# Community Profile Report: Ottumwa, Iowa CRP 301

April 30, 2017

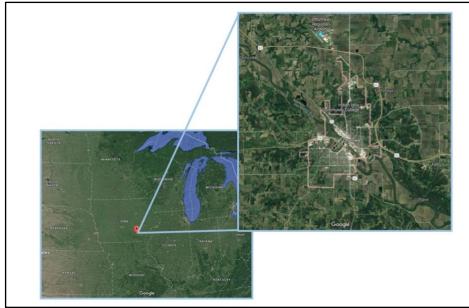
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## **Community Background**

Ottumwa, is located in the southern half of Iowa, (Midwest region of U.S.) approximately 30 miles north of the Iowa-Missouri border. Ottumwa lies in the center of Wapello County and serves as the county seat. Wapello is the 19<sup>th</sup> largest county in Iowa and lies between Monroe and Jefferson County in ranking, both of which are significantly smaller. Ottumwa is in the Southern Iowa Drift Plain region, which encompasses almost all of south Iowa (Iowa DNR, 2016). The city also lies along the southern half of the Des Moines River, which runs straight through Ottumwa—creating a need for several bridges, hence the nickname "The City of Bridges". A regional and up close map can be seen in Figure 1, below



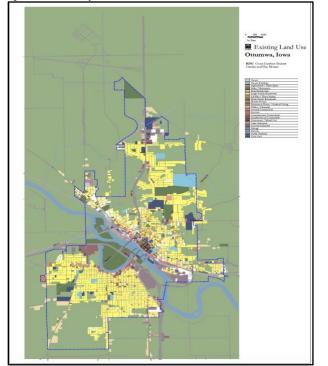
Map of Ottumwa, IA (Google, n.d.) Figure 1. Geographical Map of Ottumwa.

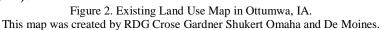
Ottumwa offers a great deal of natural resources and features for its residents and neighboring towns. The city has an expansive inventory of hiking trails, parks, and tourist resources along with features that are built into its history. A few of these features are the Greater Iowa Ottumwa Park, the Memorial Parks they feature, and the Pioneer Ridge Nature Area ("Greater Ottumwa Park", 2017).

The Greater Ottumwa Park is a campground that offers an estimated 11 miles of trails, the Beach Ottumwa waterpark, a stocked pond for fishing, electrical hook-ups, and concrete camping pads ("Things to Do in Ottumwa, Iowa...", 2017). A major natural resource for Ottumwa is the Des Moines River which runs right through the city. The river was used as a means of transportation in Ottumwa's history, but it also divided the city. To solve that issue the city built bridges to unite both sides. The Des Moines river is a place where business, recreation, and nature join. One can walk the levee trail for about a mile or fish from the banks. Locals

recommend boating as a favorite pass time ("Ottumwa: City of Bridges » Parks and Recreation", 2017).

Ottumwa, Iowa is currently a symbol of recovery as this small city is regaining its sense of pride and accomplishment while it harbors new citizens. In a span of 30 years, between 1960 and 1990, nearly a third of the population departed in tune with the slump in industry. In recent years the population decline has come under control, but the effects of the mass exodus are still being felt today. With regards to the actions of the local city planners, there has been a recent uptick in input to revitalizing the city. One prime example is the fate of the Ottumwa Theatre, formerly known as the Capri, and its next door neighbor, Capitol Theatres. These buildings were previously decimated by fires, swallowed by the mouth of inattention, and eventually fell into a decrepit state. While these adjacent buildings had the luck of a prime Main Street location, over the years they bore the brunt of the population slump and took a nose dive into a ruinous state of being (Artspace, 2014).





One problem that Ottumwa's zoning has faced, especially with regards to its subdivisions, comes as a result of the local geography and topography. In places such as the Sugar Creek Watershed, it is possible to supply services such as a sewer system, however, it's impractical for conventional subdivision development to occur. In these cases, a new Conservation Development Zone ordinance was implemented to limit development in these sites. Another past issue with subdivision planning has been maintaining population numbers. Former residents moved away, the population declined, and new residents moved to town and decided to live in developed, new areas rather than utilizing existing infrastructure. To combat this issue, the city implemented a plan to encourage residential development of subdivisions to remain within the capacity of the designed infrastructure. While the city government has the power to approve subdivisions within its jurisdiction, it does not have the authority to control other land use or zoning controls in Wapello County. This can provide a challenge in managing the development of the overall community in Ottumwa. (RDG Crose Gardner Shukert with the Citizens of Ottumwa, 2001).

While the future may appear to be an improvement, most of the residential issues can largely be tied to the past mistakes of planners' zoning decisions. The original intent of plans was to encourage large industrial businesses by leaving the option open for the future redevelopment of residential buildings by zoning the land as C-2, M-1, and M-2. This lack of foresight has resulted in patches of residential and industrial land use throughout the city, where there's no cohesive neighborhoods or industrial parks, instead limited to mixed-use developments. Another historic zoning error was placing historical buildings under the R-3 zoning umbrella. R-3 zoning is reserved for multi-family housing, even though the majority of historic homes that fell under this new zoning ordinance were single-family. Land Use of Ottumwa can be seen in Figure 2, located above.

Unsurprisingly, the transition from historic, single-family to revamped multi-family homes caused a large strain on the population and infrastructure of Ottumwa. The change was far too sudden for the city to handle and as a result, the majority of these buildings have fallen into disrepair (RDG Crose Gardner Shukert with the Citizens of Ottumwa, 2001). With an improved planning and zoning commission, housing improvement incentives, and The Brownfield Resurrection Initiative, the City of Bridges may be bridging the gap between the declining core rejuvenation movement, (Ottumwa: City of Bridges » Planning & Development).

The Ottumwa Plan is focused mainly on centralizing and enhancing neighborhoods around the river, though during the site visit, emphasis was placed elsewhere. Kevin Flanagan, the main Ottumwa planner, has stated how Main Street has the potential to become a must-see destination. He stated how Ottumwa has a historic charm that needs to be revived, which entice tourists and create a sense of community for the current residents. One of the developments that seems to be progressing for the better of the community is the Main Street Beautiful Plan (Main Street Ottumwa, 2013). Noticeable improvements are seen, yet the city is still lacking historic charm, looking more like an amusement park Main Street than a cherished landmark.

