communities in other geographic areas could proceed in at least three ways.

The source of the Dakota County parcel data was the Metropolitan Council, a **Metropolitan Planning Organization** (MPO). There are 405 MPOs in the US. Other MPOs may collect and make available similar parcel datasets for counties in their jurisdictions. These parcel data may likewise be available in digital form at no cost and could contain a variable(s) to identify CIC or similar parcels and contain similar attribute data about the parcels.

Private business sources collect, analyze and provide county tax assessor data covering the entire US or selected geographic areas in digital form for a fee. While maintaining the original parcel dataset variables, these proprietary databases may have standardized the meaning of different attributes among various county parcel datasets. If so, this may overcome the variances in terminology among counties and enable compiling a very large dataset and comparisons among several geographies.

Commercial real estate datasets may be useful to identify Common Interest Community properties placed for sale. Here a variable in the dataset could identify mortgaged properties as being part of a “Planned Unit Development” or a condominium, which could then be considered part of a CIC. The real estate listings may include important characteristics of the property including its legal CIC name, location, housing features, monthly CIC assessments among others. Alternatively, the real estate listing could help identify CIC parcels in a county parcel dataset.



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Appendix

Maps

[Figure 1. Minneapolis - St. Paul Metropolitan Area Community Designations with Metropolitan Council Thrive MSP 2040 Community Designations](#)

[Figure 2. Dakota Cities and Townships with Common Interest Community Parcels](#)

[Figure 3. Common Interest Community Parcel Detail](#)

[Figure 4. Apple Valley Common Interest Communities](#)

[Figure 5. Burnsville Common Interest Communities](#)

[Figure 6. Eagan Common Interest Communities](#)

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[Figure 8. Lakeville Common Interest Communities](#)

[Figure 9. Percent of Households with Persons Age 60+ with Common Interest Community Parcels](#)

[Figure 10. Dakota County Commissioner District #3 with Common Interest Communities](#)

[Figure 11. Apple Valley Retail Commercial Land Use and Grocery Stores with Common Interest Communities](#)

[Figure 12. Apple Valley Health Care Facilities with Common Interest Communities](#)

[Figure 13. Apple Valley MVTA Transit Stops and Route 440 with Common Interest Communities](#)

[Figure 14. Apple Valley Fire Station and Common Interest Communities](#)

[Figure 15. Apple Valley Social Engagement Sites with Common Interest Communities](#)

[Figure 16. Apple Valley Recreation Fitness Features with Common Interest Communities](#)

Tables

[Table 1. Dakota County City and Township 2018 Preliminary Population and Household Estimates](#)

[Table 2. Count and Percent of Dakota County Common Interest Communities by City](#)

[Table 3. Dakota County Tax Parcel Variables and Definitions](#)

[Table 4. Selected Data from Common Interest Communities in the Dakota County 3rd Commissioner District](#)

[Table 5. Comparison of Tax Parcel and U.S. Census Population Sample Survey Variables](#)



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 more than 41,000 members, CAI works in partnership with 64 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 foster 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 Community Association Fact Book State Page, please email foundation@caionline.org.



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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.

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