



Center for Land Use and Sustainability

SHIPPENSBURG UNIVERSITY

Housing Affordability in Cumberland County

Final Report

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Key Findings and Considerations

Key Findings:

- Within the Cumberland, Perry, and Dauphin county region, housing market metrics and stakeholder interviews indicate that the housing market in Cumberland County is the most competitive, resulting in housing affordability challenges for home buyers.
 - Cumberland County has the highest median housing value, the lowest vacancy rate, the highest average and median sales prices, the lowest cumulative days on the market, and the lowest mean months of housing supply within this regional context. At the same time, previous research has documented that the costs of rentals have also increased.
- From both the perspective of residents working in the county and employers based in the county, prevailing wages of many occupations do not support an affordable monthly housing allowance.
- Housing profiles show a housing market where single-family homes are dominant and widespread, with multi-family homes concentrated in just a few locations. Meanwhile, commuting patterns indicate high auto-dependence in Cumberland County, resulting in cost burdens for combined housing and transportation costs.
- Drivers of housing affordability within the county occur on the supply side (e.g. lack of moderately priced homes, rising costs of construction) and on the demand side (demographic trends that will keep demand high, cost barriers for home buyers).

Policy Considerations:

- Encourage flexible zoning ordinances that allow for higher density single-family and multi-family housing, walkable communities, and a mix of land uses.
- Support policies that permit and promote rental housing.
- Advocate for decreasing or streamlining regulations where appropriate.
- Pursue economic development options that attract higher paying employment opportunities.
- Support state and federal policies that increase the minimum wage or that promote a living wage.
- Advocate for workforce development related to the housing construction and remodeling industries.

Acknowledgements

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1.0 Background and Objectives

With a current population of 251,423 residents, Cumberland County, Pennsylvania, has been the fastest growing county in the Commonwealth since 2010, increasing by more than 16,000 people (6.8 percent) between 2010 and 2018 (Pennsylvania State Data Center 2019a). Cumberland County also has the second-fastest growing municipality in the state, Silver Spring Township, which grew by over 30 percent over the same time period (Pennsylvania State Data Center 2019b). The resulting demand for housing has caused an increase in housing value, despite flat or decreasing average household income (Figures 1 and 2).

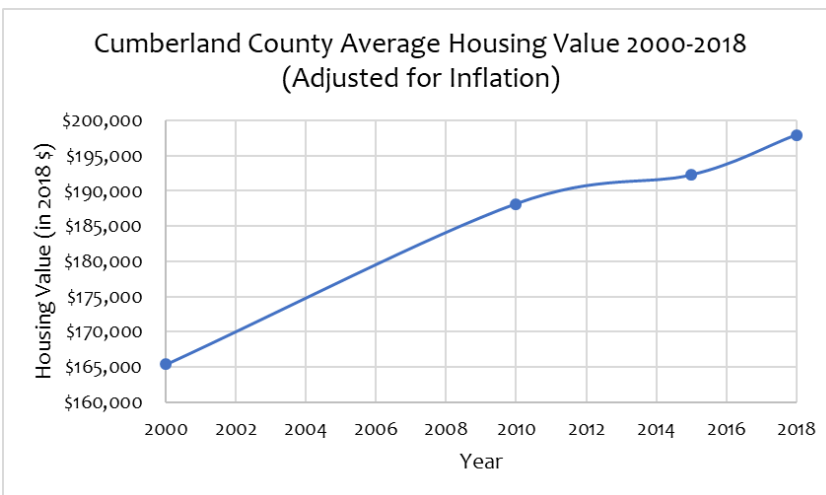


Figure 1: Average housing value in Cumberland County, 2000-2018, in 2018 Dollars. Source: IPUMS NHGIS (2019), US Census 2014-2018 American Community Survey

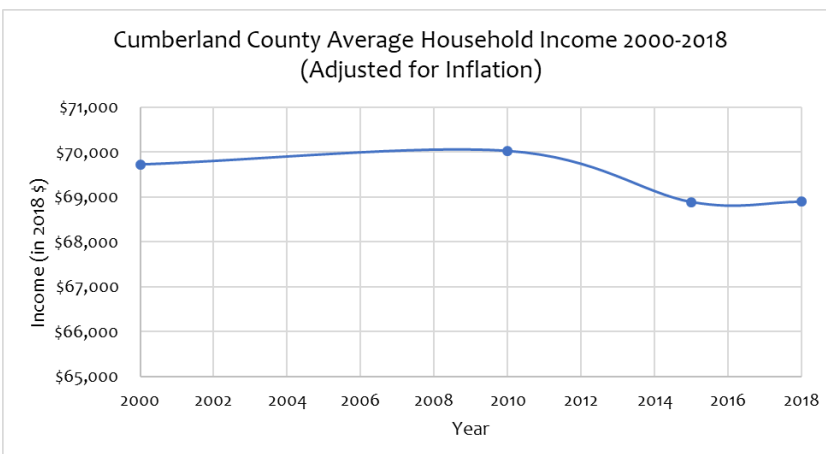


Figure 2: Average household income in Cumberland County, 2000-2015, in 2018 Dollars. Source: IPUMS NHGIS (2019), US Census 2014-2018 American Community Survey

These metrics, along with others that will be discussed in this report, indicate that housing affordability is a valid concern for residents, policy makers, and other stakeholders in Cumberland County. Housing affordability is usually considered in terms of the percentage of household income that is devoted to rent or mortgage. In the United States, a threshold of 30 percent is widely considered to be an indicator of housing affordability, ensuring that households are still able to cover other non-discretionary costs, such as transportation (HUD User 2017). Housing affordability is driven by multiple factors that operate at the local, regional, and national scale.

The objectives of this study are to:

- Identify and document key indicators of housing affordability in Cumberland County, within the geographic context of the greater Harrisburg area (Cumberland, Dauphin, and Perry counties) and with a focus on owner-occupied housing.
- Identify some of the key drivers of housing affordability, especially those that can be addressed through local-level policies.

This study synthesizes data from a variety of sources: U.S. Census data; Bureau of Labor Statistics data; housing affordability metrics from the Center for Neighborhood Technology; housing market reports and residential statistics from Bright MLS, provided by the Greater Harrisburg Association of REALTORS® (GHAR); stakeholder interviews with individuals at GHAR, Cumberland County Planning Department, Tri-County Housing Development Corp. (HDC), and Home Builders Association of Metropolitan Harrisburg. These analyses consider local, regional, and national drivers of housing affordability, and conclude with policy considerations. Using preliminary trend data, particular areas of concern related to the post-Coronavirus Disease 2019 (COVID-19) pandemic recovery are addressed. Figure 3 shows the primary geographic focus area for this study by the Center for Land Use and Sustainability (CLUS) research team.

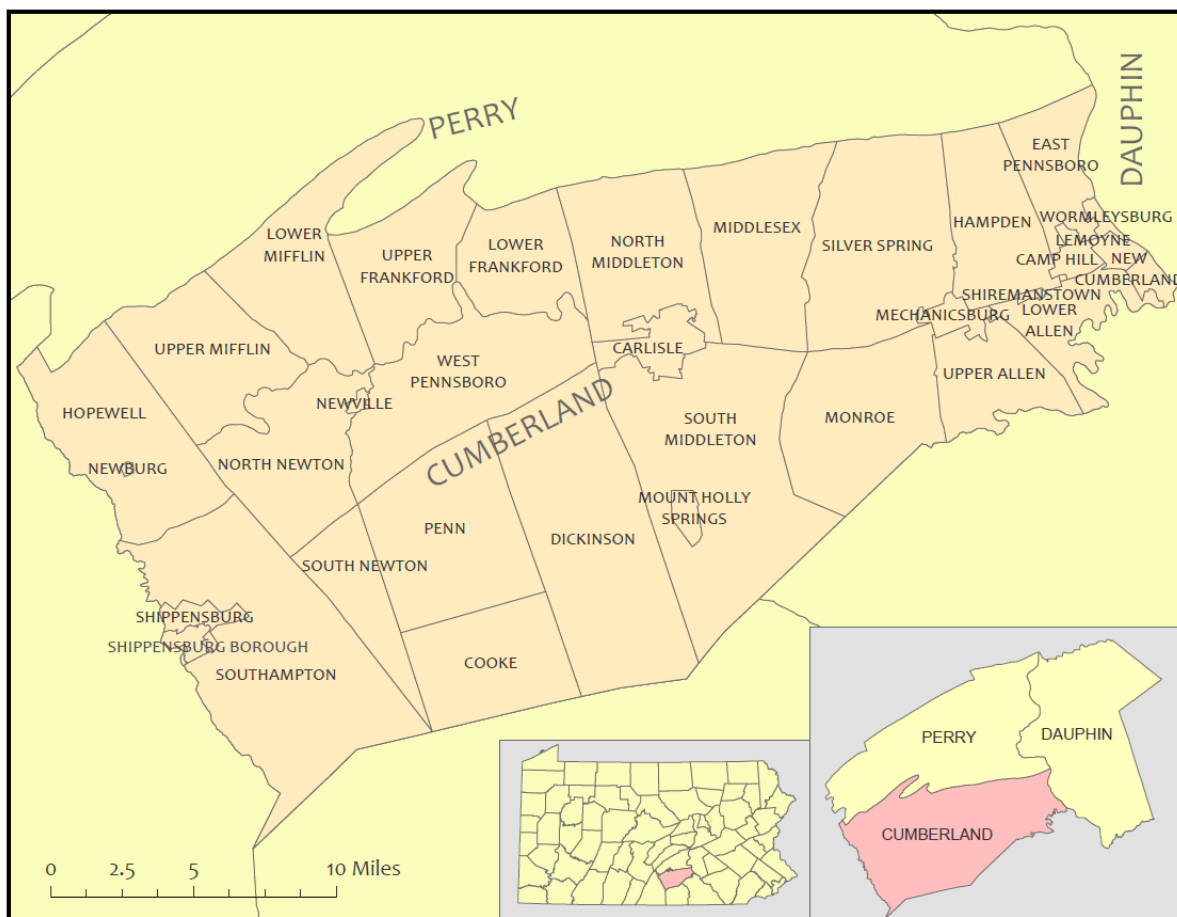


Figure 3: Study area. Cartography by Jacob Wacker, CLUS Student Fellow.

2.0 Data and Methods

2.1 Census Data and Bureau of Labor Statistics Data

To observe population, housing, income and commuting patterns, U.S. Census data were obtained from the National Historical Geographic Information System (NHGIS), which compiles a number of commonly used Census variables across time (Manson et al. 2019; IPUMS NHGIS 2019). Researchers also obtained data directly from the U.S. Census Bureau website (Data.Census.Gov, formerly American Fact Finder). Variables for 2000 and 2010 are from the decennial census program, which aims to complete a full count of population and housing. Variables for years after 2010 were obtained from the American Community Survey (ACS), a U.S. Census program that compiles data every year from a sample of the U.S. population. We utilized the 5-year data product, which aggregates sample data over a five year period – so, for example, “ACS 2015” data in this report represent an aggregation of data across 2011-2015 annual samples.

Depending on the variable (Table 1), data were obtained at the county level and/or municipal level (including all townships and boroughs in Cumberland County); some metrics were compiled for Cumberland, Perry, and Dauphin counties in order to place Cumberland County in a regional context (see Figure 3). These metrics are presented in map and graphical form.

Employment data were also collected from the U.S. Census Bureau to show employment characteristics of residents. While these data are not linked to *where* residents work, they nevertheless provide a picture of the industries that support workers who live in Cumberland County. To characterize employment patterns from the *employers’* perspective, we collected data from the Bureau of Labor Statistics (BLS). At the county scale, the BLS releases a quarterly census of employment and wages (QCEW) for generalized industry classifications. The BLS QCEW represents a quarterly count of employment and wages covering more than 95% of jobs in the United States, and is released as quarterly and annual data sets (BLS 2020a). We collected BLS QCEW annual mean and median salary by industry for Cumberland, Dauphin, and Perry counties for 2019 (BLS 2020b).

To look at more detailed occupation categories, we relied on a second data set, BLS wage data by area and occupation (BLS 2020c), which is available for metropolitan areas. For the Harrisburg-Carlisle metropolitan area (BLS 2020d) (defined by BLS as Cumberland, Dauphin, and Perry counties (BLS 2020e)), we relied on the most recent wage data set for May 2019, which reflects semiannual survey responses collected by BLS panels over a 3-year period spanning from November 2016-May 2019 (BLS 2020f).

Table 1: Census variables compiled to assess housing affordability in Cumberland County

Variable	Date(s)	Geography	Source
Population	2000, 2010, 2015, 2018	Cumberland County	IPUMS NHGIS ¹ ; U.S. Census ACS 2014-2018 5-year data (Table CP 05)
Housing vacancy rate	2000, 2010, 2015, 2018	Cumberland County	IPUMS NHGIS; U.S. Census ACS 2014-2018 5-year data (Table CP 04)
Total housing units	2000, 2010, 2015, 2018	Cumberland County	IPUMS NHGIS; U.S. Census ACS 2014-2018 5-year data (Table CP 04)
Median housing value and median rent ²	2000, 2010, 2015, 2018	Cumberland County and municipalities	IPUMS NHGIS; U.S. Census ACS 2014-2018 5-year data (Table CP 04)
Median household income ²	2000, 2010, 2015, 2018	Cumberland County and municipalities	IPUMS NHGIS; U.S. Census ACS 2014-2018 5-year data (Table CP 04)
Vacancy rates	2018	Cumberland, Perry, and Dauphin Counties	U.S. Census ACS 2014-2018 5-year data (Table CP 04)
Vacancy by type	2016	Municipalities in Cumberland County	U.S. Census ACS 2012-2016 5-year data (Table B25004)
Units per structure ³	2018	Municipalities in Cumberland County; Cumberland, Perry, and Dauphin Counties	U.S. Census ACS 2014-2018 5-year data (Table CP 04)
Owner-occupied, rentals	2018	Cumberland, Perry, and Dauphin Counties	U.S. Census ACS 2014-2018 5-year data (Table CP 04)
Means of transportation to work	2018	Cumberland, Perry, and Dauphin Counties	U.S. Census ACS 2014-2018 5-year data (Table B08101)
Regional commuting flows	2015	Cumberland, Perry, and Dauphin Counties	U.S. Census ACS 2011-2015 5-year data ⁴
Employment and Median Earnings by Industry	2017	Municipalities in Cumberland County	U.S. Census ACS 2013-2017 5-year data (Table S2405)

¹ 2000 and 2010 Decennial Census datasets and 2015 American Community Survey datasets were accessed through IPUMS NHGIS.

