

FINAL DELIVERABLE

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EXECUTIVE SUMMARY

The *North Liberty Housing Needs Assessment* was developed through a partnership with the City of North Liberty, The University of Iowa Provost's Office of Outreach and Engagement, and the University of Iowa School of Urban and Regional Planning. A team of Urban & Regional Planning graduate students, with guidance from Professor Jerry Anthony, led the study and developed the final report.

This housing needs assessment provides an analysis of demographic characteristics in North Liberty, as well as review of the characteristics of the existing housing stock and building permit trends. The report also provides an analysis of the market condition for a variety of rental and for-sale housing types and price points, with particular focus on opportunities and challenges that arise from a quickly growing population. Based on this data, the report proposes recommendations to serve housing needs of both current and future residents.

Figure 1: Aerial photograph of a North Liberty neighborhood



Source: The Gazette, digital image, May 14, 2014, accessed April 29, 2019

A primary goal of this report was to evaluate North Liberty's mix of housing options and to discover how it could evolve with any changes to the population demographics. With an understanding of the existing mix of housing types, local government officials, local developers, service providers, and other stakeholders can make informed decisions about future investment and development that responds to the community's overarching goals laid out in guiding documents, such as the Comprehensive Plan. Using this report as a guide can help ensure that current and future residents of North Liberty have access to reasonably priced housing, and that local businesses and city government can prosper.

Like most communities in Iowa, the largest proportion of housing type in North Liberty is single-family detached housing (41%). Johnson County communities tend to have a lower proportion of single-family detached (all below 50%) compared to the state of Iowa (more than 70%). The second highest proportion of housing type in North Liberty is duplexes (29%), which is by far a higher percentage than other Johnson County communities and the state. This means that North Liberty also has a lower proportion of multi-family units compared to other communities in Johnson County.

Population projects suggest North Liberty could grow to over 29,000 residents by 2030. Analysis suggests that, in order to accommodate the nearly 11,000 new residents, North Liberty would need to add about 3,800 new housing units over the next 11 years.

Other key findings of this report include challenges and opportunities. The challenges include:

- Compared to other housing types and price points, North Liberty has limited homes available under \$250,000, and the availability of these homes has been steadily decreasing. In March 2019, only 11 homes at this price point were available. This may be stifling North Liberty's development and limiting the types of residents looking to relocate there.
- A large portion of North Liberty's population (more than 8,000 in 2015) commutes out of the city for work. These commuters represent an opportunity for North Liberty to attract new employers and foster diverse employment options for its residents to limit the number of those that commute.
- Since North Liberty experienced its highest level of growth in the early 2000s, many of those units will need repairs in the next 10-20 years, which may result in hundreds of units needing repair around the same time.
- Nearly half of North Liberty residents pay more than 30% of their gross annual income on housing.

The opportunities include:

- For the foreseeable future, there will continue to be demand to live in North Liberty due to its location in the larger metropolitan area, its room for increased development, and its high quality schools.
- North Liberty has ample undeveloped land (about 21% of all land) that can be zoned and developed to fit different population segments like students or seniors, as currently its population will require different housing styles and prices as the housing stock ages.

Based on the issues and opportunities identified above, the following recommendations are initiatives North Liberty can employ to better meet the current and future housing demands.

- Prioritize quality-housing as an economic prosperity tool by maintaining internationally-recognized housing standards
- Implementing in-depth housing inspections at the inception of new rental housing projects, and yearly afterwards.
- Incentivize developers and builders to produce more entry-level housing under \$250,000
- Provide housing options for seniors and others to age in place.
- Adjust North Liberty's legal and guiding documents to reflect its housing goals and priorities.

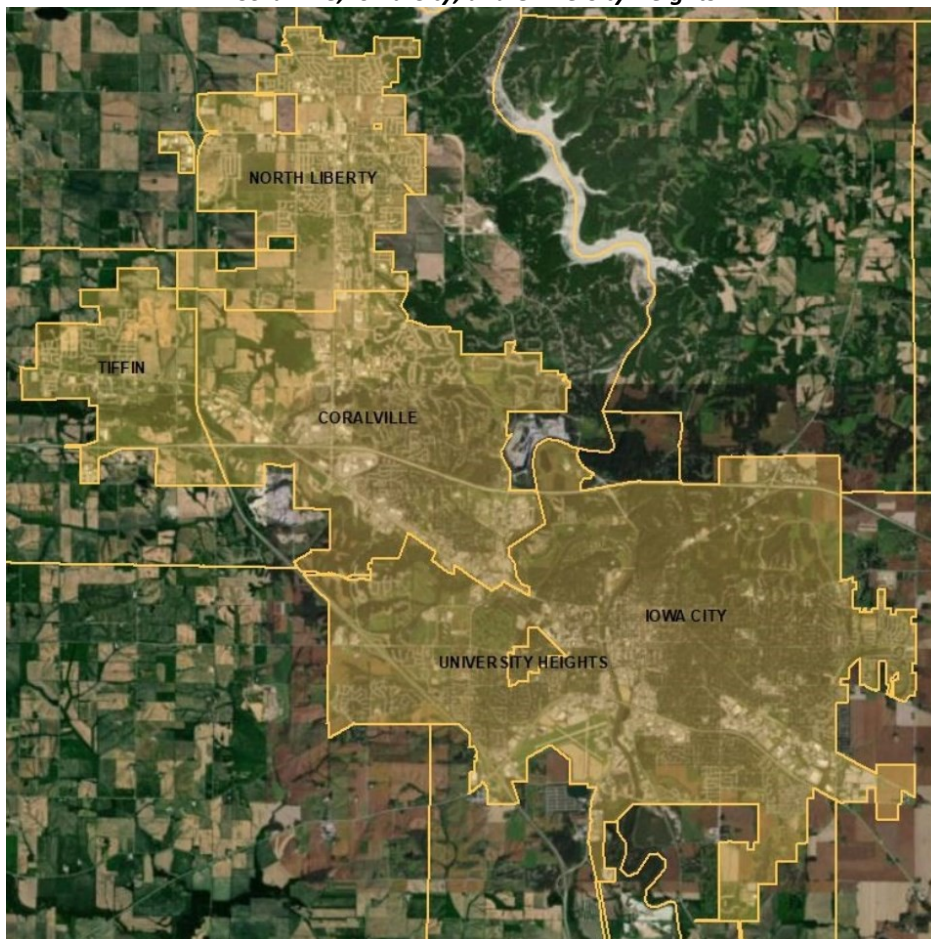
INTRODUCTION

North Liberty was incorporated in 1913 with a small population of under 200. Growth took off in the 1960s when the Iowa City Community School district opened North Liberty's first public elementary school, Penn Elementary.¹ Even through the farming crisis of the 1980s, North Liberty expanded and by the year 2000, its population was well over 5,000 people with established fire and police departments.

In recent years, North Liberty has been one of the fastest growing cities across the state of Iowa. The population is over 18,000 and continues to increase each year, with new schools, housing, and employment opportunities emerging regularly. Housing has increased alongside the influx of new residents, and North Liberty has consistently added housing developments since the early 2000s.

Being a part of the Iowa City metropolitan area, North Liberty has become a popular place to live for individuals and families working in the surrounding communities. For many families, North Liberty is the perfect "half-way point" between their jobs in either Iowa City or Cedar Rapids.

Figure 2: The Iowa City Urbanized Area of North Liberty, Tiffin, Coralville, Iowa City, and University Heights.



Source: Author

¹ Think Iowa City: History. <https://www.thinkiowacity.com/plan-your-trip/history/>

The surrounding economy is a major driver of housing demand and costs in North Liberty. North Liberty is located just seven miles from Iowa City, home to the University of Iowa and the University of Iowa Hospitals and Clinics (UIHC). The University's student body is over 32,000, while UIHC employs over 10,000 individuals and had 1,400 volunteers, making the University the largest single employer in the state of Iowa. The University's reach extends into North Liberty through its satellite offices, quick care facilities, and outreach projects connecting North Liberty and the student population. Additionally, the two cities are close enough geographically that hundreds of students and employees commute between the two communities for school and work every day. This has bolstered North Liberty's economy in multiple ways by providing residents with jobs, goods, and services in both Iowa City and North Liberty.

Initially an agricultural town, the city now boasts an array of restaurants, outdoor recreation including trails connecting to the larger metropolitan area and surrounding networks, and proximity to major thoroughfares for easy-access to Interstates 380 and 80. Just west of the Iowa River, North Liberty is close to local favorites like Sugar Bottom Beach and the Coralville Dam.

Even as the community continues to grow, community leaders and residents value North Liberty's small town reputation and work to preserve that community character. The first goal mentioned in North Liberty's 2013 Comprehensive Plan is that North Liberty should encourage growth, but that it must be done in an orderly fashion. Ordinance updates mentioned in the Comprehensive Plan indicate the North Liberty's commitment to managed growth, including changes to zoning ordinance design standards and subdivision ordinances, as well as a significant overhaul and improvements to water infrastructure in the city. The theme of maintaining a small-town feel runs throughout the document and is the driving force behind most of the planning decisions. Creating housing of all types and price points is discussed in a few of the goals, generally supporting the concept so long as the small-town feel is protected.

The Comprehensive Plan suggests policies should "encourage the development of a variety of dwelling unit types, styles, and sizes, and balanced housing stock to satisfy the needs, desires, and income levels of all people and household sizes; support high density and medium density housing in close proximity to commercial and service centers to provide intensity-of-use buffers for low density residential uses; guide the aesthetically pleasing development of the community through the use of strong design standards; reinforce, maintain, and upgrade the character of individual residential neighborhoods; and concentrate higher density, apartment-type housing in proximity to areas that offer a wide range of existing supportive services, commercial and recreational facilities".

Housing issues are also addressed in the 'land use types mix' and the 'residential' sections of the comprehensive plan. The land use section mentions that North Liberty has a large number of duplex and multi-family housing due to a variety of factors, specifically that projects were approved before the mix ratio was fully realized, demand for lower-cost housing is high due to the high cost of single-family units, and the fact that North Liberty does not have an older stock of housing which often helps with lower-cost needs. The residential uses section reiterates North Liberty's goals for the development of a diverse housing stock available at all price points. This section also describes the limitation of residential development along arterials and feeder streets and the need to develop all land following zoning classifications. This shows that there is a concerted effort to avoid sprawl and to conserve the natural areas surrounding North Liberty, a goal which is mentioned earlier in the plan.

North Liberty has consistently encouraged and invested in various types of development since it began quickly growing in the early 2000s. In fact, most of the buildings and homes in North Liberty were built within the last 20 years. More recently, Liberty High School opened its doors in August 2017 on the southeast side of the city. Even before the school opened, new neighborhoods emerged during the beginning phases of construction. Another school, Grant Elementary, is scheduled to open in Fall 2019. Although many rural Iowa communities are declining in population, North Liberty continues to expand, creating significant opportunity for the community.

METHODOLOGY

The North Liberty Housing Needs Assessment uses quantitative and qualitative data to understand housing trends and inform recommendations for future housing actions in North Liberty. The methods used to create the report include analysis of demographic and housing data, an analysis of local planning documents and ordinances, interviews with local individuals and organizations with unique perspectives about housing and market conditions in North Liberty, a “windshield survey” to evaluate housing conditions, and best practices research. The research for this report was conducted between January and May of 2019.

Data

This report uses data from a variety of sources, including:

North Liberty Special 2015 Census - The City of North Liberty conducted a special census in 2015 to get an accurate count of the number of residents in the community. The last official U.S. census count in 2010 listed North Liberty’s population at 13,374, but city officials estimated that the number had grown significantly in the years following the census. The count was significant because the state distributes its Road Use Tax funds to cities based on population.

The mid-decade census provides robust demographic information that is used throughout the report. The final official count from the US Census indicated 18,299 people lived in North Liberty in 2015.

US Census / American Community Survey - Every year households across the country are contacted by the U.S. Census Bureau to participate in the American Community Survey or ACS. The information obtained from this sample is then used to estimate characteristics about the total population. However, these estimates include margins of error and differ from those that would be obtained in a Census, where every household in the nation is contacted.

The ACS 5-year estimates are based on data collected over 60 months and are available for geographic areas of all sizes down to the Census Tract and Block Group level. The most recent 5-year estimates from the ACS are for the 2013-2017 time period.

Multiple Listing Service - The Multiple Listing Service (MLS) real estate data provides information regarding the real estate market conditions including information related to the sale price, average square foot, number of units for sale, and the average number of days properties have been listed.

Local Data - City of North Liberty staff supplied maps and local data, including residential permit data that was useful for understanding construction trends over a 20 year period.

Comparison communities

Data from comparison communities is provided in order to gauge how North Liberty compares to communities with similar characteristics. Bettendorf, Iowa and Altoona, Iowa were identified as comparison communities due to similar median incomes and their proximity to larger metropolitan areas. North Liberty is part of the larger metropolitan area surrounding Iowa City, while Bettendorf and Altoona are near the larger cities of Davenport and Des Moines, respectively.

In order to understand how North Liberty characteristics compare to those in other communities within the Iowa City metropolitan area, the report also includes data from Coralville, Solon, Tiffin, and Johnson County.

Interviews

Numerous organizations were contacted in order to gather input from local service providers and stakeholders about the housing market and housing needs in North Liberty. The planning team interviewed individuals representing real estate agencies, business leaders, affordable housing service providers, and social service providers.

Windshield Survey

The planning team conducted a windshield survey to evaluate housing condition in North liberty. The model of the survey used originated from two sources: “Conducting A Housing Needs Assessments for Your Community: A Manual Provided by The Minnesota Housing Partnership” and “A Guide to Neighborhood Housing Assessment: A Student Workbook by the Housing and Community Development, Housing Studies Program from the University of Minnesota.” The Minnesota Housing Partnership Manual provided windshield survey techniques that aided in developing measurements used to evaluate residential areas and neighborhoods, while the ‘Guide to Neighborhood Housing Assessment’ provided guidance on criteria used to measure housing conditions of individual homes. A template of the windshield survey used for this evaluation can be found in the Appendix of this report.

Case Studies

The planning team researched housing initiatives and programs in other communities to inform recommendations for North Liberty. Three case studies show how other communities have addressed housing needs.

DEMOGRAPHIC ANALYSIS

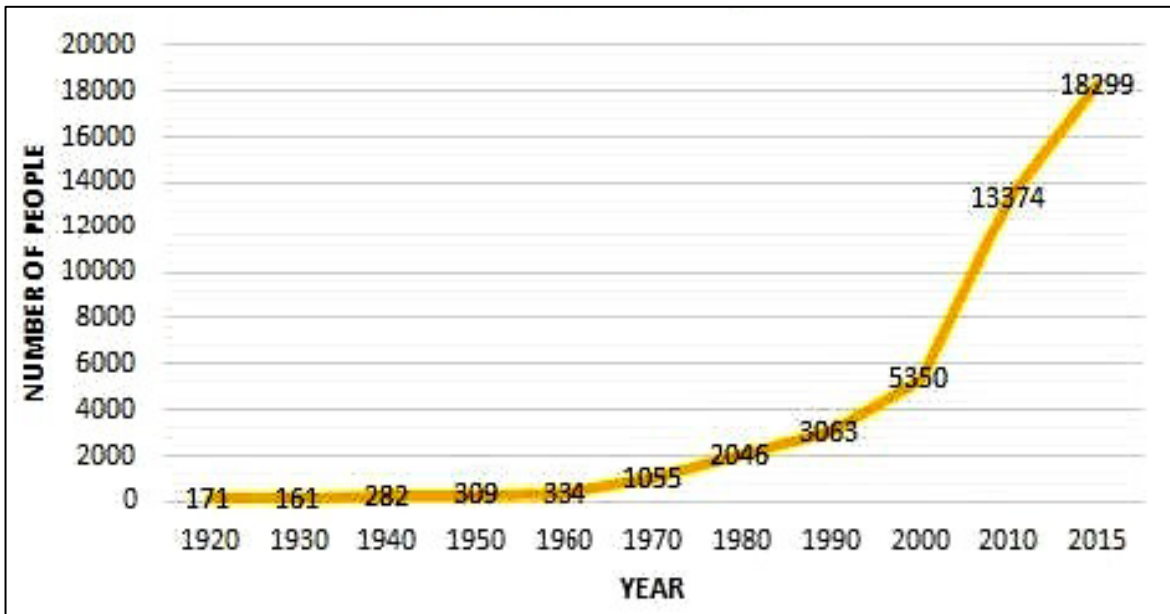
This section of the report examines factors related to the current and future demand for both owner- and renter-occupied housing in North Liberty. It includes an analysis of population and household trends, age distribution, household income, and education trends and characteristics in North Liberty. A review of these characteristics will provide insight into the demand for various types of housing in the North Liberty.

A brief economic profile and laborshed analysis can help to further illuminate some of the regional characteristics that affect the housing supply and demand in the area. This economic profile involves an examination employment, income, and poverty within North Liberty. A laborshed refers to the region in which an employment center draws its workers. This laborshed analysis will provide insight into the employment and commuting patterns within North Liberty and surrounding area.

Population Trends

Figure 3 shows the population change in North Liberty from 1920 to 2015. Significant population increases have occurred since 1960, with very rapid growth from 2000 to 2015. From 2000 to 2010, North Liberty added 8,007 residents, growing by nearly 60%. The following five year period, from 2010 to 2015, added another 5,832 (32.91%).

Figure 3: North Liberty Population, 1920-2015



Source: U.S. Census Bureau

Table 1 compares North Liberty’s populations growth to population changes in comparison cities, Johnson County as a whole, and the entire State of Iowa. As shown in the table, North Liberty has experienced a dramatic growth in total population since 2000. All other communities within Johnson County have experienced growth as well, with the most notable growth rates occurring in Tiffin and Solon. Bettendorf and Altoona have also grown in population since 2000, but at a lower rate than North Liberty.

Table 1: Population trends for North Liberty, surrounding cities, Johnson County, and Iowa, 2000, 2010, and 2017

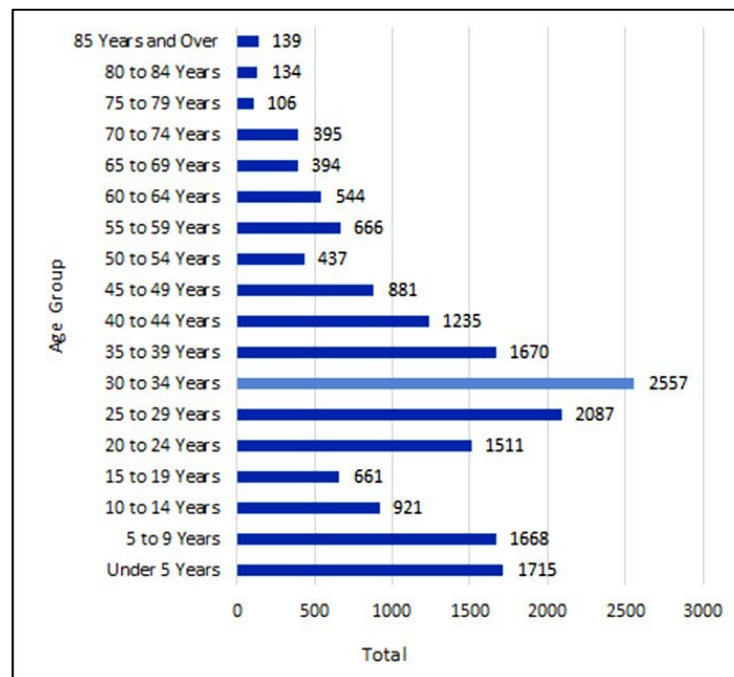
	2000	2010		2017	
	Population	Population	% Change	Population	% Change
North Liberty	5,367	13,374	59.9%	18,299*	26.9%
Altoona	10,345	14,541	28.9%	17,354	16.2%
Bettendorf	31,275	33,217	5.8%	35,293	5.9%
Iowa City	62,220	67,862	8.3%	73,415	7.6%
Coralville	15,123	18,907	20.0%	20,250	6.6%
Solon	1,177	2,037	42.2%	2,485	18.0%
Tiffin	975	1,947	49.9%	2,746	29.1%
Johnson County	111,006	130,882	15.2%	144,425	9.4%
Iowa	2,926,324	3,046,355	3.9%	3,118,102	2.3%

Source: U.S. Census Bureau 2000 and 2010, 2013-17 ACS

Age

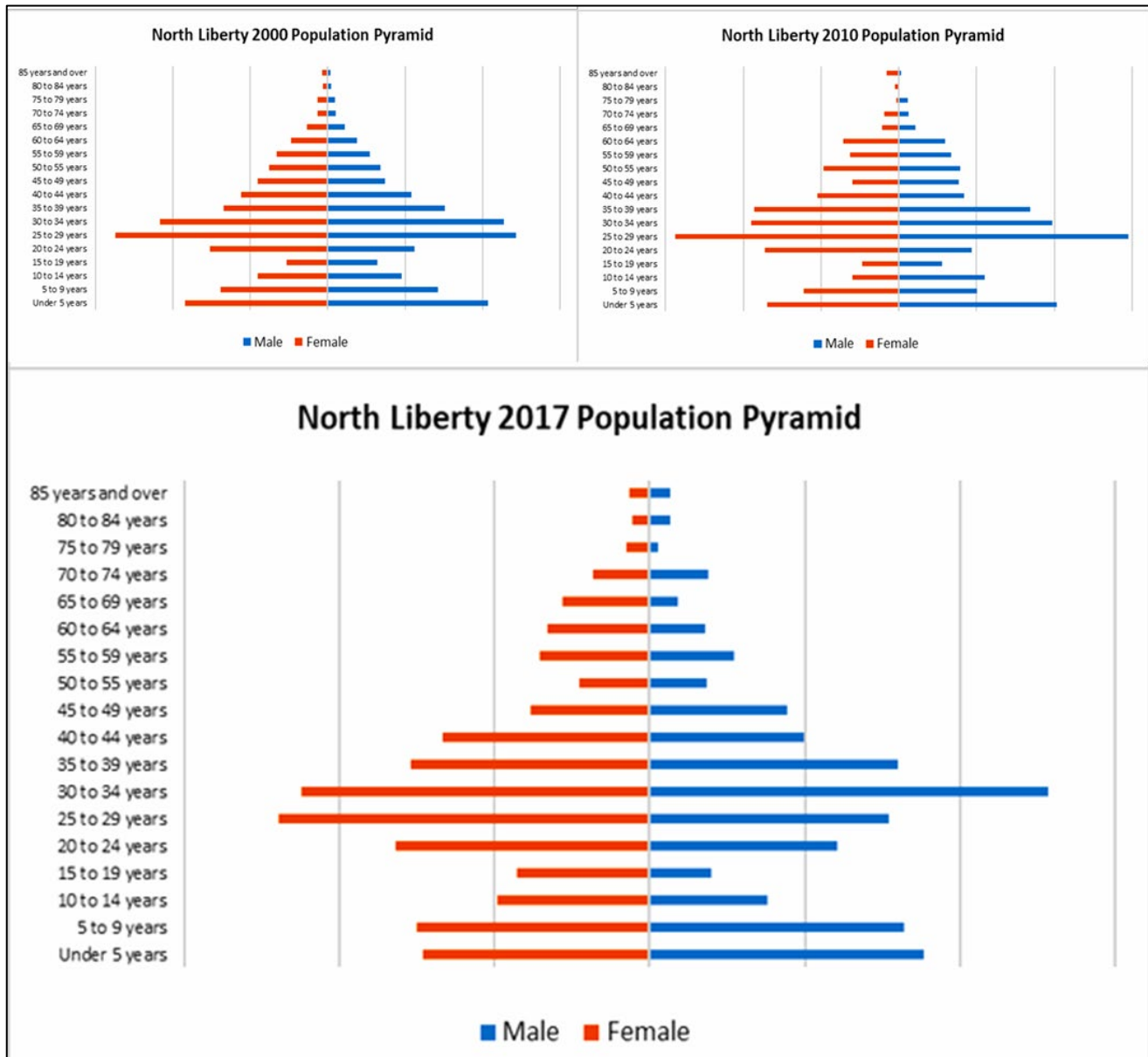
North Liberty is a relatively young community. According to the 2017 ACS estimates, the median age in North Liberty is 30.5 years, compared to 38.1 for the State of Iowa. Figure 4 shows North Liberty’s population by age group in 2017. The age group 30-34 is the largest proportion of the population with the second largest being 25-29 years of age. This is significant because these age groups tend to be when people start families or have children living at home.

