City of Duluth 2015 Housing Indicator Report

Prepared by:
Community Planning Division
City Hall Room 208
Duluth, MN 55802
http://www.duluthmn.gov/community-planning/

Released: July 2016
Executive Summary

Purpose

The Community Planning Division publishes the Housing Indicator Report annually to provide a snapshot of the current housing markets and to understand how those markets have changed over time. We include demographic and workforce statistics to provide context about what kinds of housing options are available and affordable to a diverse range of our community members.

Key Findings

Homeowners’ incomes are rising and housing values are rising. Duluth appears to have a healthy and growing homeownership market with affordable ownership options for middle income people. Duluth’s renters, on the other hand, are increasingly cost burdened. Average monthly homeownership costs are about the same as the average market rate rent for a 2 bedroom apartment. Average rent has increased steeply in the last year from $757 to $851 a month, while the vacancy rate continues to decline. This tight rental housing market increases the cost burden on all renters, but especially burdens lower income renters and renters with barriers (such as a criminal record or a low credit score). The 2016 Community Needs Assessment provided additional context about the experience of renters in the current market. Respondents told us that housing options are limited, even for those with adequate income to afford market rate apartments, so many renters are willing to or must accept substandard housing.

About 12% of Duluth’s almost 60,000 person workforce works in industries where the average wage is below what a full time minimum wage worker makes. Single minimum wage workers likely cannot afford suitable market rate housing even for just themselves. Even with two full time minimum wage income earners, families likely cannot afford suitable market rate housing.

In 2015 more new housing units were created than have been in almost 10 years, many of them apartments in larger apartment buildings. While some of these brand new units may not be affordable to lower income renters, any new units can help to increase the vacancy rate in the long term and ease the housing cost burden.
# Table of Contents

2015 Duluth Profile..............................................................................................................................................................4

Housing Markets....................................................................................................................................................................6

Neighborhood Profiles..........................................................................................................................................................7

Employment Trends..............................................................................................................................................................20

Housing Affordability............................................................................................................................................................21

Research and Data Methods..................................................................................................................................................26

Appendix.............................................................................................................................................................................28
2015 Duluth Profile

Population 86,239
Student Enrollment 20,632

Median Household Income $43,518
Occupied Households 35,558
60% Owner Occupied Households
40% Renter Occupied Households

Homeowner Median Household Income $64,563
Median Monthly Owner Costs $952
Number of Home Sales 918
Median Sales Price $151,988

Renter Median Household Income $21,393
Average Rent $851
Vacancy Rate 3.3%

Population Living in Poverty 18,306
People in Emergency Shelters 2,031
People in Transitional Shelters 297

Sources: American Community Survey (ACS) 2010-2014 5 Year Estimates, St. Louis County Assessor 2015, City of Duluth Rental Survey 2015, City of Duluth Community Planning Division

In the 1950s and 60s Duluth’s population was at its highest with over 100,000 people. During the following decades, the population gradually decreased. For the past 25 years the population in Duluth has hovered around 86,000 people. Duluth’s overall median household income increased by 6% from 2010 to 2014, but during this same time period the median household income of homeowners increased by 7% while the median household income of renters decreased by 4%. Duluth’s number of occupied housing units and the share of owner occupied and renter occupied households have remained consistent since 2010. From 2000 to 2010 the share of renter occupied units increased from 36% to 40%, while the share of owner occupied units decreased from 64% to 60% (ACS 5 Year Estimates, Decennial Census).
Just over 9%, 8,132 people, of Duluth’s population identify as people of color. Almost half (46%) of Duluth’s populations of color live in three neighborhoods - Lincoln Park, Central Hillside, and East Hillside - yet only a quarter (24%) of Duluth’s total population live in these neighborhoods. Lincoln Park’s population is 23% people of color, Central Hillside’s population is 22% people of color and East Hillside’s population is 13% people of color. There have only been two significant racial demographic shifts in Duluth since 2010. There has been a decrease in American Indian residents from 2,134 people in 2010 to 1,577 people in 2014 (-557 people). There has also been an increase in Black residents from 1,988 people in 2010 to 2,349 people in 2014 (+361 people) (ACS 5 Year Estimates, Decennial Census).