² For median household income and median housing value, data were adjusted for inflation to December 2018 using the U.S. Bureau of Labor Statistics' CPI Inflation Calculator.

³ Single family attached and detached housing units were classified as "Single Family", 2-50+ units per structure were classified as "Multi-Family" and mobile homes, boats, and RVs were classified as "Other".

⁴ 2011-2015 5-Year ACS Commuting Flows Table 1 (<https://www.census.gov/data/tables/2015/demo/metro-micro/commuting-flows-2015.html>)

⁵ Industry by Occupation and Median Earnings for the Civilian Employed Population 16 Years and Over, American Community Survey Tables S2405 and S2413

2.2 Housing + Transportation Affordability Index

The Center for Neighborhood Technology (CNT) developed the Housing + Transportation Affordability Index (H+T Index) to provide a comprehensive metric of housing affordability, considering both housing costs and transportation costs associated with a home's location (Center for Neighborhood Technology 2017). CNT combines the commonly accepted standard that affordable housing costs should not exceed 30 percent of household income with the additional consideration that no more than 15 percent of household income should be devoted to transportation. CNT recommends that affordable housing and transportation costs should consume no more than 45 percent of household income. From H+T Fact Sheets (Center for Neighborhood Technology 2020 a, b, c), researchers compiled estimates of housing costs and transportation costs as a percentage of income and average monthly housing costs for Cumberland, Perry, and Dauphin counties. For Cumberland County, the research team utilized the H+T Index mapping tool (Center for Neighborhood Technology 2020d) to display housing and transportation costs as a percent of income for Census block groups to highlight areas where housing affordability is of greatest concern. Current H+T Index calculations are based on 2015 American Community Survey data.

2.3 Market Reports and Residential Statistics from GHAR

The Greater Harrisburg Association of REALTORS® (GHAR) provided a number of reports, generated through Bright MLS, that were compiled to observe housing market trends.

- Housing market reports for condo and single-family residential units in Cumberland County, metrics from December 2015 through January 2020 include:
 - Units Sold
 - Median Sales Price
 - Average Sales Price
 - Average Days on Market
- Complete GHAR monthly core metrics (overall and county-specific) were provided for Cumberland, Dauphin, and Perry counties from December 2018 through April 2020 and include:
 - Average sales price
 - Median sales price
 - Units sold
 - Average and median days on market
 - Months of housing supply

- Quarterly housing statistics compiled at the school district level for the three counties from December 2017 through January 2020 include:
 - Units sold
 - Average sales price
 - Median sales price
 - Cumulative days on market

These metrics were compiled and selected metrics were graphed and/or mapped to observe spatial and temporal patterns and trends throughout the GHAR market area. January - April for 2018 - 2020 were subsetting to focus on preliminary impacts of the COVID-19 pandemic.

2.4 Stakeholder Interviews

The research team interviewed staff at GHAR (Kathy Ludwig, Chief Executive Officer, and Margaret Parsons, Director of Government Affairs) on February 26, 2020. On March 9, 2020, researchers interviewed staff at Cumberland County Planning Department (CCPD) (Kirk Stoner, Planning Director), Tri-County HDC (Gary Lenker, Executive Director), and the Home Builders Association (HBA) of Metropolitan Harrisburg (Jerry Leach, Executive Vice President).

GHAR's mission is "to serve real estate professionals through a commitment to promote ethical and competent real estate practices, to support the preservation of real property rights, to provide leadership in adapting to advances in the industry, and to enhance each member's opportunity for success" (GHAR 2020). GHAR has over 1,900 realtor members and 200+ affiliate members, including contractors, engineers, housing inspectors, firms, and attorneys. The mission of CCPD is to "partner with our urban, suburban, and rural communities to implement plans that promote economic development, provide more housing and transportation choices, and protect clean air, land, and water" (CCPD 2020). CCPD administers a number of programs in support of this mission, including the county comprehensive plan, providing technical planning reviews and technical assistance to municipalities, farmland and open space preservation, transportation planning, and others. Tri-County HDC is a non-profit certified Community Housing Development Organization that specializes in rehabilitation and redevelopment projects, and new home construction. Its mission is "to promote and develop affordable housing for low and moderate-income individuals and families" (Tri-County HDC, LTD 2020). Finally, the HBA represents professionals and trades that work in the home building and remodeling industries. They offer members networking opportunities, industry information, cost savings, promotion, and advocacy (HBA 2020).

Loosely structured interviews were conducted by CLUS Director Dr. Claire Jantz and CLUS Graduate Student Fellow Ed Benish. Stakeholders were asked to characterize the housing markets in Dauphin, Perry, and Cumberland counties, to identify drivers of housing affordability, and what solutions were available to address housing affordability.

3.0 Results

3.1 Census Data and Bureau of Labor Statistics Data

3.1.1 Population and housing characteristics

From 2000 to 2018, the population increased from 213,674 to 247,433 people in Cumberland County and the housing increased from 86,951 to 105,204 units. While the total number of housing units increased over the entire time period, the rate of increase has not kept pace with the rate of population growth (Figure 4).

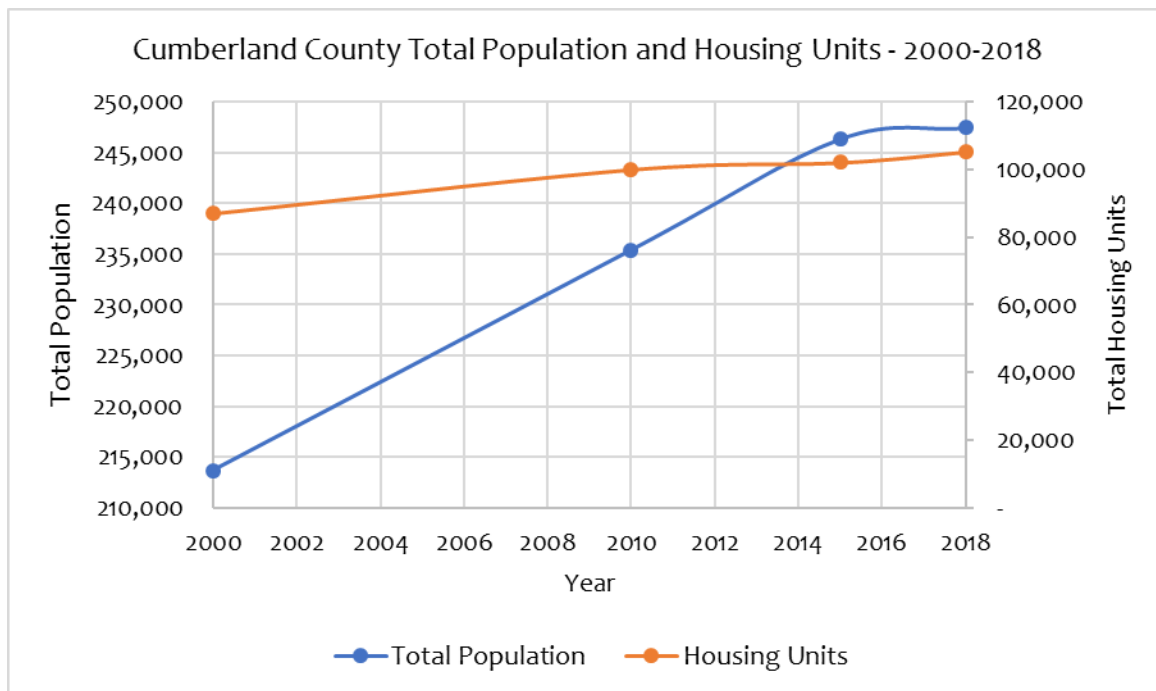


Figure 4: Population and housing unit trends in Cumberland County, 2000-2018

Housing vacancy rate can be an important indicator of housing affordability and the broader housing market. Low vacancy rates can indicate a tight housing market, while high rates can point to a stagnant or declining housing market (Florida 2018). The Cumberland County Comprehensive Plan considers 5 percent a healthy rate for overall vacancy (CCPD 2017); the overall vacancy rate takes into account all sources of vacancy (i.e. housing for rent or sale, housing for seasonal use, etc.). While showing some variation over time, overall housing vacancy rates in Cumberland County remained at or below 6 percent between 2000 and 2018, from a low of 4.1 percent in 2010 to a high of 6.0 percent in 2018 (Figure 5).

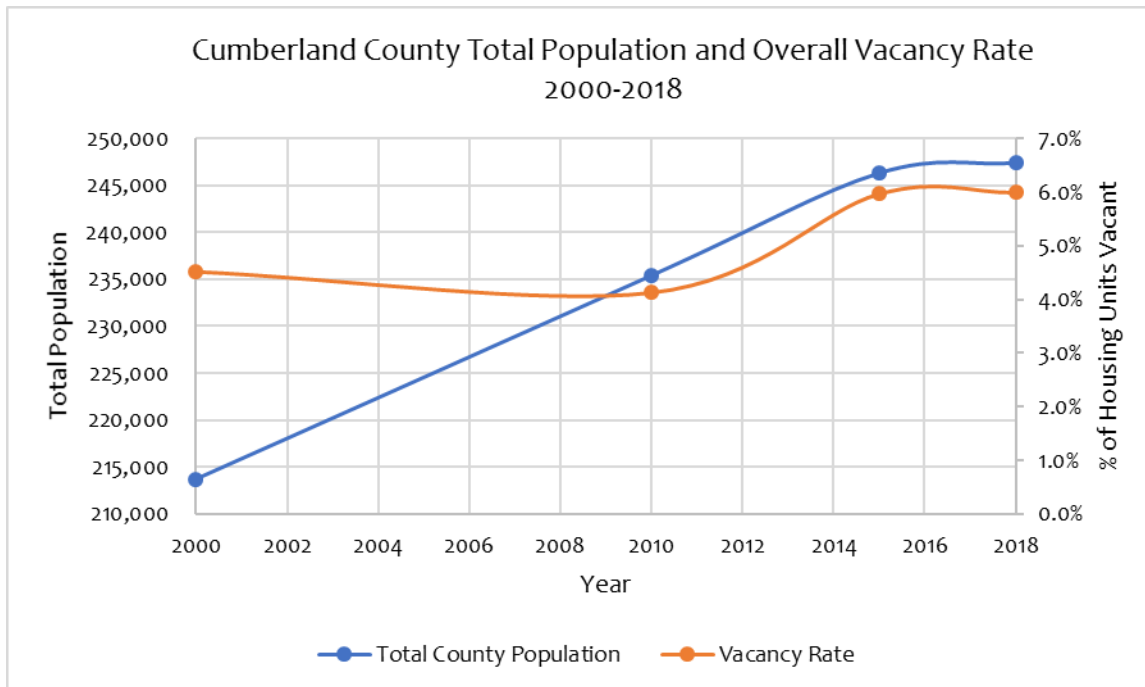


Figure 5: Housing vacancy rate and population growth in Cumberland County, 2000-2018.

Compared to Dauphin and Perry counties, 2018 data show that Cumberland County has the lowest overall vacancy rate at 6.0 percent, while Dauphin County has a 9.7 percent vacancy rate and Perry County has a 13.0 percent vacancy rate (Figure 6). When looking at vacancy rates for homeowners, which refers to homes that are for sale or sold but not occupied, all counties in the region show rates lower than 2 percent. The rental vacancy rate, which includes housing for rent or rented but not yet occupied, ranges from 3.2 percent in Cumberland County to 5.8 percent in Dauphin County. For the rental market, a healthy vacancy rate is considered to be around 7 to 8 percent (Florida 2018), while a healthy rate for owner-occupied housing is lower: Florida (2018) cites 2 percent or lower, and below 1 percent is seen only in the tightest housing markets. Based on these thresholds, the regional market for owner-occupied housing could be considered healthy but competitive, while the rental market is potentially tight, especially in Cumberland County.

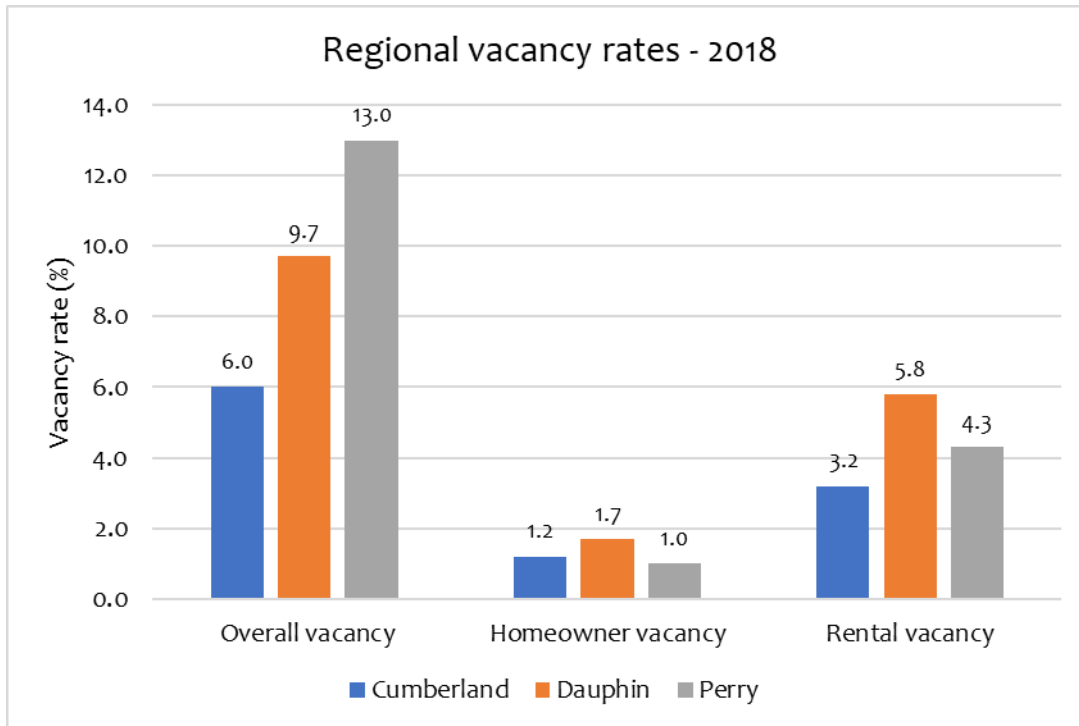


Figure 6: Vacancy rates in Perry, Dauphin, and Cumberland counties.