Figure 4: North Liberty Population by age group in 2017



Source: U.S. Census Bureau ACS 2017

Figure 5: Population pyramids for 2000, 2010 and 2017



Source: U.S. Census Bureau ACS 2000, 2010, and 2017

Figure 5 shows North Liberty’s population pyramids for the years 2000, 2010, and 2017. The population pyramids provide a general overview of how North Liberty’s population has fluctuated since the year 2000, as well as the gender makeup of each age group. In each of the study periods, the largest age group was 25 to 29 years. Additionally, North Liberty’s population has predominately been below the age of 39 years. A notable component of these pyramids is the size of the younger age groups. Many communities in Iowa are experiencing aging populations, while North Liberty has continued to attract young families.

Table 2 shows populations for youth and senior age groups in North Liberty, comparison communities, and Johnson County for the year 2017. In North Liberty, about 66% of the population is with the 18-65 age range. Of the rest of the population, about 27% is under the age of 18 and only about 7% is aged 65 years or older. Of all the communities included in the comparison, North Liberty has the lowest proportion of older residents.

Table 2: Population by Age in North Liberty, comparison communities, and Johnson County, 2017

	North Liberty	Altoona	Bettendorf	Solon	Tiffin	Iowa City	Coralville	Johnson County
Person under 5 years	9.7%	7.5%	6.1%	7.8%	10.8%	5.0%	7.1%	6.0%
Person under 18 years	27.2%	28.1%	25.5%	32.6%	28.7%	15.9%	23.2%	20.2%
Persons 65 years and over	6.6%	11.6%	15.6%	12.4%	9.7%	9.1%	9.3%	11.2%

Source: U.S. Census Bureau American Fact Finder, 2017

Race & Ethnicity

Table 3 shows the proportions of groups by race in North Liberty, comparison cities, and Johnson County in 2017. North Liberty is a predominantly White community, which makes up about 89% of the population. This high percentage of White residents is common among cities in the State of Iowa, which is 90.57% White. Black and Asian are the next two largest racial groups, comprising 4.2% and 3.9% of the total population, respectively. Iowa City (79.4% White) and Coralville (74.5% White) are more racially diverse. The Hispanic population in North Liberty is 3.3%, which is the lowest of all the comparison cities included in the table.

Table 3: Race & Ethnicity in North Liberty, comparison cities, and Johnson County, 2017

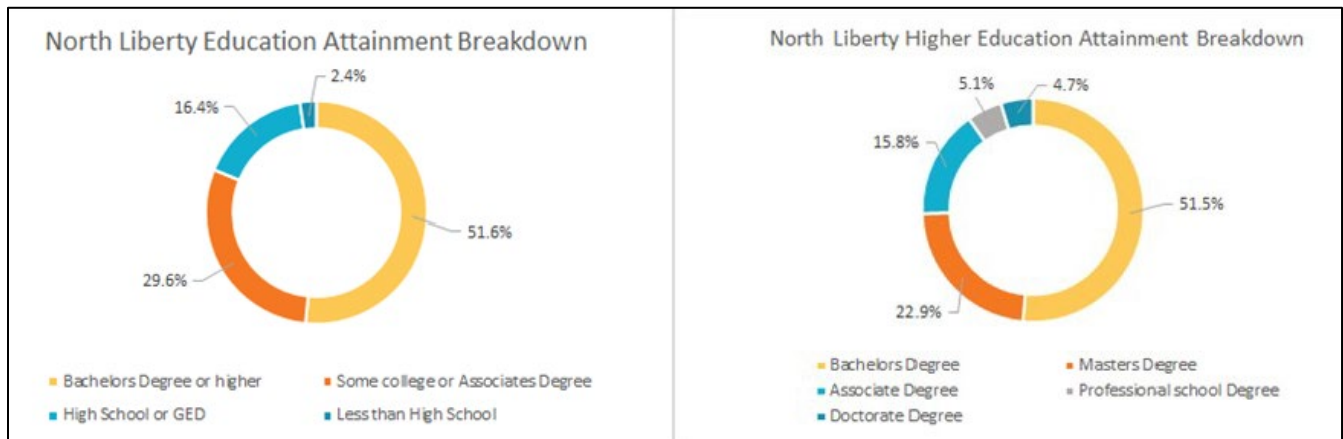
	North Liberty	Altoona	Bettendorf	Solon	Tiffin	Iowa City	Coralville	Johnson County
White Alone	88.9%	95.8%	88.7%	92.8%	85.9%	79.4%	74.5%	83.6%
Black alone	4.2%	1.2%	3.2%	0.0%	3.4%	7.3%	13.1%	7.0%
Asian alone	3.9%	1.0%	4.7%	0.0%	1.4%	7.9%	9.4%	6.6%
Other races alone	0.0%	0.8%	0.4%	0.0%	0.0%	0.5%	0.0%	0.4%
Two or more Races	2.6%	1.1%	1.9%	2.5%	4.6%	2.8%	1.2%	2.4%
Hispanic or Latino	3.3%	3.9%	4.1%	6.0%	8.2%	6.0%	5.9%	5.7%

Source: U.S. Census Bureau American Fact Finder, 2017

Educational Attainment

In 2017, LendEDU ranked North Liberty as the ninth “Most Educated City” in the country, and first in the Midwest.² Figure 6 shows educational attainment for North Liberty residents aged 25 or older in 2017. Approximately 81% North Liberty residents have attended some college or obtained an associate degree, 16.4% have a high school degree or GED, and only 2.4% have not earned a high school attainment. In terms of those who have higher education attainment level, 51.5% of North Liberty residents have a bachelor's degree, 22.9% have a master's degree, 15.8% have an associate degree, and 9.8% have a professional school degree or Doctorate degree.

Figure 6: North Liberty Educational Attainment, 2017



Source U.S. Census Bureau, ACS 2013-2017

As shown in Table 4, North Liberty has higher proportions of residents aged 25 or older with Bachelor’s degrees (51.6%) compared to the state of Iowa (27.7%) and the US (30.9%). Nearly 98% North Liberty residents ages 25 years or older have obtained at least a high school diploma. Like North Liberty, Iowa City and Coralville have a large proportion of residents with Bachelor’s degrees, largely due to the location of the University of Iowa within the metropolitan area.

Table 4: High School and College Attainment (Aged 25+) in North Liberty, comparison cities, Iowa, and the US, 2017

	North Liberty	Bettendorf	Altoona	Coralville	Iowa City	Iowa	United States
High school diploma or higher (%)	97.6%	97.0%	94.0%	96.5%	95.2%	91.8%	87.3%
Bachelor's degree or higher (%)	51.6%	49.6%	31.5%	54.9%	59.9%	27.7%	30.9%

Source U.S. Census Bureau, ACS 2013-2017

² LendEDU: Cities with Smartest Residents. <https://lendedu.com/blog/cities-smartest-residents/>

Employment

As North Liberty’s population continues to grow, employment within the city is also increasing. From 2015 to 2016, the number of employed in North Liberty grew by 12.8%, from 9,351 employees to 10,550 employees.

Table 5 shows the number of workers employed in North Liberty, comparison communities, as well as the most common job types in each community. Notably, the most common job groups in North Liberty are management, business, science & arts, while the most common jobs in for Iowa City and Coralville residents are in Health Care and Social Assistance.

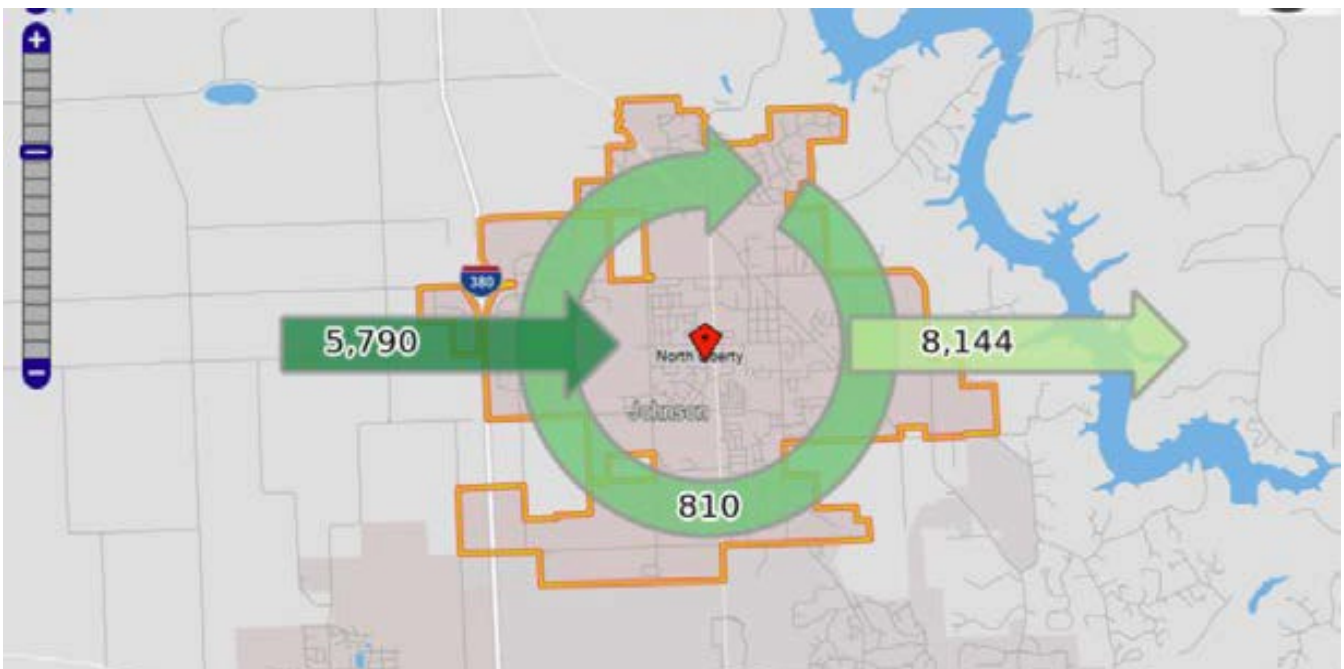
Table 5: Employment characteristics in North Liberty and comparison communities, Iowa, and the US

	North Liberty	Bettendorf	Altoona	Coralville	Iowa City
Number Employed (#)	10,550	17,544	9,397	10,969	92,945
Most Common Jobs	Management, Business, Science, Arts	Manufacturing	Health Care and Social Assistance	Health Care and Social Assistance	Health Care and Social Assistance

Source: Data USA, North Liberty, IA

Figure 7 shows employment inflow and outflow for North Liberty for 2015. A total of 6,600 individuals were employed in North Liberty. Of those 6,600, only 810 both lived and worked within North Liberty, which is about 12% of all workers in North Liberty, and about 9% of the total population (based on the 2015 population).

Figure 7: Employment inflow and outflow map, 2015



Source: OnTheMap data from 2015, Center for Economic Studies

Table 6 shows workers in different age groups, income levels, and industry class and whether they live in North Liberty. Of the 810 residents who lived within the city limits and worked in North Liberty, 225 (27.8%) were aged 29 or younger, 329 (53%) were aged 30 to 54, and 156 (19.2%) were 55 years or older. Out of the 810 residents working in North Liberty, 225 (27.8%) earned \$1,250 per month or less, 240 (29.6%) earned between \$1,251 to \$3,333 per month, and 345 (42.6%) earned more than \$3,333 per month. Additionally, 188 (23.2%) out of that 810 worked in the goods producing industry, another 188 (23.2%) worked in the trade, transportation, and utilities industry, and 434 (53.6%) worked in the all other services industry class.

The other 5,790 (87.7%) that worked within North Liberty commuted into the city for work. Of those who commuted into North Liberty for work, 1,374 (23.7%) were aged 29 or younger, 2,962 (51.2%) were aged 30 to 54 years old, and 1,454 (25.1%) were 55 years or older. Out of the 5,790 non-residents working in North Liberty, 1,146 (19.8%) earned \$1,250 per month or less, 1,551 (26.8%) earned between \$1,251 to \$3,333 per month, and 3,093 (53.4%) earned more than \$3,333 per month. Additionally, 926 (16%) out of that 5,790 worked in the goods producing industry class, 2,885 (49.8%) worked in the trade, transportation, and utilities industry, and 1,979 (34.2%) worked in the all other services industry.

Table 6: Workers by age, income, and industry class and employment location

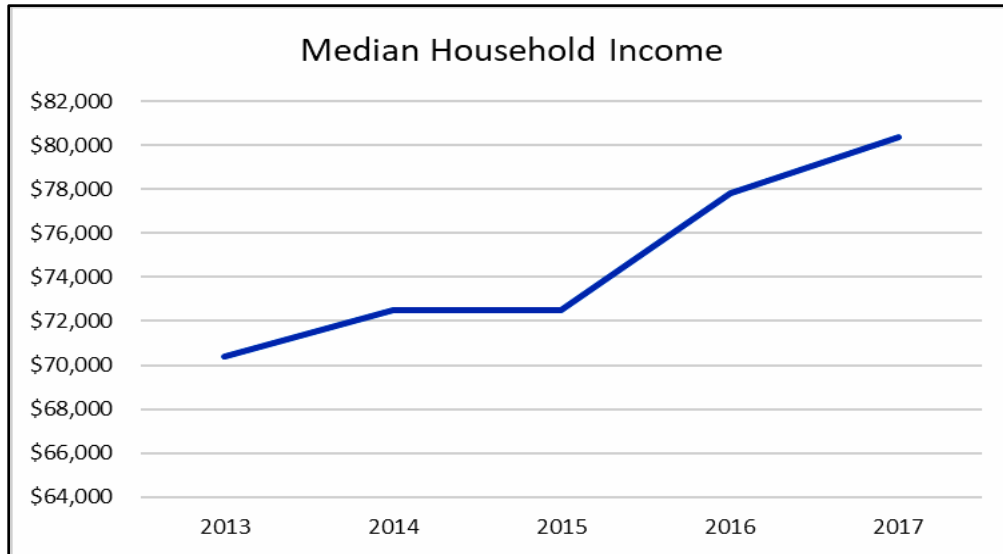
	Jobs in North Liberty Filled by Outside Workers		Jobs in North Liberty Filled by Residents	
Workers Aged 29 or Younger	1,374	23.73%	225	27.78%
Workers Aged 30 to 54	2,962	51.16%	429	52.96%
Workers Aged 55 or Older	1,454	25.11%	156	19.26%
Workers Earning \$1,250 per month or less	1,146	19.79%	225	27.78%
Workers Earning \$1,251 to \$3,333 per month	1,551	26.79%	240	29.63%
Workers Earning More than \$3,333 per month	3,093	53.42%	345	42.59%
Workers in the "Goods Producing" Industry Class	926	15.99%	188	23.21%
Workers in the "Trade, Transportation, and Utilities"	2,885	49.83%	188	23.21%
Workers in the "All Other Services" Industry Class	1,979	34.18%	434	53.58%
Total Workers	5,790	87.73%	810	12.27%

Source: U.S. Census Bureau 2015 On The Map application Center for Economic Studies

Income

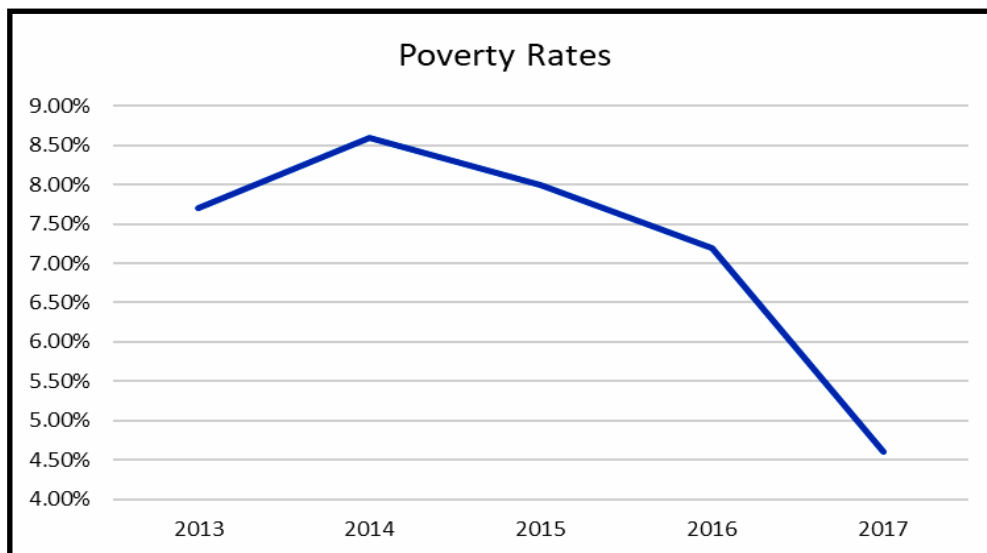
Figure 8 shows median household income in North Liberty between 2013 and 2017. Median household income rose each year during the time period, increasing from just over \$70,000 to more than \$80,000 in 2017. During the same time period, poverty rates in North Liberty have declined in recent years, as shown in Figure 9.³ From 2013 to 2016, poverty rates fluctuated between roughly 7% and 8.5%. Poverty rates decreased significantly from 2016 to 2017, dropping from 7.2% to 4.6%.

Figure 8: North Liberty Median Household Income, 2013-2017



Source US Census Bureau

Figure 9: North Liberty Poverty Rates, 2013-2017



Source: U.S. Census Bureau, American Fact Finder

³ Definitions and thresholds for poverty used in this report come from the US Census and can be found on their website: <https://www.census.gov/topics/income-poverty/poverty.html>

In 2017, 4.6% of North Liberty’s population lived below the poverty line, which, when factored into the special census population, equates to roughly 846 people. North Liberty’s poverty rate is well below the national average of 14.6% and the state average of 12.0%.

Table 7: Income characteristics in North Liberty and comparison communities, Iowa, and the US

	North Liberty	Bettendorf	Altoona	Coralville	Iowa City	Iowa	United States
Median Household Income (\$)	\$80,426	\$76,900	\$77,801	\$57,990	\$45,991	\$56,570	\$57,652
Poverty Rate (%)	4.6%	5.3%	6.1%	14.7%	28.0%	12.0%	14.6%

Source: American Community Survey 2013-2017

Households and Household Size

Table 8 shows the number of households in North Liberty, comparison cities, Johnson County, and Iowa. The number of households has also been rapidly increasing alongside the total population. From 2000 to 2010, North Liberty experienced a 143% increase in the number of households. Instead of using the latest American Community Survey data in 2017, the 2015 North Liberty Special Census was used for more accurate information. From 2010 to 2015 in North Liberty, there was an increase of households in the city by 32%. The only city studies that showed a similar percentage increase in the region was Tiffin, which increased 37% in number of households. North Liberty is also increasing in household numbers at a higher rate than Altoona and Bettendorf.

Table 8: Household data for North Liberty, similar cities, Johnson County, and State of Iowa for 2000, 2010, and 2017

	2000	2010		2017	
	# households	# households	% household change	# households	% household change
North Liberty	2,259	5,492	143%	7,228*	32%*
Coralville	6467	7,763	20%	7,882	2%
Iowa City	25,202	27,657	10%	29,967	8%
Solon	457	759	66%	882	16%
Tiffin	440	800	82%	1,093	37%
Bettendorf	12,474	13,681	7%	13,955	2%
Altoona	3,959	5,702	44%	6,242	9%
Johnson County	44,080	52,715	20%	57,423	9%
Iowa	1,149,276	1,221,576	6%	1,251,587	2%

Source: 2000 U.S. Census, 2010 U.S. Census, 2017 U.S. Census: ACS, *2015 Special Census

Average household size in North Liberty increased from 2.38 in 2000 to 2.58 in 2017. Comparatively, Johnson County’s average household size in 2017 was 2.37, and Iowa’s was 2.41. Table 9 shows the percentage of North Liberty households based on number of persons per household in 2010 and 2017. The table shows that North Liberty has seen an increase in the number of households that have four or more people and a decrease in the percentage of households with a single resident.

Table 9: North Liberty percentage of household size, 2010 and 2017

	2010	2017
1 person	31.00%	24.80%
2 persons	36.60%	33.10%
3 persons	14.20%	15.30%
4 + persons	18.20%	26.80%

Source: U.S. Census Bureau ACS 2010 and 2017

According to US Census data (ACS 2017), 2,102 of the 6,865 (30.6%) occupied housing units in North Liberty were renter-occupied (4,763 owner-occupied units, or 69.4%). The average household size of renter-occupied housing units in 2017 was 2.23 (as compared to 2.74 in owner-occupied housing units). The median rooms in all occupied housing units in North Liberty was 5.5 rooms per housing unit. Of the 6,865 occupied housing units, 6,667 (97.1%) units had 1.00 or less occupants or less per room, 161 (2.3%) had 1.00 to 1.50 occupants per room, and 37 (0.5%) had 1.51 or more occupants per room. The following chapter describes the general trends in North Liberty housing along with the current housing needs within the community.