Since 2010 Duluth’s population has shifted to include larger shares of older age groups. In 2010 43% of the population was under 25, compared to 39% in 2014. Twenty five to 44 year olds made up 20% of the population in 2010 and 23% in 2014. The share of 45 to 64 year olds has stayed the same since 2010 at 24% of the population. Those 65 and older were 13% of the population in 2010 and 14% in 2014 (ACS 5 Year Estimates, Decennial Census).

<table>
<thead>
<tr>
<th>Persons in Household</th>
<th>Federal Poverty Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$11,770</td>
</tr>
<tr>
<td>2</td>
<td>$15,930</td>
</tr>
<tr>
<td>3</td>
<td>$20,090</td>
</tr>
<tr>
<td>4</td>
<td>$24,250</td>
</tr>
<tr>
<td>5</td>
<td>$28,410</td>
</tr>
<tr>
<td>6</td>
<td>$32,570</td>
</tr>
<tr>
<td>7</td>
<td>$36,730</td>
</tr>
<tr>
<td>8</td>
<td>$40,890</td>
</tr>
</tbody>
</table>

For families/households with more than 8 persons, add $4,160 for each additional person
Source: U.S. Department of Health and Human Services, 2016

After increasing steadily starting in 2009, Duluth’s student enrollment at University of Minnesota-Duluth, St. Scholastica, and Lake Superior College peaked in 2012 at 24,658 students. Since 2012, enrollment has gradually declined down to 20,632 students in 2015.
Housing Markets

The average market rate rent was $713 per month in 2010, but increased steeply from $757 in 2014 to $851 in 2015. The vacancy rate was 3.4% in 2010 and 3.3% in 2015, but fluctuated up to 4.6% in the years between. Vacancy rates have been declining for the past few years. Low vacancy rates and higher rents create a more competitive rental market resulting in more cost burdened renter households (City of Duluth Rental Survey).

Vacancy Rates

Source: City of Duluth Rental Survey

Public housing vacancy rates dropped from 2% in 2014 to 1.6% in 2015. Public housing waiting list numbers went up from 635 people in 2014 to 995 in 2015. Housing Choice Voucher (HCV) waiting list numbers went down from about 1,400 people in 2014 to about 1,300 people in 2015. Unused vouchers went from 7% returned in 2014 to 0% returned in 2015. People on the HCV waiting list usually wait 12-18 months. Wait times for public housing are often shorter, around 4 months, except for 2 bedroom apartments which have a 12 month wait.

The total number of home sales in Duluth has increased from 608 in 2010 to 918 in 2015. During this same time period the median sales price has increased 15% from $137,950 to $158,532 and the average sales price has increased 17% from $161,443 to $189,500. The average market value of a single family home in Duluth was $154,00 in 2010 and increased to $157,107 in 2015. The average market value, median sale price, and average sale price of homes in Duluth have all increased slightly since 2014 (St. Louis County Assessor).

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Single Family Home Market Value</td>
<td>$154,000</td>
<td>$153,504</td>
<td>$157,107</td>
</tr>
<tr>
<td>Median Sale Price</td>
<td>$137,850</td>
<td>$149,900</td>
<td>$151,988</td>
</tr>
<tr>
<td>Average Sale Price</td>
<td>$160,863</td>
<td>$174,078</td>
<td>$181,208</td>
</tr>
</tbody>
</table>

Source: St. Louis County Assessor
The number of foreclosures continues to decrease Countywide and in Duluth.

### Foreclosures

<table>
<thead>
<tr>
<th>Year</th>
<th>Duluth</th>
<th>St. Louis County</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: St. Louis County Assessor

Almost half of Duluth’s housing stock (45%) was built in 1939 or earlier, more than 75 years ago, but there were 410 new residential dwelling units permitted in 2015. This is the highest number of new dwelling units created since 2006 when there were 602 new units. With 74 demolitions in 2015, the net gain in dwelling units for the year was 335. This again is the largest net gain in dwelling units since 2006. The majority (93%) of the units permitted in 2015 were in a few large apartment buildings. It can take a year or two from getting a permit to having an occupied housing unit, so these new units will begin to impact the housing markets in the next couple of years. In addition to new housing units, there were 1,037 permits issued for housing alterations and 48 permits issued for housing additions. There was a spike in the number of alterations permits in 2012 (1,794 permits), likely caused by the flood, and the number has been gradually declining since then. The 2015 number is still more than double the number of permits issued in 2011 (471 permits).