At the municipal scale within Cumberland County, municipalities with the highest overall vacancy rates are either in the most southern portion of Cumberland County, or the northeast portion closest to Harrisburg (Figure 7A). Cooke Township in the southern part of the county is an outlier, as the majority of the township is in the Michaux State Forest and all vacancies (100 percent) are classified as “seasonal, recreational, or occasional use.” The highest homeowner vacancy rates (Figure 7B) are concentrated in the municipalities to the west of Carlisle and in the eastern part of the county west of Harrisburg. It is notable that there are a number of townships throughout the county that have a very low vacancy rate, below 0.2 percent. Dickinson Township has the highest rental vacancy rate, over 35 percent, but several townships have very low rates, below 0.9 percent.

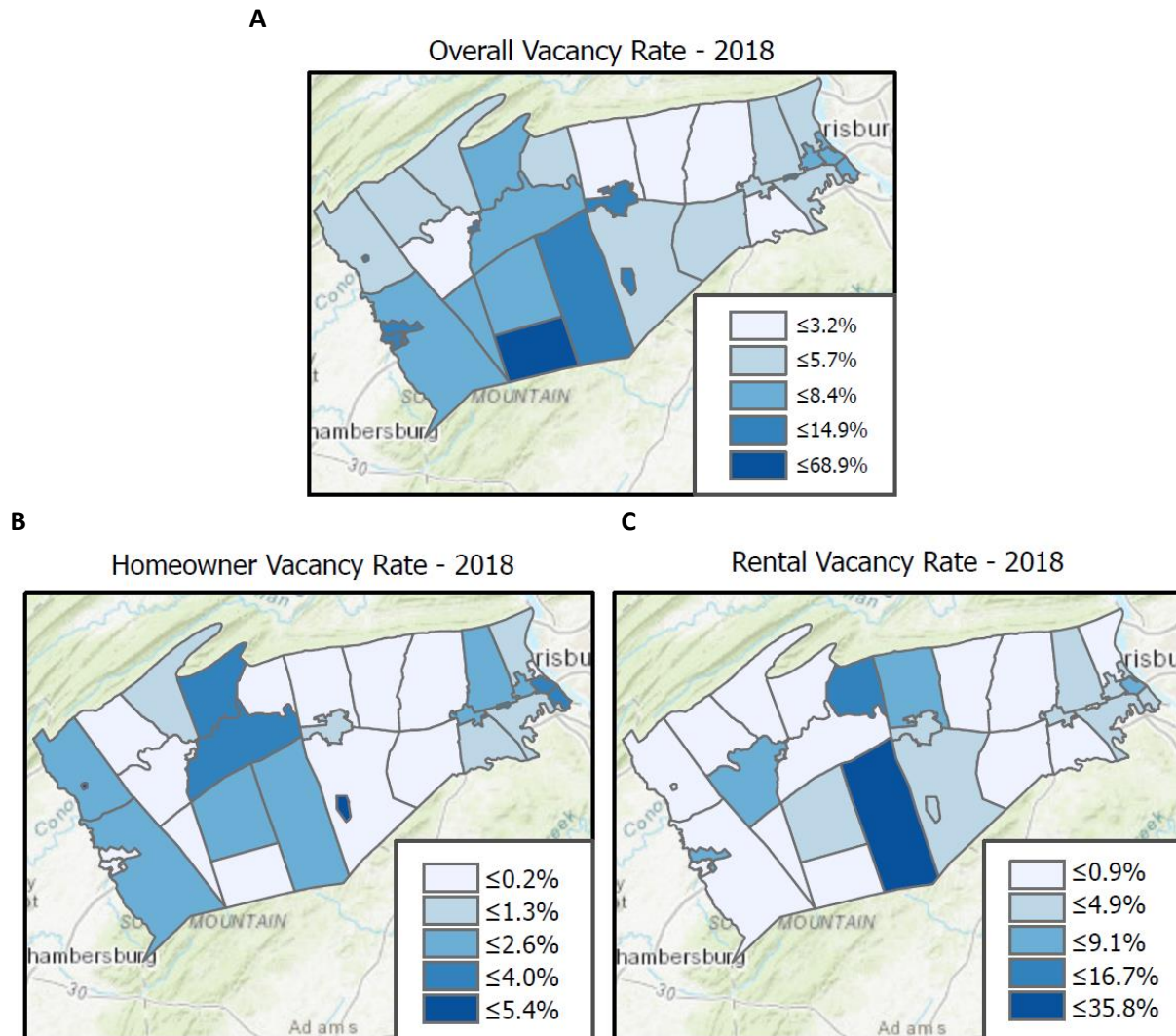


Figure 7: Overall (A), homeowner (B), and rental (C) vacancy rates for municipalities in Cumberland County. Cartography by Jacob Wacker, CLUS Student Fellow.

To better understand vacancy rate, it is useful to consider the type of vacancy (Figure 8). In many municipalities, the majority of vacancies are classified as “Other Vacancy”, which means they are year-round vacancies, but do not fit into a category. Common reasons for an “Other Vacancy” include the owner not wanting to rent or sell, a property being used for storage, or in the process of foreclosure (Kresin 2013). The “For rent” vacancy rate is higher in more urbanized municipalities, such as Camp Hill and Mechanicsburg, or in places where the rental market is otherwise a dominant characteristic, such as the municipalities around Shippensburg University (Shippensburg Borough, Shippensburg Township, and Southampton Township) or Dickinson College (Dickinson Township).

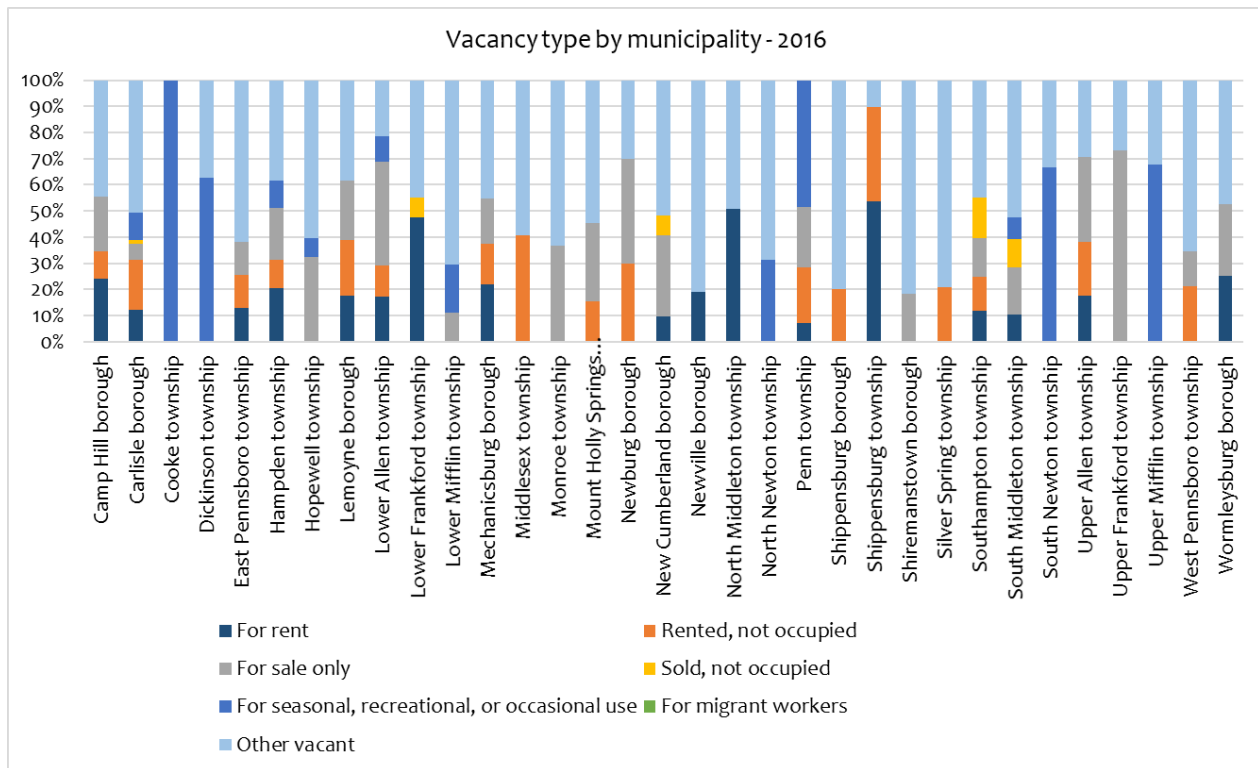


Figure 8: Vacancy type by municipality in Cumberland County, 2012-2016 ACS

The dominant housing type in Cumberland County is single-family homes (Figure 9). Geographically, single-family homes are widespread throughout the county, while multi-family homes are more commonly found in the more densely settled municipalities closer to Harrisburg, in the boroughs (Carlisle, Mount Holly Springs, Shippensburg), and in Southampton Township, likely due to the student rental market associated with Shippensburg University (Figure 10 A and B).

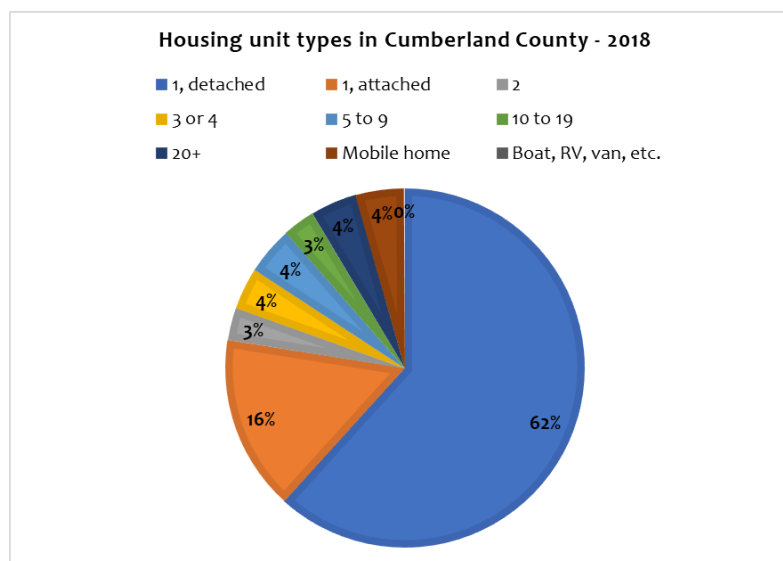


Figure 9: Housing units types in Cumberland County.

When observing patterns of owner occupied housing compared to renter occupied housing (Figure 10 C and D), the comparative concentration of rental housing in a few boroughs and municipalities is a contrast to the widespread pattern of owner occupied housing.

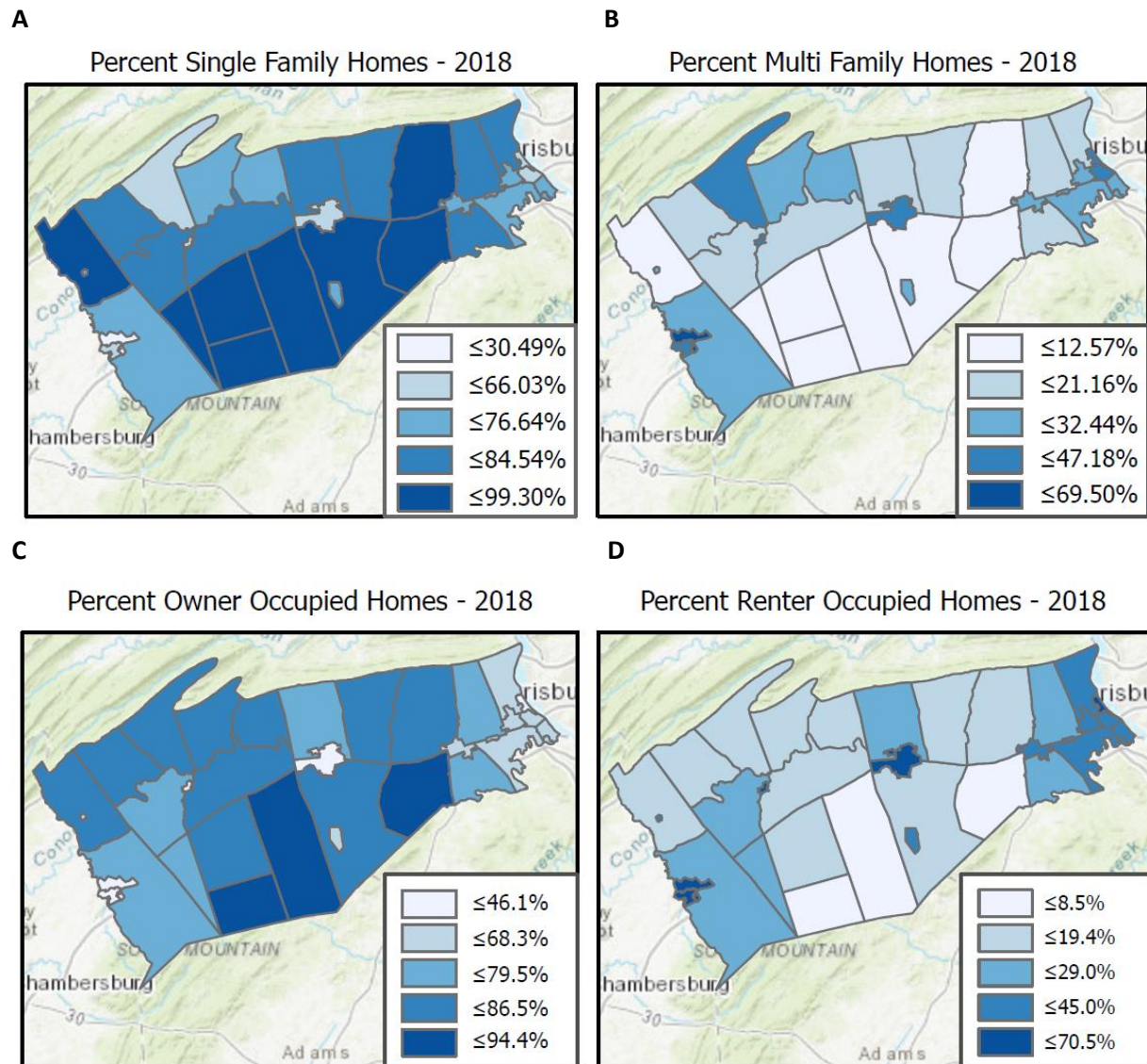


Figure 10: Percent of single family housing units (A), multi-family housing units (B), owner occupied (C), and renter occupied (C) by municipality in Cumberland County. Cartography by Jacob Wacker, CLUS Student Fellow.

When considering the regional context, Cumberland and Perry counties have similar percentages of single family homes (single unit attached and detached), while Dauphin County has the highest percentage of multi-family homes (Figure 11).

