KENT COUNTY
ESSENTIAL NEEDS TASK FORCE

Economic and Workforce Development Subcommittee

Demographic Similarity Clustering

The hope for this project was to assess if census tracts could be grouped based on similar demographic profiles and indicators of potential economic and workforce development needs. Statistical cluster analysis aims to create groups of data (census tracts in this case) that are most similar to others in their cluster while also making the clusters as different as possible from one another. These clusters are based on similarities of the populations living in the area, not on geographic proximity. Petersen Research Consultants partnered with ENTF on this endeavor and tested numerous indicators from the 2019 American Community Survey (ACS) 5-year estimates. As such, these indicators were gathered prior to the COVID 19 pandemic. Though more current data are not available across all of these indicators, current data suggest that disparities have increased since the beginning of the pandemic.

The indicator descriptors that most characterize each cluster are noted in the chart below.

	Predominate Racial Group	Unemployment Rate	Educational Attainment	Median Income	Single Parent Households
Cluster 1	White	Low	High	High	Few
Cluster 2	White	Low	High	High	Few
Cluster 3	Black/African American	High	Low	Low	Many
Cluster 4	White & Hispanic/Latino	Moderate	Low	Low	Many

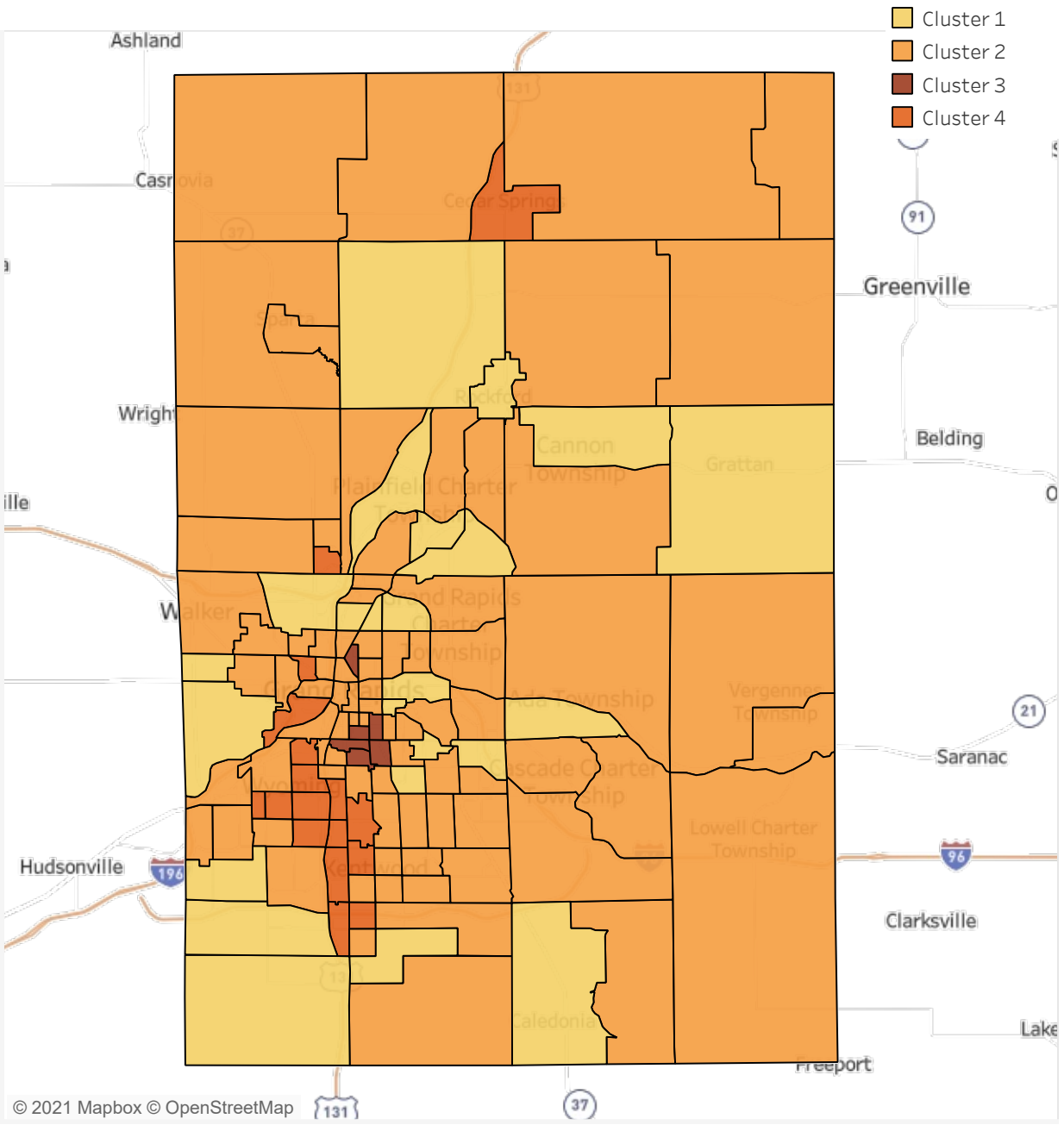
Please note, these clusters are determined based on which census tracts are most similar to one another on a variety of indicators. There are systemic reasons why these indicators exist, may show disparities by race/ethnicity, and why these indicators show a difference in geospatial distribution (including a history of redlining, inequitable lending practices, disparate resource investment, etc). The intent is for this information to be used to help inform future resource investment and collaboration between service providers.