### Neighborhood Profiles

Looking at changes in neighborhoods can help us to better understand housing trends that might be missed when just looking at the City as a whole. In this section we look at Duluth’s neighborhood demographics and housing markets and how they have changed since 2010. We compared neighborhood changes to citywide changes and highlight instances where neighborhood changes are significantly different than citywide changes. Tables showing all of the changes since 2010 are included in the appendix.
We use Duluth’s Planning Districts as boundaries to better understand neighborhood level changes. Most of these Planning Districts are aggregates of a handful of smaller neighborhoods, but have large enough populations that we can track changes that are statistically significant. The boundaries of the Planning Districts also line up well with the boundaries of census tracts, making it easier to use American Community Survey (ACS) demographic data. There are ten Planning Districts, numbered 1-10, but we have split District 5 into Central Hillside/Downtown (5) and Park Point (5.1) because the demographics are significantly different in these areas.
Planning District 1
*Morgan Park, Gary New Duluth, Fond du Lac, Smithsville, Riverside, Norton Park*

Population **6,627**
Median Household Income **$41,650**
Occupied Households **2,816**
71% Owner Occupied Households
29% Renter Occupied Households

Homeowner Median Household Income **$49,522**
Median Monthly Owner Costs **$678**
Number of Home Sales **62**
Median Sales Price **$121,140**

Renter Median Household Income **$23,257**
Average Rent **$582**
Vacancy Rate **13.8%**

Sources: ACS 2010-2014 5 Year Estimates, St. Louis County Assessor 2015, City of Duluth Rental Survey 2015

The number of renter occupied households has increased since 2010 from 25% of households to 29% of households in 2014, along with a 17% increase in the median household income of renters. Average rent has remained steady only increasing by $12 from 2010 to 2015.
Planning District 2
Bayview Heights, Cody, Fairmont, Spirit Valley, Irving, Denfeld, Oneota

Population 11,147
Median Household Income $39,858
Occupied Households 4,909
68% Owner Occupied Households
32% Renter Occupied Households

Homeowner Median Household Income $53,834
Median Monthly Owner Costs $800
Number of Home Sales 112
Median Sales Price $128,354

Renter Median Household Income $21,148
Average Rent $818
Vacancy Rate 5.4%

Sources: ACS 2010-2014 5 Year Estimates, St. Louis County Assessor 2015, City of Duluth Rental Survey 2015

With a $217 increase, District 2 experienced one of the highest increases in average rent from 2010 to 2015. The increase in rent from 2010 to 2014 was modest ($22), so the District experienced a significant increase just in the last year. The average and median home sales prices in District 2 increased by about 30% from 2010, while median household income in the neighborhood only increased by 1%.
Planning District 3
Lincoln Park

Population **5,855**
Median Household Income **$28,157**
Occupied Households **2,626**
**47%** Owner Occupied Households
**53%** Renter Occupied Households

Racial Composition
- American Indian (5.3%)
- Black (9.4%)
- Other Race (0.9%)
- Two or More Races (7.2%)
- White (77.4%)

Homeowner Median Household Income **$47,136**
Median Monthly Owner Costs **$845**
Number of Home Sales **36**
Median Sales Price **$104,138**

Renter Median Household Income **$17,383**
Average Rent **$614**
Vacancy Rate **6.7%**

Sources: ACS 2010-2014 5 Year Estimates, St. Louis County Assessor 2015, City of Duluth Rental Survey 2015

District 3 has lower than citywide education and income levels and higher than citywide proportions of renter occupied households and people of color. Since 2010 the number of renter occupied households and people of color have increased significantly while the number of owner occupied households and white people have decreased significantly. District 3 experienced a mild increase in average rent since 2010 ($28), but was the only District to experience a decrease in rent since 2014. Average and median home sale prices have increased modestly since 2010, but District 3 still has the lowest average market value housing in the City at just under $100,000.
Planning District 4  
*Piedmont Heights, Duluth Heights*

- **Population**: 11,988
- **Median Household Income**: $52,480
- **Occupied Households**: 4,788
  - **70%** Owner Occupied Households
  - **30%** Renter Occupied Households

<table>
<thead>
<tr>
<th>Homeowner Median Household Income</th>
<th>$67,456</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Monthly Owner Costs</td>
<td>$1,006</td>
</tr>
<tr>
<td>Number of Home Sales</td>
<td>152</td>
</tr>
<tr>
<td>Median Sales Price</td>
<td>$176,300</td>
</tr>
</tbody>
</table>

| Renter Median Household Income    | $30,449 |
| Average Rent                      | $1,040  |
| Vacancy Rate                      | 3.5%    |