Another plan, in collaboration with the Ottumwa Legacy Foundation, is the Riverfront Plan (Ottumwa Regional Legacy Foundation, 2015). The plan utilizes social media and community input to inventory existing structures and create plans for future improvements. The Riverfront Plan has condominiums, an ice skating facility, and consolidated baseball fields. The idea is to attract more people to Ottumwa to showcase its natural features and history, while also contributing to the community. By creating new housing, they hope to draw in new people to the city which will then be able to contribute to the economy and fund public housing maintenance programs. However, the plan focuses more on long-term results than short-term challenges, as there are other issues that are not fully addressed with the Riverfront Plan. One solution could be to propose initiatives to incentivize owners to restore historic homes, while simultaneously restoring their historic downtown and improving the city as a whole.

Another goal the Ottumwa planners have is that of expansion, specifically, the acquisition of land on the northern limits of the city (Ottumwa Regional Legacy Foundation, 2014). Although this is an obvious area of potential, with adequate access to the local highway and the sheer ease of development thanks to naturally flat ground, this proposal also appears to be shortsighted. This land allocation goal should be saved for future developments and proposals, as there are more pressing issues that need to be focused on. Furthermore, the infrastructure required to complete any future developments on the northern part of town would be futile, as access roads and adequate access to water and sewage would far exceed the potential revenue. The current sewage system is already at capacity, therefore extending the limits of the sewage system before expanding the capacity and efficiency is irresponsible.

## **Population Profile**

In order to understand Ottumwa and to make good future planning decisions, the city's population needs to be analyzed by looking at different aspects such as population size, age and gender composition, population change, racial composition, racial composition by census tract, and population projections.

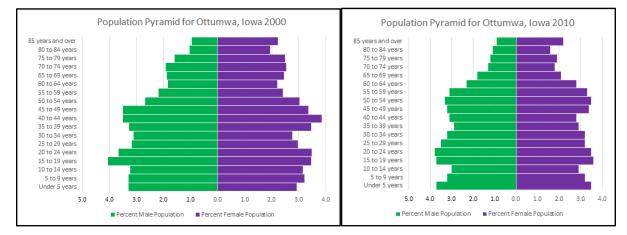


Figure 3 and 4. Population Pyramid of Ottumwa, Iowa in 2000 and 2010. Graph was made using data from the 2000 and 2010 Census and shows population for age cohorts in Ottumwa in 2000 and 2010.

The first population aspect that was analyzed in Ottumwa was age and gender composition. When comparing the 2000 and 2010 population pyramids, Ottumwa's age makeup has changed in a few noticeable ways throughout the 10 year span. The female population age 30-34 increased (2.8% to 3.2%) and the male population age 70-74 decreased rather significantly (1.9% to 1.3%). In 2000, there was a high concentration of the population age 35-49, represented by a bulge on the population pyramid. In 2010, the pyramid shows a high concentration of the population age 45-59, which is the 2000 bulge aged by 10 years. The shift upward of the bulge shows that the population of Ottumwa is getting older as a higher concentration of the population gets closer to the top of the pyramid. In contrast, Ottumwa's "Under 5 Years" age cohort has grown for both males and females between 2000 and 2010. The male population increased from 3.3% to 3.7% and the female population increased from 2.9% to 3.5%, an overall increase of 1% for the "Under 5 Years" cohort.

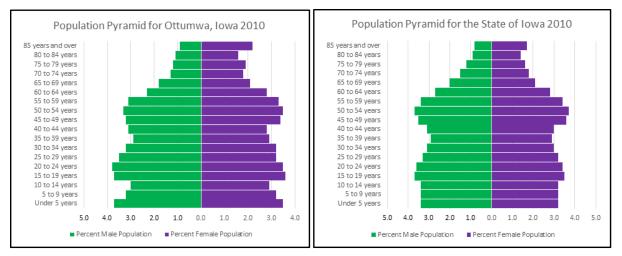


Figure 5 and 6. Population Pyramid of Ottumwa and Iowa 2010. Graph was made using data from the 2010 Census and shows population for age cohorts in Ottumwa and Iowa in 2010.

Compared to the State of Iowa in 2010, Ottumwa's 2010 population pyramid has the same general shape with bulges around the 50-54 and 20-24 age groups. The 50-54 bulge on the Ottumwa pyramid is smaller than that of Iowa's meaning that Iowa has a larger percentage of males for this age range. Where Ottumwa really differs from the state is in the young age groups. Iowa has a steady growth rate for children 14 years and younger at around 3.5%. Ottumwa is experiencing growth in the population 14 years and under. The population concentration increases from the 10-14 age group down to the 5-9 age group and then to the "Under 5 Years" age group. The percentage of the female population in Ottumwa for the 85 years and over cohort is quite larger than that of the State of Iowa (2.2% and 1.8% respectively).

Overall, Ottumwa and Iowa had very similar population pyramids in 2010. One cannot be classified as older or younger than the other. The major difference is seen in the population 14 years and younger. When looking at this age group, it can be inferred that Ottumwa's population is seeing growth due to the higher concentration of population from 2000 to 2010. An increase in the young population is an indicator of population growth in the future. As the young population ages in Ottumwa, more people will eventually be of age to start their own families and thus population growth continues. The State of Iowa does not seem to have the same potential for future growth as Ottumwa because of the 2010 trend for the population 14 years and younger. The child population in Iowa has stayed steady therefore decreasing the likeliness of future population growth. When looking at population change data from 2000 and 2010 census, Ottumwa clearly grew at a slower rate than the State of Iowa. However, this trend could change in the coming years.

Based on the age composition of Ottumwa, some community aspects will need to be monitored. Since Ottumwa has such a sizable older population, especially in the 85 years and over cohort, there needs to be a higher concentration of healthcare facilities in order to care for that population. Child care needs should also be increased if the child population continues its trend of growth.

Measures	Ottumwa	State of Iowa
Population 2000	24,998	2,926,324
Population 2010	25,023	3,046,355
Absolute population change 2000-2010	25	120,031
Percent population change 2000-2010	0.1	4.1
Average annual absolute population change 2000-2010	2.5	12,003
Average annual exponential population growth rate 2000-2010	0.01%	0.40%

Table 1: Population of Ottumwa and Iowa in 2000 and 2010

When looking at overall population change data from 2000 and 2010 census, Ottumwa clearly grew at a slower rate than the State of Iowa. Ottumwa's population only added 25 people, a 0.1% increase, in 10 years. Iowa's population added 120,031 people, a 4.1% increase. The rate at which the percent of population changed from 2000 to 2010 was about 40 times greater for the State of Iowa than that of Ottumwa. However, the population growth in Ottumwa could change in the coming 20 to 30 years. Ottumwa could see increased population growth as the growing child population gets older and begins to start their own families.