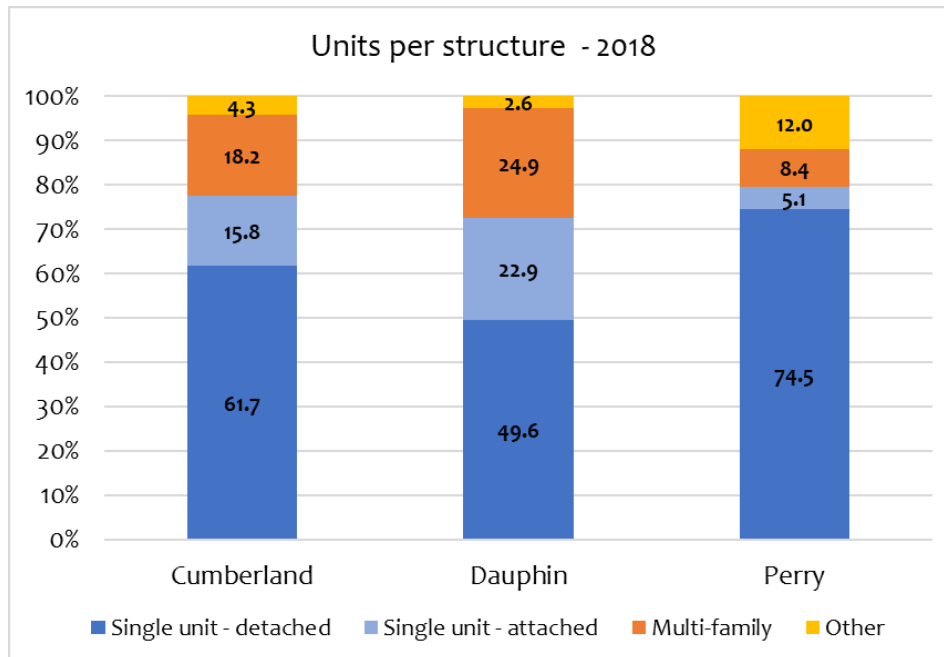


Figure 11: Single family, multi-family, and other housing percentages in Perry, Dauphin, and Cumberland counties.

Similarly, rates of homeownership in Cumberland and Perry counties are high (Figure 12), with nearly 80 percent owner occupied dwellings in Perry County and over 70 percent in Cumberland County. While Dauphin is still dominated by owner-occupied housing (over 60 percent), nearly 40 percent of the housing is renter-occupied.

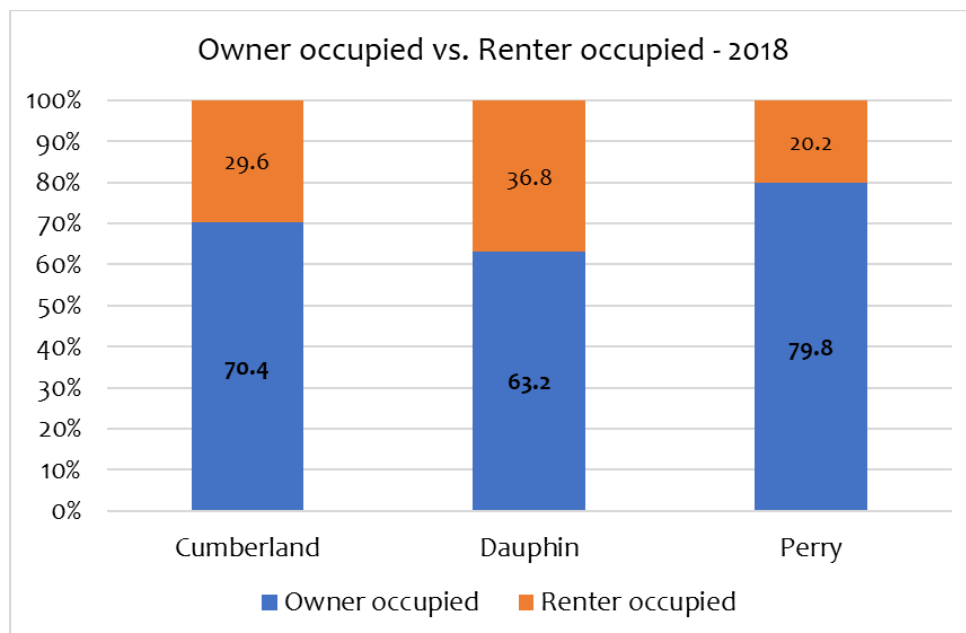


Figure 12: Owner-occupied vs. renter-occupied housing in Perry, Dauphin, and Cumberland counties.

3.1.2 Housing value and household income

Average housing values in Cumberland County increased from \$165,376 in 2000 to \$197,900 in 2018 (inflation adjusted to 2018 dollars). The median household income (inflation adjusted) for Cumberland County increased slightly from \$69,725 in 2000 to \$70,029 in 2010, but fell to \$68,895 in 2018 (see Figures 1 and 2). Even more dramatic decreases in inflation adjusted median household income were observed in Dauphin (\$66,773 in 2000, \$57,814 in 2018) and Perry (\$65,934 in 2000, \$62,266 in 2018) counties.

At the municipal scale, median household income in 2018 ranges from \$30,323 in Shippensburg Township to \$92,440 in Dickinson Township, median housing values range from \$83,200 in Shippensburg Township to \$263,400 in Hampden Township, and median rent ranges from \$757 per month in Newville Borough to \$1,351/month in Silver Spring Township. Areas with the highest median housing values are closest to Harrisburg and the central-southern municipalities (near Michaux State Forest) (Figure 13A). The geographic distribution of median household income (Figure 13B) is closely related to the median housing value (Figure 13B) and median rent (Figure 13C).

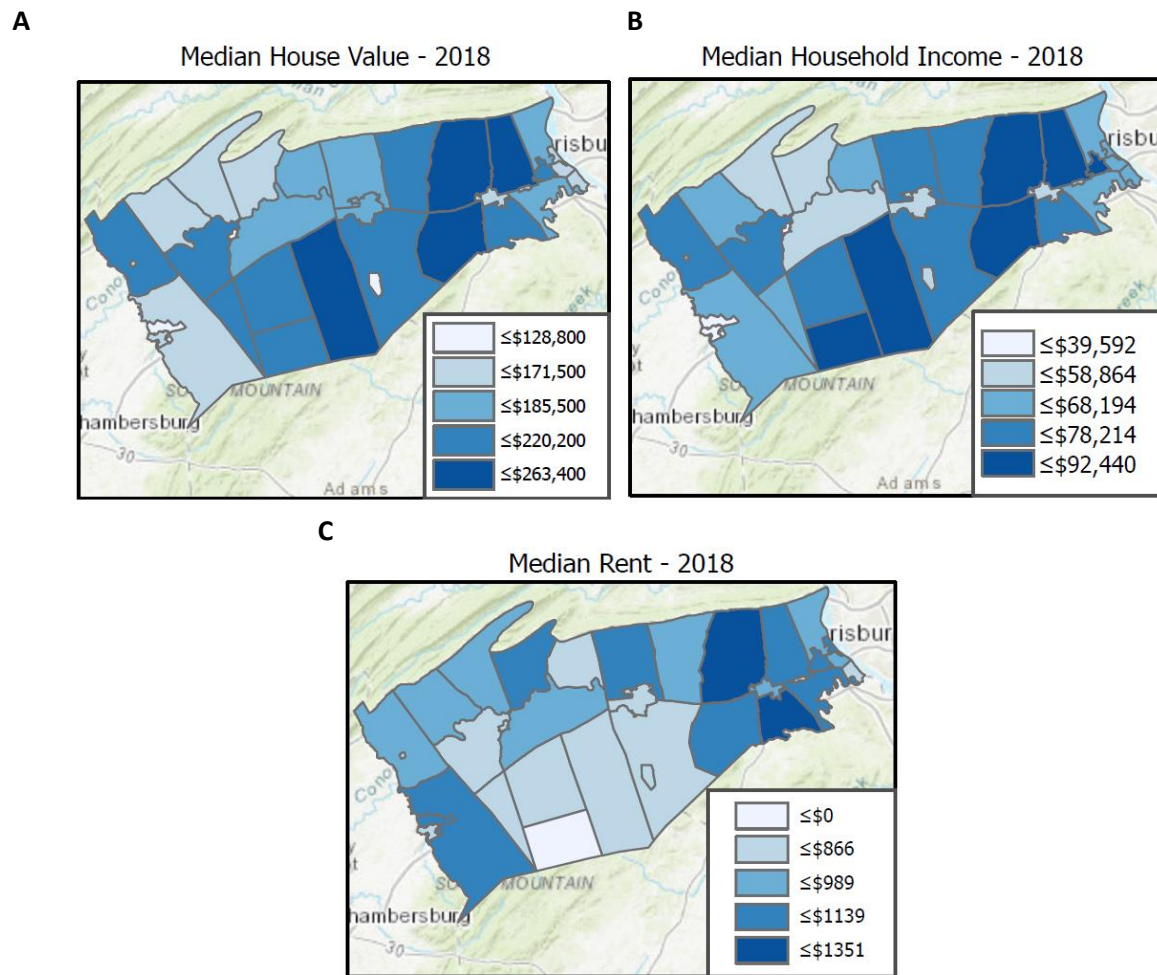


Figure 13: Median housing value (A), median household income (B), and median rent for municipalities in Cumberland County. Cartography by Jacob Wacker, CLUS Student Fellow.

Within the regional context, Cumberland County has the highest median household income and the highest median housing value (Figure 14). Median rent in 2018 in Cumberland County is \$973, \$922 in Dauphin County, and \$782 in Perry County.

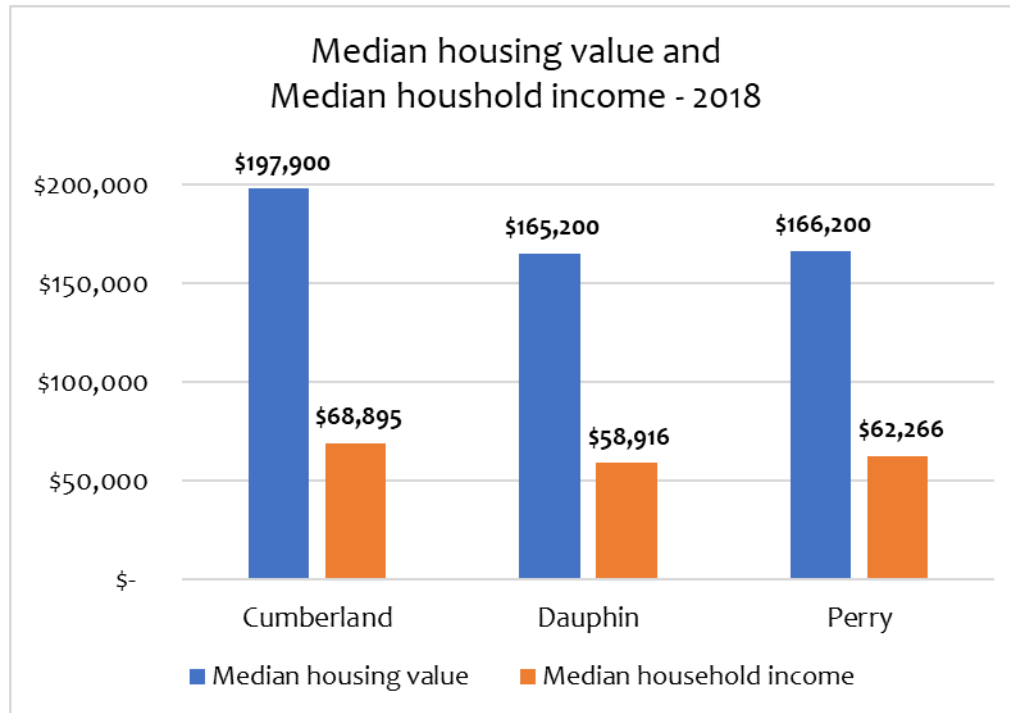


Figure 14: Median housing value and median income in Perry, Dauphin, and Cumberland counties.

3.1.3 Employment characteristics of residents

The largest employment by industry sector for Cumberland County residents is “Educational services, health care, and social assistance” making up 22.2 percent of the jobs held by residents, followed by “Retail trade” (12.7 percent), and “Professional, scientific, and management, and administrative and waste management services” (11.8 percent) (Table 2). Corresponding median salaries by industry are included in Table 2, and the estimated maximum monthly housing allowance, which assumes that housing should not exceed 30 percent of monthly income is also estimated. It is important to note that these employment data reflect the jobs *held by residents*; they do not necessarily relate to *where* the place of employment is located.

Industry	Number of residents employed	Percent of residents employed	Salary	Monthly housing allowance
Civilian employed population 16 years and over with earnings	125,972	100.0	\$ 40,750.00	\$ 1,018.75
Educational services, and health care and social assistance	27,958	22.2	\$ 39,502.00	\$ 987.55
Retail trade	16,050	12.7	\$ 22,825.00	\$ 570.63
Professional, scientific, and management, and administrative and	14,902	11.8	\$ 51,146.00	\$ 1,278.65
Public administration	10,910	8.7	\$ 61,545.00	\$ 1,538.63
Finance and insurance, and real estate and rental and leasing	10,255	8.1	\$ 50,075.00	\$ 1,251.88
Manufacturing	10,186	8.1	\$ 48,076.00	\$ 1,201.90
Arts, entertainment, and recreation, and accommodation and food services	8,760	7.0	\$ 13,250.00	\$ 331.25
Transportation and warehousing, and utilities	8,419	6.7	\$ 44,034.00	\$ 1,100.85
Construction	6,256	5.0	\$ 45,625.00	\$ 1,140.63
Other services, except public administration	6,085	4.8	\$ 26,888.00	\$ 672.20
Wholesale trade	3,086	2.4	\$ 48,029.00	\$ 1,200.73
Information	1,786	1.4	\$ 44,066.00	\$ 1,101.65
Agriculture, forestry, fishing and hunting, and mining	1,319	1.0	\$ 31,689.00	\$ 792.23

Table 2: Employment and median salary by industry for residents of Cumberland County, 2017, ranked by prevalence. The monthly housing allowance is based on the assumption that not more than 30 percent of income should be allocated to housing.

3.1.4 Employment characteristics by industry

While the above data from the Census illustrates the characteristics of the jobs held by Cumberland County residents, Bureau of Labor Statistics data show characteristics of the jobs that can be found in the study counties, as well as the wages paid to workers (whether they live in the county of interest or not). Annualized data from the 2019 BLS quarterly census of employment and wages (QCEW) for generalized industry classifications (BLS 2020b) (Figure 15) show that “Trade, transportation, and utilities” is the most dominant employment sector in Cumberland (21.9 percent), Dauphin (20.6 percent), and Perry (22.7 percent) counties. The industry characteristics in Cumberland and Dauphin counties are similar, with “Professional and business services” and “Education and health services” being the second and third most important employment sectors, whereas in Perry County, “Education and health services” and “Construction” round out the top three employment sectors. Corresponding annual

wages are shown in Table 3, and the estimated maximum monthly housing allowance is shown in Table 4.