Sources: ACS 2010-2014 5 Year Estimates, St. Louis County Assessor 2015, City of Duluth Rental Survey 2015

District 4 had the second highest increase in average rent ($248) since 2010. The District experienced almost no changes in racial composition or owner occupied and renter occupied households. Median and average home sale prices increased slightly less than citywide increases. Median household incomes remained relatively stagnant.
Planning District 5  
*Central Hillside, Downtown*

Population **6,418**  
Median Household Income **$21,280**  
Occupied Households **3,463**  
20% Owner Occupied Households  
80% Renter Occupied Households

Homeowner Median Household Income **$53,711**  
Median Monthly Owner Costs **$926**  
Number of Home Sales **18**  
Median Sales Price **$115,673**

Renter Median Household Income **$17,010**  
Average Rent **$834**  
Vacancy Rate **1.6%**

Sources: ACS 2010-2014 5 Year Estimates, St. Louis County Assessor 2015, City of Duluth Rental Survey 2015

District 5 has lower than citywide education and income levels and higher than citywide proportions of renter occupied households and people of color. District 5 is the most renter occupied District in the City with 80% of households renting. Since 2010, District 5 experienced a slight decrease in populations of color and in owner occupied households. Average rent increased by $168 since 2010. District 5 has one of the lowest vacancy rates in the City at 1.6%. Median and average home sale prices have decreased significantly since 2010 and District 5 has one of the lowest average market values for homes. Median household income has decreased for renters, while it has increased for homeowners in the District since 2010.

Source: Jacob Norlund CC BY 2.0
Planning District 5.1
Park Point

Population 1,170
Median Household Income $56,078
Occupied Households 559
64% Owner Occupied Households
36% Renter Occupied Households

Homeowner Median Household Income $76,042
Renter Median Household Income $38,214
Median Monthly Owner Costs $1,015
Average Rent $1,033
Number of Home Sales 9
Vacancy Rate 2.8%
Median Sales Price $410,000

Sources: ACS 2010-2014 5 Year Estimates, St. Louis County Assessor 2015, City of Duluth Rental Survey 2015

Since 2010 District 5.1 has had a slight increase in owner occupied households and a slight decrease in renter occupied households as well as a slight overall population decrease. Average and median sale prices are difficult to compare through time in this District because there are so few home sales.
Planning District 6
East Hillside

Population 8,808
Median Household Income $35,427
Occupied Households 4,077
39% Owner Occupied Households
61% Renter Occupied Households

Racial Composition

Homeowner Median Household Income $56,128
Median Monthly Owner Costs $837
Number of Home Sales 55
Median Sales Price $125,103

Renter Median Household Income $22,587
Average Rent $736
Vacancy Rate 3.1%

Sources: ACS 2010-2014 5 Year Estimates, St. Louis County Assessor 2015, City of Duluth Rental Survey 2015

District 6 has lower than citywide income levels and higher than citywide proportions of renter occupied households and people of color. Since 2010 the average rent in District 6 has remained relatively stagnant, only increasing by $27, but the vacancy rate has dropped significantly in the last year from 5.5% in 2014 to 3.1% in 2015. Median household income in the district has increased significantly since 2010, but only because of an increase in homeowner median household income. Renter households experienced a decrease in median household income since 2010. The number of owner occupied households has remained about the same since 2010 while the number of renter occupied households had decreased by just over 250 households.

Source: Jacob Norlund CC BY 2.0
Planning District 7
*Endion, Congdon Park*

Population **9,096**
Median Household Income **$64,155**
Occupied Households **3,656**
52% Owner Occupied Households
48% Renter Occupied Households

Homeowner Median Household Income **$105,022**
Median Monthly Owner Costs **$1,367**
Number of Home Sales **81**
Median Sales Price **$239,000**

Renter Median Household Income **$29,275**
Average Rent **$945**
Vacancy Rate **2.5%**

Sources: ACS 2010-2014 5 Year Estimates, St. Louis County Assessor 2015, City of Duluth Rental Survey 2015

District 7 experienced a significant increase in median household income and owner occupied households since 2010. With an increase of almost 250 owner occupied households and a decrease of almost 275 renter occupied households, the District shifted from a majority renter households to a majority owner occupied households. The gap in median household income between owners and renters is the largest in the City at $75,000. District 7 had the largest increase in average rent ($264) since 2010, with a large increase of $227 occurring just since 2014. The vacancy rate (2.5%) was the same in 2010, but increased from 0.7% in 2014. Median and average home sale prices increased in line with citywide increases, but District 6 has the second highest average market value for homes at almost $251,000.