HOUSING CHARACTERISTICS

This section of the report examines housing factors related to the current and future demand for both owner- and renter-occupied housing in North Liberty. It includes an analysis housing types, household tenure, housing conditions, and housing costs relative to incomes. A review of these characteristics provides insight into the demand for various types of housing and price points in North Liberty.

Mix of Housing Type

Table 10 shows the number of housing units in North Liberty, comparison cities, Johnson County, and Iowa, as well as the proportion of various housing types in each community. Of all the communities listed, North Liberty has the highest proportion of single-family attached units, also called duplexes.

The mix of housing types in Coralville is notably different than North Liberty. While North Liberty and Coralville both have nearly the same percentage of single-family detached units, North Liberty has about twice the proportion of duplexes compared to Coralville. Coralville, on the other hand, has more housing supply in the categories of structures that have 2 units, 3 or 4, 5 to 9 units, 10 to 19 units, and 20 or more units. In other words, Coralville has about the same percentage of single-family detached houses but has significantly more multifamily complexes than North Liberty.

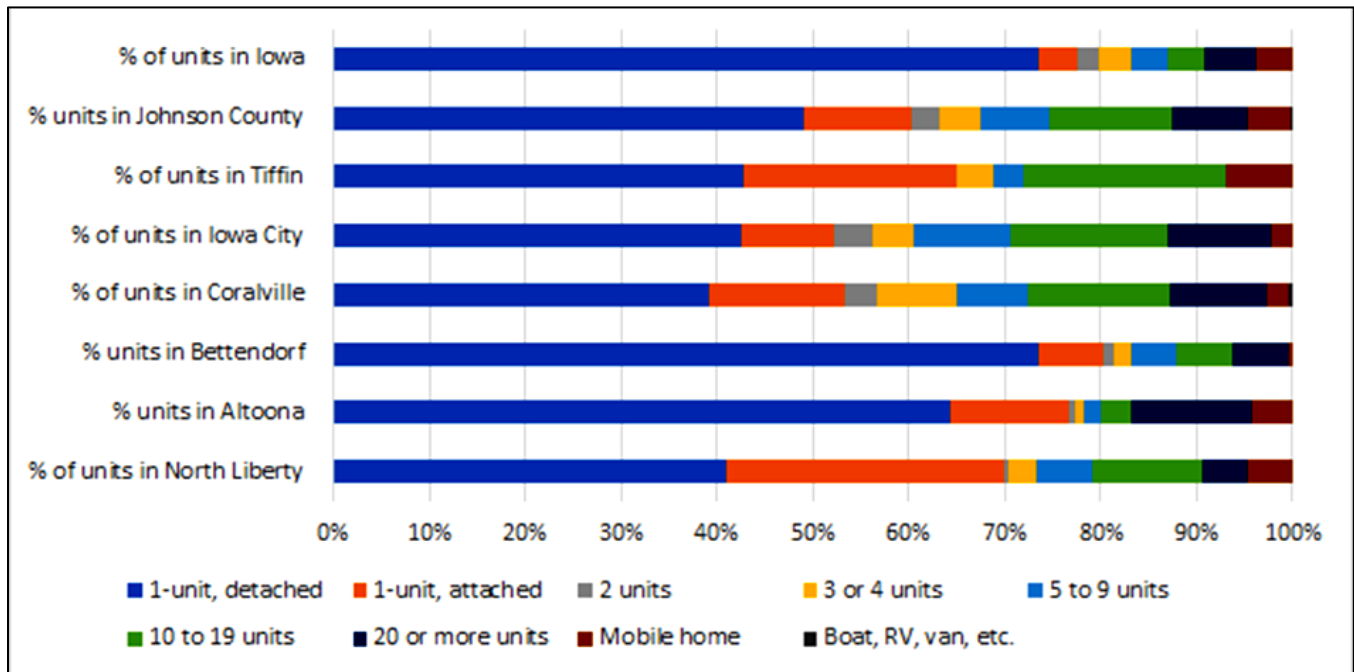
Table 10: Type of housing structures for North Liberty, surrounding cities, Johnson County and State of Iowa

	North Liberty	Altoona	Bettendorf	Coralville	Iowa City	Tiffin	Johnson County	Iowa
Total housing units	7,143 units	6,526 units	15,015 units	8,633 units	31,669 units	1,166 units	60,952 units	1.38M units
1-unit, detached	40.9%	65.0%	73.5%	39.1%	42.5%	42.7%	49.0%	73.5%
Duplexes	28.9%	12.5%	6.7%	14.3%	9.8%	22.2%	11.3%	3.9%
2 units	0.5%	0.8%	1.0%	3.3%	4.0%	0.0%	2.8%	2.3%
3 or 4 units	2.9%	0.9%	1.9%	8.4%	4.3%	3.9%	4.3%	3.4%
5 to 9 units	5.8%	1.7%	4.7%	7.4%	10.0%	3.0%	7.2%	3.7%
10 to 19 units	11.6%	3.3%	5.8%	14.7%	16.5%	21.2%	12.8%	3.9%
20 or more units	4.6%	12.5%	5.8%	10.2%	10.8%	0.0%	7.9%	5.5%
Mobile home	4.7%	4.4%	0.5%	2.3%	2.2%	6.9%	4.6%	3.7%
Boat, RV, van, etc.	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.1%	0.0%

Source: U.S. Bureau ACS 2017

Figure 10 provides a visual representation of housing types for North Liberty and comparison communities. About 41% of North Liberty’s housing is single-family detached while other communities such as Bettendorf and Solon have 73.5% and 60.1% of their housing unit stock as single family detached. Only Coralville has a smaller proportion of single-family detached housing units. North Liberty has, by far, the highest proportion of duplexes compared to the comparison communities. In terms of large multi-family structures, North Liberty has about 4.6% of its housing units in the 20 or more-unit complexes category. Comparatively, Altoona has 12.5% of its units, Coralville has 10.2% of its units, and Iowa City has 10.8% of units that are a part of the large multi-family structures. Tiffin does not have any structures with 20 more unites. In general, North Liberty has a smaller proportion of single-family detached housing than most communities, a much higher proportion of duplexes, and a smaller proportion of multi-family complexes with 20 units or more compared to the comparison communities.

Figure 10: Percentage of housing units for North Liberty, similar cities, Johnson County, and State of Iowa.

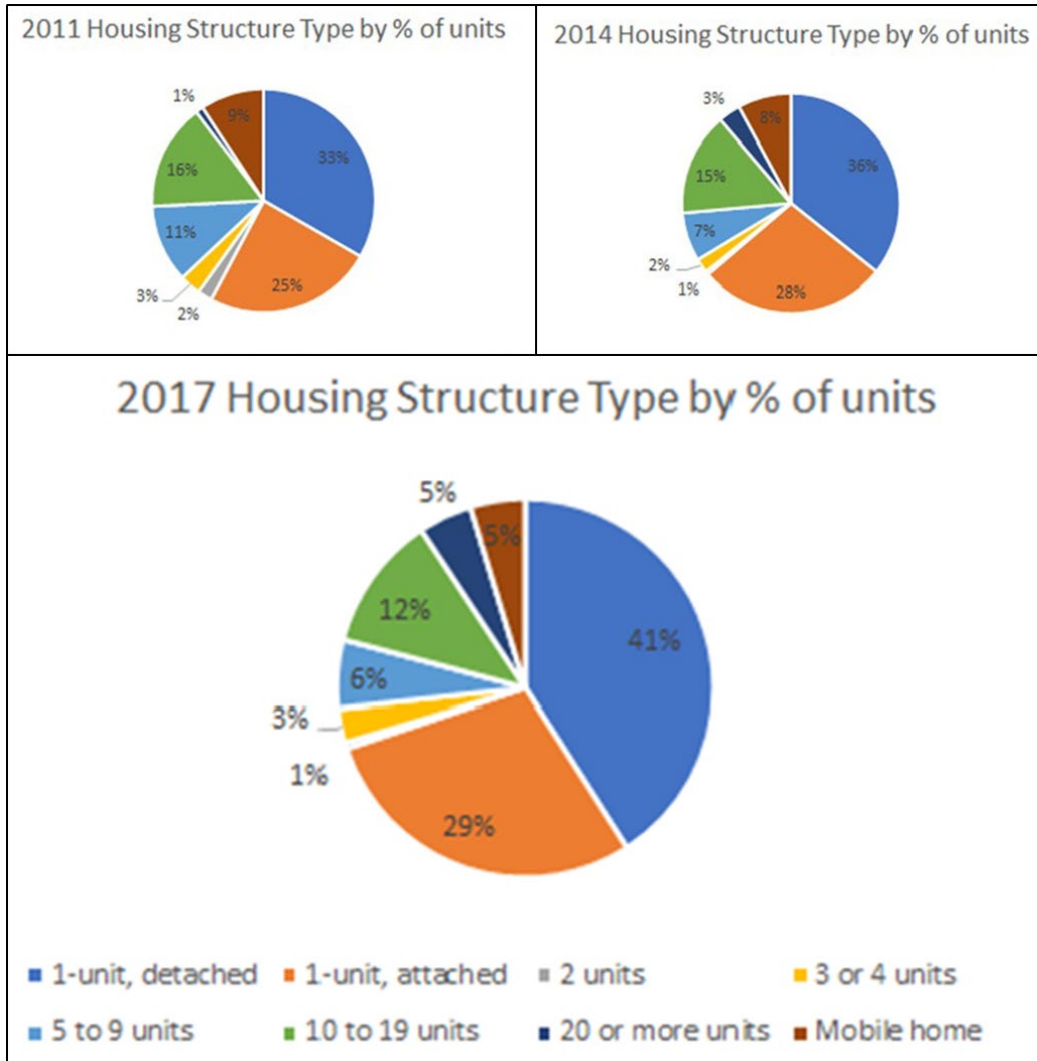


Source: U.S. Census Bureau ACS 2017

Figure 11 shows the proportion of housing structures by type in North Liberty for 2011, 2014, and 2017. Over time, single detached housing has become an increasingly larger percentage of the housing units in North Liberty. From 2011 to 2017, there has been an increase of 1,907 to 2,919 single family detached housing, or a 33.3% to 40.9% increase in the portion of housing units within the community that are under the single-family detached housing structure. There has also been an increase in the proportion of single-family attached housing from 24.5% of the total housing units to 28.9%. Furthermore, the proportion of structures that have more than one unit have been declining in North Liberty. In fact, according to the American Community Survey data, there has been a decline of units within structures that have 2 or more units from 1,887 units to 1,820 within the 2011 to 2017 time period. If mobile homes are included in that number, there would have been a total of 2,413 units under the multi-family or mobile home option in 2011 and only 2,157 units in 2017. This is a decline of 256 units that are in the category of multi-family housing of 2 or more units or in the mobile home category.

The pie charts in Figure 11 illustrate that the proportion of 1-unit, detached and 1-unit attached in 2017 make up a larger proportion of the housing unit stock relative to the other housing structures than they did in 2011. At the same time, the amount of 2 or more, 3 or 4, 5 to 9, and 10 to 19 units have been declining.

Figure 11: Proportion of North Liberty Housing Structure Types by # of Units, 2011, 2014, and 2017



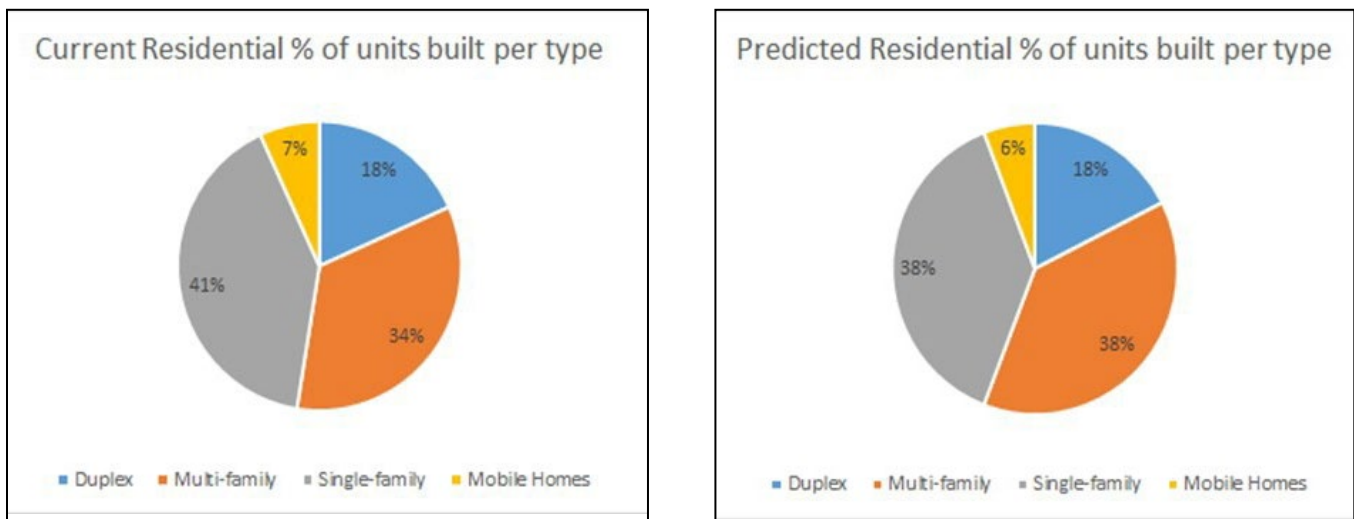
Source: U.S. Census Bureau ACS 2011, 2014, 2017

Based on data provided by the City of North Liberty, Table 1 shows the most up-to-date breakdown of duplex, single-family, multi-family, and mobile homes in terms of number of units and predicted unit build out. According to the city data, there are 1,422 duplexes, 2,657 multi-family, 3,153 single-family, and 531 mobile home units already built. A total of 180 duplex, 849 multi-family, 356 single-family, and 0 mobile home units are anticipated to be built in the future. Combining the two numbers, it is possible to get a predicted number of units for each category. There would be a total of 1,602 duplexes, 3,506 multi-family, 3,509 single-family, and 531 mobile homes units. Figure 12 provides a visual representation of the proportions of housing types currently and after the anticipated build out.

Table 11: Numbers of Housing Types

	Built Units	Additional Units	Predicted Unit Build Out
Duplex	1,422	180	1,602
Multi-family	2,657	849	3,506
Single-family	3,153	356	3,509
Mobile Homes	531	0	531
Total Units	7,763	1,385	9,148

Figure 12: Current and predicted residential units by percentage.



Source: City of North Liberty

Housing Conditions

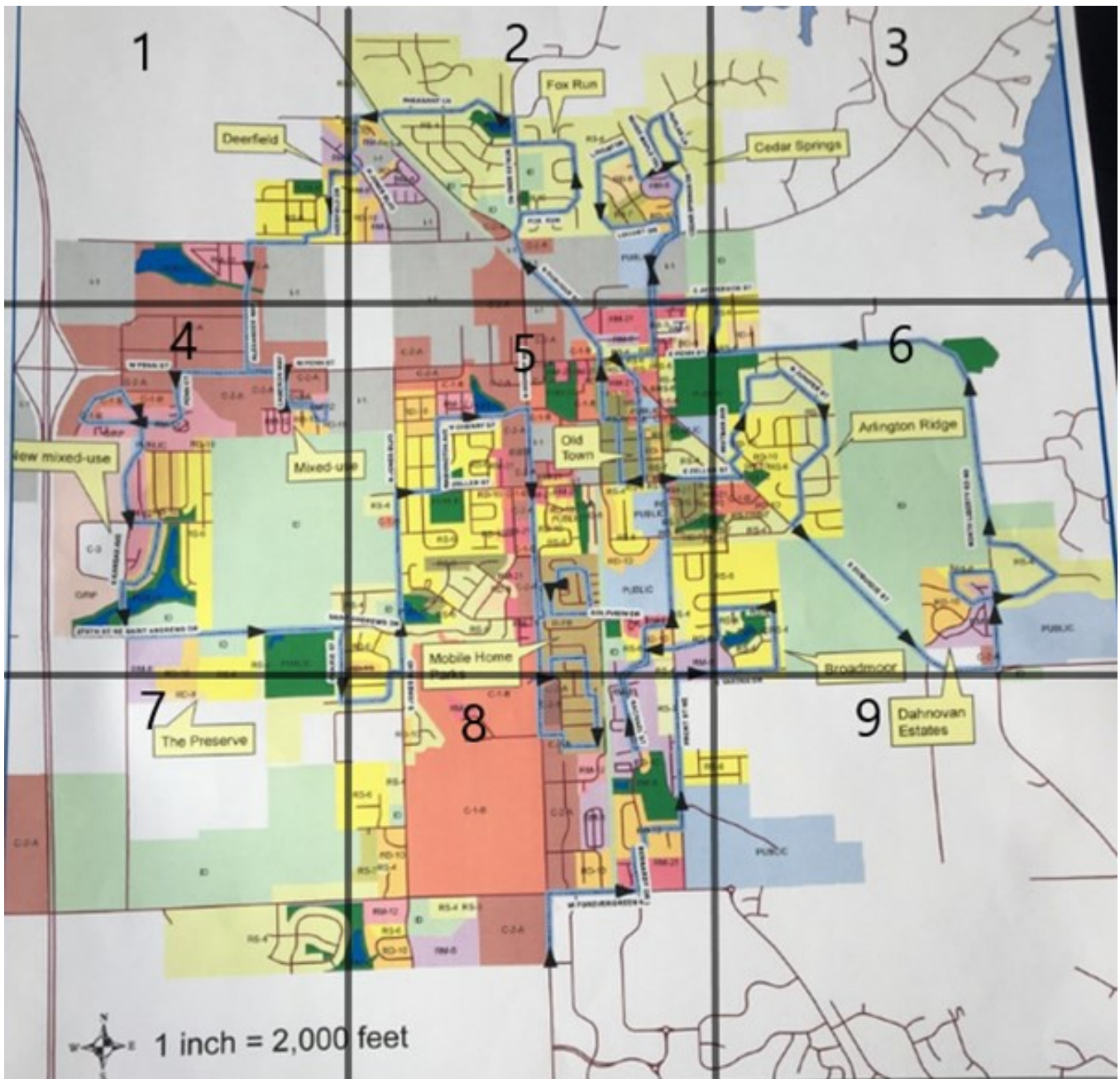
The project team conducted a housing conditions survey in North Liberty to learn about the city and to determine the overall quality of the housing stock, amenities, and accessibility. A housing conditions survey is a useful way to cultivate a general understanding of housing conditions within specific neighborhoods or residential areas. The housing conditions survey can reveal any extent of deterioration in the housing stock and can also expose whether good housing conditions or bad housing conditions are concentrated in specific areas within a city.

The model of the survey used originated from two sources: “Conducting A Housing Needs Assessments for Your Community: A Manual Provided by The Minnesota Housing Partnership” and “A Guide to Neighborhood Housing Assessment: A Student Workbook by the Housing and Community Development, Housing Studies Program from the University of Minnesota.” The Minnesota Housing Partnership Manual provided windshield survey techniques that aided in developing measurements used to evaluate residential areas and neighborhoods, while the ‘Guide to Neighborhood Housing Assessment’ provided guidance on criteria used to measure housing conditions of individual homes. A template of the windshield survey used for this evaluation can be found in the Appendix of this report.

To conduct the field survey, North Liberty was divided into nine quadrants and surveys were conducted through a mix of on-foot and drive-by observations. Data collection for this survey was completed via a street- by-street

basis, as well as a house-by-house basis. Residential areas were measured on a street-by-street basis first to assess the general characteristics of the neighborhood. Secondly, one house per street was considered in greater detail to evaluate the housing conditions. The project team rated exterior conditions of structures as excellent, good, average, poor, or deteriorated based on first-hand observations. To avoid bias, the selected sampled houses were chosen at random. Some quadrants contain neighborhoods that fall within that area, but not all residential areas fell within a distinguished 'neighborhood'.

Figure 13: Map of North Liberty neighborhoods divided into 9 quadrants.



Source: Dean Wheatley, Director of Planning in North Liberty

Observations

In quadrant 1, most houses outside are described as looking fairly new and in great to good condition with no major zoning violations present. There is a combination of single-family houses in the Deerfield neighborhood as well as a multifamily area with duplexes and townhomes near the southern portion of the quadrant.



1225 Deerfield



1005 Pheasant

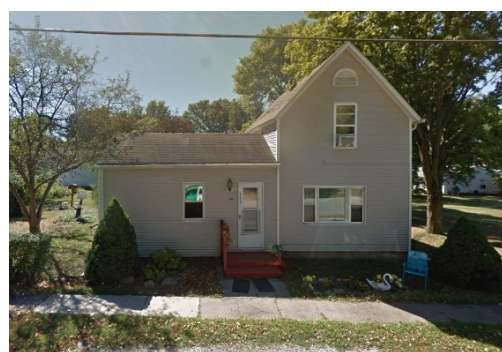
In quadrant 2, houses are described as typical suburban single-family homes with some variation in house styles and aesthetics. On a few of the streets in the Cedar Springs neighborhood, there is a mix of fourplexes and duplexes of varying stories that looked new and in good to great condition.

Quadrant 3 mostly contains land that is outside of the main city limits, therefore North Liberty does not have zoning identified in this area. As touched on, most homes that were evaluated in this quadrant were described by the planning team as being large and luxurious single-family custom-built homes in great condition.

In quadrant 4, mixed-use neighborhoods can be found here. This quadrant was described as having a variation of housing types including duplexes, town homes, triplexes, apartments, and single-family homes all in good condition. This area seems to have the most multifamily housing options available close together in space and some residences are in walking distance to a commercial business area.



400 Cambria Drive



115 Walnut St

Quadrant 5 is home to the Old Town and Mobile Home neighborhoods. In some areas of the quadrant, housing types are strictly single family, while others contain a mix of single family, duplexes, and apartments. Some small repair work and projects such as additions are visibly noticed on the homes. Housing conditions are primarily

described as good to fair/average and noted that the stock is older, but few hazards are found.