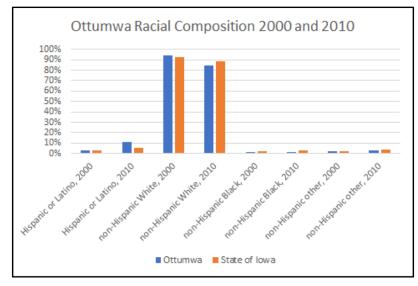


Figure 7. Ottumwa Racial Composition 2000 and 2010. Data was retrieved from the 2000 and 2010 Census.

Racial composition of Ottumwa was analyzed between 2000 and 2010 census data. The racial groups analyzed were categorized as Hispanic or Latino, non-Hispanic White, non-Hispanic Black, and non-Hispanic other. The table below shows the percent population composition for each racial group in 2000 and 2010 for Ottumwa and the State of Iowa.

Table 2. Measures of Racial Composition and Percent Difference in Ottumwa and Iowa. Data was retrieved from the 2000 and 2010 Census.

Measures	Ottumwa	State of Iowa	Percent Difference Between Ottumwa and Iowa
Percent Hispanic or Latino, 2000	2.8%	2.8%	0%
Percent Hispanic or Latino, 2010	11.3%	5.0%	6.3%
Percent non-Hispanic White, 2000	94.1%	92.6%	1.5%
Percent non-Hispanic White, 2010	84.3%	88.7%	4.4%
Percent non-Hispanic Black, 2000	1.3%	2.1%	0.8%
Percent non-Hispanic Black, 2010	1.7%	2.9%	1.2%
Percent non-Hispanic other, 2000	1.8%	2.5%	0.7%
Percent non-Hispanic other, 2010	2.6%	3.6%	1.0%

The most notable information from the table is the growth of the Hispanic or Latino population from 2000 to 2010 in Ottumwa. The Hispanic or Latino population was at only 2.8% in 2000, the same rate as the State of Iowa. This population increased in 2010 to 11.3% of Ottumwa's total population, an increase of 8.5%. The 2010 composition of the Hispanic or Latino group in Ottumwa is more than twice the composition for Iowa.

As a result of the increase of the Hispanic or Latino group in Ottumwa from 2000 to 2010, the composition of the non-Hispanic White group decreased significantly between 2000 and 2010. The composition of non-Hispanic White in 2000 Ottumwa was 94.1% which later dropped to 84.3% in 2010, a decrease of 9.8%. The population of non-Hispanic Whites was 1.5% higher in Ottumwa than the State of Iowa in 2000. However in 2010, Ottumwa's non-Hispanic White population percentage dropped below that of the State of Iowa by 4.4%.

The population of non-Hispanic minorities increased for both Ottumwa and Iowa between 2000 to 2010, but Iowa had larger percentages. Over all, Ottumwa diversified between 2000 and 2010 by increasing the proportion of minority populations.

Some possible reasons for this increase in diversity could be the result of a changing economy more heavily influenced by professions that are composed of mainly minority workers, such as manufacturing. An increase in these types of jobs may have had an influence on the influx of the minority population. Another possible cause is simply immigration, as the immigration rate has steadily increased from 2000 to 2010, further diversifying the United States. Changes in housing affordability and community programs could have also attracted the minority population to Ottumwa as many minority workers have low-wage jobs.

Table 3. Tract Numbers and Population for the City of Ottumwa. Data from the ACS 2015 5-year estimates.

City of Ottumwa	Tract Number							
Measures: ACS 2015 5-year estimates	9602	9603	9604	9605	9606	9608	9609	9610
Population	2,577	4,424	3,866	2,656	2,788	3,252	2,760	3,295
Percentage non-Hispanic White	76.7%	91%	78.6%	65.6%	76%	88.7%	80.7%	92.6%
Percent Hispanic	16.3%	5.7%	12.6%	22%	16.4%	8.7%	15.9%	6.9%
Percent non-Hispanic Black	1.8%	0.7%	4.8%	11.5%	1.5%	0%	1.6%	0.4%
Percent non-Hispanic Asian	0%	1.2%	1.2%	0.9%	4.3%	1.2%	0.9%	0%
Percent non-Hispanic other	5.2%	1.5%	2.7%	0%	1.7%	1.4%	0.9%	0.1%

Another way to analyze population is to look at the racial composition of census tracts to understand if there are areas of a city that have higher concentrations of different racial backgrounds. In Ottumwa, there are eight census tracts. In each census tract, there is a disproportionate majority of non-Hispanic White population with the highest percentage being 92.6% in tract 9610 and the lowest being 65.6% in tract 9605. The next most represented group in each tract is the Hispanic population. The highest concentration of Hispanics is in tract 9605 at 22%. All of the tracts have disproportionately low percentages of both non-Hispanic Black, non-Hispanic Asian and non-Hispanic other with their highest percentages, respectively, being 11.5% in tract 9605, 4.3% in tract 9606, and 5.2% in tract 9602 and 9610. The most diverse census tract is 9605 and the least diverse is 9610.

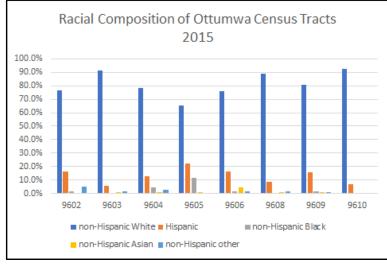


Figure 8. Racial Composition of Ottumwa Census Tracts 2010. Data from ACS 205 5-estimates.

The census tract data shows that Ottumwa's census tracts are predominantly non-Hispanic White in race with smaller percentages of Hispanic and even smaller percentages of non-Hispanic Black, non-Hispanic Asian, and non-Hispanic other. The concentration of non-Hispanic Black seems to cluster in tract 9605 while the concentration of non-Hispanic Asian and non-Hispanic other seems to be relatively evenly spread among each census tract. The concentration of Hispanics is also relatively spread out as many of the tracts have over 12%, but some have less than 9%. Census tract 9605 should be further investigated because it has a much different racial composition than the rest of the tracts. There could be some segregation occurring in Ottumwa that is causing census tract 9605 to have higher concentrations of Hispanic and non-Hispanic Black populations.

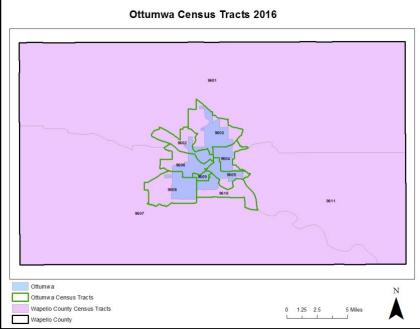


Figure 9. Map of Ottumwa and Wapello County Census Tracts. Data from TIGER/Line and IDNR.