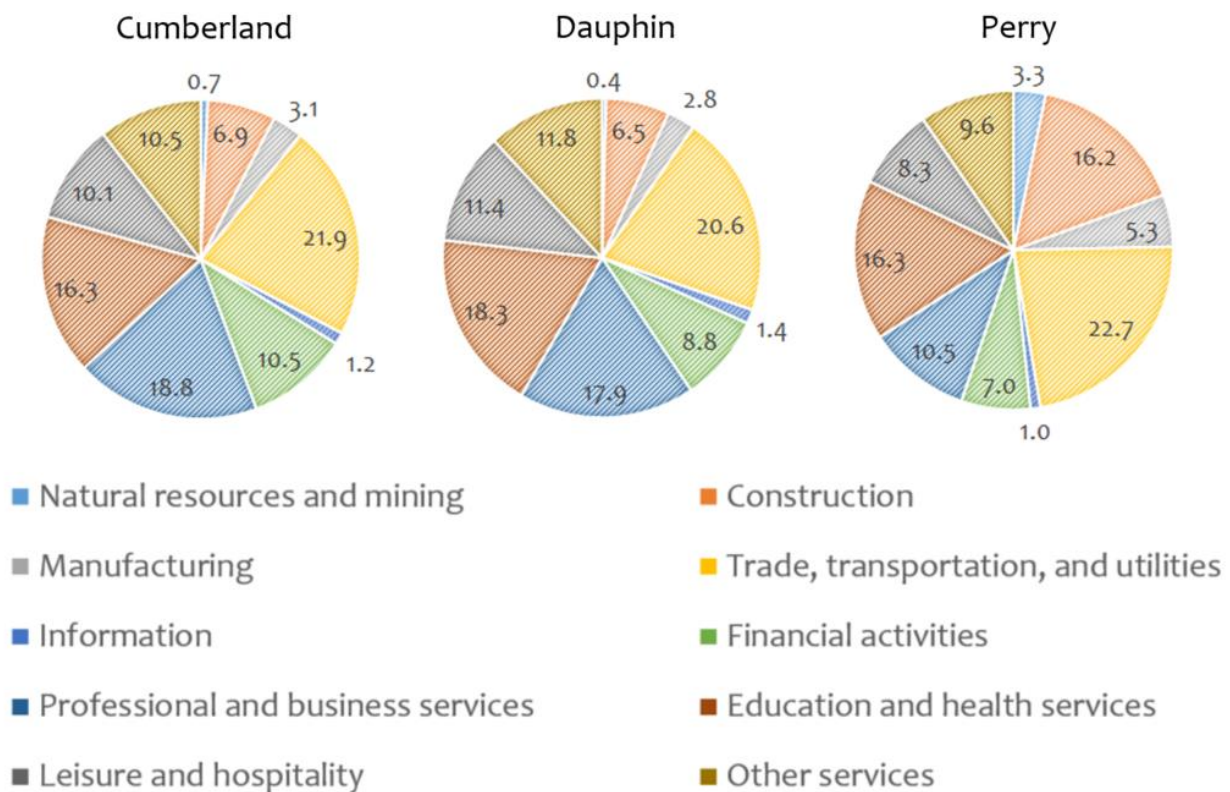


Figure 15: Employment industry make up in Cumberland, Dauphin, and Perry counties, based on the 2019 BLS QCEW data (BLS 2020b)

Industry	Cumberland	Dauphin	Perry
Natural resources and mining	\$ 35,287	\$ 34,060	\$ 32,308
Construction	\$ 62,883	\$ 63,227	\$ 43,158
Manufacturing	\$ 57,027	\$ 67,434	\$ 38,936
Trade, transportation, and utilities	\$ 43,343	\$ 47,266	\$ 24,804
Information	\$ 61,046	\$ 72,011	\$ 34,706
Financial activities	\$ 74,677	\$ 74,561	\$ 49,115
Professional and business services	\$ 69,842	\$ 75,705	\$ 38,732
Education and health services	\$ 52,885	\$ 61,963	\$ 34,503
Leisure and hospitality	\$ 19,148	\$ 21,326	\$ 12,307
Other services	\$ 35,386	\$ 43,812	\$ 28,017

Table 3: Mean salary for 2019 for workers employed in Cumberland, Dauphin, and Perry counties, by industry (BLS 2020b)

Industry	Cumberland	Dauphin	Perry
Natural resources and mining	\$ 882	\$ 852	\$ 808
Construction	\$ 1,572	\$ 1,581	\$ 1,079
Manufacturing	\$ 1,426	\$ 1,686	\$ 973
Trade, transportation, and utilities	\$ 1,084	\$ 1,182	\$ 620
Information	\$ 1,526	\$ 1,800	\$ 868
Financial activities	\$ 1,867	\$ 1,864	\$ 1,228
Professional and business services	\$ 1,746	\$ 1,893	\$ 968
Education and health services	\$ 1,322	\$ 1,549	\$ 863
Leisure and hospitality	\$ 479	\$ 533	\$ 308
Other services	\$ 885	\$ 1,095	\$ 700

Table 4: Maximum mean monthly housing allowance based on the assumption that not more than 30% of monthly salary should be allocated to housing, derived from the salary data reported in Table 3.

As described in section 2.1, the BLS wage dataset reports wages for more detailed occupation classifications at the scale of metropolitan areas. For the Harrisburg-Carlisle metropolitan area, which is comprised of Dauphin, Cumberland, and Perry counties, these data show that the top three industries that employ the most workers are “Office Administrative Support Occupations,” “Transportation and Material Moving Occupations,” and “Sales and Related Occupations” (Table 5). Assuming the 30 percent threshold, the mean monthly housing allowance for these occupations range from \$928 - \$1,037 while the median monthly housing allowance ranges from \$686 - \$945.

Another variable of interest in Table 5 is the location quotient (LQ), which shows each occupation’s share of employment relative to the national average (BLS 2011). For example, the LQ value of 1.49 for “Transportation and Material Moving Occupations” indicates that this occupation accounts for roughly 1.5 times the share of employment in the Harrisburg-Carlisle metropolitan area than it does nationally. While the LQ values in the Harrisburg-Carlisle metropolitan area do not diverge very strongly away from the national average, it is an indicator of what occupations are more or less concentrated in this region relative to the national average.

Occupation title	Total employment	Location quotient	1	\$	Mean annual salary	Median annual salary	Mean monthly income	Median monthly income	Mean monthly housing allowance	Median monthly housing allowance
All Occupations	329,510				50,450	\$ 40,180	\$ 4,204	\$ 3,348	\$ 1,261	\$ 1,005
Office and Administrative Support Occupations	50,190	1.15	\$		40,660	\$ 37,810	\$ 3,388	\$ 3,151	\$ 1,017	\$ 945
Transportation and Material Moving Occupations	41,910	1.49	\$		37,120	\$ 34,030	\$ 3,093	\$ 2,836	\$ 928	\$ 851
Sales and Related Occupations	29,000	0.9	\$		41,460	\$ 27,450	\$ 3,455	\$ 2,288	\$ 1,037	\$ 686
Food Preparation and Serving Related Occupations	26,420	0.87	\$		24,160	\$ 21,660	\$ 2,013	\$ 1,805	\$ 604	\$ 542
Business and Financial Operations Occupations	22,620	1.23	\$		69,740	\$ 64,730	\$ 5,812	\$ 5,394	\$ 1,744	\$ 1,618
Healthcare Practitioners and Technical Occupations	21,900	1.13	\$		78,300	\$ 69,190	\$ 6,525	\$ 5,766	\$ 1,958	\$ 1,730
Educational Instruction and Library Occupations	17,130	0.86	\$		58,000	\$ 55,410	\$ 4,833	\$ 4,618	\$ 1,450	\$ 1,385
Management Occupations	15,140	0.84	\$		115,210	\$ 104,840	\$ 9,601	\$ 8,737	\$ 2,880	\$ 2,621
Healthcare Support Occupations	14,680	1	\$		30,250	\$ 28,810	\$ 2,521	\$ 2,401	\$ 756	\$ 720
Production Occupations	13,730	0.67	\$		39,600	\$ 37,320	\$ 3,300	\$ 3,110	\$ 990	\$ 933
Installation, Maintenance, and Repair Occupations	11,940	0.93	\$		49,590	\$ 46,840	\$ 4,133	\$ 3,903	\$ 1,240	\$ 1,171
Computer and Mathematical Occupations	11,470	1.12	\$		82,640	\$ 78,510	\$ 6,887	\$ 6,543	\$ 2,066	\$ 1,963
Construction and Extraction Occupations	9,840	0.71	\$		49,460	\$ 46,460	\$ 4,122	\$ 3,872	\$ 1,237	\$ 1,162
Building and Grounds Cleaning and Maintenance Occupations	8,530	0.86	\$		28,190	\$ 26,190	\$ 2,349	\$ 2,183	\$ 705	\$ 655
Personal Care and Service Occupations	7,680	1.04	\$		28,000	\$ 23,930	\$ 2,333	\$ 1,994	\$ 700	\$ 598
Protective Service Occupations	6,740	0.86	\$		50,840	\$ 40,200	\$ 4,237	\$ 3,350	\$ 1,271	\$ 1,005
Community and Social Service Occupations	5,790	1.15	\$		51,070	\$ 49,070	\$ 4,256	\$ 4,089	\$ 1,277	\$ 1,227
Architecture and Engineering Occupations	5,100	0.88	\$		72,400	\$ 73,420	\$ 6,414	\$ 6,118	\$ 1,924	\$ 1,836
Arts, Design, Entertainment, Sports, and Media Occupations	3,570	0.79	\$		52,400	\$ 46,980	\$ 4,367	\$ 3,915	\$ 1,310	\$ 1,175
Legal Occupations	3,050	1.18	\$		88,500	\$ 73,410	\$ 7,375	\$ 6,118	\$ 2,213	\$ 1,835
Life, Physical, and Social Science Occupations	2,850	0.98	\$		67,200	\$ 63,790	\$ 5,600	\$ 5,316	\$ 1,680	\$ 1,595
Farming, Fishing, and Forestry Occupations	250	0.23	\$		39,930	\$ 36,450	\$ 3,328	\$ 3,038	\$ 998	\$ 911

Table 5: Employment and wage data for detailed industry classifications for the Carlisle-Harrisburg Metropolitan Area (Cumberland, Dauphin, Perry counties), ranked by prevalence, based on the May 2019 BLS wage data (BLS 2020f).

3.1.5 Commuting patterns

In terms of commuting methods, the study region is overwhelmingly auto-dependent (Figure 16); between 79 and 82 percent of workers in all three counties drive alone to work. At 82 percent, Cumberland County has the highest proportion of workers driving alone. As will be discussed in section 3.2, these commuting patterns contribute to higher transportation costs that must be accounted for in household budgets.

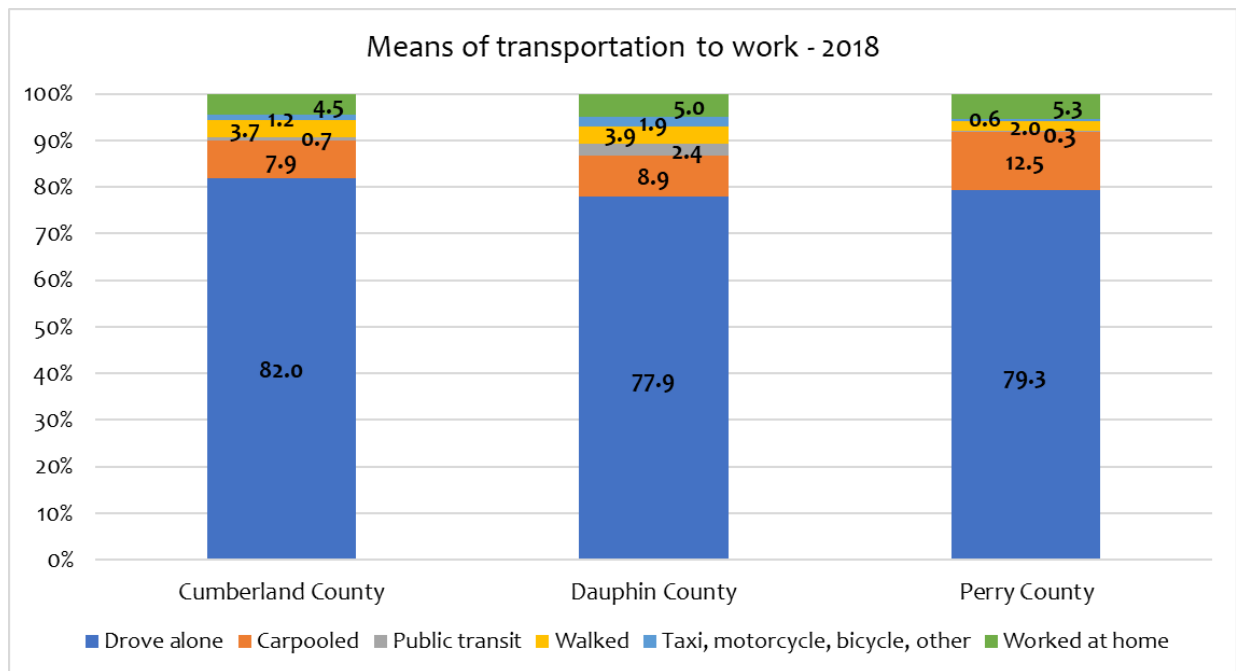
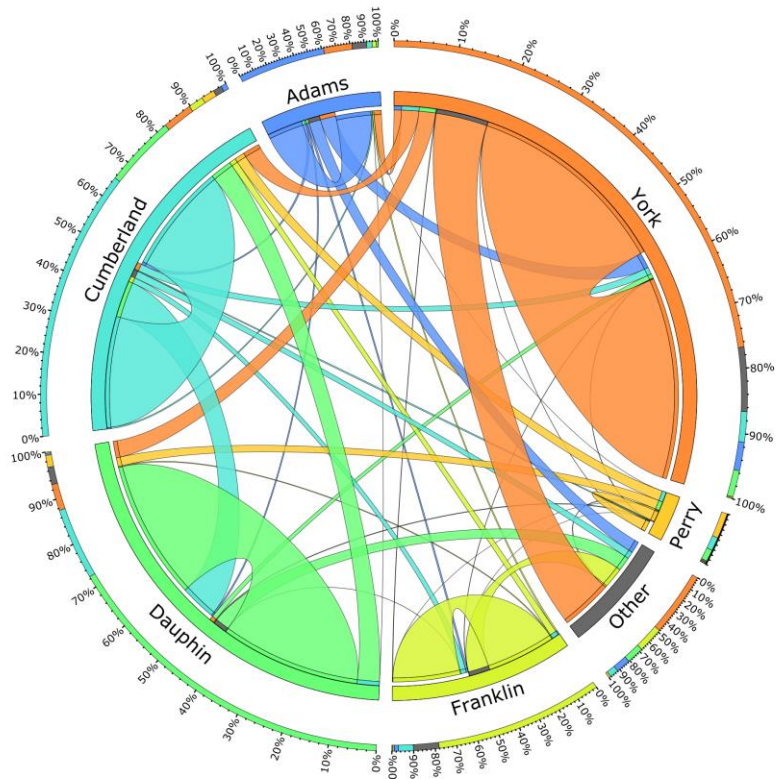


Figure 16: Commute type for Cumberland, Dauphin, and Perry counties.