Quadrant 6 houses were mainly newer and of good to great condition. The Arlington Ridge and Broadmoor neighborhoods that take up most of this space are primarily single-family homes although small pockets of a block or two will feature duplexes and triplexes. There are some multifamily units towards the western boarder of the quadrant nearing Old Town, and the housing stock gets older towards the town's center. The Dahnovan Estates neighborhood is very new and not fully occupied, some construction is still taking place and vacant lots are still present.



545 Strathmoor Street



1640 Red Barn Street

In quadrant 7, this smaller area of development in the southeastern portion of the quadrant also seems very new. The area is described as having only single-family homes. There are similar house styles along the block with minor variations, all in great condition. This area is similar to neighborhoods in quadrant 2 and the newer development in present in quadrant 6.

In quadrant 8, homes throughout this area are described as in good condition. This area contains a fair portion of mobile home court residences along with a strong presence of duplexes and some multifamily apartment buildings. Some single-family homes are also available in this quadrant also. Based on the team's observations, the homes seem older in this quadrant but still well maintained. There are a few farm style homes along the main roads that run north and south.

Quadrant 9, similar to quadrant 3, falls within an area outside of the main city limits. A small residential area was evaluated and is described to be very new single-family homes in great condition. This observation seems to mirror what was noted in quadrant 7.



Mobile Homes in North Liberty

Table 12 shows the ratings of Quadrants and neighborhoods. Rating numbers indicate conditions according to the following parameters:

5. **Excellent:** No apparent problems.
4. **Good:** A structure recently built and meeting codes or which, if somewhat older, has had careful maintenance of both structure and grounds. No surface wear is apparent, and repairs are not needed.
3. **Average:** Minor deficiency. A sound structure but in need of surface maintenance and possibly showing small signs of wear. The structure is not as well maintained as the “good” category and the pavement or accessory building may need repairs. Minor maintenance needed.
2. **Poor:** Major deficiency. Significant surface wear is noticeable. The structure is slightly out of plumb with cracks, holes, or breaks evident in walls, foundation, and roof. Paint is blistered and windows, steps, etc. may need to be replaced. Major maintenance is needed.
1. **Deteriorated.** No rehabilitation feasibility. The structure is unsound and totally substandard. The foundation, roof, and bearing elements have substantial defects.

An evaluation of the rating results reveals that quadrants 2 and 6 received the highest average quality ratings of 4.9 and 4.5 (not counting 3 and 9) . The neighborhoods located in this quadrant include: Arlington Ridge in quadrant 6 with an average rating of 5, Dahnovan Estates in quadrant 6 with an average rating of 5, and Fox Run in quadrant 2 with an average rating of 4.6. This is aside from quadrants 3, 7, and 9 which are located on the outskirts of North Liberty and mainly feature new luxury custom built homes. The lowest quality rating quadrant was quadrant 4 with an average rating of 3.9 followed by quadrant 5 with an average rating of 4.1. The neighborhoods with the lowest quality ratings are Glenmore Place located in quadrant 4 and Old Town located in quadrant 5, each with an average quality rating of 3.5.

This survey is valuable for establishing a baseline of housing condition and to understand the housing types and housing quality throughout North Liberty.

Table 12: Ratings of quadrants and neighborhoods from quality survey

Quadrant	Average Rating	Neighborhood	Average Rating
1	4.3	Arlington Ridge (6)	5
2	4.9	Broadmoor (6)	4
3	5	Cedar Springs (2)	5
4	4.2	Dahnovan Estates (6)	5
5	3.9	Deerfield (1)	4
6	4.5	Fox Run (2)	4.8
7	5	Glenmore Place (4)	3.5
8	4.2	Melrose Terrace (4)	4
9	5	Mixed-Use (4)	4.7
		Mobile Homes (5)	3.4
		Old Town (5)	3.5
		Vicky Lee Condos (5)	4
		West Lake Park (4)	4

Source: Author

Housing Tenure

Housing tenure represents the number of owners and renters in a given housing market and can be useful in determining market successes and what type of housing might be needed in the community. While there is no established ideal ratio of owner-to-renter-housing, certain factors can contribute in deciding what the ideal ratio is for a specific community. For example, if a community contains or is reasonably located near a secondary educational institution, then a greater need for rental housing can be expected rather than owner-occupied housing. While the inclusion of certain factors can lead a community to an “ideal” ratio, it is up to the community’s discretion to decide what type of housing be made available.

Table 13: Owner and Renter Occupied Housing in North Liberty, comparison cities, Johnson County, and Iowa, 2017

	Renter-Occupied Housing			Owner-Occupied Housing		
	#	%	Difference to North Liberty	#	%	Difference to North Liberty
North Liberty	2,102	30.6%	-	4,763	69.4%	-
Altoona	1,657	26.5%	-4.1%	4,585	73.5%	+4.1%
Bettendorf	3,197	22.9%	-7.7%	10,758	77.1%	+7.7%
Coralville	3,641	46.2%	+15.6%	4,241	53.8%	-15.6%
Iowa City	15,520	52.3%	+21.7%	14,177	47.7%	-21.7%
Solon	257	29.1%	-1.5%	625	70.9%	+1.5%
Tiffin	398	36.4%	+5.8%	695	63.6%	-5.8%
Johnson County	23,391	40.7%	+10.1%	34,032	59.3%	-10.1%
Iowa	362,302	28.9%	-0.1%	889,825	71.1%	+0.7%

Source: U.S. Census Bureau ACS 2017

Table 13 shows the number and proportion of owner-occupied and renter-occupied housing in North Liberty and comparison communities in 2017. North Liberty’s owner/rental ratio has remained relatively consistent each year since 2010, with around 70% ownership and 30% rental. This ratio is very similar to the ratio for the entire state of Iowa, with a difference of only 0.7%. Johnson County, on the other hand, differs from North Liberty by a renter-occupied housing rate that is 10.1% higher than North Liberty. Iowa City and Coralville have higher proportions of renter-occupied housing as well, by 21.7% and 15.6% respectively. The table shows that, of the comparison communities, North Liberty has the lowest proportion of renter-occupied housing in Johnson County. Compared to Bettendorf and Altoona, however, North Liberty has a higher proportion of renter-occupied housing.

In order to fully understand the housing situation in North Liberty, it is essential to contextualize some of the demographic information that has been discussed already within this report. The three main points discussed that benefit from contextualization most are: dwelling structure, household size, and share of cost-burdened households.

Table 14 shows the breakdown of North Liberty housing types by housing tenure. Owner-occupied housing units tend to be single-family detached units or duplexes, at about 86%. Not surprisingly, renter-occupied units are mostly duplexes or structures with 5 or more units. Less than 6% of renter-occupied housing are single-family detached units.

Table 14: North Liberty Dwelling Structure by Tenure 2017

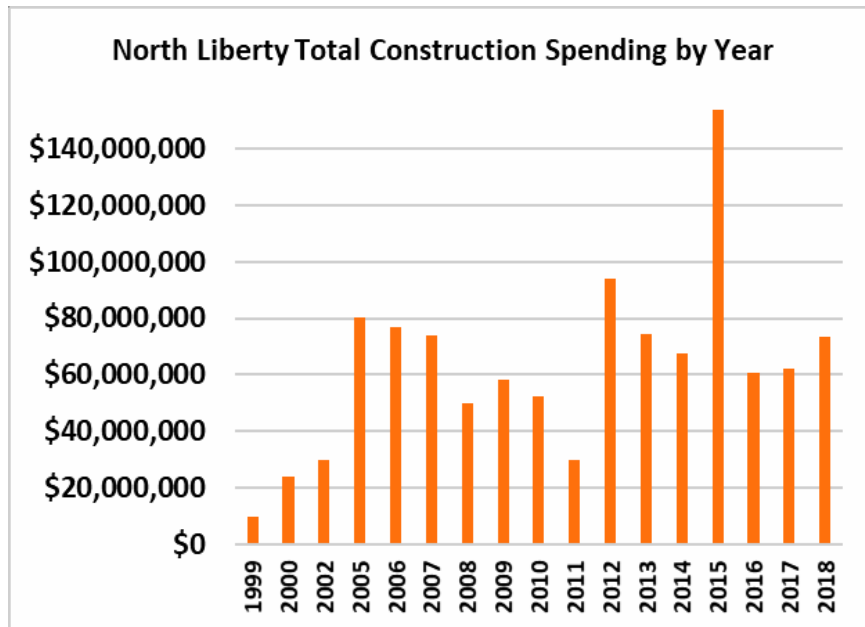
	Owner		Renter	
	Count	Percentage	Count	Percentage
1, detached	2,724	57.2%	122	5.8%
1, attached (duplex)	1,366	28.7%	632	30.1%
2 apartments	0	0.0%	39	1.9%
3 or 4 apartments	35	0.7%	69	3.3%
5 to 9 apartments	78	1.6%	339	16.1%
10 or more apartments	274	5.8%	850	40.4%
Mobile home, etc.	286	6.0%	51	2.4%

Source: U.S. Census Bureau ACS 2017

Permit Data and Construction Trends⁴

North Liberty is a growing city, indicated by the increase in construction spending over the last twenty years. Figure 14 shows the total annual construction spending from 1999 to 2018. Total construction spending in 1999 was \$9.9 million, while today it is more than seven times that amount, about \$73.5 million.

Figure 14: North Liberty construction spending 1999-2018.

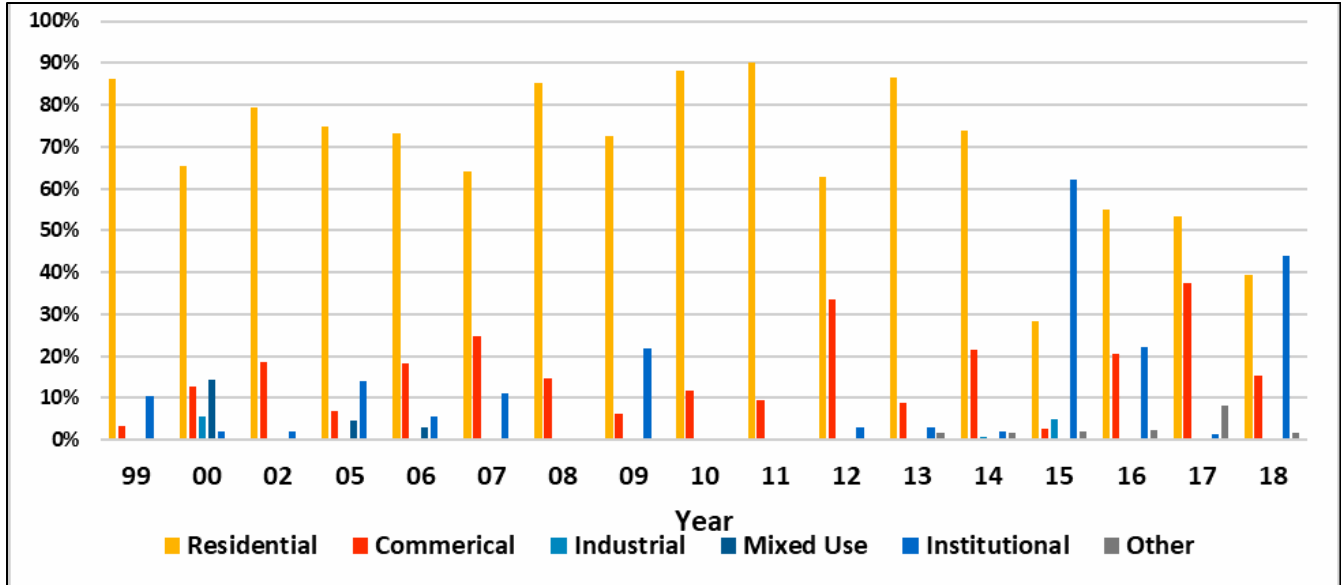


Source: City of North Liberty, permit documentation

⁴ Permit and construction data was provided by the City of North Liberty. Data includes the years 1999-2018, with the exception of 2001, 2003, and 2004 which was not obtained.

The growing number of residents has led to a boom in the housing market. Residential construction has predominantly been the largest percentage of total construction spending. However, in recent years the amount of school and institutional spending has outpaced residential development. Figure 15 shows the percentage of spending from each of the main categories of construction: Residential, Commercial, Industrial, Mixed Use, and Institutional. As the graph indicates, institutional spending was relatively high in 2015 and 2018. More detailed information about the number of permits, number of units, construction costs, and permit information is shown on Table 15.

Figure 15: Percent of total construction spending by use



Source: City of North Liberty, permit documentation

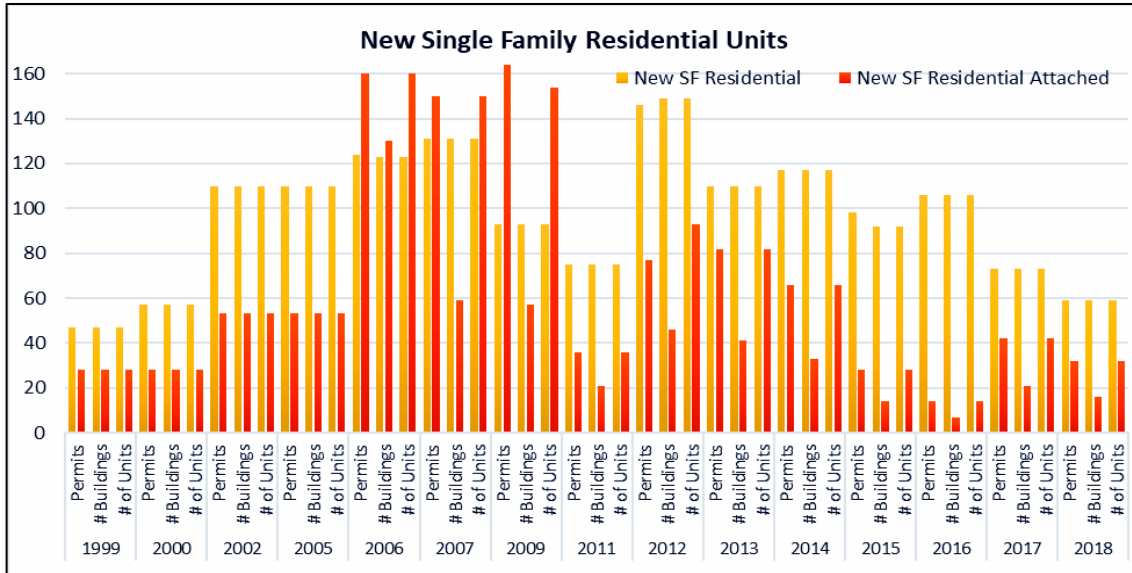
Table 15: North Liberty Residential Construction information for 1999-2018

	Permits	# Buildings	# of Units	Residential Construction Total	Permit Charges	% Charged for Permit	Total Construction	Residential % of Construction
1999	144	137	170	\$8,561,557	\$89,335.77	1.0%	\$9,949,500	86%
2000	146	143	239	\$15,603,424	\$151,206.57	1.0%	\$23,908,325	65%
2002	234	238	313	\$23,666,919	\$259,831.38	1.1%	\$29,862,259	79%
2005	234	238	313	\$59,945,165	\$520,462.73	0.9%	\$80,188,570	75%
2006	404	271	445	\$56,473,627	\$471,565.00	0.8%	\$77,010,026	73%
2007	387	194	325	\$47,363,158	\$422,909.03	0.9%	\$73,964,581	64%
2008	355	188	325	\$42,472,023	\$0.00	0.0%	\$49,806,991	85%
2009	360	151	259	\$42,365,078	\$459,668.68	1.1%	\$58,364,862	73%
2010	349	0	0	\$45,998,047	\$479,441.68	1.0%	\$52,200,046	88%
2011	296	128	190	\$26,980,264	\$283,005.32	1.0%	\$29,943,439	90%
2012	416	255	417	\$58,900,822	\$612,304.64	1.0%	\$93,875,608	63%
2013	300	160	272	\$64,715,816	\$512,277.01	0.8%	\$74,665,173	87%
2014	293	155	271	\$50,132,405	\$713,469.05	1.4%	\$67,797,787	74%
2015	211	107	245	\$43,744,409	\$430,125.70	1.0%	\$153,594,456	28%
2016	223	114	148	\$33,265,126	\$383,322.63	1.2%	\$60,529,356	55%
2017	256	104	150	\$33,208,421	\$399,322.01	1.2%	\$62,320,776	53%
2018	289	79	130	\$28,866,351	\$329,683.43	1.1%	\$73,575,124	39%

Source: City of North Liberty, permit documentation

Figure 16 shows the single family residential and single family residential attached (duplexes) permits. Single family attached homes were the most popular from 2006 to 2009 and have receded in popularity since. While new single family residential has increased since 1999, it is currently on the decline since 2014.

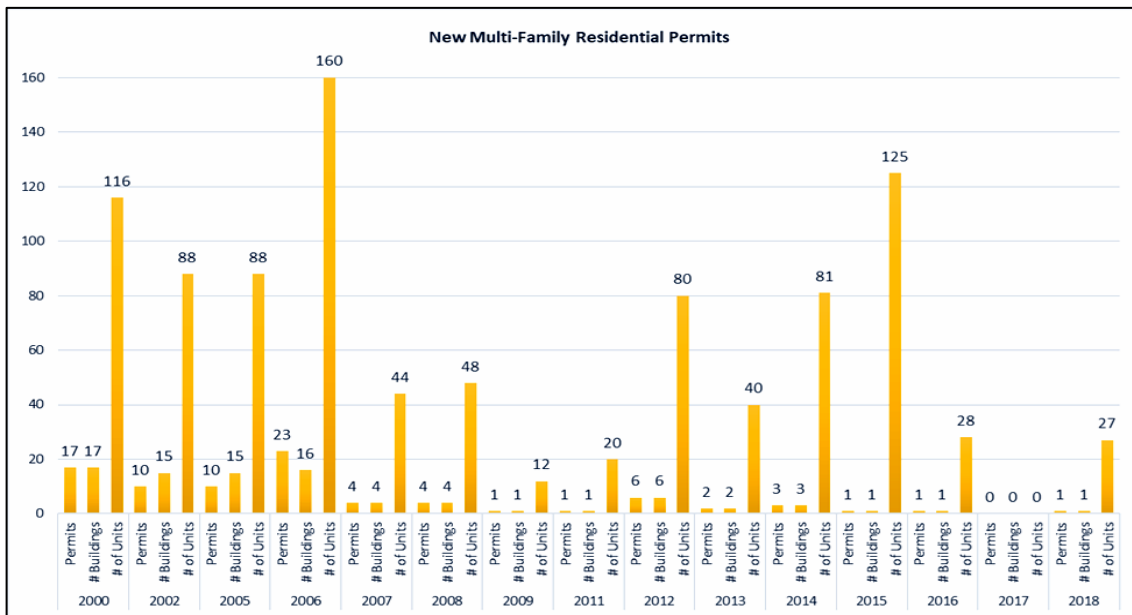
Figure 16: New single family residential units and attached units 1999-2018.



Source: City of North Liberty, permit documentation

Figure 17 shows new multi-family residential permits (excluding duplexes) from 2000 to 2018. From 2000 to 2006 more buildings were built with fewer units. These were typically 6-12 units per building. From 2007 to 2009 the number of units per building stayed at 11 to 12. From 2013 to 2018 the new multi-family units contained 20 units and up. The overall number of units added to the market by means of multi-family construction is on the decline; in 2017 there were no multi-family permits issued.

Figure 17: New multi-family residential number of permits, buildings and units for 2000-2018.



Source: City of North Liberty, permit documentation.

Table 16 shows the number of multi-family buildings (excluding duplexes) built each year over the last two decades, as well as the number of units per year and the average number of units per year. The years 2000, 2002, 2005, and 2006 were the most active in terms of new multi-family structures. More recently, since 2011, the number of new buildings has been relatively low, but the buildings have contained many more units. The average number of new units in multi-family buildings during the time period is about 62.

Table 16: Number of Units for Multifamily Buildings

	# Buildings	# of Units	Average Units Per Building
1999	3	36	12
2000	17	116	6.82
2002	15	88	5.87
2005	15	88	5.87
2006	16	160	10
2007	4	44	11
2008	4	48	12
2009	1	12	12
2011	1	20	20
2012	6	80	13.33
2013	2	40	20
2014	3	81	27
2015	1	125	125
2016	1	28	28
2017	0	0	0
2018	1	27	27
Annual Average	5.6	62.1	21.0

Source: City of North Liberty, permit documentation.

The City of North Liberty divides residential permits into two categories: new construction and alterations. New construction is the only category that can add dwelling units. In 2007 that distinction was made in the permit documentation; prior to that, tracking the number of dwelling units being added to the market was difficult. There are seven subcategories: new single family, new single family attached, new townhomes, new multi-family, residential alterations, residential additions, and manufactured homes/mobile homes. Continuing to track this data will help the City understand how well development is responding to demand for various types of housing.

Table 17 shows the building permit fee schedule for North Liberty, which can be found on the City’s website. Permit fees are important because they can indicate when a municipality is trying to incentivize development. Typically, permit fees are a percentage of the construction budget and sometimes a percentage of the total square footage. The incentive is directed towards higher-priced projects. The lower the dollar value, the higher the percentage that a developer will pay for the permit. For instance, projects valued at \$500 are charged a \$23.50 permit. This is 4.7% of the budget. A project valued at \$50,000 has a permit fee of \$643.75 which is 1.2% of the budget. A \$1 million-dollar project has a permit cost of \$5,608.75 which is .56% of the budget.