Source: Todd Murray CC BY 2.0
Planning District 8
Woodland, Hunters Park, Morley Heights/Parkville

Population 7,385
Median Household Income $79,650
Occupied Households 2,923
85% Owner Occupied Households
15% Renter Occupied Households

Homeowner Median Household Income $89,555
Median Monthly Owner Costs $1,069
Number of Home Sales 117
Median Sales Price $181,000

Renter Median Household Income $20,530
Average Rent *
Vacancy Rate *

*insufficient data
Sources: ACS 2010-2014 5 Year Estimates, St. Louis County Assessor 2015, City of Duluth Rental Survey 2015

In District 8 the number of owner occupied households and population of white people have decreased significantly since 2010. At the same time the number of renter occupied households and populations of color have remained about the same, increasing the shares of renters and people of color in the District. The median household income of homeowners increased significantly since 2010, while the median household income of renters decreased slightly. Median and average sale prices have increased since 2010, but not as much as citywide increases.

Source: Area Voices CC BY 2.0
Planning District 9
Lakeside, Lester Park, North Shore

Population 9,374
Median Household Income $68,492
Occupied Households 3,775
85% Owner Occupied Households
15% Renter Occupied Households

Racial Composition

- American Indian (0.8%)
- Black (1.4%)
- Other Race (0.6%)
- Two or More Races (2.3%)
- White (94.9%)

Homeowner Median Household Income $71,920
Median Monthly Owner Costs $1,136
Number of Home Sales 184
Median Sales Price $167,350

Renter Median Household Income $29,381
Average Rent $836
Vacancy Rate 4.8%

Sources: ACS 2010-2014 5 Year Estimates, St. Louis County Assessor 2015, City of Duluth Rental Survey 2015

In District 9 the population of white people remained about the same while populations of color increased slightly, increasing the share of people of color in the District. While the number of owner occupied households decreased, the number of renter occupied households increased slightly increasing the share of renters from 12% in 2010 to 15% in 2014. Median and average home sale prices increased significantly since 2010. District 9 had the highest number of home sales in 2015 with 184 sales. The median household income of owners increased, while the median household income of renters decreased since 2010.

Source: Duluth News Tribune CC BY 2.0
Planning District 10
Kenwood, Chester Park

Population 10,210
Median Household Income $48,131
Occupied Households 2,495
62% Owner Occupied Households
38% Renter Occupied Households

Homeowner Median Household Income $70,151
Renter Median Household Income $24,278
Median Monthly Owner Costs $979
Average Rent $1,056
Number of Home Sales 92
Vacancy Rate 0.7%
Median Sales Price $170,883

Sources: ACS 2010-2014 5 Year Estimates, St. Louis County Assessor 2015, City of Duluth Rental Survey 2015

The overall population in District 10 has not changed significantly since 2010, but the population of white people has decreased while populations of color, especially those who identify as two or more races, have increased. The median and average sales prices of homes increased slightly more than the citywide increases since 2010. The median household income of owners increased, while the median household income of renters decreased since 2010.
Employment Trends

The U.S. unemployment rate has steadily declined since 2010. The unemployment rates in Minnesota and Duluth have shown a similar trend, until 2015, when they increased slightly. In 2015 there were 59,410 jobs located in Duluth. The average wage in Duluth increased by 4% from $45,656 in 2014 to $47,476 in 2015. Many of the Duluth industries that experienced increases in average wages also had decreases in the number of people employed. Wholesale trade, finance and insurance, administrative services for waste management, and accommodation and food services all had a greater than 15% increase in average wages and a 6% or more decrease in number of jobs. In 2015, the construction industry stands out with a 20% increase in average wage and a 24% increase in number of jobs. The construction industry also had the highest number of new jobs at 528 and one of the higher average wages at $64,324. Duluth’s largest employment industry is healthcare and social assistance. About 30% of Duluth’s workforce has jobs in this industry. The industry created 334 new jobs in 2015, and the average wage increased by 26% from 2014 to $57,668 in 2015. Employing 5,760 people accommodation and food services in the third largest employment industry in Duluth, but has the lowest average wage at $17,836 per year.