Population projections can be useful for determining possible future population and help a community prepare in different ways for an increase or decrease in population. For Ottumwa, six different population projections and two averages were calculated based on the population changes between census years 1990 and 2000, and 2000 and 2010. The calculations are in the table below. Based on these projections, Ottumwa is not expected to see a lot of population growth. Some methods even predict a decline in population. The projections with a 10-year base will more accurately predict the future population of Ottumwa because they use 2000-2010 census data instead of 1990-2010 data. Each of these time periods take into account very different numbers. Between 2000 and 2010, the 10-year base period, Ottumwa only added 25 people to its population. Between 1990 and 2000, around 500 people were added to Ottumwa's population. By using the 20-year base, the projections are based on a population increase of about 525 people. The 10-year base is more accurate for Ottumwa because it takes into account the growth pattern that has occurred over the last 10 years rather than the last 20 years, where the 1990-2000 decade experienced a much higher rate of growth.

Ottumwa Projections	2020		2030						
	10-year base 20-year base		10-year base	20-year base					
		Į	Į						
Linear	25,048	25,291	25,073	25,558					
Geometric	25,048	25,295	25,073	25,570					
Exponential	25,048 25,295		25,073	25,570					
	Ratio Approaches								
Constant Share	24,279		23,845						
Shift Share	24,590	24,559	24,456	24,395					
Share of Growth	25,085	34,161	25,121	39,494					
Averages Based on Simple (Linear & Exponential) and 1.0 Scenario Ratio									
Average of all 5 projections	24,751	27,327	24,624	28,754					
Trimmed Average (without the highest & lowest projections)	24,819	25,293	24,765	25,564					

Table 4. Ottumwa Population Projection for the years 2020 and 2030. Projections are based on Ottumwa 1990, 2000, and 2010 Census populations.

The trimmed average is the best method for Ottumwa to use when calculating population projections. The trimmed average takes into account the variation of each projection method and eliminates the outliers that may be skewing the projections. Based on the 10-year base trimmed averages, Ottumwa's 2010 population of 25,023 is expected to decline in 2020 by 204 people and again in 2030 by 54 people. The expected decline is not drastic, but is something that community planners should take into consideration when making future planning decisions. Efforts to maintain and growth the population should be prioritized to prevent severe population

loss farther into the future. Improving the housing stock in Ottumwa is one of the most important things Ottumwa planners could do to help prevent future population loss. The housing stock in Ottumwa is very old so making updates to deteriorating housing is key. Making sure housing is affordable should also be a focus. Making these changes will reduce the Ottumwa residents' desire to move outside of Ottumwa and could even attract people to the city. Providing adequate services, such as daycare, healthcare, and entertainment, will also keep people in Ottumwa.

## Household Analysis

For this household analysis of Ottumwa, the information is obtained from the 2010 census and ACS 2015 five year estimates. According to the census 2010 report, Ottumwa has 10,251 households. Of those, 6,208 are family households and 4,043 are non-family households. So, 60.6 percent of households in Ottumwa are family homes, and 39.4 percent are non-family, which means that Ottumwa is more of a family oriented city. These results are actually very similar to the State of Iowa. Iowa has 1,221,576 households, of which 790,034 are family households and 431,542 are non-family. That means that 64.7 percent of households in Iowa are family households, which is only a few percentage points off from Ottumwa's results. It would seem that the city of Ottumwa and the State of Iowa are both higher in family households indicating that they are good places to build and raise a family.

The 2010 census (Table 1) shows that Ottumwa has 3,079 households with individuals under 18, which equals 30 percent. The State of Iowa has similar results where 373,432 households have individuals under 18, which equals 30.6 percent. In this aspect, Iowa and Ottumwa are almost neck and neck because there is only a 0.6 percent difference between the two. There is a bigger difference between households with individuals over 65 but still not that large. Ottumwa has 2,891 households with individuals over 65, which equals 28.2 percent, and Iowa has 311,990 which equals 25.5 percent. This shows that both Ottumwa and Iowa have similar amounts of households with individuals under 18 and over 65. The census also looks at average household size and family size. These two aspects are very similar between Ottumwa and Iowa. Ottumwa has a 2.36 average household size and 2.97 for average family size while Iowa has a 2.41 average household size and a 2.97 average family size. For both Ottumwa and Iowa they have the exact same average family size but the average household size only differs by less than one percent.

The ACS 2015 five year estimates (table 2) has similar results as the census 2010, but they do differ. The five year estimate shows that Ottumwa has 10,068 households. Of these households, 63.1 percent are family households and 36.9 percent are non-family. The State of Iowa results show that there are 1,236,409 households of which 64.5 percent are family households and 35.5 percent are non-family. These percentages are very close to the 2010 census results. For Ottumwa, the percentage of households with individuals under 18 on the ACS 2015 five year estimates is 32.6 percent. The percentage of households with individuals over 65 is 36.2 percent. In Iowa, the percentage of households with individuals under 18 is 30.3 percent and for individuals over 65 it is 36.3 percent. These results, just like the census 2010, are very similar, with only a few percentage family size from the ACS estimates comparing Iowa and Ottumwa are very similar to the census 2010 data. The average household size in Ottumwa is 2.38 and the average family size is 2.92 whereas in Iowa the average household size is 2.42 and the average

family size is 2.98. They are almost the exact same for both Ottumwa and Iowa with Iowa being just slightly larger.

What the census 2010 and ACS 2015 five year estimates show is that Ottumwa and Iowa are very similar in their household analysis's. They each have roughly the same family sizes, household sizes, family households, and so on. Another method of analysing housing data in Ottumwa is to look at the different tracts within Ottumwa and compare those to each other. This is provided by the ACS 2015 five year estimates. There are eight different tracts that are analysed and they each have data on household size, income, percentages of family households and non-family households, and households with individuals under 18 and over 65. (Table 3)

There are two tract levels that have very high median household incomes compared to the other tracts. The highest levels of income being \$58,829 for tract 9603 and \$55,189 for tract 9607. Tract 9607 also has the highest percentage of family households at 79.4 percent as well as the highest percentage of households with individuals over 65 at 45.3 percent. They also have the lowest percentage of households with individuals under 18. The average household size for all tracts in Ottumwa falls between 2 and 3. It appears that there is not really a connection between income and household statistics. The two tracts with the highest median income have very different percentages of family households. Tract 9603, with \$58,829 median income has 67.2 percent family households. The median household income does not go higher than \$58,829 and the lowest income is \$21,224. Households with individuals over 65 and under 18 vary throughout median income levels so that appears to have no relation to median income.

The trip to Ottumwa was helpful to see what life really is like in the small town of Ottumwa. It is one thing to look at data and information online but it is another thing to actually see it in person and experience their living style first hand. Ottumwa has a lower to medium income level but the data and visiting Ottumwa shows that it is a good place to raise a family.