Table 17: Building Permit Fee Schedule for North Liberty

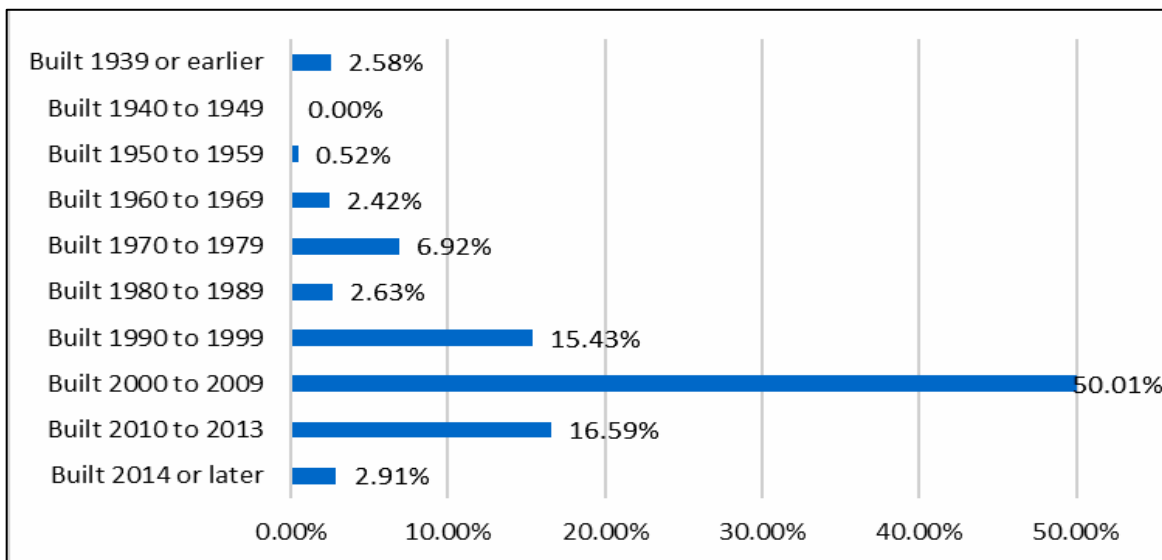
Total Valuation	Fee
\$1 to \$500	\$23.50
\$501 to \$2,000	
For the first \$500	\$23.50
Plus, for each additional \$100 or fraction thereof, to and including \$2,000	\$3.05
\$2,001 to \$25,000	
For the first \$2,000	\$69.25
Plus, for each additional \$1,000 or fraction thereof, to and including \$25,000	\$14.00
\$25,001 to \$50,000	
For the first \$25,000	\$391.25
Plus, for each additional \$1,000 or fraction thereof, to and including \$50,000	\$10.10
\$50,001.00 to \$100,000	
For the first \$50,000	\$643.75
Plus, for each additional \$1,000 or fraction thereof, to and including \$100,000	\$7.00
\$100,001 to \$500,000	
For the first \$100,000	\$993.75
Plus, for each additional \$1,000 or fraction thereof, to and including \$500,000	\$5.60
\$500,001 to \$1,000,000	
For the first \$500,000	\$3,233.75
Plus, for each additional \$1,000 or fraction thereof, to and including \$1,000,000	\$4.75
\$1,000,001 and over	
For the first \$1,000,000	\$5,608.75
Plus, for each additional \$1,000 or fraction thereof	\$3.65

Source: City of North Liberty Website, permit fee calculator

Housing Stock Age

Figure 18 shows the distribution of existing housing units by the decade they were built. North Liberty's housing stock was constructed between 2000 and 2009, which is more than half of the total housing stock. The housing stock within North Liberty is relatively new, particularly compared to the state of Iowa, where 26.1% of all housing units were built in 1939 or earlier. Though the conditions vary between different properties, many homes in North Liberty are aging and will need ongoing repair in the next 10 to 20 years. Without proper maintenance and care, the housing stock within a community could become unsafe, inadequate, or unattractive.

Figure 18: Percent of Housing Units Built by Decade 1939-2014



Source: U.S. Census Bureau, ACS 2013-2017

A significant amount of housing was constructed in North Liberty between 2000 and 2010. According to US Census data, approximately 3,086 homes were during the ten-year time period (a 56.49% increase from the 2000 number of housing units, 2,377 in total). Table 18 shows the change in housing stock for North Liberty and comparison communities. The only surrounding community with a similarly dramatic increase was Tiffin, a much smaller community, and 422 housing units were constructed in that same timeframe. From 2010 to 2017, North Liberty has experienced even more growth in terms of housing units within the community. That is, 1,680 housing units were constructed (a 23.52% increase) during this most recent timeframe. When comparing these growth rates to Johnson County and the entire state, North Liberty has experienced rapid growth. Johnson County's housing stock grew by 9,063 units (16.51%) from 2000 to 2010 and then by 6,058 units (9.94%) from 2010 to 2017. The housing stock available in the entire state of Iowa grew by 94,791 units (7.14%) from 2000 to 2010 and then by 48,831 units (3.55%) from 2010 to 2017.

Table 18: Change in Housing Stock for North Liberty, comparison cities, Johnson County and Iowa

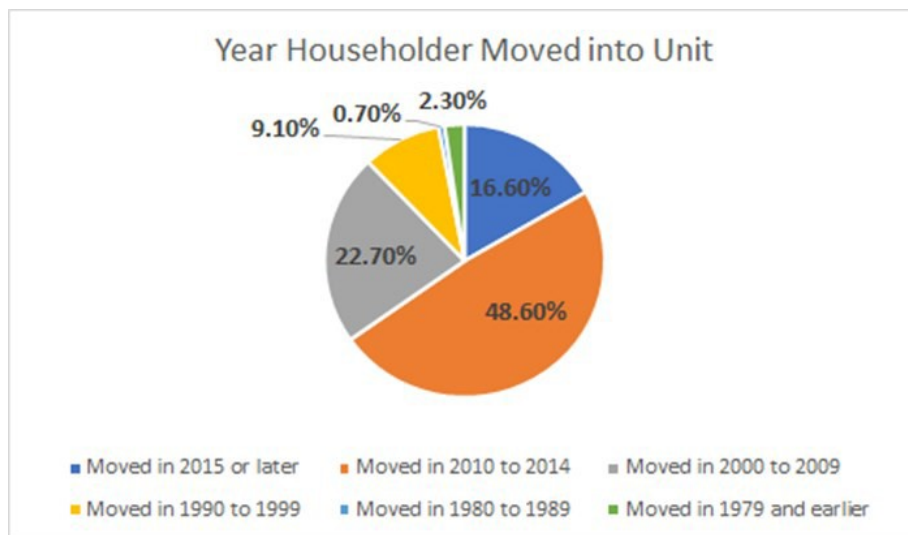
	2000 Census		2010 ACS		2017 ACS	
	Number of Housing Units	Percentage Change	Number of Housing Units	Percentage Change	Number of Housing Units	Percentage Change
North Liberty	2,377	-	5,463	56.49%	7,143	23.52%
Altoona	3,959	-	5,374	26.33%	6,526	17.65%
Bettendorf	13,044	-	13,840	5.75%	15,015	7.83%
Iowa City	26,083	-	28,913	9.79%	31,669	8.70%
Coralville	6,754	-	8,119	16.81%	8,633	5.95%
Solon	496	-	807	38.54%	938	13.97%
Tiffin	457	-	879	48.01%	1,166	24.61%
Johnson County	45,831	-	54,894	16.51%	60,952	9.94%
Iowa	1,232,511	-	1,327,302	7.14%	1,376,133	3.55%

Source: U.S. Census Bureau American Fact Finder, 2000 SF1, 2006-10 ACS, 2013-17 ACS

Moved-In Year

Figure 19 provides an overview of when North Liberty residents moved into their homes. Between 2010 and 2014, North Liberty experienced a significant influx of residents, as 3,334 householders (48.6%) moved into their respective units during this time. Between 2000 and 2009, 1,557 householders (22.7%) moved into their housing unit in North Liberty. In 2015 or afterwards, 1,142 householders (16.6%) moved into their units. Between 1990 and 1999, 627 householders (9.1%) moved into their units, while 156 householders moved into their units in 1979 and earlier. Finally, only 49 householders (0.7%) moved into their units between 1980 and 1989.

Figure 19: Percentage of year the householder moved into unit.



Source: U.S. Census Bureau ACS 2013-2017

Vacancy Rates

As shown in Table 19, vacancy rates in North Liberty are relatively low when comparing the rates to all other comparison communities, including Johnson County and the state of Iowa. The steady decline in vacancy from 2000 to 2017 indicates that North Liberty housing is in high demand. Vacancy rates in the state of Iowa have grown in that same timeframe, while in other communities the vacancy rate increased from 2000 to 2010 but then decreased from 2010 to 2017.

Table 19: Change in Vacancy Rates of North Liberty, comparison cities, Johnson County, and Iowa, 2000, 2010, and 2017

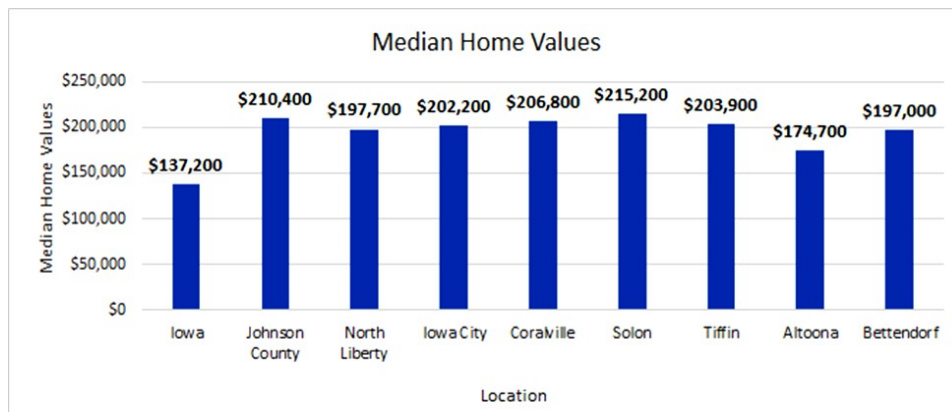
	2000 Census	2010 ACS	2017 ACS
	Vacancy Rate	Vacancy Rate	Vacancy Rate
North Liberty	4.96%	4.37%	3.89%
Altoona	2.75%	2.40%	4.35%
Bettendorf	4.37%	3.69%	7.06%
Iowa City	3.38%	6.81%	6.23%
Coralville	4.25%	9.83%	8.70%
Solon	7.86%	5.08%	5.97%
Tiffin	3.72%	7.62%	6.26%
Johnson County	3.82%	7.12%	5.79%
Iowa	6.75%	8.39%	9.05%

Source: U.S. Census Bureau American Fact Finder, 2000 SF1 poverty, 2006-10 ACS, 2013-17 ACS

Housing Values

Figure 20 shows the median home value in each respective community within Johnson County as well as the comparison cities of Altoona and Bettendorf. It also compares North Liberty's median home value to Johnson County and the entire state of Iowa. The Johnson County home value (\$210,400) is significantly higher than the entire state's median value (\$137,200). When comparing North Liberty to other Johnson County communities in 2017, it ranks at the bottom of the list when it comes to median home values (\$197,700). Bettendorf falls just \$700 below the median North Liberty home value, while Altoona's median home value in 2017 was \$23,000 less (\$174,700).

Figure 20: Median Home Values by location.



Source: U.S. Census Bureau ACS 2013-2017

The Multiple Listing Service (MLS) real estate data provides information regarding the real estate market conditions including information related to the sale price, average square foot, number of units for sale, and the average number of days properties have been listed. In the following analysis, data from the month of March each year was used to get a sense of the market within North Liberty and avoid variation that is caused by seasonal adjustments to the market. By using the same month, the data can better show changes from year to year.

Table 20: Median Sold Prices in North Liberty for the Month of March, 2014-2019

	Mar. 2014	Mar. 2015	Mar. 2016	Mar. 2017	Mar. 2018	Mar. 2019	Mar. Average Median
Single Family Homes Under 250k	\$212,000	\$160,000	\$228,000	\$204,000	\$236,000	\$196,000	\$206,000
Single Family Homes Above 250k	\$332,000	\$351,000	\$302,000	\$340,000	\$410,000	\$330,000	\$344,167
Condos	\$129,000	\$130,000	\$130,000	\$141,000	\$170,000	\$127,000	\$137,833
Zero Lot	\$189,000	\$193,000	\$180,000	\$179,000	\$217,000	\$240,000	\$199,667
All single family	\$309,000	\$285,000	\$280,000	\$317,000	\$381,000	\$267,000	\$306,500

Source: Multiple Listing Service

Table 21 shows the average price per square foot for different housing unit types and price points. Single family homes above \$250k have the highest square foot price compared to other types of units. Interestingly, the different unit square foot prices only range from \$100 per square foot for condominiums compared to \$134.20 for single family home units above the \$250k sale price. Using this data, average square footage per housing type and price point can also be calculated. Condominiums have an estimated average of 1,378.33 square feet for each unit, while single family homes above 250k have an estimate of 2,565.16 square feet. While the average price per square foot is different by about \$34 between the two different types of units, the square foot estimates, or size of the actual units, are vastly different between the categories.

Table 21: Average Sold Price Square Footage in North Liberty for the Month of March, 2014-2019

	Mar. 2014	Mar. 2015	Mar. 2016	Mar. 2017	Mar. 2018	Mar. 2019	Average
Single Family Homes Under 250k	\$99	\$109	\$116	\$113	\$133	\$123	\$115
Single Family Homes Above 250k	\$131	\$128	\$134	\$122	\$153	\$137	\$134
Condos	\$95	\$96	\$99	\$101	\$103	\$106	\$100
Zero Lot	102	104	100	102	113	116	106
All single family	121	123	130	121	151	134	130

Source: Multiple Listing Service

For-Sale Housing Trends

Table 22 shows that number of units for sale during the month of March from 2014 to 2019. This data provides information about the availability of for-sale housing in North Liberty for different housing types and price points. The category with the highest average number of units available for sale are single family homes above \$250k, at 95 units for sale. Comparatively, there was only an average of 18 single family homes under \$250K for sale during the month of March. There were 47 units, on average, for the zero-lot type housing and 35, on average, for condominiums for sale. Generally, there is a higher number of units for sale at the higher price range.

Table 22: Number of Units for Sale during the month of March, 2014-2019

	Mar. 2014	Mar. 2015	Mar. 2016	Mar. 2017	Mar. 2018	Mar. 2019	Average
Single Family Under 250k	34	24	31	17	11	11	18
Single Family Above 250k	81	115	110	95	92	74	95
Condos	29	35	36	24	40	48	35
Zero Lot	57	43	39	48	36	59	47

Source: Multiple Listing Service

Table 23 shows the average number of days a unit is on the market for housing units for sale during the month of March. This data helps illustrate demand- fewer days on the market suggests more demand. The average number days that condominium units are on the market is 50 days, for zero lots it is 67 days, single-family units under \$250k is 75 days, and single-family homes above \$250k is 97 days. The higher end homes stay on the market for longer periods of time compared to other housing units that might be cheaper to buy. The amount of time single family homes are on the market has been generally increasing since 2014, while the amount of time condos and zero lot homes have been on the market has been generally decreasing.

Table 23: Average Number of Days a Unit is on the Market 2014-2019

	Mar. 2014	Mar. 2015	Mar. 2016	Mar. 2017	Mar. 2018	Mar. 2019	Average
Single Family Under 250k	57	60	76	86	89	82	75
Single Family Above 250k	89	94	94	97	102	107	97
Condos	65	65	50	48	35	38	50
Zero Lot	97	62	71	81	36	59	67

Source: Multiple Listing Service

Rental Housing Availability and Costs

Rental housing trends are essential to understanding housing mix in a community. In North Liberty, 30.6% (2,102 out of 6,865) of all occupied housing were renter-occupied in 2017. In 2010, 28.8% (1,506 out of 5,224) occupied housing units in the community were renter-occupied. Looking back to the year 2000, 29.4% (664 out of 2,259) occupied housing units were renter-occupied. Even as North Liberty has grown, the availability of rental units in North Liberty has remained relatively consistent over nearly two decades.

Figure 21 shows the average gross monthly rents asked in North Liberty and comparison communities for 2017. By a significant margin, North Liberty had the highest median gross rent, at \$1,119 per month. The next highest, Tiffin, is \$150 lower at an average of \$964 per month. Solon is the only comparison community with average monthly rent below the state wide median of \$740. Additionally, Altoona and Bettendorf average monthly rents are well below North Liberty's median gross rent in 2017, at \$845 and \$930 per month, respectively.

Figure 21: Median Gross Monthly Rent of North Liberty, comparison cities, Johnson County, and State of Iowa, 2017



Source: U.S. Census Bureau ACS 2013-2017

Table 24 shows the number of household paying rent at various price points. About 678% of renter-occupied households pay more than \$1,000 per month for housing. For reference, a rental price of \$1,250 per month requires a household income of at least \$50,000. This number is calculated based households paying 30% of their gross household income on housing costs (\$1,250 monthly rent, or \$15,000 annually, is 30% of \$50,000).

Table 24: Distribution of Rental prices

Gross Rent	Households Paying Rent	Percentage of Households Paying Rent
Less than \$499	27	1.33%
\$500 to \$599	111	5.48%
\$600 to \$699	143	7.07%
\$700 to \$799	48	2.37%
\$800 to \$899	175	8.65%
\$900 to \$999	164	8.10%
\$1,000 to \$1,249	720	35.57%
\$1,250 to \$1,499	290	14.33%
\$1,500 to \$1,999	346	17.09%
No Cash Rent	78	3.85%

Source: U.S. Census Bureau ACS 2013-17

ZONING CODES OF ORDINANCE

This section describes aspects of the Codes of Ordinance which are associated with housing and zoning for housing within North Liberty. This section will refer to each chapter by its name or number and the reader can find the specific subsection within those chapters for future research.

Residential Zones

North Liberty has several single-family lot size zones, including:, two different types of two-unit residence zones, five different multi-unit zones, and a residential factory-built housing park district that are available.

The single-family zoning ranges from a 4,500 square feet minimum area lot size to a 15,000 square feet area lot size. Added on to the minimum lot size requirement, there are frontage and width regulations regarding the lot itself. Additionally, there are yard requirements regarding depth and width. The minimum lot size requirements restrict development in a way that encourages a lower density of housing. For example, in a RS-3 zoning, only single-dwelling unit building can be built on the space of a 15,000 square-foot area of land. Furthermore, the yard requirements restrict development in a way that only allows development to occur 20 to 25 feet away from the front of the property and 5 to 10 feet away from the side of the property. The same type of regulations applies to both the Two-Unit Residence Districts and Multi-Unit Residence Districts referenced below. For duplexes, a developer must have at least 10,000 square feet total for the lot size with 5,000 reserved for each dwelling unit. Furthermore, multi-unit residence districts have regulations on density from 4 units per acre to 21 units per acre. There is a minimum lot size of 21,780 square feet for any lot size using the multi-unit residence district zoning. Each residential zone is described below.

Chapter 145 Manufactured and Mobile Homes

The North Liberty Zoning Code defines manufactured and mobile homes as well as establishes the definitions for manufactured home communities and mobile home parks. According to the codes a manufactured home or mobile home that is not stationed within either of their respective communities must be converted into “real property” and must be placed on a permanent foundation and will be subject to real estate taxes unless it is part of a retailer’s stock or has been considered real property since January 1, 1995.

168.01 ID Zone – Interim Development District

The Interim Development District is intended to act as a buffer between agriculture and higher-intensity uses, think of this as the buffer zone. This zone permits for most agricultural functions as well as low-intensity development such as schools, places of worship, golf courses, country clubs, and single-unit housing. Minimum lot sizes for the main three functions are 1 acre for single-family dwellings and family homes; 3 acres for public buildings, places of worship, school, community buildings, and country clubs; and 5 acres for all other buildings and/or livestock.

168.01 RS Zones – Single-Unit Residence Districts

This section deals with all single-unit residential densities and which includes four densities, RS-3, RS-4, RS-6, RS-7, RS-8, RS-9, and RS-O. All RS districts allow for public parks, places of worship, schools, recreational facilities, and libraries. They have established that no new RS-8 districts should be established, and that RS-O should only be assigned to neighborhoods that it would not change the essential character of. Nearly all zones limit commercial to home occupations, and there is a note that it is preferred to buffer the RS-3 and RS -4 zones from more intense-use areas with RS-6 and RS-7 districts. Many of the same uses as in the ID zones are permitted, aside from agricultural uses, lot size requirements for single-dwelling unit buildings/family homes range from 15,000ft² in RS-3 to 4,500ft² in RS-9.

Table 25: Single Unit Residence Zoning Districts (Single-family)

Zone	Minimum Lot Size (sq. ft.)	Frontage (ft.)	Width	Front Yard Depth (ft.)	Each Side Yard Width (ft.)	Rear Yard Depth (ft.)
RS-3	15,000	50	100	25	10	30
RS-4	10,000	40	80	25	10	30
RS-6	7,000	35	70	25	8	30
RS-7	6,000	35	60	20	5	25
RS-8	5,000	35	60	20	5	25
RS-9	4,500	35	40	25	5	25

Source: City of North Liberty Zoning Code

168.01 RD Zones – Two-Unit Residence Districts

This section deals with the two-unit residence districts which include two-apartment buildings and duplex units. There are two zoning districts RD-8 and RD-10 and aside from them dealing with two-unit dwellings fall under similar use allowances as the RS districts. The minimum lot size is 10,000ft² with 5,000 ft² per unit for RD-8 and 9,000 ft² with 4,500 ft² per unit for RD-10.

Table 26: Two-Unit Residence Districts (Duplex)

Zone	Minimum Lot Size (sq. ft.)	Frontage (ft.)	Width (ft.)	Front Yard Depth (ft.)	Each Side Yard Width (ft.)	Rear Yard Depth (ft.)
RD-8	10,000 -- 5,000 per dwelling unit	40	100	25	10	30
RD-10	9,000 -- 4,500 per dwelling unit	35	80	25	10	30

Source: City of North Liberty Zoning Code

168.02 RM Zones – Multi-Unit Residence Districts

This section deals with multi-unit residence districts and consists of five densities: RM-4, RM-6, RM-8, RM-12, and RM-21. Again, this district stays consistent with the others and allows most non-residential non-commercial development as well as removing the restriction of commercial activity to only home occupation. All RM zones

have a required minimum lot size of 21,780 ft² but decrease the required square footage per dwelling unit as the density increases. For example, RM-4 requires 10,000 ft² per dwelling unit whereas RM-12 requires 3,500 ft² and RM-21 requires only 2,000 ft² per dwelling unit.

Table 27: Multi-Unit Residence Districts (Multi-family) and Zoning Requirements

Zone	Minimum lot size (sq. ft.)	Maximum Density (units/acre)	Frontage (ft.)	Width (ft.)	Front Yard depth (ft.)	Each Side Yard Width (ft.)	Rear Yard Depth (ft.)	Maximum Height (ft.)
RM-4	21,780 – 10,000 Per DU	4	75	100	45	20	35	40
RM-6	21,780 – 7,000 per DU	6	75	100	45	20	35	40
RM-8	21,780 – 5,000 per DU	8	75	100	45	20	35	40
RM-12	21,780 – 3,500 per DU	12	50	80	35	15	35	40
RM-21	21,780 – 2,000 per DU	21	50	80	25*	10*	30	65

**An additional foot of front yard depth and side yard width is required for every foot of building height over 45 feet.*

Source: City of North Liberty Zoning Code

168.01 R-FB Zones – Residential Factory-Built Housing Park Districts

The last section which deals with housing types and their development is the residential factory-built park district. This district seems to conflate manufactured housing and mobile homes as it does not create a distinction between the two. This section establishes the minimum requirements to establish a factory-built housing park and permits specific accessory buildings that other zones do not. The minimum lot size is 5,500 ft² for single-family dwellings, family homes, manufactured homes, and modular homes. The minimum lot size for a factory-built housing park is 10 acres.