Cluster Membership

After statistically analyzing demographic and economic stability indicators, four clusters emerged. These clusters are based on indicator similarity, not geographic proximity (closeness to one another). The indicators that were most useful in differentiating clusters were:

- income (median and poverty level),
- race and ethnicity distribution,
- employment,
- education, and
- single parent households.

Census tracts across Kent County are shaded in the map at right to indicate which cluster they are a member of. Based on this information, clusters 3 and 4 are most in need of workforce development resources. This presentation will walk through these indicators and discuss how the clusters differ on these factors.

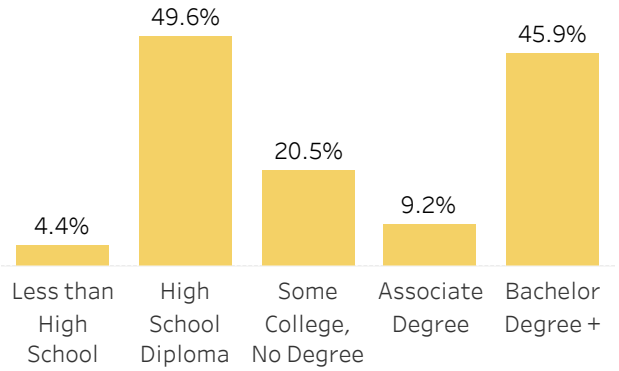


Cluster 1 Profile

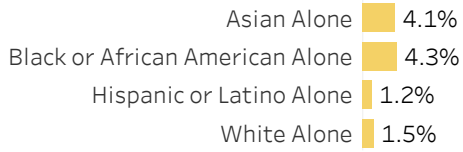
149,069 people, **23.0%** of popuation

The **race/ethnicity** of the population is predominately White.

Educational attainment is high.

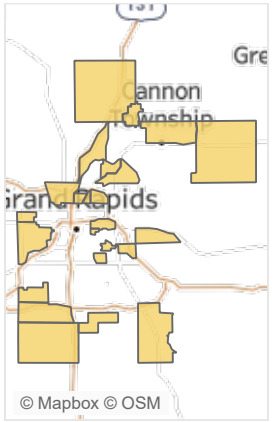


Unemployment is generally low, but there are disparities in the unemployment rate by race/ethnicity.

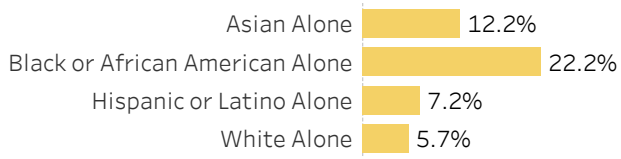


$79,330
Median household income is high.

24 census tracts



Poverty is generally low, but there are disparities in the percent of households living below 100% of the federal poverty line by race/ethnicity.

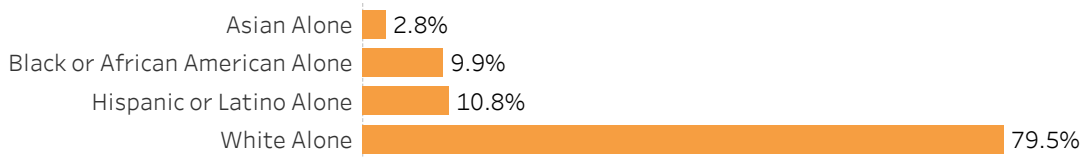


6.8%
There are few single parent households.