Census 2010	Ottumwa	Ottumwa %	Iowa	Iowa %
Total number of households	10,251	100.0	1,221,576	100.0
Family households	6,208	60.6	790,034	64.7
Non family households	4,043	39.4	431,542	35.3
Households with individuals under 18	3,079	30.0	373,432	30.6
Households with individuals over 65	2,891	28.2	311,990	25.5
Average household size	2.36	Х	2.41	Х
Average family size	2.97	Х	2.97	Х

Table 5. Census 2010 data for households in Ottumwa, IA

Table 6. Ottumwa and Iowa Households. Data from ACS 2015 five-year estimates.

Measures: 2015 5-year estimates	Ottumwa	MOE	State of Iowa	MOE

Total housing units	11,121	<u>+</u> 230	1,354,264	<u>+</u> 658
Total number of households	10,068	<u>+</u> 291	1,236,409	<u>+</u> 3,802
Household per housing unit ratio (calculate)	0.905		0.913	
Percentage of non-family households	36.9 %	<u>+</u> 2.9	35.5 %	<u>+</u> 2.9
Percentage of family households	63.1 %	<u>+</u> 2.9	64.5 %	<u>+</u> 4.2
Percentage of households with individuals under 18	32.6 %	<u>+</u> 2.0	30.3 %	<u>+</u> 0.2
Percentage of households with individuals over 60	36.2 %	<u>+</u> 1.7	36.3 %	<u>+</u> 0.1
Average household size	2.38	<u>+</u> 0.06	2.42	<u>+</u> 0.01
Average family size	2.92	<u>+</u> 0.10	2.98	<u>+</u> 0.01

Table 7. Households by Census Tracts. Date from ACS 2015 five-year estimates.

Ottumwa	Tract number							
Measures: ACS 2015 5-year estimates	9602	9603	9604	9605	9606	9607	9609	9610
Total households	1,003	1,752	1,584	966	1,221	1,497	1,238	1,340
Percentage of family households	52.9%	67.2%	65.7%	59.2%	62.2%	79.4%	58%	67.7%
Percentage of nonfamily households	47.1%	32.8%	34.3%	40.8%	37.8%	20.6%	42%	32.3%
Percentage of households with individuals under 18	35.9%	29.2%	33.9%	37.8%	28.9%	26.1%	30.4%	31.4%
Percentage of households with individuals over 65	44.0%	40.2%	32.7%	21.8%	36.0%	45.3%	33%	38.4%
Average household size	2.57	2.26	2.39	2.75	2.19	2.54	2.22	2.46

Median household income (\$)	21,224	58,829	41,898	30,932	33,856	55,189	27,674	36,295
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## Housing Analysis

Ottumwa's housing issues are very complicated. They have the dual task of 1) improving the existing stock while increasing and/or maintaining affordability and 2) looking towards producing new housing for future growth. Ottumwa is also looking attract new businesses to the area. The housing stock has a large effect on these business owners' decisions and Ottumwa's housing is extremely old and in many cases, poorly maintained. Housing overall is also a huge factor in the health and well-being of a city and if Ottumwa is committed to creating a city that makes its residents healthy, then it should be committed to improving housing conditions. This housing analysis will compile relevant statistics regarding housing in Ottumwa and Iowa, for comparison, and offer insights into issues of quality, affordability, increasing their tax base, and job creation in relation to housing.

When comparing Ottumwa to the rest of the state, there are significant differences and few similarities.

One of the places where Iowa and Ottumwa are comparable is evident in the makeup of households and families. The household per housing unit ratio is exactly the same between Iowa and Ottumwa, 1.10, and differences between the percentages of non-family and family households, households with individuals under 18 and those over 60, and average household and family size are almost exactly the same. Overall, there is not much of a difference between Ottumwa and the State of Iowa for percentages of housing units, no matter the group. It can be inferred that Ottumwa is slightly more affordable than the State as the average household and family size is smaller, as well as the household per housing unit ratio. This is one of the few topics where Ottumwa reflects the trends of Iowa as a whole.

Table 8. Occupied vs Vacant Units in Ottumwa vs. Iowa

Occupied vs Vacant Units	Ottumwa	lowa
Percent occupied housing units	90.50%	91.30%
Percent vacant housing units	9.50%	8.70%

Vacancy rates show the percentage of available housing units. As seen in Table 1.1 (above) Ottumwa's vacancy rates are fairly high, but only .8% higher than the rest of Iowa. Ottumwa has 11,121 total housing units, which means they have around 1,000 vacant units. Ottumwa's vacancy rate also ties into the household per housing unit ratio. The average household and family size is smaller, as is the ratio, and coupled with a higher vacancy rate, it can be assumed there is a surplus of housing available in Ottumwa versus the State. Having a surplus typically means a city does not need to build more housing, but Ottumwa's current stock is, as indicated by Table 1.2 (below), extremely old and according to the city planners, extremely distressed. This means that Ottumwa's housing stock will need heavy rehabilitation and/or new housing.

Ottumwa has a surplus of distressed housing with a nearly stagnant population, ultimately making the city an unattractive place for companies and its citizens. This leaves Ottumwa's

housing supply in dire attention; it currently reflects a generally depressed atmosphere. The distressed housing makes it difficult for the city to attract outsiders, let alone investors. The high percentage of renter-occupied housing units in Ottumwa is concerning because the city is not maintaining adequate tax returns. This feeds into a seemingly continuous cycle; the city of Ottumwa has a distressed housing supply that is unable to receive the necessary maintenance due to the inefficient tax returns from the relatively small percentage of owner-occupied housing units in Ottumwa.

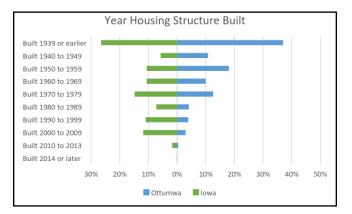


Figure 9. The year housing structures were built in Ottumwa compared to Iowa. Data from the ACS 2015 5-year estimates.

Table 9. Owner vs Renter occupied in Ottumwa and Iowa.							
Owner occupier vs Renter occupied Ottumwa Iowa							
Percent owner-occupied housing units	67.80%	71.50%					
Percent renter-occupied housing units	32.20%	28.50%					

Compared to the State of Iowa, Ottumwa has more renter-occupied housing units than owner-occupied housing units, at 67.8% and 32.2% respectively (see Table 1.3). This rate for renter-occupied units is higher than the State's 28.5%. There is not a drastic difference between the two and both are close to the national ratio of 70% owned-30% rented, but in the context of Ottumwa the problem with renting does not lie in the ratio of rent to owned, but in the price and quality of the units.