Table 28: Residential Factory Built Housing

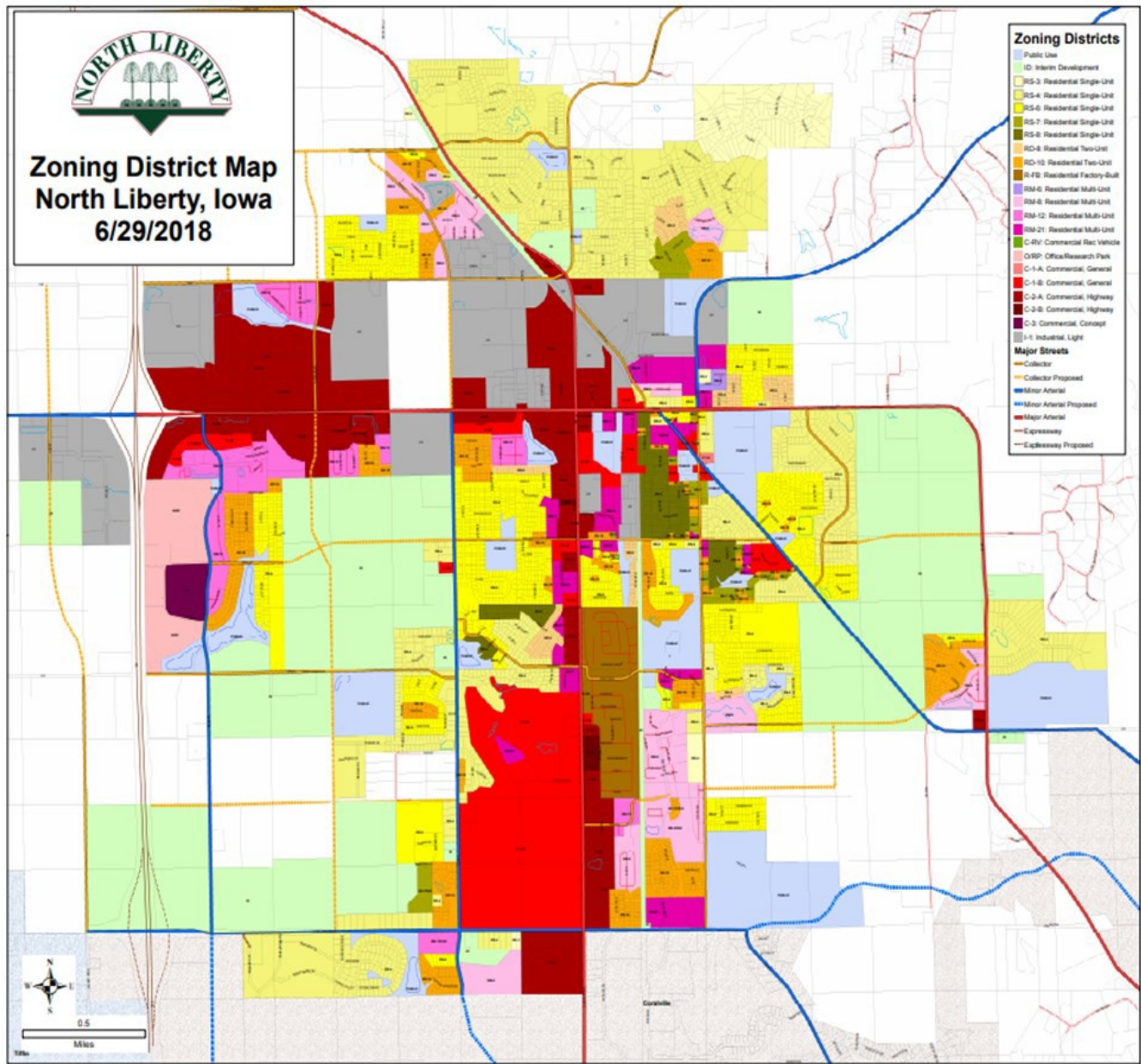
Zone	Minimum gross area of park	Minimum lot size (sq. ft.)	Frontage (ft.)	Width (ft.)	Front Yard Depth (ft.)	Each Side Yard Width (ft.)	Rear Yard Height (ft.)
R-FB	10 acres	5,500	35	50	20	8	25

Source: City of North Liberty Zoning Code

Land Use

Figure 22 shows the north Liberty Zoning District map, created June 29, 2018. A broad review of the zoning map helps illustrate how the community might continue to grow in the future.

Figure 22: City of North Liberty, Zoning District Map



The maps shows a high amount of commercial development adjacent from Highway 965 and the exit off I-380 onto Penn Street. Single-family residential units are located away from these arterial roads and behind the commercial and multi-family development that is also sometimes located along these two roads. Also, R-FB zoning is adjacent to the highway.

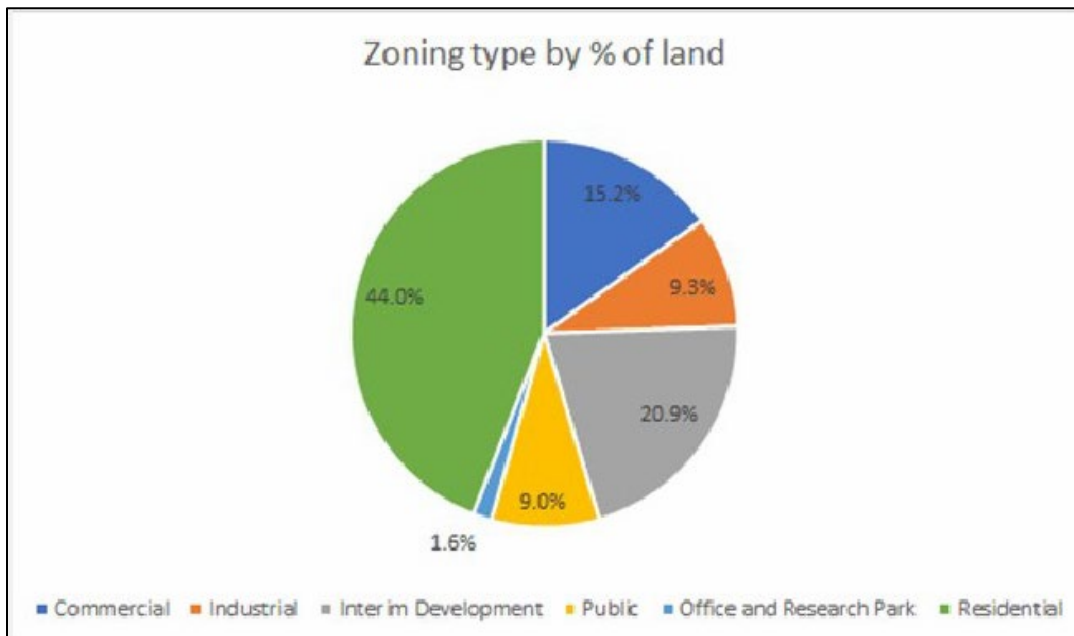
Industrial-zoned properties are located north of Penn Street on Highway 965. Farther north, there is an increased presence of single-family homes under the zone of RS-4, as well as duplex and multi-family complexes that can be seen on the west side of that area.

Areas near the Penn Street and Dubuque Street intersection are zoned RS-8, which primarily consists of older homes considered part of Old Town. This area has a few sections of higher density multi-family zones and commercial areas.

Overall, a large amount of Interim Development land is located on the east and west side of the city. The west side has a section of Office and Research Park with RM-12 zoning surrounding the area with some duplexes and single-family. The east side of the city also has a lot of Interim Development zoned land. Much of this area seems to include R-4, RS-6, and RD-10 zoning. Liberty High School will certainly drive future development in this area.

Figure 23 shows the proportions of zoning types by category of zoning. A total of 44% of North Liberty’s land is zoned Residential. The second most zoned land is Interim Development at 20.9%, the third most is Commercial at 15.2%, the fourth most is Industrial, fifth is Public, and the least used zoning type is the Office and Research Park at 1.6%. This data shows that North Liberty has a large portion of its land that is designated for living purposes. Additionally, undeveloped parcels make up about 21% of all land within the city boundaries, suggesting that North Liberty has a lot of potential to grow and develop in these areas.

Figure 23: Zoning Type by Percentage



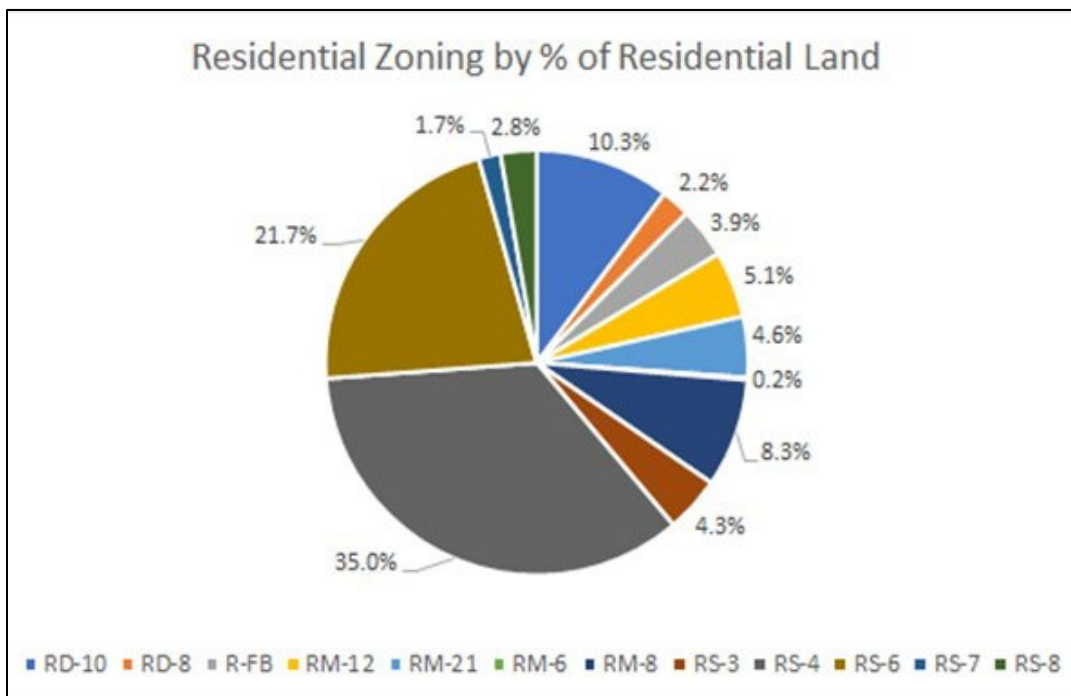
Source: Information extrapolated from City of North Liberty Zoning Code

Figure 24 shows the proportions of residentially zoned parcels by residential zoning classification. RS-4 makes up the largest percentage of residentially zoned parcels at 35%, followed by RS-6 with 21.7%, RD-10 at 10.3%, RM-8 at 8.3%. The subsequent zones that take up the next highest among of the land include a variety of different single-family, multi-family, duplex, and fabricated built housing.

Adding all the different zones provides an estimate on how much land is used for different categories of housing. For example, 65.5% of the land is occupied by single-family zoning, 18.2% by multi-family zoning, 12.5% by duplex-type zoning, and 3.9% for fabricated built housing districts. Comparing this to the actual amount of currently built

units, 41% of the units are single-family, 34% is multi-family, 18% is duplex, and 7% are mobile homes. This means that the single-unit residence district zoning takes up lots of land compared to the actual amount of housing units produced when compared to the other types of housing. Specifically, the calculations shows that single-family type zoning has roughly 2.7 units per acre, multi-family type zoning has 9.5 units per acre, duplex type zoning has 6.4 units per acre, and fabricated homes have 6 units per acre. In other words, the multi-family, duplex, and fabricated homes are more efficient in terms of land use when considering density.

Figure 24: Residential Zoning by Housing Classification.



Source: Information extrapolated from City of North Liberty Zoning Code

An important thing to note is that the current land use map does not use the RS-9 zoning and when single family zoning is used, it generally consists of only RS-4 or RS-6 zones. The RS-8 zoning is currently only used in areas that consist of older development such as in Old Town or close to Zeller Street. The RS-7 is used for development surrounding the RS-8 zoning to provide a smoother transition between house zonings. Most recent single-family developments are in the RS-4 and RS- 6 zones.

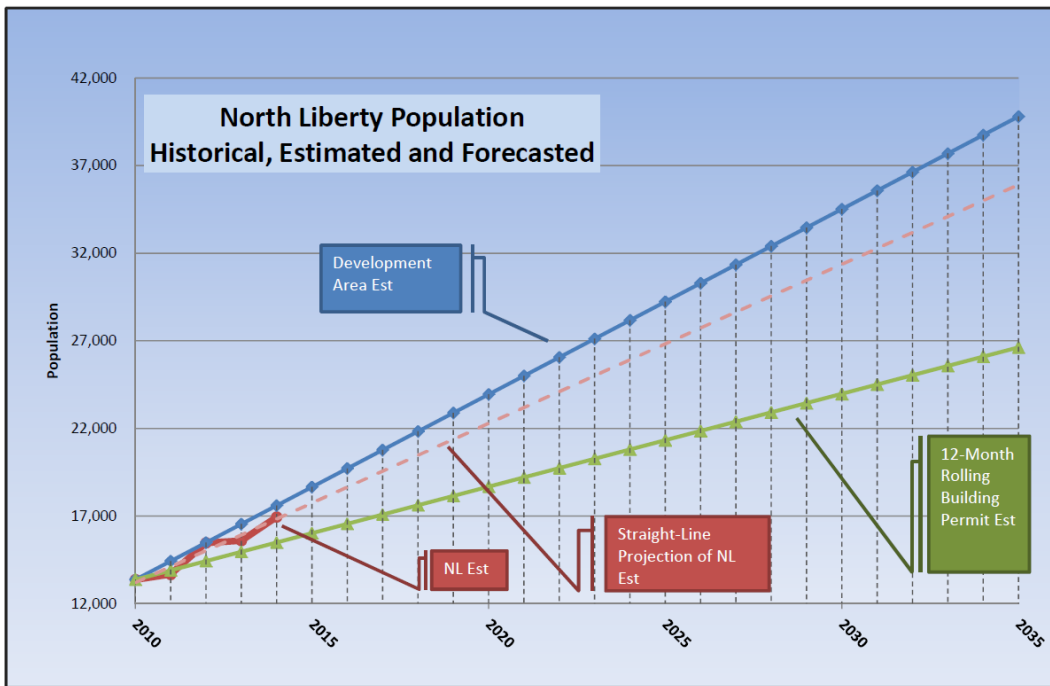
HOUSING NEEDS

This section of the report examines anticipated housing needs in North Liberty. First, population growth projections are used to estimate housing demand through 2030, followed by an analysis of housing affordability in the current market, and, lastly, a summary of input about housing needs from numerous housing service providers and stakeholders.

Anticipated Housing Demand

Housing demand in the future will be determined largely by the size of the population. While population forecasting cannot perfectly predict the future, estimates can help the City plan for growth and development. The North Liberty Comprehensive Plan, approved in 2013, forecasted population through 2035 using multiple scenarios based on historical building permits, historical population data, and development potential, as shown on Figure 25. By 2030, the analysis suggested that North Liberty could accommodate nearly 35,000 residents. The growth rate, if trends continued, showed north Liberty growing to nearly 32,000 by 2030. Building permits trends indicated a slower growth rate, estimating a population of around 25,000 by 2030.

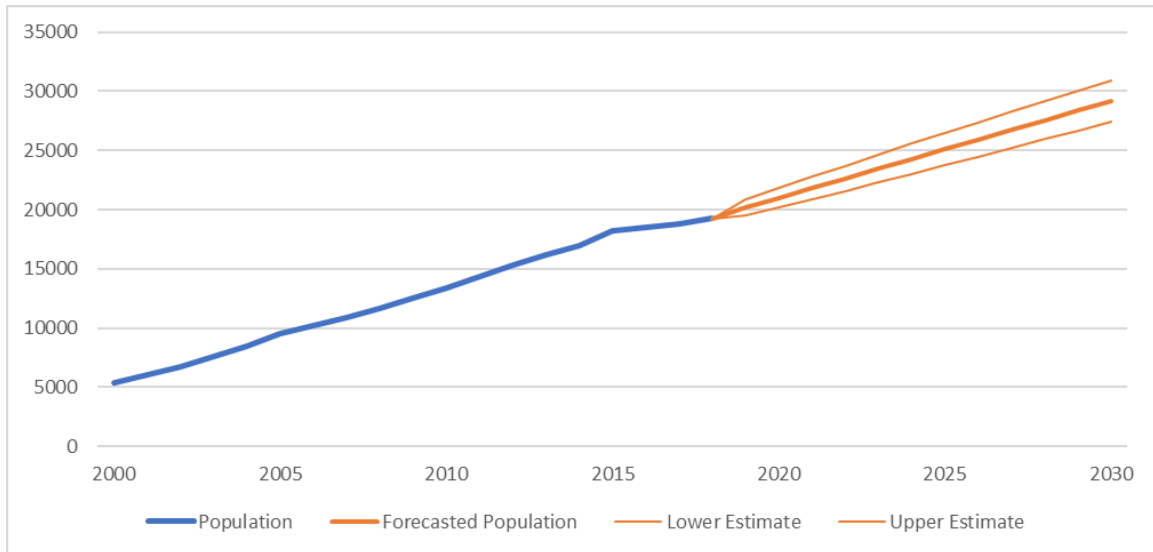
Figure 25: North Liberty Comprehensive Plan Population Forecast



Source: City of North Liberty Comprehensive Plan, Approved November 2013

Future populations for North Liberty were also projected using historical data gathered from the US Census Bureau’s estimated and counted total population for the city for the years 2000 to 2018, as shown in Figure 26. This data allowed for a population projection based on historic rates of growth for the city. The forecast predicted future values using the existing time-based data and the AAA version of the Exponential Smoothing (ETS) algorithm found in Microsoft Excel.

Figure 26: North Liberty Population Forecast (Excel Exponential Smoothing Method)



Source: US Census 2000 and 2010, American Community Survey

A range was given in the forecast, showing the upper and lower bounds of what the expected population might look like. The upper estimate at the year 2030 is just below 31,000 residents. The lower estimate is 27,442 residents. The model's best guess for the 2030 population of the North Liberty is 29,195 residents, which is within the range suggested in the North Liberty Comprehensive Plan.

Different methods of population forecasting could generate different results. It is also important to note that the North Liberty special census showed faster growth than previously estimated by the US Census. For the purposes of this report, the ETS forecasted population is used to estimate housing needs in 2030. City officials should continue to monitor and evaluate population trends in order to generate updated and accurate estimates as the city grows.

Using an estimated population of 29,195 indicates that North Liberty would have 10,896 more residents than the 2015 special census count of 18,299. This rate of growth would be slightly slower than the rate between 2000 and 2015, during which time North Liberty added 12,949 over 15 year period.

In order to estimate how many new housing units would be necessary to accommodate the estimated North Liberty population in 2030, current average household size is assumed to remain constant (2.58 in 2017). Using these assumptions, North Liberty would need to add 4,223 more housing units by 2030, when compared to the actual number of housing units in 2015. Accounting for new units built since 2015 according to building permit data (148 in 2016, 150 in 2017, and 130 in 2018), North Liberty would need an additional 3,795 units by 2030 to accommodate the increase in population, or an average of 345 new units each year. This rate of growth would be comparable to the rates in the 2000's, which peaked at 445 new units in 2006.

The projected population and project housing demand can also provide some insight into the number of new housing units by housing type. Through policy actions, housing programs, and development guidelines, city officials can help guide growth to achieve a housing mix that aligns with housing goals and priorities. For this analysis, the current housing mix is assumed. Table 29 shows the number of new units by housing type to accommodate the estimated population in 2030. The number of estimated new single-family units needed is 1,552, and the estimated number of new duplex units needed is 1,097.

Table 29: Housing Demand by Housing Type for 2030 Projected Population

	Proportion of Housing (using 2017 mix)	# of New Units by 2030
Single Family	40.9%	1,552
Duplex	28.9%	1,097
2-4 Units	3.5%	133
5-9 Units	5.8%	220
10-19 Units	11.6%	440
20+ Units	4.6%	175
\$1,000 to \$1,249	4.7%	178
Total	100%	3,795

Housing Affordability

The cost of housing is a primary factor for families and individuals making decision about where to live. Those decisions also depend greatly on income and ability to pay. Rising housing costs can impact current North Liberty residents, particularly renters, and the ability of North Liberty to attract new residents. Additionally, housing costs can impact the ability of residents to remain in the community as they move through stages of life. As shown in the previous chapter, North Liberty has a decreasing number of for-sale single family housing units below \$250,000, as well as the highest median gross monthly rent in Johnson County. These factors may present challenges for residents or prospective residents to find, afford, or maintain housing that meets their needs and preferences, and contributes to the overall picture of housing needs in North Liberty.

A common approach to understanding housing affordability is to evaluate how much of residents’ incomes are used to pay for housing. This section relies on a general benchmark from US Department of Housing and Urban Development (HUD) for determining when housing is considered affordable, which is when “the occupant(s) is/are paying no more than 30 percent of his or her income for gross housing costs, including utilities.” Housing costs exceeding 30% of income can often indicate that households are unable to provide necessities for themselves or that their ability to contribute to the local economy through spending is diminished. HUD defines households that spend more than 30% of their income on housing as “cost-burdened”.

Because of North Liberty’s close proximity to the University of Iowa, one important caveat to note, as pointed out by local officials, is that some residents who would fit the technical definition of “cost-burdened” may have little or no income as they work towards their college degree. These residents will likely not have realized their full earning potential, and their “cost-burdened” status would therefore be a temporary and intentional situation. However, this report does not delineate student residents from non-student residents, as identifying the proportion of residents that would fit this description is outside of the scope of this report and would require additional research.