To better understand connections between where workers live and where they work, the research team analyzed commuter flows for workers over the age of 16. In this analysis, the geographic scope was broadened to include much of south-central Pennsylvania, and regional commuting patterns were visualized using a circular flow diagram (Figure 17). In this diagram, workers' place of residence is indicated where a colored ribbon touches the outside of the circle, and the place of work is indicated at the other end of the ribbon. The proportion of the circle occupied by a county corresponds to that county's share of workers. For example, York County has the largest share of workers, followed by Dauphin and Cumberland counties. Perry County's share of workers is the smallest.

In all counties, most workers live and work in the same county. In Cumberland County, 66 percent of workers commute within the county, while 33 percent work in other counties. The majority of commuters leaving Cumberland County travel to work in Dauphin County. The top four counties with residents that live and work in the same county are Dauphin (77 percent), Franklin (70 percent), York (68 percent), and Cumberland (66 percent).

A



B

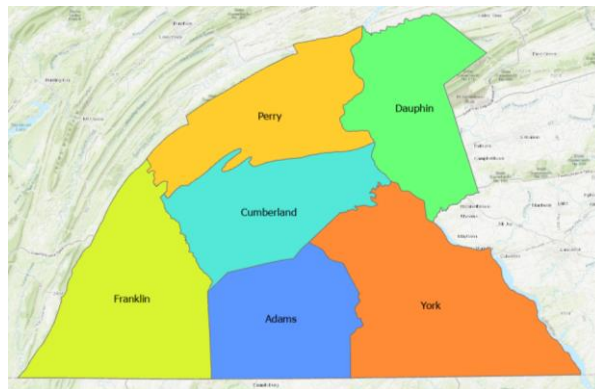


Figure 17: Circular flow diagram of commuting patterns (A) for counties in south-central Pennsylvania (B). Cartography by Matt Ostap, CLUS Student Fellow.

3.2 Housing + Transportation Affordability Index

According to CNT data for the study area, Cumberland County has the highest average monthly housing costs (\$1,322 averaged between home owners and renters) compared to Dauphin and Perry counties (\$1,303 and \$1,216 respectively) (Figure 18). This translates to 28 percent of household income in Cumberland County devoted to housing, higher than both Dauphin (26 percent) and Perry (25 percent) counties (Figure 19). In aggregate, Cumberland County is approaching the 30 percent threshold of

household income that should be allocated to housing. When housing and transportation costs are included, all three counties exceed the 45 percent threshold recommended by CNT, with Cumberland and Perry counties at 50 percent and Dauphin at 47 percent.

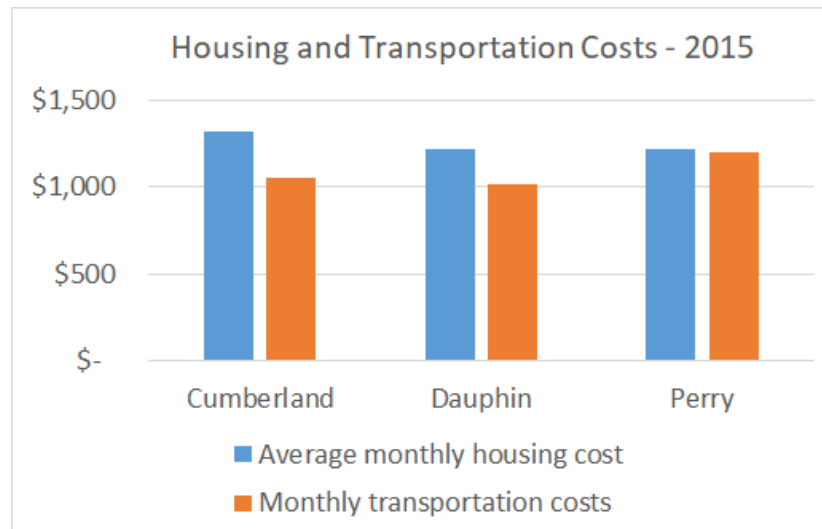


Figure 18: Average monthly housing and transportation costs for Cumberland, Dauphin, and Perry counties (Center for Neighborhood Technology 2020a, b, c).

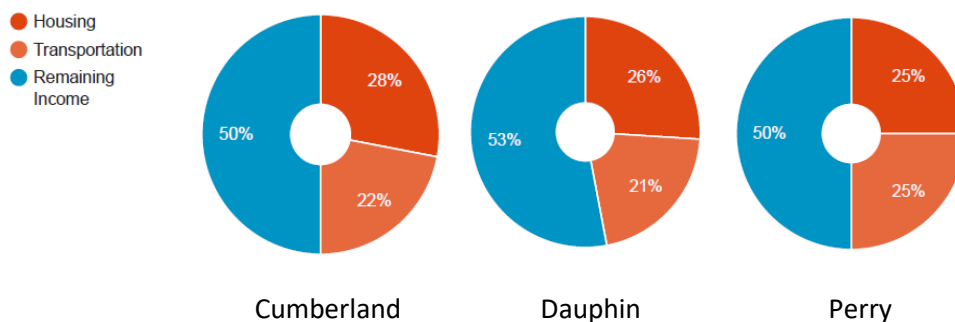


Figure 19: Proportion of household income devoted to housing, transportation, and other expenses for Cumberland, Dauphin, and Perry counties (Center for Neighborhood Technology 2020a, b, c).

Within Cumberland County, there is significant spatial variability related to housing affordability. A map of housing cost as a percentage of household income for Census block groups indicate hotspots where housing costs exceed the recommended 30 percent threshold (Figure 20A). When both housing and transportation costs are considered, only the most densely populated townships and boroughs remain below the 45 percent threshold (Figure 20B).

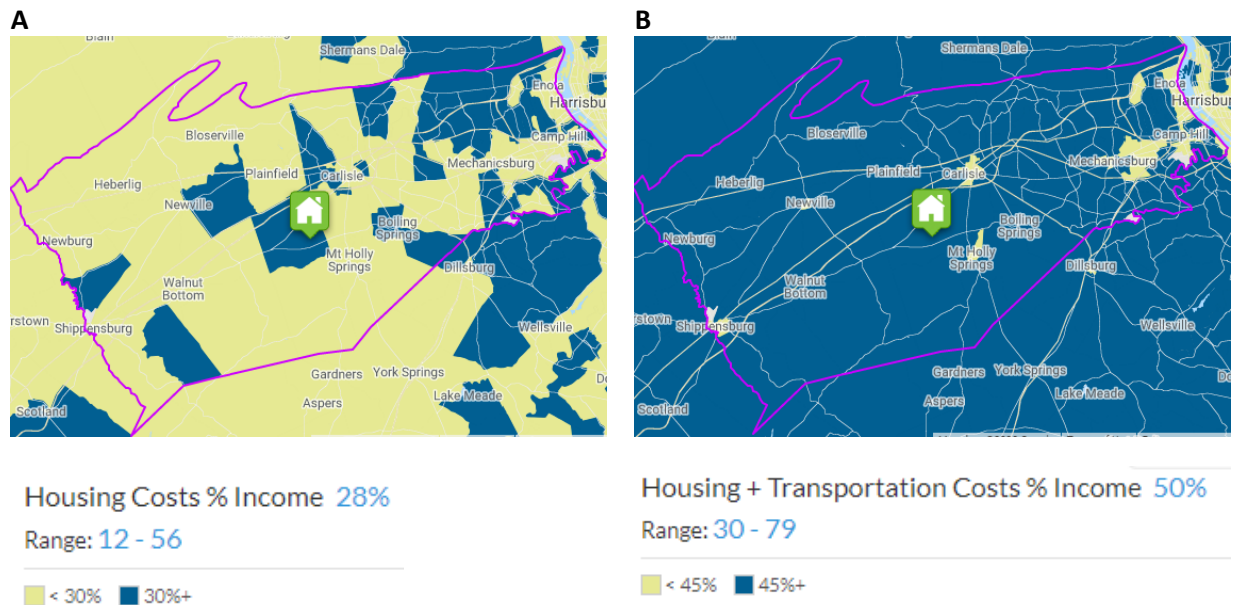


Figure 20: Housing costs as a percent of income (A) and housing + transportation costs as a percent of income (B) for Census block groups in Cumberland County (Center for Neighborhood Technology 2020d).

3.3 Market Reports and Residential Statistics from GHAR

Data compiled from Bright MLS and provided by GHAR provide additional insight into the status and trends of the housing market in Cumberland County. Unlike Census data, these metrics present “real time” snapshots of multiple variables related to the housing market, and also report on actual home sale prices – as opposed to the estimated home value in the Census. Two key indicators include average sales price and average days on the market. Observing trends in these indicators on a monthly basis for condos and single family homes between 2015 and 2019 for Cumberland County (Figure 21) illustrate short term (month to month) variability and long term trends. Since 2015, the increase in average sales price and corresponding decrease in average days on the market indicates an increasingly competitive housing market in Cumberland County. High demand for condos and single family homes has increased the sales price, and these units continued to sell very quickly.

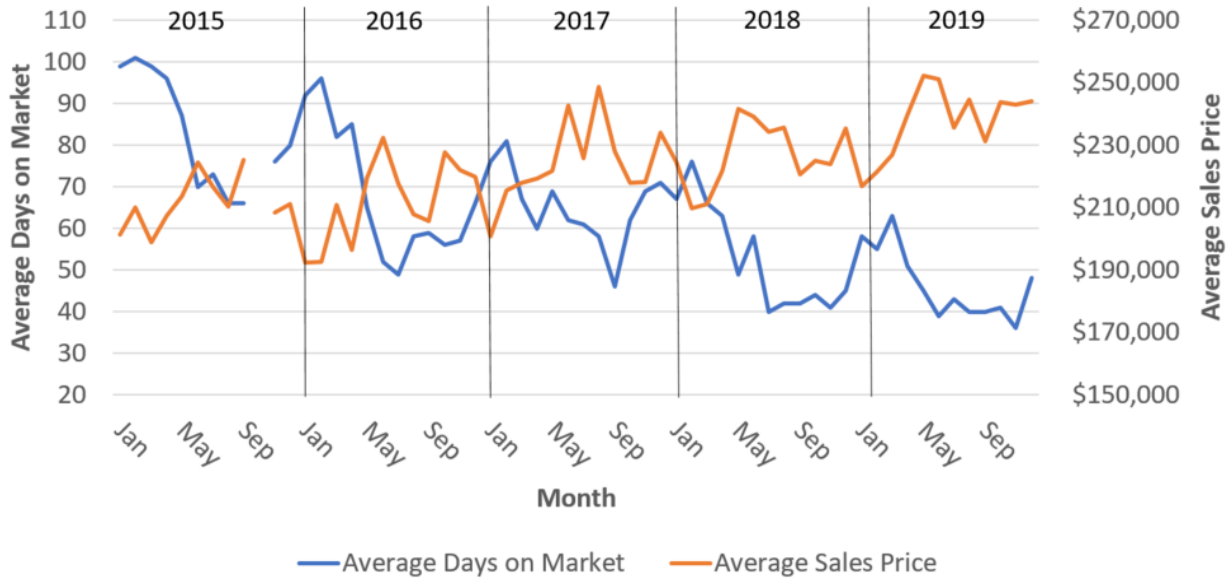


Figure 21: Monthly average days on the market and average sales price for condos and single family homes for Cumberland County, 2015-2019. Data for October 2015 were not available.

Market reports from December 2018 to January 2020 show dominant patterns within the overall GHAR market area and individually within Cumberland, Perry, and Dauphin Counties. During this time period, the entire GHAR market area saw increases in average and median sales prices (Figure 22), decreases in median days on the market (Figure 23), and decreases in months of supply (Figure 24). From 2018 to 2019, the average sales price rose from \$226,889 to \$237,580 in Cumberland County, \$175,668 to \$194,192 in Perry County, and \$179,812 to \$193,625 in Dauphin County.

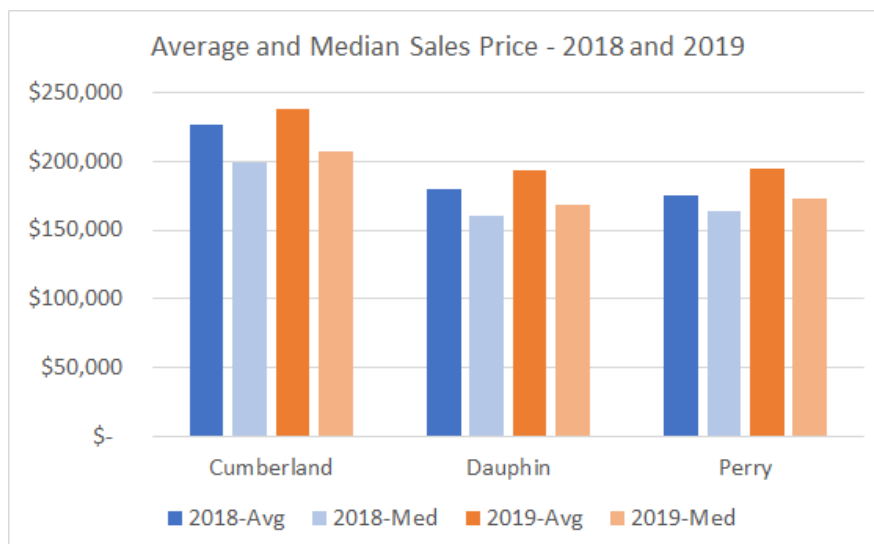


Figure 22: Average and median sales price for condos and single-family homes (2018 and 2019) for Cumberland, Dauphin, and Perry counties.