Quantitatively, one can see from Table 1.4 that rent is lower in Ottumwa compared to the state, but the rental burden is over 10% higher for Ottumwa. This is mainly indicative of their lower median income. This rental burden is also hard to justify given the quality of rental units in Ottumwa, because qualitatively, according to the city planners, most rental units are over-priced for their shoddy conditions and rental properties are also owned by local slumlords.

Table 10. Affordability in Ottumwa and Iowa						
Affordability Idicators	Ottumwa Iowa					
Median value of owner occupied housing units	72300	129200				
Median gross rent	614	697				
Percent of housing units for which rent is more than 30% of household income (affordability)	54.80%	44.60%				

The overpriced and poorly maintained housing supply combined with the lower median income creates an unattractive site for real estate investment. Ottumwa has had an issue with industries leaving the city in the past, and if the community wants corporations to invest in its

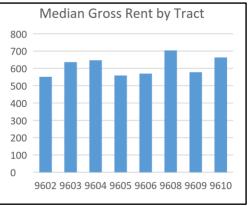
economy, then the planners will have to make the housing supply a more attractive option for the citizens. Ottumwa needs a sustainable industry to increase the tax revenue by providing more jobs for its citizens. The over-priced properties in Ottumwa puts a serious constraint on the growth of the population.

Now looking to Table 1.5, one can see if gas prices fall below 54 cents per mile, then it would be less financially stressful to live twenty to thirty minutes from Ottumwa if you worked there. Even considering the expenses of driving, one may opt to live outside of Ottumwa for a better selection of housing options. In fact, many people who work in the city of Ottumwa reside in different cities within Wapello County. Wapello is the poorest county in Iowa, and Ottumwa is one of the most expensive cities within the county of Wapello. Ottumwa's median gross rent is \$614, which is notably more expensive than the neighboring cities, even though the quality of housing will be generally the same or better across Wapello.

City	Median Gross Rent	Distance from Ottuma	\$ gas per mile	cost of drive	total cost (month)
Eldon	483	11.	\$0.54	6.156	729.24
Blakesburg	470	1	3 0.54	7.02	750.8
Agency	570	5.1	6 0.54	2.7864	681.456
Chillicothe	500	8.	0.54	4.428	677.12
Ottumwa	614		0.54	0	614

Table 11. Median Gross Rent, Distance from Ottumwa etc in Ottumwa, IA.

Census Tracts:





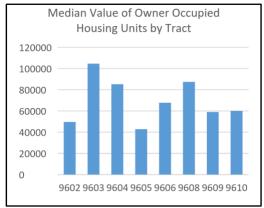
It was established in the earlier comparison that Ottumwa's housing stock is worse than the State's, which puts them at a significant disadvantage, but some parts of Ottumwa are more disadvantaged than others. Ottumwa has a large Hispanic population that has been segregated into certain parts of the city, specifically Tract 9605.

Segregation often exacerbates inequality. Areas that minorities are segregated into are often stigmatized, which leads to discrimination. It also has to be recognized that segregation is not only an issues in large inner cities. It happens everywhere

Tract 9605 in Ottumwa is 66% White-only, 22% Hispanic or Latino, 11% Black-only, and 1% Asian-only. This tract has the highest minority population of all the census tracts and is

also one of the most disadvantaged in terms of housing.

First, Tract 9605 has one of the lowest gross rents, at \$559, \$55 lower than Ottumwa's. They also deal with the highest percentage of renter occupied housing and have the lowest



median value of owner occupied housing units.

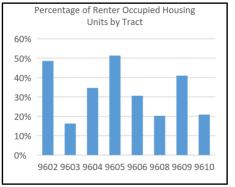


The other census tract with large Hispanic and Latino populations, like 9602 and 96096, face the same issues as Tract 9605, but they are both lower income and have more people per household. The low rents and low housing values of homes in these census tracts is concerning. The quality of homes in Ottumwa overall is extremely poor, so having that issue exacerbated by concentrated poverty is a real concern. Poor housing leads to other problems such as reduced health and high levels of truancy. Ottumwa has to take this issue seriously. Below is Table 1.-which details more information about housing in each census tract.

Ottumwa	Tracts							
Measures: ACS 2015 5 yr	9602	9603	9604	9605	9606	9608	9609	9610
Total housing units	1148	1787	1734	1147	1406	1584	1315	1469
Percentage of vacant housing units	13%	2%	9%	16%	13%	13%	6%	9%
Percentage of occupied housing units	87%	98%	91%	84%	87%	87%	94%	91%
Percentage of owner occupied housing units	51%	84%	65%	49%	69%	80%	59%	79%
Percentage of renter occupied housing units	49%	16%	35%	51%	31%	20%	41%	21%
Median value of owner occupied housing units	49600	104600	85200	42800	67700	87400	59000	60000
Median gross rent	551	636	647	559	570	704	578	663
Median household income	21224	58829	41898	30932	33856	45179	27674	36295

12. Ottumwa Tracts from ACS 2015 5-year estimates.

#### Major factors hindering growth:



Low Tax Revenue renew infrastructure/housing supply	ightarrow Inability to
Poor (quality) Housing Stock Expense/Liability	$\rightarrow$ Increasing
Relatively high median gross rent to neighboring cities	→ Compared
Lower median income Poor County	$\rightarrow$ Wapello =

High Renter Occupied

 $\rightarrow$  High Vacancy Rate

Ottumwa is determined to stimulate the growth of the community, but in order to plan for growth, Ottumwa must attract companies to invest in the city. Companies need an incentive to invest in a community like Ottumwa. Unfortunately, Ottumwa has a low tax revenue so the community is unable to renew the existing housing supply on their own terms. This results in an aging housing stock that is increasing in expense as well as becoming a liability for the entire community.

For many communities, the housing supply is often an incentive for outside companies to base their operations there. However, Ottumwa is having difficulty drawing in new business due to their housing stock, which is currently in such a bad state that it is an active disincentive for development. To remedy this, Ottumwa is in need of serious revitalization. A revitalized housing stock will make Ottumwa more attractive to its citizens and outsiders; however, the city currently does not have the tax revenue to fix the housing issue. There must be investment and financial aid to stimulate the revitalization of a community.

This relationship between the housing stock and financial investments in this community has created a paradoxical cycle. Companies would be attracted to Ottumwa if the city had an attractive housing supply, but Ottumwa does not have the tax revenue to renew its housing stock. The community is in need of large scale redevelopment and rehabilitation in order to fix the housing supply, all of which requires a huge amount of capital which the city does not have and investors are unwilling to make. Essentially, Ottumwa needs an initial big investment before more big investments are made. Housing in Ottumwa has become a complex problem, but that does not mean there is no hope. Extreme cases such as these leave the doors open for new and creative solutions.