![Unemployment Rates 2004-2015](image)

Source: Minnesota Department Employment and Economic Development, Local Area Unemployment Statistics

It is important to consider where jobs are located because about 27%, or 3,911 renter occupied households do not have access to a vehicle. An additional 867 owner occupied households do not have access to a vehicle either. The top three geographic employment centers in Duluth employ three-quarters of the workforce. Zip codes 55801 and 55802 (downtown central business district and Canal Park) have just over 17,000 jobs (33% of Duluth’s jobs) and an average wage of $43,774; zip codes 55811 and 55814 (airport and mall areas) have just over 13,000 jobs (26%) and an average wage of $32,737; and zip code 55805 (hospitals in the East Hillside) has just over 9,000 jobs (18%) and an average wage of $73,528.
Housing Affordability

The demographics of those who own or rent their homes may help us to better understand the barriers to affordable housing in Duluth. The gap between homeowners' incomes and renters' incomes appears to be increasing. While homeowners' incomes have steadily increased, renters' incomes have remained stagnant.

![Median Household Income](chart.png)

Sources: ACS 5 Year Estimates

Source: piratejohnny CC BY 2.0
The gap between average rent and what median income renter households can afford continues to increase. With rents rising and the incomes of households that rent going down, more and more households are cost burdened.

Sources: ACS 5 Year Estimates, City of Duluth Rental Survey

Householders of color, who make up about 7% of total households, are much more cost burdened than white householders. There are significant disparities in median household income between white households and households of color. Householders of color disproportionately rent rather than own their homes. Citywide, 60% of the 35,548 households own while 40% rent. About 62% of white households own, while 38% rent. These percentages are drastically different for Duluth’s 2,504 households of color, with 27% owning and 73% renting.

Source: ACS 2010-2014
The American Community Survey (ACS) categorizes household types as married couple, single adults living with or without children, and “nonfamily” households. It is impossible to tell how many “nonfamily” households are college students, unrelated roommates, relatives who are not spouses, or other non-married people who many would call families. About 60% of homeowners are married couple families, 30% are “nonfamily” households, and 10% are single adults with or without children under 18 years of age. Almost 70% of renters are “nonfamily” households, 12% are married couples, and 18% are single adults living with or without children. ACS data shows that 21% of renter households and 44% of owner households have children under 18 years of age. The average rent of 2 and 3 bedroom apartments increased proportionately more than 1 bedroom and studio apartments. Low income roommates who have multiple household incomes and college students who have access to credit in the form of student loans are likely more able to maintain stable housing even with higher rent increases in multiple bedroom apartments. Low income families who want to rent suitably sized housing are likely less able to maintain affordable housing with these disproportionate rent increases.

Source: City of Duluth Rental Survey
With significantly lower incomes and similar average housing and transportation costs, renters across the city are far more cost burdened than homeowners. The majority of households rely on automobiles for transportation, making the average costs of transportation unaffordable to median income renters in every neighborhood. The following location affordability maps shows the relative affordability of different neighborhoods based on median household incomes and location specific average housing and transportation costs. Housing is considered affordable if the household pays 30% or less of its income towards housing costs. In order for housing to be truly affordable, the household should not pay more than 50% of its income towards the costs of housing and transportation.
Low income workers are likely underemployed and are less likely to have sick time and benefits making it even more difficult to find and keep suitable, affordable housing (Xia, 2016). The average wage for Duluth’s third largest employment industry, accommodation and food services, is $17,836 per year. This works out to less than minimum wage for a full time employee or a higher wage employee who is not working full time. About 12% of the almost 60,000 person workforce work in industries where the average wage is below what a full time minimum wage worker makes.

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Studio apartment</td>
</tr>
<tr>
<td>avg monthly costs</td>
<td>$535</td>
</tr>
<tr>
<td>income to afford</td>
<td>$21,400</td>
</tr>
<tr>
<td>hourly wage to afford (40 hours/week)</td>
<td>$10</td>
</tr>
<tr>
<td>hours/week at minimum wage ($9.00)</td>
<td>46</td>
</tr>
</tbody>
</table>