Table 30 shows the number of renter-occupied and owner-occupied households that pay more than 30% of their income on housing, as well as the number that pays more than 50% of their income on housing. Of the 6,865 total households in North Liberty, nearly one-quarter (1550 households) were cost-burdened according to HUDs definition of affordability. Of these cost-burdened households, 820 were homeowners (18% of all owners) and 730 were renters (35% of all renters). Of all cost-burdened households, a little over one-quarter (28%) were considered extremely cost-burdened, or paying more than 50% of their income towards housing, which increases the likelihood that they are unable to afford other necessities.

Table 30: Total Cost-Burdened Households in North Liberty, 2015

Tenure	Number of Cost-Burdened Households		Percent of All Owners		Percent of all Renters		Percent of all North Liberty Households	
	>30%	>50%	>30%	>50%	>30%	>50%	>30%	>50%
Owner	820	185	18.4%	4.1%	-	-	12.5%	2.8%
Renter	730	250	-	-	34.9%	12%	11.1%	3.8%
All Households	1550	435	-	-	-	-	23.7%	6.6%

Source: HUD User, Consolidated Planning/CHAS Data

Table 30 also shows that renters are more likely to pay 30% of their income toward housing (34.9% of all renters) compared to owners (18.4% of all owners). Renters are often the most likely to be cost-burdened due to the rising nature of rents compared to mortgages. Rental prices can impact the ability of those households to save for the down payment on a home.

Cost-burdened households were further broken down by income levels as a percentage of the area median income (AMI) in order to attain a general profile of these households. AMI considers geographic location and household size. Area median income (AMI) is the mid-point of a region’s income distribution – half of the families in a region earn more than the median and half earn less than the median. The geographic extent to determine AMI for North Liberty is all of Johnson County.

For housing policy, income thresholds are set relative to the area median income— such as 50% of the area median income— and they identify households eligible to live in income-restricted housing units and the affordability of housing units for low-income households. Among the programs that determine eligibility based on the AMI are Section 8, HOME, LIHTC, Section 515, 202 and 811. Appendix II shows AMI for North Liberty by household size for 2010, 2015, and 2018. For reference, the area median income, according to HUD, for a family of four in North Liberty is \$87,000.

Table 31 shows cost-burdened households (i.e. households paying more than 30% of income toward housing) that would also be considered low to moderate income households at three income levels: less than 30% AMI; between 30% and 50% AMI; and between 50% and 80% AMI. The table shows that:

- North Liberty has 365 households that earn less than 30% of AMI and pay more than 30% of their income toward housing, which is 5.6% of all North Liberty households. About two-thirds of those households are renters. Of those households, about half (180) pay more than 50% of their income toward housing. These low-income households are most likely to struggle to afford other basic necessities.
- North Liberty has 640 households that earn between 30% and 50% of AMI and pay more than 30% of their income towards housing, which is 9.8% of all North Liberty households. Just over half of those households are renters. Of those households, roughly one-third (225) pay more than 50% of their income toward housing.
- North Liberty has 365 households that earn between 50% and 80% of AMI and pay more than 30% of their income towards housing, which is 5.6% of all North Liberty households. Those households are nearly all renters. Less than one-third of those households are renters. Of those households, only 30 pay more than 50% of their income toward housing.

Interestingly, owners make up a larger share of cost-burdened households at an income level between 50% and

80% AMI. This is likely attributed to this being the first income range in which households have the economic means to purchase a home. While these households may still struggle to afford living expenses, their mortgage payments will remain relatively constant over the coming years while their wages generally continue to rise.

Table 31: Cost-Burdened Households in North Liberty by Income Level and Housing Tenure, 2015

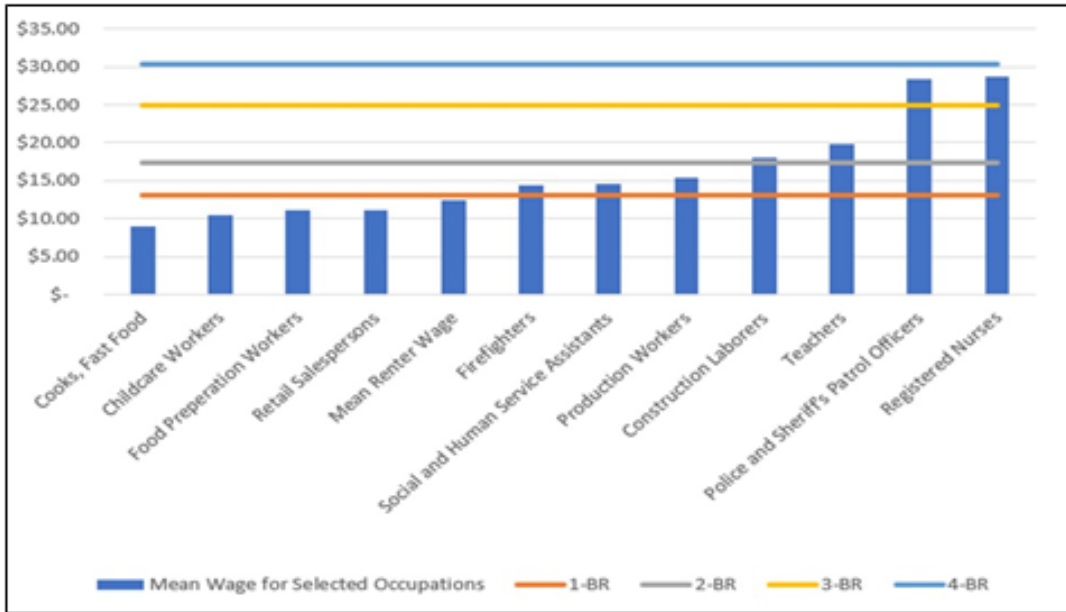
Income Used for Housing Costs	Number of Households		Percent of All Owners		Percent of all Renters		Percent of all North Liberty Households	
	>30%	>50%	>30%	>50%	>30%	>50%	>30%	>50%
Cost-Burdened Households in North Liberty Earning Less than 30% AMI								
Owner	110	40	2.5%	0.9%	-	-	1.7%	0.6%
Renter	255	140	-	-	12.2%	6.7%	3.9%	2.1%
All Households	365	180	-	-	-	-	5.6%	2.7%
Cost-Burdened Households in North Liberty Earning 30% to 50% AMI								
Owner	300	115	6.7%	2.6%	-	-	4.6%	1.8%
Renter	340	210	-	-	16.3%	5.3%	5.2%	1.7%
All Households	640	225	-	-	-	-	9.8%	3.4%
Cost-Burdened Households in North Liberty Earning 50% to 80% AMI								
Owner	230	30	5.2%	0.7%	-	-	3.5%	0.5%
Renter	135	-	-	-	6.5%	12%	2.1%	-
All Households	365	30	-	-	-	-	5.6%	0.5%

Source: HUD User, Consolidated Planning/CHAS Data

Figure 27 compares local wages for common occupations and the amount required to afford rental housing in North Liberty. The mean renters wage in Johnson County is \$12.50. The graph shows that single-earner households earning the mean rental wage or less would not be able to afford any rental housing in North Liberty. The occupations that would fit this description food service workers, childcare workers, and retail salespersons. Firefighters, social & human service assistants, and production workers make just slightly more than necessary to afford a one-room rental unit. For low-skilled workers with dependents, even in dual-income households, finding affordable housing in North Liberty would likely be challenging.

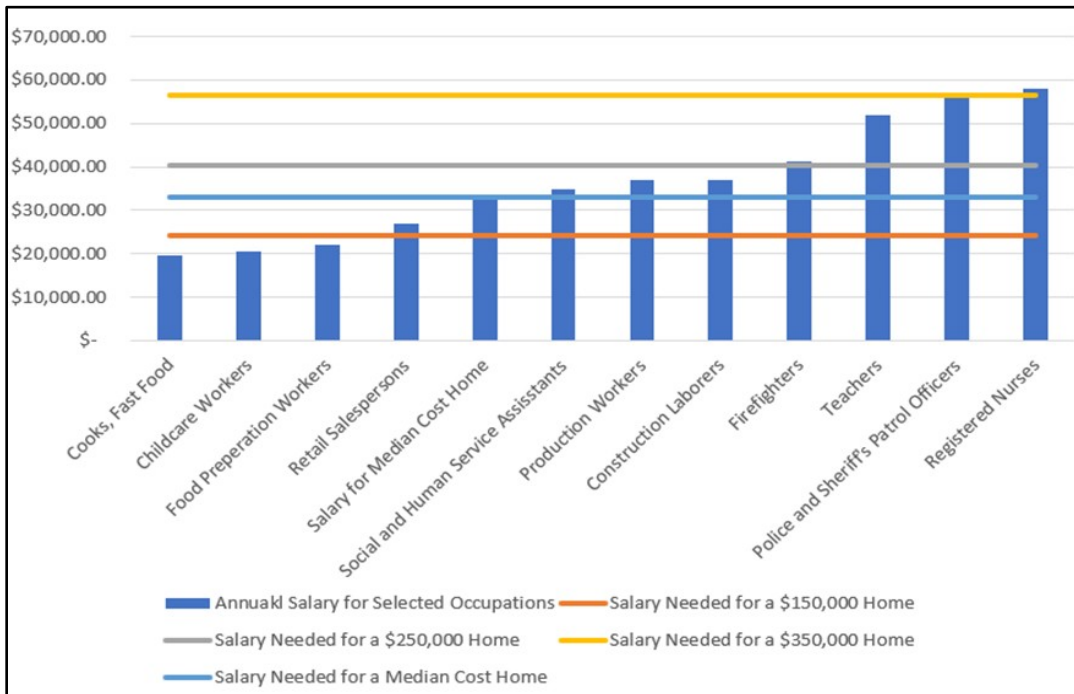
Applying the same analysis for prospective home-buyers tells a similar story. Figure 28 compares local wages for common occupations and the amount required to afford for-sale housing in North Liberty. Data on home prices was obtained from Zillow and other similar real estate services in the area. The median listing price for homes in Spring 2019 was \$205,100. Assuming a 20% down-payment and a 4.45% interest rate, the salary needed to afford the mortgage amount of \$164,080 would be approximately \$33,080, with monthly payments of \$827. The equivalent hourly wage over a 40-hour work week would need to be \$17.23. With a 20% down-payment, a large segment of North Liberty’s workforce is unable to afford a home priced as low as \$150,000. This includes food preparation workers, fast food cooks, and childcare workers. Taking into consideration the large hurdle of a 20% down-payment, many families in North Liberty are likely unable to build equity through homeownership and would have to continue paying ever-rising rents instead.

Figure 27: Type of employment by hourly wage necessary to afford rent



Source: Iowa Workforce Development 2018

Figure 28: Type of employment by hourly wage necessary to afford mortgage payments



Source: Iowa Workforce Development 2018, Zillow

Table 32: Cost-Burdened Households by Age, 2009 and 2017

Age	15 to 24		25 to 34		35 to 64		65 and Above	
Year	2009	2017	2009	2017	2009	2017	2009	2017
Owner	68	22	190	289	325	218	46`	135
Renter	181	75	160	269	123	261	33	103
Total	249	97	350	558	448	479	79	238

Source: U.S. Census Bureau ACS 2013-2017

Table 32 shows cost-burdened households by age group from 2009 to 2017. During this time period, North Liberty grew from around 13,000 residents to over 18,000 residents. As the data shows, cost-burdened households in the 15-24 age bracket saw a significant decrease in the number of both cost-burdened renters and cost-burdened owners. For households in the 25-34 age bracket, the number of both cost-burdened renters and owners has increased. For households in the 35-64 age bracket, the number of cost-burdened renters increased, while the number of cost-burdened owners decreased. The most significant change occurred in households aged 65 and above; in this group, the number of cost-burdened owners more than tripled between 2009 and 2017.

Perception of Housing Needs: Interviews With Local Stakeholders

Numerous organizations were contacted in order to gather input from local service providers and stakeholders about the housing market and housing needs in North Liberty. This section provides a summary of responses from the interviews with real estate agencies, business leaders, affordable housing service providers, and a social service provider.

Real Estate Agencies

The project team met with representatives of the Iowa City Area Association of Realtors along with specific real estate firms. Most of the representatives serve the broader metropolitan area, which provides a perspective of housing trends in North Liberty and the surrounding area. One firm recently expanded their work into the rental side of real estate, which they reported as having been a successful endeavor, and could therefore offer valuable information about rental opportunities in North Liberty.

Representatives described the changes in client desires over the years. In the early 2000s, most individuals and families locating to North Liberty were young and working in the larger surrounding communities. They chose to move to North Liberty for cheaper housing options. However, as demand has increased, so has the cost of housing, altogether decreasing the amount of families financially able to relocate to North Liberty.

One key takeaway from the interviews held with real estate personnel was that they believe there are not enough options for young individuals and families at entry-level prices. They asserted that the demand for entry-level homes was extremely high, forcing some households to broaden their search to a higher price bracket. As a result, there was total saturation at the \$250,000 range, not allowing households to move up or down in price. Representatives felt that a solution to this issue could be incentivizing homeowners in this price range to move up to the \$400,000 range and free up the few options in lower price ranges.

Representatives also shared speculation on how the expansions to Interstate 380 may position North Liberty in

competition with the south side of Cedar Rapids, as transportation becomes more accessible. Attracting Cedar Rapids residents may be a place that North Liberty could thrive, provided it maintains housing options at different price points.

Interviewees also expressed that they'd like the City to work closely with developers, realtors, and builders., which would improve relationships and make North Liberty a better place to live by providing a variety of housing options. Representatives felt that if there were greater efforts from all sides of the housing issue in terms of collaboration, North Liberty would sustain its younger population, while providing options for them to age in place at an affordable price.

Business Leaders

Since access to housing opportunities and affordability are inextricably linked to economic development, the planning team consulted with business leaders in North Liberty to understand their perspectives on local housing issues. The planning team conducted three phone interviews with a local business manager, a business owner, and a human resources director.

The main theme from those interviews was the lack of entry level housing options for young and growing families. Two of the companies mentioned that roughly 1/3 of employees both live and work in North Liberty. Of those workers who fill positions within North Liberty businesses and live in the community, some are living in the trailer court while others are living in subdivisions located throughout the city.

While some business leaders felt that the housing boom has brought some negative effects such as congestion and traffic, other felt that the housing boom has left a positive impact on their companies. This comment came from a company that works in alignment with the construction industry, so they were able to capture economic gains from the ripple effect. Another interviewee pointed to a concern that young families are being underserved in the housing market and that North Liberty must be competitive to attract entry level buyers.

The topic of entry level housing was mentioned in a few interviews. Business leaders felt that the common theme is the lack of affordable housing. It is not available primarily as single-family housing with 3-4-bedrooms on its own single lot for young growing families. Specifically, they were speaking not in terms of apartments, mobile homes, or zero-lot lines, but about single-family dwellings on their own lot with their own backyard. A main factor is the entry price point in the housing market. Some business leaders felt that the housing market in North Liberty is priced much higher than other nearby areas like Cedar Rapids.

Affordable Housing Service Providers

One key takeaway from interviews with a representatives who work as local affordable housing service providers was that North Liberty has been somewhat favorable toward affordable housing in the past because of the LIHTC projects that have occurred within the city and the allowance for higher density housing. Recently, North Liberty has been zoning for larger lot sizes especially around the new Liberty High School. There was a general concern for oversupply of housing to those that already can afford that type of housing. Another concern involved the potential of individuals deciding to live in a certain area of the city because of the two school districts that divide the city. This could influence diversity within the neighborhoods and schools.

A recent development mentioned was the recent acquisition of the Gulfview Mobile Home Park by an out-of-state private equity firm. After acquiring the property, the firm proposed a rent increase of 58% on the land. As the land of these homes is usually owned by a landlord, this means that the residents must pay the rent on the land even though they likely already own the mobile home.

When thinking about what issues should be prioritized by the city, there was an expressed need for more funding for affordable housing. More specifically, funding such as federal funds like the Community Development Block

Grant (CDBG). The organization expressed the need for zoning laws that allowed for builders to make smaller units. Additionally, the desire for a program that would allow for homeownership to become more stable by helping occupants with upkeep and utilities was expressed.

Some affordable housing initiatives are currently taking shape in North Liberty. The Housing Trust Fund of Johnson County's (HTFJC) mission is to promote and support affordable housing throughout the county. There are two main advantages to housing trust funds: they specifically cater to local needs and priorities and they provide more flexible financing compared to private institution financing restrictions and federal and state funding. This organization funds entities and projects involving affordable housing through revolving low-interest loans and sometimes gifting funds. The HTFJC also engages in the preservation of the local housing stock which is carried out through housing rehabilitation programs. In addition to these two programs, the HTFJC also has an active homebuyer's assistance program where funds can go towards a down payment or be used for home repairs. Three projects in North Liberty have been implemented with the help of this entity: Jefferson Point gives affordable housing options to senior citizens, Penn Oaks a rehab project, and North Liberty Park Apartments that implements rent based on income.

Interviewees expressed a concern surrounding the limited amount of affordable housing in North Liberty. Entry level housing options for first time home buyers under \$250,000 is simply not available. One organization expressed that North Liberty does have an interest and concern for adding more funding into the pot that will assist with creating and rehabilitating housing opportunities in North Liberty.

Social Service Providers

The planning team consulted with the North Liberty Community Pantry. The Community Pantry serves a wide range of needs in North Liberty and partners with the services in Iowa City and Coralville. This provides them the unique ability to compare the needs of North Liberty to other towns and see first-hand how social service assistance has been changing over the years.

The main theme throughout the interview was that there has been an increase in the number of families seeking assistance from the Community Pantry. While the pantry will welcome anyone who needs assistance, they tend to mostly serve families receiving TDAP or Government Food Assistance. They perform an annual survey that is optional for persons served and according to last year's results, 99.9% of their client base was below the federal poverty level.

From this conversation, it was mentioned that "when a town grows, it grows at all levels and there needs to be preparation for that." The representative also described the high level of cost-burdened households that come to the Community Pantry for assistance. Specifically, the recent rise in clients requesting assistance was attributed to an increase in land cost, not necessarily rent price. In the past, more families owned their dwelling and could easily afford the land rental price. As land has become more expensive in North Liberty, more families are becoming housing-insecure.

Housing Affordability Analysis

Market failure in housing occurs when the free market for housing is unable to provide for the needs of the community resulting in an inefficient allocation of resources. This presents itself in a myriad of ways including homelessness, vacant housing, and large numbers of cost-burdened households. While this report does not indicate North Liberty has major issues with homelessness or vacant housing, market failure in North Liberty is seen in the large percentage of cost-burdened households in the community, especially renter-occupied units. These households are spending more than 30% of their income on housing related costs and must often make sacrifices in other parts of their budget to make ends meet. Approximately, 1,550 households in North Liberty are

cost-burdened, nearly 25% of all households. Demand clearly exists in North Liberty's housing market for lower priced housing. This demand is highest among renters. While a variety of factors impact housing affordability, such as local wages and costs of constructions materials, Increasing the supply of affordable rental units would correct this market failure.

There also exists demand for entry level housing for young families and professionals in the Johnson County area who may be looking to own a home in North Liberty, especially entry-level homes and homes under \$250,000. As detailed previously in the report, common occupations in North Liberty do not provide earnings high enough to afford most of the available homes in North Liberty. Additionally, the barrier to ownership for these folks is often the 20% down-payment on a house. The city can adopt home-ownership assistance programs to help fill the void in the market for these folks, as well as other solutions also described in the recommendations section of the report.

Additionally, most of the North Liberty workforce commutes from outside the city. By providing more options for affordable housing, it's possible the city could attract some of these commuters to live within North Liberty. Not only would this provide a more reliable and cohesive workforce in the city, it would also act to increase North Liberty's tax base which the city could then use on the other recommendations – both in this report and beyond. The attraction of a larger workforce to North Liberty may also have a compounding effect on employers and the city at large as well. As the city continues to grow, more employers may enter North Liberty to take advantage of a growing, educated workforce. North Liberty has a prime opportunity to continue to attract skilled laborers and ensure the kind of growth the city has experience over the past 10 years continues at a sustainable level.

Finally, there appears to be a lack of affordable housing primarily for North Liberty's older population. The number of cost-burdened owners and renters for households over the age of 65 have doubled since 2009. This highlights the demand for additional senior living facilities in the city. The population of North Liberty has a high number of residents between the ages of 20-44 who need to be considered in this assessment as well. In the next 20 years, as this population continues to age, this age group may run into the same problems as current households over the age of 65. If North Liberty is not adequately prepared for the aging of this population in terms of housing affordability, availability, and accessibility, the city could see an exacerbation of this cost-burden problem among its more vulnerable populations.

CASE STUDIES

This section provides three case studies to show how other communities have addressed housing needs. Examples from Iowa City, Iowa, Waverly, Iowa, and Northfield, Minnesota are described.

Iowa City, Iowa

Iowa City performed an Affordable Housing Action Plan in 2016 which consisted of several recommendations that may be applicable to the City of North Liberty. Iowa City and North Liberty are connected, and both communities have influence on each other in direct and indirect ways. This is especially the case when it comes to housing issues. Iowa City's Affordable Housing Action Plan included items of adopting an inclusionary zoning code amendment to the Riverfront Crossings District, distributing dollars from the City's newly created Affordable Housing Fund, considering an annexation policy that provides affordable housing, pursuing various regulatory changes to the city code, encouraging LIHTC projects, and providing regulations for tenant displacement type issues. This plan has been used as a guidance tool for the city government.

Inclusionary Zoning was adopted in the Riverfront Crossings District, which required developments with 10 units or more to have 10% of its total units as affordable housing units for at least 10 years. The household is an income eligible household if their income is 60% of the area median income for the city and leasing. It is 110% of the area median income if buying an affordable housing unit.

Applying a similar principle, the city implemented a policy requiring annexation of land for the purpose of housing to include a proportion of affordable housing with the goal of encouraging diversity within the school system. Additionally, the city has strategically encouraged Low Income Housing Tax Credit within the city. The LIHTC projects are funded by investors who then receive income tax credits. This has created a steady amount of funds for these affordable housing projects.

Notably the city also implemented a policy for tenant displacement which made it a requirement for the city council to approve major site plans when 12 or more households are being displaced and no accompanying rezoning. The city also implemented rent abatement for issues where the rental unit failed to remedy the health or safety of the tenant.

The plan also included key elements of changing regulatory changes within the city code of Iowa City. For example, it suggested waiving parking requirements for affordable units in the Riverfront Crossing/Downtown area. Additionally, it recommended the removal of minimum lot size requirements in PUDs.

Waverly, Iowa

In 2010, Waverly was chosen by the U.S. Environmental Protection Agency (EPA) and the Federal Emergency Management Agency (FEMA) to "receive technical assistance to assist in recovering from flooding that took place in June 2008." The EPA and FEMA directly conducted workshops in Waverly, which resulted in a final report titled Waverly, Iowa Smart Planning Workshop: Policy Options and Project Designs.