## Unemployment

In order to understand the long term effects for Wapello County for their unemployment lifespan going from the year 2000-2015 is most appropriate in order to understand the long term unemployment rates before the economic crisis in 2008 and how the county has recovered since then. The unemployment rates in Wapello County are much higher than the unemployment rates for the State of Iowa especially after the economic crisis hit in 2008 Wapello County had a large jump in percentage of unemployment, almost twice that of the State of Iowa. Wapello County was just above the unemployment rate they were at in 2008 in 2015. So, they have made some progress in bringing that rate down The State of Iowa had the same trend, just not as severe, and viewers can watch their unemployment rates drop below that of the unemployment rate from 2008.

The population decline in Ottumwa from the 1960's to the 1990's has influenced unemployment within the city a great deal. The city is trying to increase the amount of jobs in the city, and since the population growth seems to be steady around 25,000 people the increase in jobs will lower the unemployment rate and create a better economy for the residents within the city, and the surrounding community for the future(population).

Over the past year, the number of employed workers has increased by 1.2% which averages a 0.1% increase each month. Over the past month, the employment levels in Ottumwa have grown faster and the economy is continually improving. The unemployed population has decreased by 151 people or 21.8% in the last year which averages a -1.82% decrease each month. Ottumwa has a 4.5 % unemployment rate which worse than Wapello County and Iowa, and only 1 percent better than the United States unemployment rate.

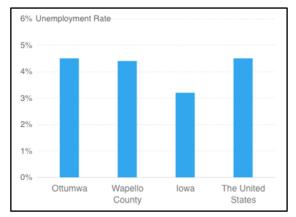


Figure 12. Unemployment Rate in Ottumwa, Wapello County, Iowa, The United States.

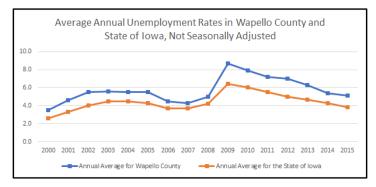


Figure 13. Average Annual Unemployment Rates in Wapello County and State of Iowa, Not Seasonally Adjusted. Bureau of Labor Statistics

Causes for this trend could be due to job availability within this mostly rural county, companies moving to more populated city locations or the economic crisis in 2008, in which many people lost their jobs. The City of Ottumwa was hit significantly harder by the recession which began in 2007, with their unemployment over 2% higher than the rest of the state. The recession's effects can be seen in full force in the graph above by 2009. But for both Iowa and Ottumwa, the unemployment raises each year from 2007-2010, and then they begin to fall each year after. Ottumwa's average annual rate was 4.9% while Iowa's rate was 3.8% (BLS, 2015).

Unemployment is expected to continue declining as industries grow in the area and the city plans are put into effect to bring jobs and money to Ottumwa and other surrounding areas in order to help the residents. Ottumwa's population has a large young population in both the year 2000 and 2010 from the ages of 15-29 years old, and a large middle aged population from the ages of 40-59 years old. Since they have a large young population and a large middle aged population the amount of work needed and the amount of work available clashes. The demand

for jobs is high, but there are no jobs available. The same trend with the age population happens for the state of Iowa, however Iowa has more job availability. Their unemployment rates are lower than Ottumwa's.

Population in the city is comprised of 30 percent people under the age of 18 and 28.2 percent above the age of 65 (Table 1). This means that 41.8 percent of the population is now between the ages of 19 and 64 years old and is considered the normal working time frame. When comparing this to the unemployment rate, this might include people who cannot work anymore or are not yet old enough to have a job. This trend in population has stayed the same, for the most part, over the last 30 years which means the unemployment rate will not increase and instead stay the same or continue to decrease.

In a span of 30 years, between 1960 and 1990, nearly a third of the population departed in tune with the slump in industry. In recent years the population decline has come under control, but the effects of the mass exodus are still being felt today. Artspace, a consulting company for the Ottumwa Regional Legacy Foundation, compiled a report identifying areas which had been largely affected by industry movements. Stated in this report 9,000 people left the community between 1960 and 1990 which is almost enough for any economy to crumble, (Artspace, 2014). Working through some of the lasting effects of this recession and the market crash in 2008, city planners have been working to rejuvenate the downtown city. Incentives are given to residents to maintain their homes by implementing housing programs to help people who might not be able to afford repairs on their own. Upon visiting this town, this group learned from the local planners that this was just one of the ways to draw in more people to the city.

## **Economic Structure**

Local economies have no physical boundary, but there are indicators that show where the local economy may exist in a general sense. The local economy of Ottumwa should be defined by the micropolitan statistical area. The MSA includes Wapello and Davis County in Iowa. Ottumwa is located in Wapello County and is the only sizable city between both counties. Ottumwa can act as a hub for the small surrounding cities for goods and services and drive the economy of the two counties. Various data tools help illustrate how many are contributing to the local economy. One tool is an inflow/outflow chart.

The inflow/outflow chart shows the amount of people living in Ottumwa and commuting to work outside of town along with who is commuting to Ottumwa for work from outside of town. This is important to show, as it indicates how successful the city is able to house and employ people. Some towns employ lots of people, but house few, and others vice versa. In Ottumwa, 42.9% of workers live in town. 47.2% of workers live somewhere else outside of the 9 nearest places. The furthest city from which workers come to Ottumwa's local economy to work is Cedar Rapids, with 0.8% of the workers. Looking at the Inflow/Outflow analysis, 7,965 people are employed in Ottumwa and live elsewhere. 5,584 live in Ottumwa and work outside of this town. 5,983 people work in Ottumwa while simultaneously living there. Out of the 11,567 people living in Ottumwa, 48.3% of them are employed outside of Ottumwa. The other share of those people (51.7%) are employed within the selection area. Referring to the In-Area Employment Efficiency chart, 57.1% of the 13,948 people are employed in Ottumwa but commute from outside of town for employment. The inflow/outflow analysis shows that Ottumwa is able to employ many but house less. There are still a fair amount of vacant housing

in Ottumwa. With the programs in place, the housing is improving but more initiatives may be needed. Average household income is another useful tool for knowing a local economy.