Sources: City of Duluth Rental Survey, ACS 5 Year Estimates

No average cost market rate housing, not even a studio apartment, is affordable to one full time minimum wage worker. A household with two full time minimum wage workers could afford an average studio, 1 bedroom, and likely a 2 bedroom apartment without being cost burdened. The monthly costs of an average home could be affordable to a household with two full time minimum wage workers, but they would likely need assistance to purchase a home. The Minnesota Cost of Living Study calculates that an average family of two adults and one child in our region would need to earn $46,812 per year “to maintain a simple living that meets basic needs for health and safety” (2016, p. 9). A majority of Duluth’s workforce (70%) work in industries where the average wage for one worker is above $47,000. These workers and their households could likely afford any type of average market rate housing in the City without being cost burdened.
Research and Data Methods

American Community Survey and Census Data
To combine census tract data into Planning Districts we added counts, such as population or number of households, and used weighted averages for median or average statistics, such as median household income or average housing costs. Decennial Census data is an actual population count and is very accurate down to the neighborhood block level. For data the Decennial Census has stopped tracking and to measure changes more frequently than every 10 years, we use American Community Survey 5 Year Estimates. These estimates are reliable, but have high margins of error when looking at a small sample of the population, such as a neighborhood block. Having a large enough sample size to track significant changes is the main reason why we aggregately compare all populations of color in Duluth to white populations when looking at racial demographic changes.

Rental Indicators
Every fall the Community Planning Division conducts a rental survey to gather information about market rate rental units throughout the City. We ask landlords and property managers to give details about the apartments they rent including the number of units in each building, the rent at the time they fill out the survey, the number of vacancies, and who pays utilities. We use a database of landlords and managers who have answered the survey in previous years as well as searching the City’s database for rental license holders to find new potential respondents. There are about 14,000 rental units in the City and for the 2015 rental survey we collected information from about 2,000 of those units.

Homeownership Indicators
Average sale price, median sale price, and average market value are data points we use to understand homeownership trends in Duluth. None of these numbers offer a stand alone definition of the housing market, but can be useful to compare over time and in different neighborhoods to find trends. Average sales price can be inflated or deflated by a handful of very high or very low sales prices. Median sales price can shift significantly because of one very high or one very low sales price. Average market values are estimates made by the Assessor’s Office and can vary significantly from the actual sales price.

Neighborhood Change
We looked at factors of neighborhood change based on studies about equitable development, gentrification, and displacement. These factors include vulnerability to displacement (lower than citywide education levels and incomes, and higher than citywide renter occupied households) and indicators that the neighborhood may be experiencing gentrification (higher than citywide increases in incomes, education levels, or housing prices). Another factor we looked at is racial demographics. Because the median household
incomes for populations of color are lower than for the population of white people and because people of color are proportionately more likely to rent rather than own their homes, people of color in Duluth are more susceptible to displacement when neighborhoods experience investment and revitalization. This is the first year that this type of analysis has been done and we hope to expand it and track changes over time in future Housing Indicator Reports.

**Location Affordability Maps**
Location and access to opportunities is a component of truly affordable housing. For the location affordability maps we used average rents from our Rental Survey and ACS data for average homeowner housing costs. The dollar value we calculated for transportation costs does not tell us about the actual costs for residents in certain neighborhoods, but gives us a way to compare the potential cost burden of transportation. Using ACS commuter data, the values we calculated for average transportation costs take into account the way people in different neighborhoods commute to work. The transportation cost number was calculated with a weighted average of the costs of each mode of transportation and the number of people who commute that way. We used the average cost of owning a car in our region from the annual Minnesota Cost of Living Study. We calculated the average size of carpools from the ACS data and discounted the cost of owning and operating a car proportionately. We used the cost of a monthly bus pass for public transit commuters. We assigned zero transportation costs to people who walk and work from home. For instance, District 5 (Central Hillside and Downtown) has one of the lowest calculated transportation costs because a high proportion of residents walk to work. This does not mean that people who walk to work in District 5 do not also have to pay for a car, but it does tell us that there are lower cost ways to access economic opportunity in that District.

**Data Sources**
Access to Paid Sick Time in Duluth, Minnesota, Jenny Xia, May 2016
City of Duluth Community Needs Assessment
City of Duluth Rental Survey
Gentrification and Displacement Study: implementing an equitable inclusive development strategy in the context of gentrification, Lisa K. Bates, PhD, May 2013
Minnesota Department of Employment and Economic Development (DEED)
Minnesota Cost of Living Study, John Clay, et. al., DEED, May 2016
St. Louis County Assessor
U.S. Census Bureau American Community Survey 5 Year Estimates (ACS)
U.S. Census Bureau Decennial Census