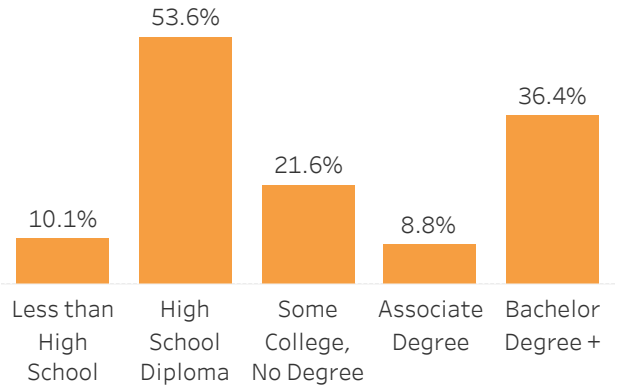
Cluster 2 Profile

395,202 people, **61.0%** of popuation

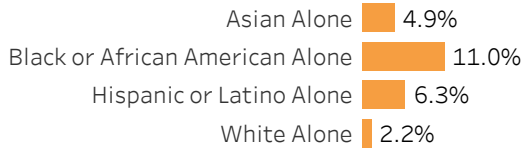
The **race/ethnicity** of the population is predominately White.



Educational attainment is high.

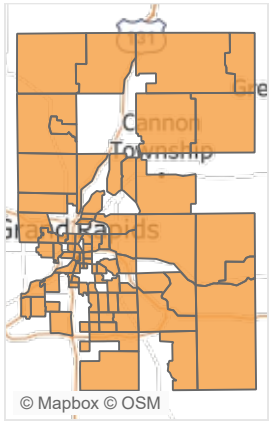


Unemployment is generally low, but there are disparities in the unemployment rate by race/ethnicity.

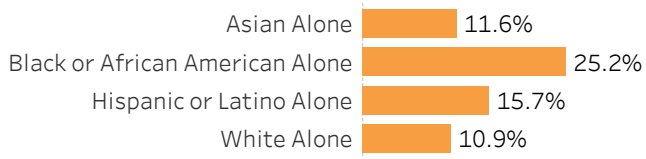


$66,678
Median household income is high.

81 census tracts



Poverty is generally low, but there are disparities in the percent of households living below 100% of the federal poverty line by race/ethnicity.

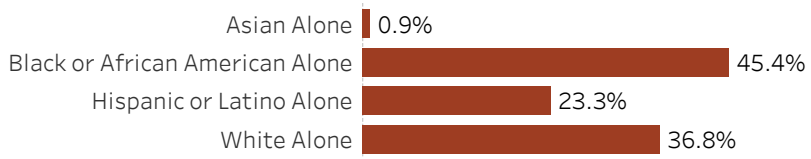


10.1%
There are few single parent households.

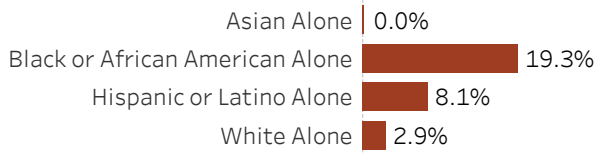
Cluster 3 Profile

24,910 people, **3.8%** of popuation

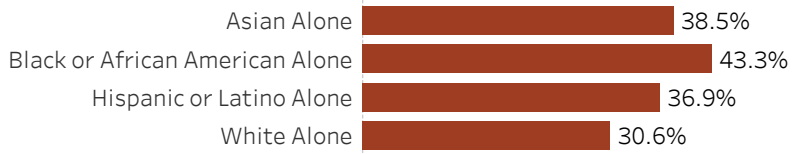
The **race/ethnicity** of the population is predominately Black or African American and Hispanic or Latino.



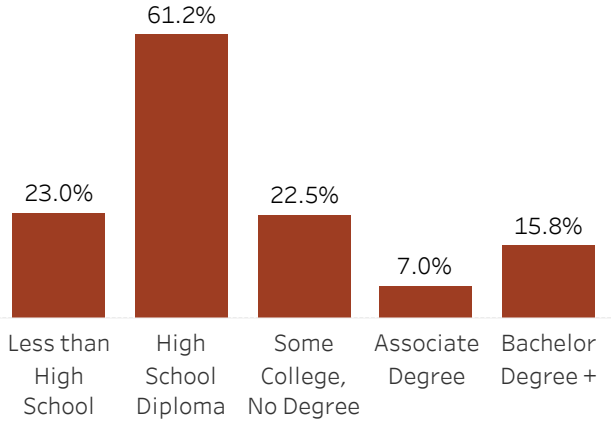
Unemployment is high, and there are disparities in the unemployment rate by race/ethnicity.