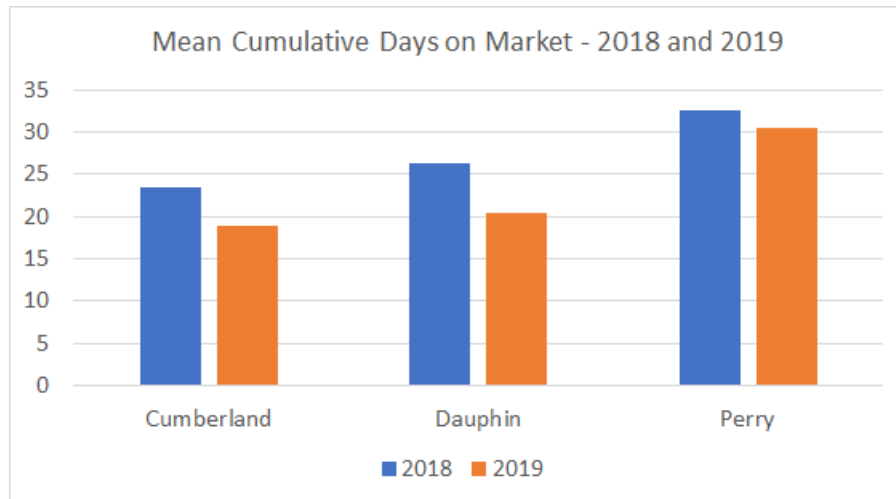


Figure 23: Mean cumulative days on the market (2018 and 2019) for condos and single-family homes for Cumberland, Dauphin, and Perry counties.

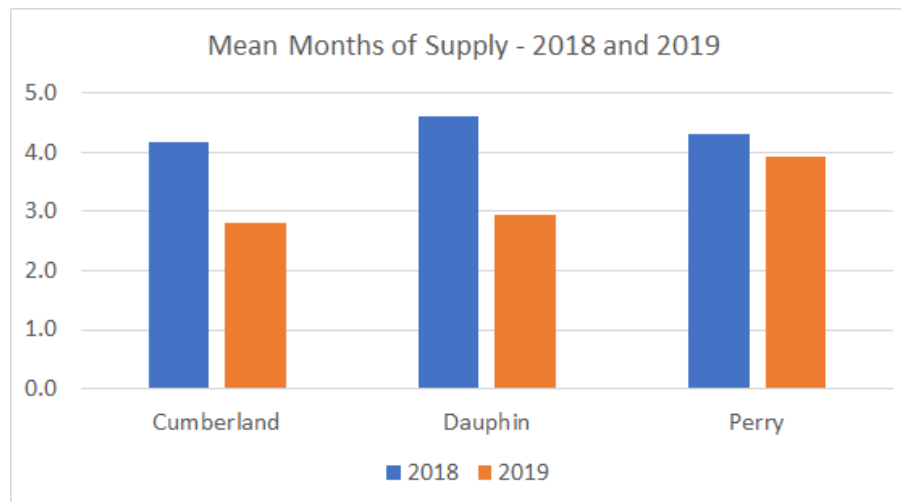


Figure 24: Mean months of housing supply (2018 and 2019) for condos and single-family homes for Cumberland, Dauphin, and Perry counties.

Months of supply is an indicator of how many months it would take for all the current homes for sale on the market to sell, given a monthly sales volume, and is calculated by dividing the total number of homes for sale by the number of homes sold in one month. A 6 month supply is generally considered to represent a balanced market (Dunn 2020). This metric has decreased between 2018 and 2019 to an average of 3.5 months for Cumberland County, 4.3 months for Perry County, and 3.7 months for Dauphin County. Median cumulative days on the market data follow similar decreasing trends, with Cumberland County averaging 21 days on the market, Perry County averaging 31 days on the market, and Dauphin County averaging 23 days on the market. Of the three counties in the GHAR market area, these metrics demonstrate that Cumberland County has the most competitive housing market.

While the entire market has seen increasing average sale prices and an unbalanced market, GHAR also compiles Bright MLS data quarterly at the school district level, which for the purpose of this study can indicate finer-scale geographic patterns (Figures 25 and 26). In Cumberland County, average sale prices ranged from a high of \$297,275 in the Cumberland Valley School District to a low of \$158,502 in the Shippensburg School District, with Big Spring School District reflecting the median with an average sales price of \$197,233. Average days on the market ranged from 44 days on the market in the Camp Hill School District to 109 days on the market in the Shippensburg School District, with Mechanicsburg School District as the median with an average of 65 days on the market.

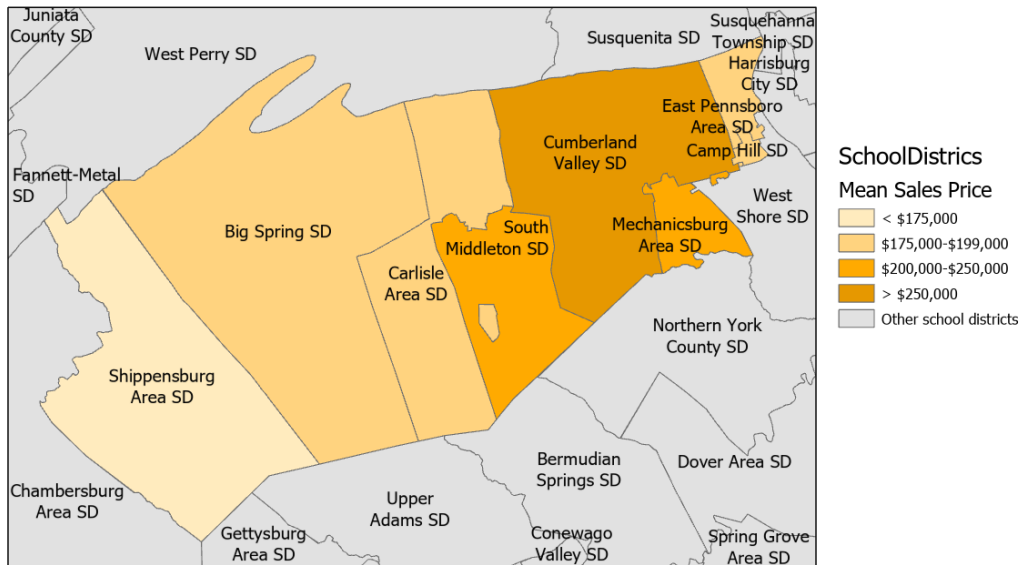


Figure 25: Average sales price (4th Quarter 2017 to 4th Quarter 2019) for condos and single family homes by school district in Cumberland County.

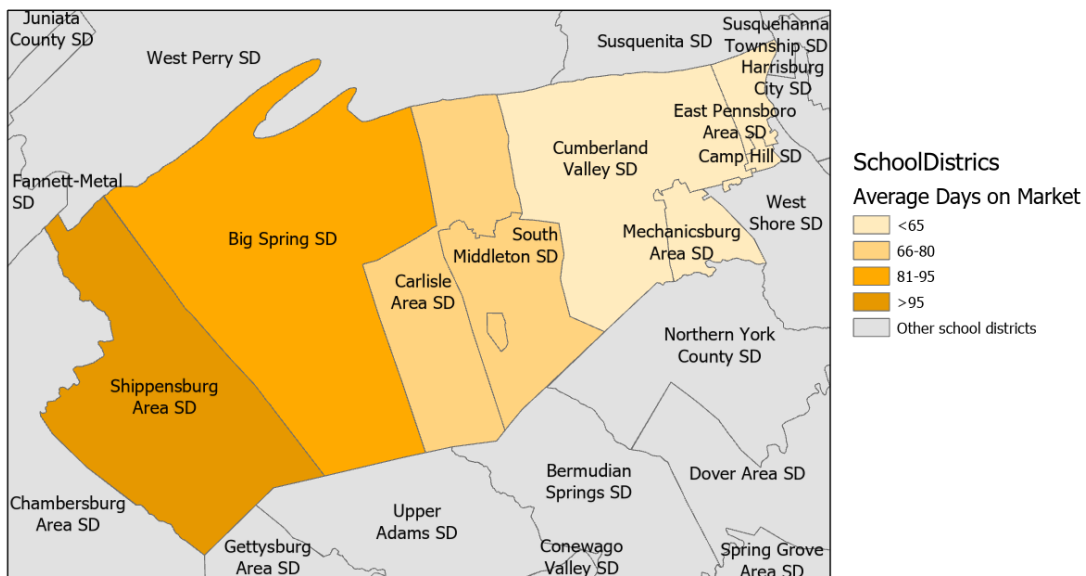


Figure 26: Average number of days on the market (4th Quarter 2017 to 4th Quarter 2019) for condos and single family homes by school district in Cumberland County.

3.3.1 January - April Market Trends, 2018-2020

Given the potential of the COVID-19 pandemic (on-going at the time of this writing) to disrupt housing markets, it is worthwhile to take note of any potential changes in housing market metrics that may be observed even at this early stage. In south-central Pennsylvania, business closures, including those associated with real estate began to be suspended in mid-March (Urie 2020; Vendel 2020). While early May saw some reopening, the entire month of April was a shutdown period where no face-to-face real estate activities were permitted.

Below are selected monthly average housing market statistics (condos and single family homes) from January to April for the past three years (2018-2020) for the GHAR region and for Cumberland County (Figure 27). For both the region and the county, trends in units sold show an increase between January and March from 2018-2020, but the drop in units sold in April 2020 is not consistent with previous years. Median price shows an increase in April of 2020 that is not consistent with 2018 and 2019 trends (Figure 28). Days on the market (Figure 29) have decreased in general between 2018 and 2020, and April 2020 does not seem to diverge significantly from historic trends.

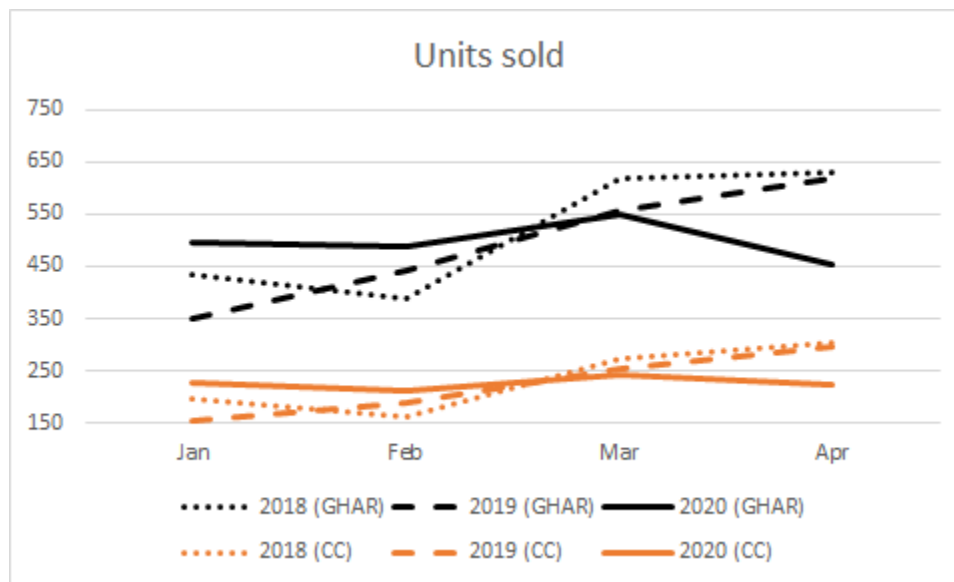


Figure 27: Units sold (condos and single family homes) from January to April for 2018 - 2020 in the GHAR region (black lines) and for Cumberland County (orange lines).

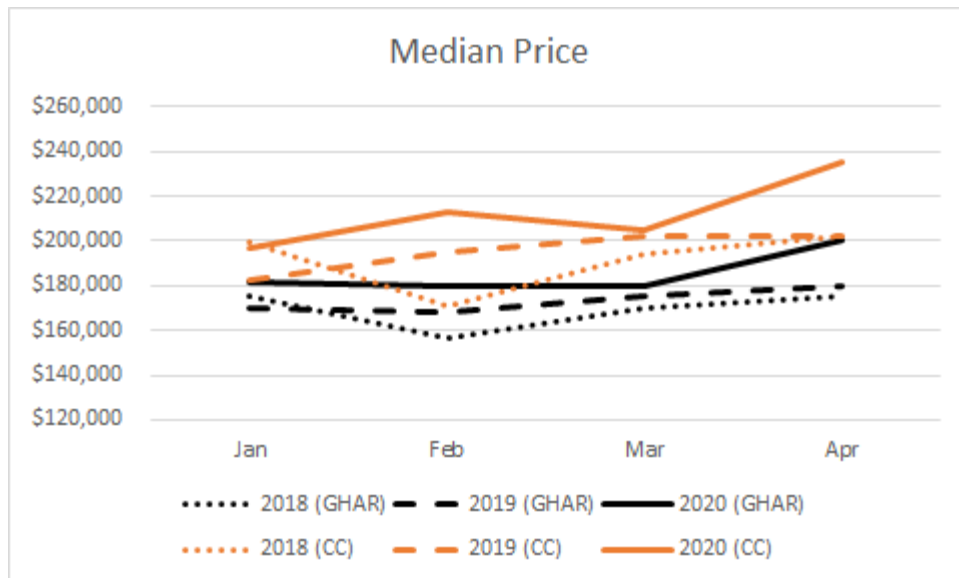


Figure 28: Median price (condos and single family homes) from January to April for 2018 - 2020 in the GHAR region (black lines) and for Cumberland County (orange lines).

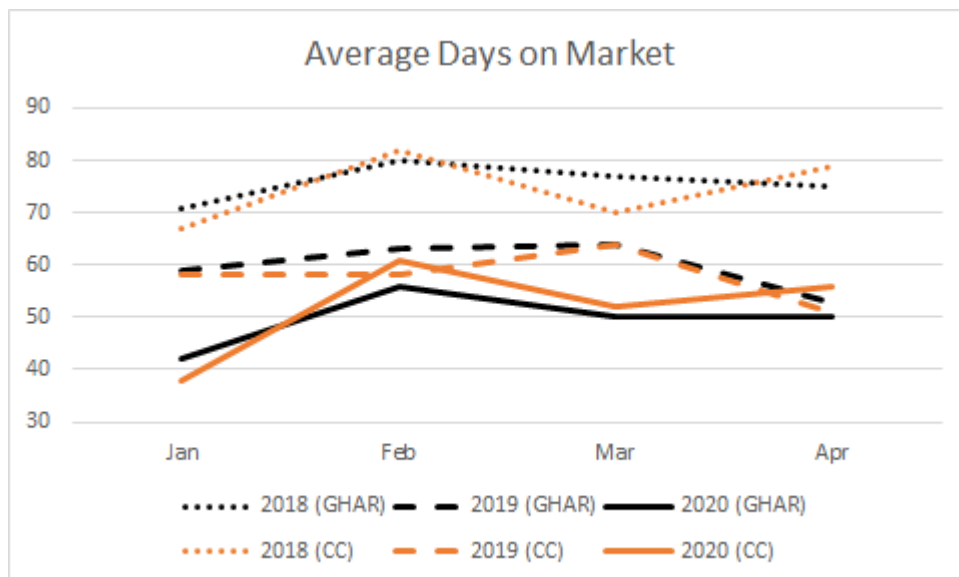


Figure 29: Average days on the market (condos and single family homes) from January to April for 2018 - 2020 in the GHAR region (black lines) and for Cumberland County (orange lines).