Looking at average household income of a city in comparison to the city's respective state or county can indicate many things and reinforce or reveal trends seen in other parallel data. In 2015, Ottumwa had a mean household income of \$50,942 compared to Iowa's at \$68,466. The average household in Ottumwa was \$18,000 less than the average Iowa household in 2015. The median household income in Ottumwa in 2015 was \$38,570 compared to Iowa's at \$53,183. Per capita income divides all the money earned by a city's residents in a year and divides it among the entire population. The per capita income in Ottumwa was \$21,052 in 2015 compared to Iowa's at \$27,950. The per capita income gap is a lot smaller between Ottumwa and Iowa compared to the gaps between mean and median income. Over all, Ottumwa is not as wealthy as the state of Iowa (2015 ACS 5-year estimates DP03).

Unemployment rates are a functional measure that can indicate how a local economy is compared to a larger economy. From 2007 to 2015, Ottumwa had a higher average annual unemployment rate than the state of Iowa. Both Ottumwa and Iowa's average annual unemployment rate rose in 2009 during the recession and then declined every year after that. In 2015, Ottumwa experienced a higher average annual unemployment rate than the state of Iowa. Ottumwa's average annual rate was 4.9% while Iowa's rate was 3.8% (BLS, 2015).

Employment by industry is also telling of an area's economy. A place that has a majority of its employment in agriculture will be a different economy and culture compared to a place with a majority of employment in transportation. The manufacturing industry has the largest share in the Ottumwa Micropolitan economy, generating 268,428 thousand dollars in 2015. Government has the next largest share of the economy at 186,647 thousand dollars. Most of the money generated by government is generated by the local government at 157,245 thousand dollars. Health care and social assistance has the third largest industry share at 118,770 thousand dollars (BEA 2015). This is congruent with the age trends in Ottumwa. There is a large retirement age population. Retired people often have social security and medicare. The healthcare and social assistance industry would make sense to be larger in Ottumwa with the larger elderly population. There may simply be more demand for it. Ottumwa is also in a more rural part of Iowa, therefore it may be the resource of many surrounding farms and residences outside town.

When looking at the allocation of jobs per industry for Wapello County and the state of Iowa, there is obvious overlap as well as large differences between them. Wapello County has manufacturing playing a larger part in the local economy than the state of Iowa, as well as a slight advantage in retail trade, educational services, and health care and social assistance. The state of Iowa plays a larger role in the economy than Wapello County in the industries of: finance and insurance, wholesale trade, and agriculture, forestry, fishing, and hunting. In most other industries such as accommodation and food services as well as public administration, the role in local economies is nearly the same for both Iowa and Wapello County.

These differences in economic focus highlight the skill sets and composition of the local workers for each area, with Wapello County catering to low-tech industries due to higher concentrations of manufacturing jobs. The state of Iowa has more high-tech commercial jobs, as shown by higher percentages of finance and insurance as well as some professional and technical services. The difference between the high and low tech industry focus gives an idea as to what economic and planning policies each area implements. Wapello county is composed primarily of manufacturing and other low-tech jobs, making the center city-Ottumwa-a city primarily for

those industrial workers. This reliance on industrial manufacturing jobs has hurt Wapello's economy as a whole, as the decline in manufacturing jobs nationwide has had a more pronounced effect on Ottumwa's economy and has also contributed to their population decline.

In regard to location quotients for Wapello County's economy compared to Iowa's economy, Wapello once again proves to be in favor of the industrial by having a location quotient of 2.48 for utilities in reference to Iowa's economy. The high location quotient value suggests that Wapello county and Ottumwa should focus on expanding their exports of their utilities, as they could provide a source of income and opportunities for local communities. One of the areas that has a location quotient of approximately 1.0, meaning that the local economy has about the same share in industry as the reference economy, is that of health care and social assistance. With a location quotient 1.02, Wapello county and Iowa have similar shares in the economy for health care and social assistance, which can also correlate to Wapello county and Iowa having similar age demographics. Lastly, Wapello has a location quotient of 0.33 for management of companies and enterprises, which shows a dependence on the surrounding economies for that commercial industry. This shows an area where Ottumwa needs to incentivize small-business owners into coming to Ottumwa, as they are performing below average compared to the state in regards to company headquarters and high-tech commercial enterprises.

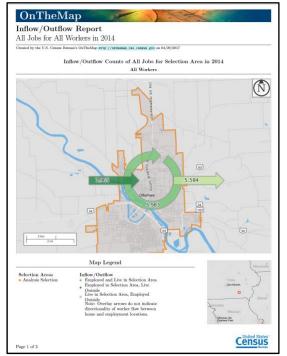


Figure 14. Inflow Outflow Report All Jobs for All Workers in 2014. United States Census Bureau.

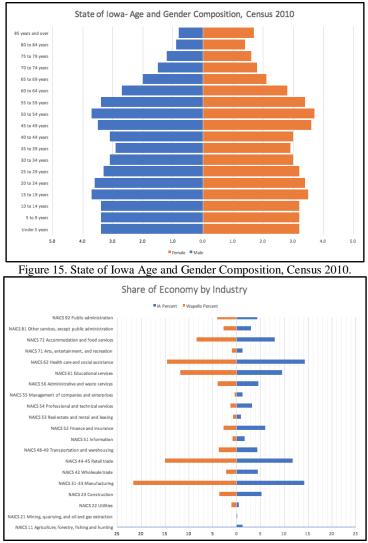


Figure 16. Share of Economy by Industry..

## Conclusion

Ottumwa is a historic town on the river with a vibrant and reemerging downtown area. The "City of Bridges" has similar demographics in comparison to the State of Iowa, although Ottumwa's population growth rate is much lower than Iowa's. There are a few different incentives and revitalization techniques that have been proposed. For example, there are incentives for people to rehabilitate houses and a riverfront plan has been proposed. This could attract tourism and revitalize the riverfront area.

The population of Ottumwa is currently composed of a largely non-Hispanic White population with high numbers of older women and growing child population. While the city as a whole is not very diverse, it does have a quickly expanding Hispanic population, which is growing at a rate more than twice that of the State of Iowa. However, even with that growth, the city's population as a whole is projected to remain stagnant or even drop in numbers. This lack or loss of growth can be combatted with improvements to current housing and childcare services which could provide an incentive needed in order to kickstart and renew interest in attracting people to the city as a place to live.

While Ottumwa has a lot of historic charm, it has some issues. People travel to work in Ottumwa, but many do not actually live there. Part of the reason why people do not live in Ottumwa is the poor housing stock. A lot of houses on the market have fallen into disrepair. There are many large and historic homes that are literally falling apart, which is partially due to the low median income. It is especially low compared to Iowa's median income. While it is a hard task, planners must focus on bringing in more income into the city of Ottumwa, which will have to be a combination of improving housing stock while also drawing in more business. If Ottumwa can work on housing and generating a larger tax base, they can become an even larger, more productive leader for Iowa's southeast region.

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