Poverty is high, and there are disparities in the percent of households living below 100% of the federal poverty line by race/ethnicity.



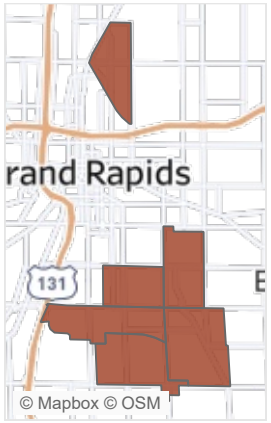
Educational attainment is low.



$33,970
Median household income is low.

29.4%
There are many single parent households.

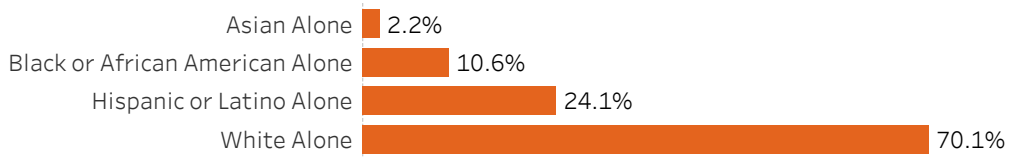
6 census tracts



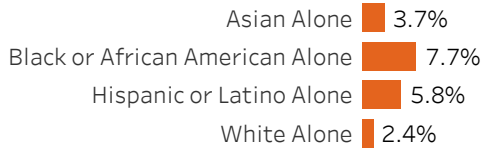
Cluster 4 Profile

78,940 people, **12.2%** of popuation

The **race/ethnicity** of the population is predominately White and Hispanic or Latino.

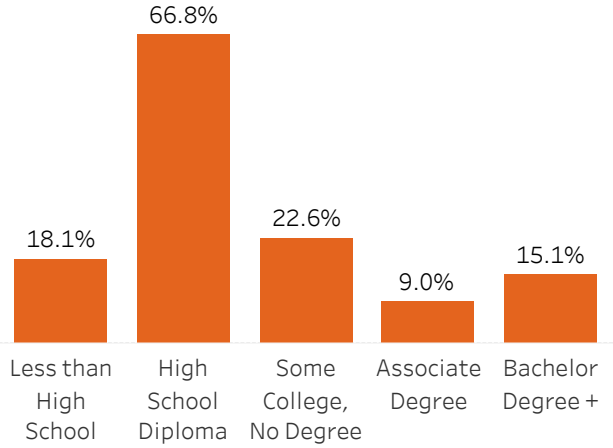


Unemployment is moderate, and there are disparities in the unemployment rate by race/ethnicity.



Poverty is high, and there are disparities in the percent of households living below 100% of the federal poverty line by race/ethnicity.

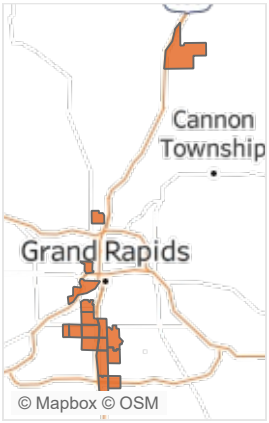
Educational attainment is low.



$47,248
Median household income is low.

20.9%
There are many single parent households.