3.4 Stakeholder Interviews

During loosely structured interviews, stakeholders from GHAR, Cumberland County Planning Department, Tri-County HDC, and the Home Builders Association of Metropolitan Harrisburg were asked to characterize the housing markets in Dauphin, Perry, and Cumberland counties, to identify drivers of housing affordability, and consider what solutions were available to address housing affordability. Key points from those interviews are summarized here.

3.4.1 Housing market characteristics

Stakeholders reported that prospective buyers consider a number of factors in addition to housing cost: school district, proximity to work, parks, church, recreational opportunities, etc. These factors can carry a different weight depending on the individual buyer.

In the study area, stakeholders noted that in years leading up to the 2008 recession, the housing market was fairly balanced. Between 2011-2013 there was also a relatively healthy balance as the housing industry recovered after the recession. It was noted that this balance was short-lived because of pent up demand for housing. Now, it is widely recognized by stakeholders that there is low supply and high demand.

3.4.2 Drivers of housing affordability

Stakeholders raised a number of issues that impact the ability of prospective buyers to afford a home in the current housing market. It was noted that younger buyers are already carrying significant debt from college loans and have less buying power. Empty-nesters who may want to downsize are unable to find an affordable smaller home and thus stay put, resulting in a decrease of appropriate housing stock available for first-time homebuyers or buyers starting families. With relatively flat income growth and high demand driving up housing and rental costs, the availability of affordable housing for residents in the workforce has diminished.

Stakeholders also identified the role of building codes and increasing regulations on the cost of housing, Pennsylvania did not have a statewide building code until 1999, when the Commonwealth adopted the Uniform Construction Code. As federal programs, such as the National Flood Insurance Programs, began to require building codes and land use zoning requirements, regulations on real estate development increased. More recently, stormwater codes have become more stringent. Stakeholders noted that these regulations have the consequence of significantly increasing the cost of construction and redevelopment.

Finally, stakeholders noted that construction of new housing cannot keep pace with demand. Construction is slowed by the need to meet regulations, and a skilled labor force supporting the construction industry is limited. It was noted that even if construction could take place faster, the construction industry does not have the capacity to respond.

3.4.3 Solutions

Stakeholders identified a number of potential solutions. One stakeholder noted the potential importance of the First Time Homebuyers Savings Account bill, currently being considered by the

Pennsylvania General Assembly (House Bill 128¹, Senate Bill 309²). This bill would address the cost burden for homebuyers by providing a tax benefit for savings accounts used for the purchase of a new home.

Several comments were made regarding the role of land use policies. For example, stakeholders raised the need to encourage zoning flexibility and focus on creating a mix of use and density. It was noted that current zoning regulations across municipalities in the region continue to have a strong focus on low density single-family detached residential use. Stakeholders would welcome zoning that supports a more diverse mix of housing. At the same time, there is a need for transportation improvements to link residential and commercial areas. It was noted that these approaches have the potential to create affordable and desirable housing opportunities for Millennials, a large market of potential homebuyers that are already cost-burdened and who have preferences for higher-density, mixed use, walkable communities. While new housing should be a focus, stakeholders also highlighted the role of revitalization efforts to address development needs, and that infill is an important piece of this strategy.

Finally, stakeholders advocate for a reduction of stormwater costs and the need to embrace the use of green infrastructure and best management practice (BMP) stormwater infrastructure for small to large sites.

4.0 Conclusions and Policy Considerations

4.1 Housing Affordability in Cumberland County

Our analysis of Census data demonstrates that the housing market in Cumberland County is highly competitive. Within the focus region of Cumberland, Dauphin, and Perry counties, Cumberland County faces the most challenges with housing affordability: it has the lowest overall vacancy rate, and low rates of homeowner and rental vacancy rates (Figure 6) and the highest median home value (Figure 14). With 82 percent of residents commuting alone to work, Cumberland County residents also pay a significant fraction of their income on transportation costs. According to CNT, nearly all residents in Cumberland County devote more than 45 percent of their income to housing and transportation costs.

Housing market reports from Bright MLS support these findings, demonstrating an increase in sales prices for condos and single-family homes, a decrease in days on the market, and a limited inventory. Within the region, housing market indicators show that Cumberland County has the most competitive housing market.

¹ Pennsylvania General Assembly. Regular Session 2019-2020, House Bill 128. An Act providing for the establishment of first-time home buyer savings accounts for first-time home buyers in this Commonwealth. <https://www.legis.state.pa.us/cfdocs/billInfo/billInfo.cfm?sYear=2019&sInd=0&body=H&type=B&bn=128>

² Pennsylvania General Assembly. Regular Session 2019-2020, Senate Bill 309. An Act providing for the establishment of first-time home buyer savings accounts for first-time home buyers in this Commonwealth. <https://www.legis.state.pa.us/cfdocs/billInfo/BillInfo.cfm?syear=2019&sind=0&body=S&type=B&bn=309>

4.2 Drivers of Housing Affordability

Multiple factors drive housing affordability, and Cumberland County is not alone in facing this challenge. The Joint Center for Housing Studies (JCHS) of Harvard University (2019) reported that 31.5 percent of US households are cost burdened, paying more than 30 percent of their income for housing.

Nationwide, lack of supply, especially for lower-cost single-family homes, is one driver of housing affordability (JCHS 2019); this trend is strongly evident in Cumberland County's metrics. JCHS (2019) point out that this shortfall is due to multiple factors: a housing surplus from the housing boom in the early 2000s took over a decade to work through, making the building industry wary of creating another housing bubble; labor shortages in the construction industry; and a focus on construction for the high end market. This latter point suggests that the rising costs of construction make it less profitable to build more modest, affordable housing. Meeting housing supply will likely be a challenge for the next decade, driven by demographic trends that will be dominated by the Millennial and Baby-Boom generations. Millennials are expected to drive up demand for owner-occupied housing appropriate for families with children, while Baby-Boomers who age in place will likely fuel growth in the home remodeling industry and those who relocate will drive demand for small, accessible, and affordable homes (JCHS 2019).

Higher construction costs related to regulations also play a role. According to a report from the National Association of Home Builders (Emrath 2016), regulations account for 24.3 percent of the final price of a new single-family home built for sale; 14.6 percent is due to a higher price of the finished lot while 9.7 percent is due to increased building costs. For multi-family homes, Emrath and Walter (2018) estimate that over 30 percent of the costs are due to regulatory compliance. In both cases, increases in costs from changes in building codes were cited as the most important, although compliance with zoning and subdivision approval, land dedications, compliance with OSHA regulations, costs incurred from delays associated with regulation, and others also play a role.

Employment characteristics also reveal a potential gap in the jobs that are based in Cumberland County (Tables 3 and 5) compared to the jobs held by residents (Table 2), although direct comparisons are difficult since the U.S. Census and the Bureau of Labor Statistics use different occupational coding systems. The BLS salary data (Tables 3 - 5) is relevant when considering whether a *worker* in Cumberland County could afford to purchase an average home in the county. As an example, a search on Zillow performed on July 2, 2020 showed 53 homes for sale in Cumberland County between \$210,000 and \$230,000 – in 2019, the average sales price for a home in Cumberland County was \$237,580 (see section 3.3). Ten single family homes and townhomes from across the county were selected, resulting in a sample of homes that had 3-5 bedrooms, 2-4 bathrooms, an average of 1,963 square feet, and an average sales price of \$222,631. Assuming a 20% down payment (\$44,562), which usually avoids the need to pay mortgage insurance, the estimated monthly housing cost, including principal and interest, property taxes, home insurance, and HOA fees (if applicable), comes to \$1,141. This exceeds the estimated mean and median monthly housing allowance for the top four occupations in the metropolitan region (Table 5); within Cumberland County, the wage earned by those in the most common occupation, "Trade, transportation, and utilities," allows for a housing allowance of \$1,084

(Table 4). This example sheds light on the issues related to cost-burdened households that is highlighted in section 3.2.

Even for residents, occupations held create income challenges for housing affordability (Table 2). The monthly housing allowance based on the overall median salary is \$1,018.75. The top two industries for resident workers, “Educational services, and health care and social assistance” (22.2 percent) and “Retail trade” (12.7 percent), generate monthly housing allowances that are less than \$1,000. In fact, nearly half (47.7 percent) of resident workers earn a median salary that generates a monthly housing allowance less than \$1,000, and 55.8 percent would not be able to afford the monthly housing costs outlined in the above example.

On the demand side, while Millennials make up the largest cohort of home buyers (37 percent) (National Association of REALTORS® Research Group 2019), 70 percent of Millennial renters in a recent survey by Apartment List say they cannot afford to buy (Warnock 2019). While the ability to afford a down payment is the prominent concern (cited by 60 percent of respondents), 38 percent cite poor credit, and 29 percent cite the burden of monthly mortgage payments. Further, nearly half of Millennial renters, who are often burdened with student loan debt, have no savings for a down payment (Warnock 2019). The average Millennial has less than \$5,000 in savings and a net worth of less than \$8,000 (Hoffower 2020). Using the example given above, home buyers in Cumberland County could expect to need around \$40,000 for a 20% down payment.

4.3 Impacts of COVID-19

Within Cumberland County and the study region, 2018-2020 trends for January-April indicate that the housing market is still strong: while the number of sales have declined in April 2020 relative to historic patterns, median prices are up and days on the market do not seem to have been affected. That is consistent with national trends. While there is trepidation on the part of home buyers and a decrease of homes on the market, housing analysts are optimistic: mortgage rates are near record lows; there is not a mortgage crisis (as there was in the 2008 recession); and the Coronavirus Aid, Relief, and Economic Security (CARES) Act allows homeowners with government-backed loans to apply for up to a year of forbearance if they have financial hardships due to the pandemic (Bortz 2020).

However, it is important to note that there is a great deal of uncertainty that will be in play for at least the next year. With unemployment currently at record highs and no way of knowing how the economic recovery will proceed or how buyer preferences will be impacted, long term impacts of the COVID-19 pandemic on the housing market are impossible to predict (Stewart 2020). It is possible that the longer term impacts of COVID-19 will make the issue of housing affordability even more pressing.

4.4 Policy Considerations

Given the above discussion, policy considerations can be formed to address housing supply and lowering barriers or costs for home buyers.

While housing supply is a national issue, local land use policies can play a role in creating a more diverse and affordable housing market. In previous assessments of Cumberland County's housing, it has been noted that except for in the County's older boroughs, multi-family homes make up only a small percentage of the housing stock. For example, a 2014 report found that Cooke, Lower Frankford, and Upper Mifflin townships had no multi-family units (Cumberland County and Carlisle Borough 2014). A 2019 report notes the strong focus on low density residential land use zoning, even in rapidly growing townships (Michael Baker International 2019). Encouraging municipalities to revise their zoning ordinances to allow more flexibility for higher density single-family and multi-family housing would help create space for the development of moderately priced homes. Likewise, encouraging zoning that allows for a mix of land uses would also address housing affordability issues³. Mixed use, high density development patterns tend to be less auto-dependent, decreasing transportation costs (Center for Neighborhood Technology 2017). It should also be noted that these types of walkable, multi-use communities with modest, modern, and affordable homes are appealing to Millennial homebuyers (Lerner 2019) and could also address housing needs for aging Baby-Boomers (JCHS 2019).

While this report focuses largely on home ownership, rentals are an important piece of meeting housing affordability goals, especially given the limited capacity of Millennials to pursue home ownership. However, the rental market in Cumberland County is competitive too. In a recent affordable housing report, Michael Baker International (2019) note that Cumberland County rental unit prices have seen a shift between 2010 and 2017 with fewer units available under \$700/month while the amount of units over \$1,000/month has increased dramatically. In 2017, 42.3 percent of the rental units in Cumberland County cost at least \$1,000/month (Michael Baker International 2019). Ordinances that permit or promote rental units should be encouraged.

Zoning flexibility may also help with the cost burden of regulations, ultimately passed on to home buyers, since compliance with zoning and subdivision ordinances represent a significant piece of the costs of regulations (Emrath 2016; Emrath and Walter 2018). Streamlining the regulatory approval process would help to ease the costs of delay, which ranges from months to years (Emrath 2016). Local policies can do little to mitigate state and national regulations, including stormwater requirements, but local stakeholders should continue to advocate for housing affordability considerations in these regulations. It should be noted that regulations can be beneficial to homeowners, for example, in keeping insurance premiums low (Kasal and Turns 2010) or decreasing the risk of downstream flooding or pollution, and so regulatory changes should be considered carefully in terms of both short and long term costs and benefits.

³ See Lancaster County Planning Commission (2012) for specific examples of zoning flexibility to encourage affordable housing.

While changes to land use policy can help to create a more balanced housing and rental market for workers and residents in Cumberland County, fostering economic development that focuses on higher wage jobs may also be a pathway for local decision makers to pursue. Likewise, supporting state or federal policies that promote a higher minimum wage or living wage would raise the incomes of the lowest paid workers. These options would allow Cumberland County workers to earn a wage that would allow them to afford homes near their workplace. However, it should be emphasized that this would not obviate the need for pursuing a range of options – the drivers of housing affordability are multi-faceted and so multiple solutions should be pursued.

To address the lack of savings available to many first-time home buyers, some progress is underway at the state level to encourage savings associated with the cost of new home purchases: the Pennsylvania General Assembly is currently considering a bill that would create a first-time homebuyers savings account program (Snyder 2020). If passed, this program would allow for savings up to \$50,000 over a ten year time period. Money deposited in this account would be eligible for state income tax deduction. This bill has broad support state-wide and is one for which local stakeholders should advocate.

Finally, workforce development training related to the housing construction and remodeling industries should be encouraged throughout the rapidly growing region of south-central Pennsylvania. Over the next decade, this region can expect a continued need for new home construction and home renovation, creating a workforce need for these trades.

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