The recommendations of this plan include having a mix of housing types which includes a blend of income levels and household types. In the plan, there were incentives for constructing new mixed-use buildings or multi-family housing such as reducing the parking requirements, providing density bonuses, or having a more streamlined approval process. Additionally, the report recommended a reduction in lot sizes and width as way to reduce overall home prices which would reduce the cost of land and infrastructure costs for the developer. With the goal of increasing the diversity of housing types in a subdivision, the reports mentions the possible policy where

subdivisions involving more than 10 lots would be required to have minimum of 20 percent of the houses between 5,000 and 7,000 square feet, with another 30 percent between 7,000 and 9,000 square feet, and the remainder over 9,000 square feet.

The report also mentions allowing for the use of Accessory Dwelling Units (ADUs) which allows so that “granny flats” are permitted on a single family housing lot. This allows for an additional income for home owners to rent the ADUs and allows for the tenant to acquire a unit that is cheaper in rent. By allowing for ADUs, cities can increase the affordable housing stock in a sustainable manner that is in line with smart growth principles.

Northfield, Minnesota

The City of Northfield Manufactured Home Acquisition Program is a program that assists manufactured homes to become code-compliant if achieving code-compliance would require investment of 25% or more of the estimated value of the unit. The assisted homes need to be owner-occupied, be the only residential property that the owners own or co-own, and the owners’ gross family income being less than or equal to 80% of the county average median income. When the cost of the repairs is determined to be more than 25% of the total value of the manufactured home, the applicant is notified. The program provides up to \$10,000 for down payment/closing costs, and up to \$3,000 for demolition of the existing manufacture home. With this program, the City of Northfield Building Department inspects whether the unit is code-compliant. The costs of this program are covered by the Community Development Block Grant (CDBG) Entitlement Program which provides annual grants on a formula basis to entitlement cities.

While the City of North Liberty would not be able to adopt this exact program because the city does not qualify for the CDBG federal program, North Liberty is still able to investigate applying for the CDBG state program which offers block grants to cities in the State of Iowa. The City of Hiawatha, Iowa also operates a similar program to Northfield.

RECOMMENDATIONS

This section includes recommendations for the City of North Liberty to manage growth and development related to housing in order to meet the needs of current and future residents. The recommendations include policy tools, housing initiatives, and, as appropriate, updating guiding documents to reflect housing priorities.

Policy Tools

- **Adhere to internationally-recognized standards for development**

North Liberty has already adopted the International Building Code and International Residential Code. The city should continue to ensure these standards are being held during new development and any type of rehabilitation. The city inspector should uphold the values found in the zoning codes to help ensure the high quality of North Liberty's housing stock.

Housing Initiatives

- **Incentivize developers and builders to produce more entry-level housing under \$250,000**

The data indicates that the average number of single-family homes in North Liberty under the \$250k amount and for sale in the month of March was 18 units. Comparatively, those that were above the \$250k amount had 95 units for sale. The number of units for condos that were available had an average of 35 and the average for zero lot units was 47. Condos and zero lot units are generally at a lower selling price point compared to the other type of units such as single-family. This shows that there is a very large supply of housing that is listed above the \$250k mark. In contrast, single-family homes that were above the \$250k mark also had a higher number of days on the market. Tying in the data with perceptions of housing, there is an indication that there are several entry-level and lower-income home buyers that have difficulty in being able to buy homes in North Liberty because of the lack of supply for housing under \$250k pricelevel.

Being proximal to the University of Iowa and Kirkwood Community College, North Liberty has an opportunity to appeal to the student population, who typically rent for the duration of college. Attracting young professionals entering the job market would bring creativity, skill, and ambition to the community. If housing were affordable and high-quality, these young folks would be inclined to stay in the growing city, creating life-long residents with intense community pride. The city should conduct a study targeted at young professionals and families to understand the demand for what types of housing they prefer. National trends and conversations with community members show that millennial age individuals value experiences over the "bells and whistles" of a home. This is where the city could incentivize a diverse mix of multi-unit developments to be compatible in scale with single-family developments.

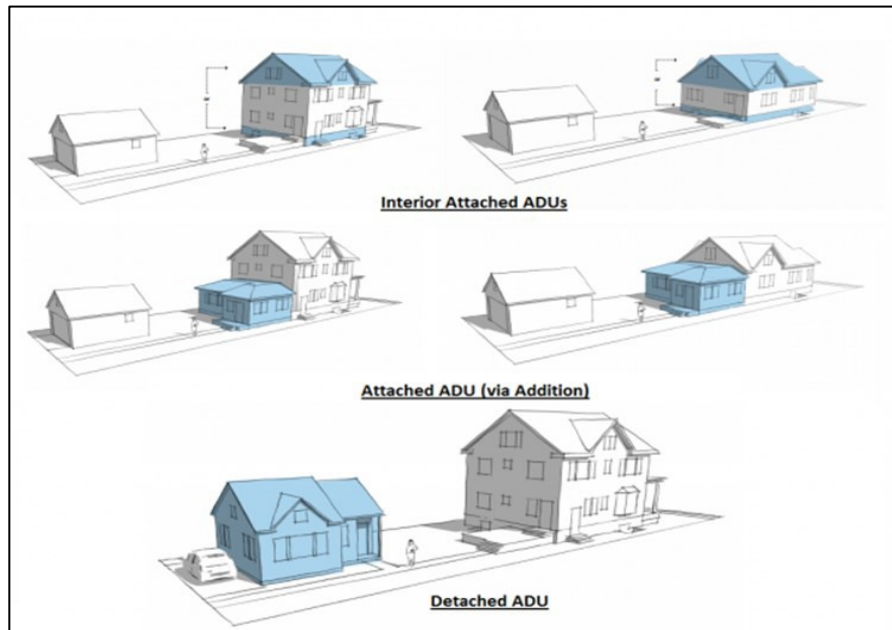
- **Ensure the quality of rental housing by implementing an annual inspection program**

Due to the drastic increase and quick build-times of multi-family units in the early 2000s, much of the housing stock will require updates and rehabilitation in the next 10-20 years. North Liberty can get a jumpstart and encourage quality housing for their renting residents by implementing annual inspections and ensuring that landlords and developers abide by the building code. Studies show that utility and maintenance costs escalate dramatically for units that are not well-maintained over the years. Through annual inspections, the city and community can have a better understanding of conditions and respond accordingly.

- **Provide housing options for seniors and others to age in place**

North Liberty can encourage its residents to age in place by developing a variety of senior housing types. Additionally, through conversations with local realtors and real estate brokers, it is clear there is a need for housing options for parents of grown children and grandparents that want to relocate closer to their children and grandchildren, who might be young families living in North Liberty. Options for senior housing could include assisted-living apartments or accessory dwelling units (ADU). These could be developed close to nature areas and health services as to better serve the senior residents. There are a variety of ADU styles including interior attached, attached, or detached, as seen in Figure 29 below.

Figure 29: Examples of Additional Dwelling Unit Methods.



Source: missingmiddlehousing.com

- **Prioritize housing as a tool for economic prosperity and community pride**

When adequate housing is provided to all residents, the entire community benefits. Housing security can have a compounding effect on the community by increasing civic involvement, elevating community and school pride, and providing economic value to local businesses.

External resources can support local housing programs that promote housing security and affordability. For example, the City of North Liberty could consider a program with funding from the State of Iowa’s CDBG Housing Rehabilitation Fund. The goal of the fund is to provide economic opportunities for low and moderate income individuals. Projects allow for a maximum unit subsidy of \$38,500 per unit for rehabilitation, technical service costs, and temporary relocation. This type of fund was used in Hiawatha through the East Central Iowa Council of Governments (ECICOG) for a targeted area within the city. In North Liberty, this type of program could provide rehabilitation assistance to areas such as Old Town, the Gulfview mobile home park, and others. This would help residents make home improvements and reduce monthly utility costs through “weatherization” of their homes.

Comprehensive Plan and Zoning Code

- **Guide future development for the benefit of the entire community and to meet the housing demand**

With open land left for development, North Liberty can guide remaining parcels for types of development that can meet the housing demand for safe, quality housing and meet different income thresholds. There are two methods to go about planning for and developing currently undeveloped land: strict developer requirements and inclusionary zoning.

One effective tool would be limiting some freedoms of developers. Due to exorbitant demand for housing in the Iowa City metropolitan area, North Liberty has maintained very few requirements for new developments. This has led to developer-led development and may not be a sustainable solution if North Liberty desires a healthy housing mix. To address this, North Liberty should hold developers to a standard that will ensure North Liberty's housing stock remains in high quality, adheres to the zoning code and comprehensive plan, and paves a path for future smart development.

Another tool to achieve this is Inclusionary Zoning. In this type of planning, North Liberty's zoning code could be adapted to require certain percentages of new housing developments to be affordable for low- and moderate-income households, usually by a percentage requirement for new development. This tool could address existing and future issues of the lack of affordable housing to meet the household incomes of individuals and families that desire to live or already reside in North Liberty. An example of this can be found in the Minneapolis 2040 Comprehensive Plan and corresponding Zoning Code.

- **Make changes as needed in the Zoning Code to encourage increased density**

The City of North Liberty currently has a residential zoning code that requires a minimum lot size for each unit. This essentially means that for each unit, the unit must occupy a set amount of land and cannot occupy less than the amount indicated within the city code. The most-used residential zone is RS-4, which occupies 35% of all North Liberty land that is zoned for residential use; this zone has a minimum lot size of 10,000 square feet per unit. The second-most used zoning code is RS-6 which occupies 21.7% of the land with a minimum lot size of 7,000 square feet. Such large minimum lot sizes have a significant inflationary effect on housing price and increase the amount of land that is consumed within the city. Currently in North Liberty, single-family developments have an approximate density of about 2.7 units per acre, multi-family units about 9.5 units per acre, duplexes nearly 6.4 units per acres, and mobile homes 6 units per acre. The higher the density, greater the efficiency of land use. Even though 65.5% of residential land is occupied by single-family, it only makes up 41% of the housing units available.

To curb land sprawl and provide more lower-priced housing, the city can increase its density by lowering the minimum lot sizes for the RS-4 and RS-6 zones, encouraging higher density single-family zoning such as the RS-8 zoning, continuing the promotion of zero-lot and multi-family structures, examine the option of proposing maximum lot sizes, consider requiring developments of ten or more units to have a diverse range of lot sizes, and evaluate whether lot size requirements are needed in planned area developments (PADs). Smaller lot sizes would allow for more efficient use of land and allow for an increase in housing supply to meet the demand. Multi-family and zero-lot structures have a lower sale price and can increase availability of rental housing. Additionally, requiring larger scale developments to have housing with lower lot sizes would allow for a diversity of housing type and income.

Given the ongoing boom in residential development in North Liberty, there is no need to reduce permit fees to stimulate new construction. However, the city's permit fee structure (shown in Table 33) has many categories and perhaps could be simplified. Permit fees for new construction of residential, commercial, and industrial structures could be set at 1%. Permit fees for alterations (commercial and residential), mixed use, manufactured homes/mobile homes, and institutional/assembly could be capped at 2.5%.

Table 33: Percentage of the total construction cost that was paid toward permit fees 2000-2018

	2000	2002	2005	2006	2007	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
New SF Residential	1.1%	1.2%	0.8%	0.9%	0.9%	1.0%	1.0%	1.0%	1.0%	0.6%	1.7%	1.2%	1.2%	1.1%	1.0%	1.0%
New SF Residential Attached	1.1%	1.1%	1.0%	1.0%	1.0%	1.2%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.0%	1.1%	1.2%	1.1%
New Townhouse							1.3%	1.2%	1.2%	0.9%	0.2%			2.5%	1.4%	1.2%
New MF Residence	0.7%	0.6%	0.6%	0.6%	0.6%	1.0%	0.8%	0.8%	0.9%	0.8%	0.7%	0.6%	0.7%		1.1%	0.7%
Residential Alteration	3.7%	1.7%	1.8%	1.6%	1.9%	1.8%	1.7%	1.5%	1.9%	2.8%	11.1%	1.6%	1.8%	1.7%	1.9%	2.6%
Residential Addition		1.9%	1.2%		0.3%		1.8%	1.5%	1.4%	1.6%	1.4%	1.6%	1.4%	1.4%	1.7%	1.4%
Manufactured Home/Mobile		4.7%	3.9%		3.2%										1.1%	3.2%
Residential Total	1.0%	1.1%	0.9%	0.8%	0.9%	1.1%	1.0%	1.0%	1.0%	0.8%	1.4%	1.0%	1.2%	1.2%	1.1%	1.0%
New Commercial	0.6%	0.5%	0.6%	0.5%	0.5%	0.6%	0.7%	0.7%	0.4%	0.7%	0.9%	0.6%	0.6%	0.5%	0.8%	0.6%
Commercial Alteration	1.5%	1.3%	1.1%	1.4%	0.6%	1.0%	1.1%	1.1%	0.8%	1.2%	18.5%	1.2%	0.9%	1.2%	0.7%	2.2%
Commercial Addition	1.8%	1.6%	1.0%		0.6%		1.1%	1.6%	0.5%	0.8%	0.4%	1.2%	1.1%	1.6%		1.1%
Commercial Total	0.7%	0.5%	0.8%	0.5%	0.5%	0.8%	0.7%	0.8%	0.4%	0.8%	2.5%	0.8%	0.7%	0.5%	0.8%	0.8%
New Industrial	0.5%								0.9%		0.8%	0.0%				0.5%
Industrial Alteration	0.2%										1.7%				0.5%	0.8%
Industrial Addition																
Industrial Total	0.5%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.9%		1.0%	0.0%			0.5%	0.3%
Mixed Use	0.5%		0.5%	0.5%												0.5%
New School			0.4%		0.4%	0.4%				0.5%	0.5%				0.4%	0.4%
Public Project									0.0%			0.2%	0.0%	0.0%	0.0%	0.0%
New Outbuilding	1.4%	0.9%	0.1%	1.0%	1.4%	1.3%										1.0%
New Daycare Center			0.6%													0.6%
New Place of Assembly																
New Institutional				0.4%	0.4%											0.4%
New Warehouse				0.7%												0.7%
New Place of Worship						0.6%										0.6%
Institutional Total	1.4%	0.9%	0.4%	0.6%	0.4%	0.5%			0.0%	0.5%	0.5%	0.2%	0.0%	0.0%	0.4%	0.4%
Other	1.7%	4.3%	0.6%	22.9%	44.0%			0.9%	14.4%	3.7%	20.0%	3.6%	6.1%	5.2%	4.7%	10.2%
Total	0.9%	1.0%	0.8%	0.8%	0.7%	0.9%	1.0%	1.0%	0.9%	0.8%	2.0%	0.5%	0.9%	1.3%	0.8%	1.0%

Source: City of North Liberty, permit documentation

As shown above, currently in North Liberty, the permit fee for new residential is just above 1%, for alterations about 2.6%, and for manufactured homes/mobile homes about 3.2%. Fee for new commercial projects is 0.6%, for commercial alterations about 2.2%, and for Industrial, Mixed Use, and Institutional uses around .5%.

A second recommendation is to incentivize mixed use developments. These are the current categories of permits being tracked: New Single Family Residential, New Single Family Residential Attached, New Townhouse, new Multi-family residential, New Commercial, New Industrial, New School, Residential Alteration, Residential Addition, Commercial Alteration, Commercial Addition, Industrial Alteration, Industrial Additional, Other, Public Project, Manufactured Homes. There is an allusion to mixed use development in 2000, 2005 and 2006 by the categories of ‘New Commercial Industrial’ and ‘New Commercial and Apartment’. After 2006 those categories were not tracked. According to Tom Palmer, a North Liberty Building official, “Starting in 2006 staff was instructed to place mixed uses in the zoning classification use. So commercial projects with residential units above will be listed under new commercial categories.” Tracking these permit types and locations would show whether a mixed use development would help to diversify existing neighborhoods. One of the resident’s interviewed remarked that the neighborhoods did not have a mix of incomes and were isolated from public transportation. This lack of integration between neighborhoods could be remedied by placing mixed use developments between neighborhoods. Encouraging mixed use developments would bring residents closer to the services they need, thus encouraging community-oriented development.

By incorporating smart density principles within the residential zoning code for the city, North Liberty will better be able to achieve the goals of increasing the housing supply in a more affordable manner and using land in a more efficient manner.

APPENDIX I

Windshield Survey

North Liberty Neighborhood/Block/Address: _____

By Street - Residential Areas/Neighborhoods: As you drive around, notice:

- a. Various neighborhoods and their character: numbers of mailboxes on houses; cars parked on the street; evident racial/ethnic concentration

- b. Variety of housing types: single-family, multifamily, townhouses, manufactured housing, nursing homes, mobile home parks, (identifiable) subsidized housing

- c. Residents' apparent ages (e.g., toys in yards) and income levels (indicated by housing size and amenities, cars, boats, etc.)

- d. Compatibility of mixed/different housing types and densities

- e. Housing conditions, fire and safety hazards, and zoning violations

- f. Short walking distances to shopping; sidewalks in good condition; off-street parking available (streets don't become evening "park lots")

- g. Neighborhoods are all-residential or include "life stage facilities" (e.g., child care and youth centers, Senior Centers, etc.)

By House - Housing conditions survey:

HOUSING CONDITION	EXCELLENT (5)	GOOD (4)	AVERAGE (3)	POOR (2)	DETERIORATED (1)	COMMENTS:
Foundation						
Roof						
Siding						
Doors/Windows						
Yard						
Chimney						
Garage						
Other						

Excellent (5) – no apparent problems

Good (4) – A structure recently built and meeting codes or which, if somewhat older, has had careful maintenance of both structure and grounds. No surface wear is apparent, and repairs are not needed.

Average (3) – (Minor Deficiency). A sound structure but in need of surface maintenance and possibly showing small signs of wear. The structure is not as well maintained as the “good” category and the pavement or accessory building may need repairs. Minor maintenance needed.

Poor (2) – (Major Deficiency). Significant surface wear is noticeable. The structure is slightly out of plumb with cracks, holes, or breaks evident in walls, foundation, and roof. Paint is blistered and windows, steps, etc., may need to be replaced. Major maintenance is needed.

Deteriorated (1) – (No Rehabilitation Feasibility). The structure is unsound and totally substandard. The foundation, roof, and bearing elements have substantial defect.

BUILDING OCCUPANCY STATUS:	CHECK ONE
Fully Occupied (House or multi-family complex appears to be fully inhabited)	
Partially Occupied (Some units appear vacant; some appear inhabited. Clues to look for vacancy: no names on mailboxes, no curtains or blinds, broken out windows, etc.)	
Unoccupied and Boarded (Residence is entirely unoccupied; all windows and doors are securely boarded)	
Unoccupied and Unboarded (Residence is entirely unoccupied; one or more windows and doors are not securely boarded)	

BUILDING MATERIAL	CHECK ONE
Wood	
Masonry (brick or block)	
Stone	
Metal (includes vinyl siding)	
Other:	

EVIDENCE OF RECENT IMPROVEMENT:	CHECK ONE
Yes (obvious recent improvements to building, such as new porch, new roof, new siding, new paint)	
No (no obvious improvements)	

EVIDENCE OF ACTIVE IMPROVEMENT:	CHECK ONE
Yes (Evidence of current improvement activity. Building materials, ladders, work crew or posted building permit still on locations)	
No (No current improvement activity)	

Other Comments:

APPENDIX II

Table 34: Area Median Income of North Liberty, IA by Year⁵

	HH Composition	2018	2015	2010
30% of AMI	1	\$18,270	\$17,290	\$16,345
	2	\$20,880	\$19,760	\$18,680
	3	\$23,490	\$22,230	\$21,015
	4	\$26,100	\$24,700	\$23,350
	5	\$28,188	\$26,676	\$25,218
	6	\$30,276	\$28,652	\$27,086
	7	\$32,364	\$30,628	\$28,954
	8	\$34,452	\$32,604	\$30,822
50% of AMI	1	\$30,450	\$28,805	\$27,230
	2	\$34,800	\$32,920	\$31,120
	3	\$39,150	\$37,035	\$35,010
	4	\$43,500	\$41,150	\$38,900
	5	\$46,980	\$44,442	\$42,012
	6	\$50,460	\$47,734	\$45,124
	7	\$53,940	\$51,026	\$48,236
	8	\$57,420	\$54,318	\$51,348
60% of AMI	1	\$36,540	\$34,566	\$32,676
	2	\$41,760	\$39,504	\$37,344
	3	\$46,980	\$44,442	\$42,012
	4	\$52,200	\$49,380	\$46,680
	5	\$56,376	\$53,330	\$50,414
	6	\$60,552	\$57,281	\$54,149
	7	\$64,728	\$61,231	\$57,883
	8	\$68,904	\$65,182	\$61,618
80% of AMI	1	\$48,720	\$46,060	\$43,575
	2	\$55,680	\$52,640	\$49,800
	3	\$62,640	\$59,220	\$56,025
	4	\$69,600	\$65,800	\$62,250
	5	\$75,168	\$71,064	\$67,230
	6	\$80,736	\$76,328	\$72,210
	7	\$86,304	\$81,592	\$77,190
	8	\$91,872	\$86,856	\$82,170
120% of AMI	1	\$73,080	\$69,132	\$65,352
	2	\$83,520	\$79,008	\$74,688
	3	\$93,960	\$88,884	\$84,024
	4	\$104,400	\$98,760	\$93,360
	5	\$112,752	\$106,661	\$100,829
	6	\$121,104	\$114,562	\$108,298
	7	\$129,456	\$122,462	\$115,766
	8	\$137,808	\$130,363	\$123,235

Source: U.S. Census Bureau Fact Finder, UHAB: Income Limits Explained

⁵ AMI by household size was calculated according to the instructions in the LIHTC legislation, which is available on HUD's website. The 1-person family income limit is 70% of the 4-person income limit; the 2-person family income limit is 80% of the 4-person income limit; the 3-person family income limit is 90% of the 4-person income limit; the 5-person income limit is 108% of the 4-person income limit; the 6-person family income limit is 116% of the 4-person income limit; the 7-person family income limit is 124% of the 4-person income limit; and the 8-person family income limit is 132% of the 4-person income limit. 60% of Area Median Income and 120% of AMI was calculated by multiplying the 50% threshold by 1.2 and calculated by multiplying the 50% threshold by 2.4 respectively.