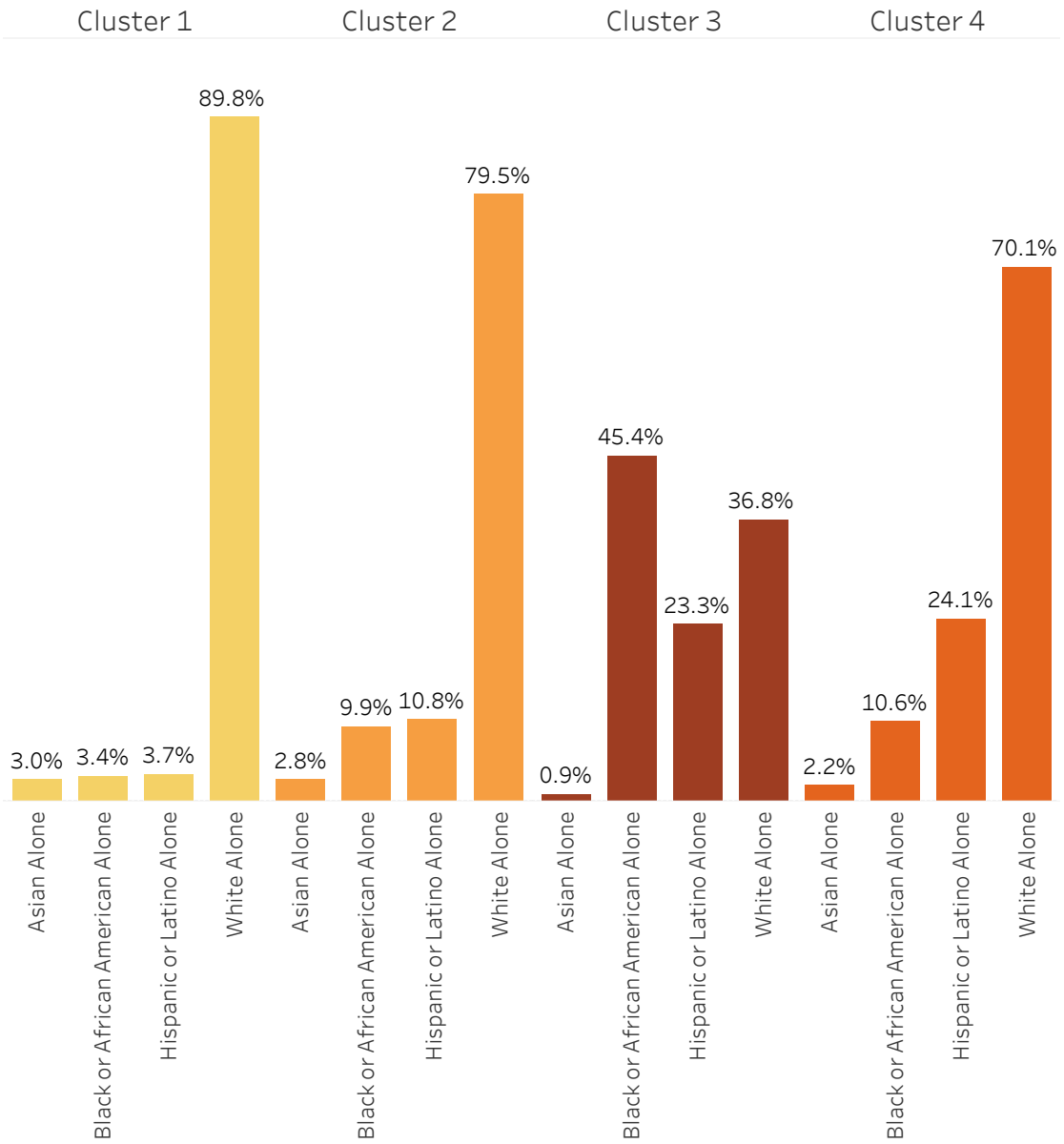
17 census tracts



Race & Ethnicity

This chart grouping shows the racial and ethnic distribution for each of the clusters. The values shown here are the average of all census tracts in that cluster . The clusters appear to have some differences in the race and ethnic make up of their residents. Clusters 1 and 2 are predominantly composed of residents who identify as White. Cluster 3 has a more diverse race/ethnicity distribution, with 45% of residents identifying as Black or African American, 37% identifying as White, and 23% as Hispanic/Latino. Cluster 4 consists of roughly 70% White residents, but has the largest proportion of Hispanic/Latino residents of all four clusters, at 24%.

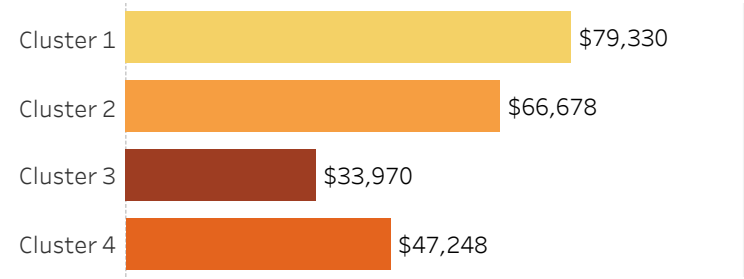
The geographic distribution of residents of different demographic groups is highly influenced by systemic factors, including a history of redlining and discriminatory lending. Race and ethnicity are included in these analyses because they are factors that differentiate the residential clusters from one another. Information about people who identify as American Indian, Alaskan Native, Native Hawaiian, two or more races, or another race can be found on the indicator dashboard.



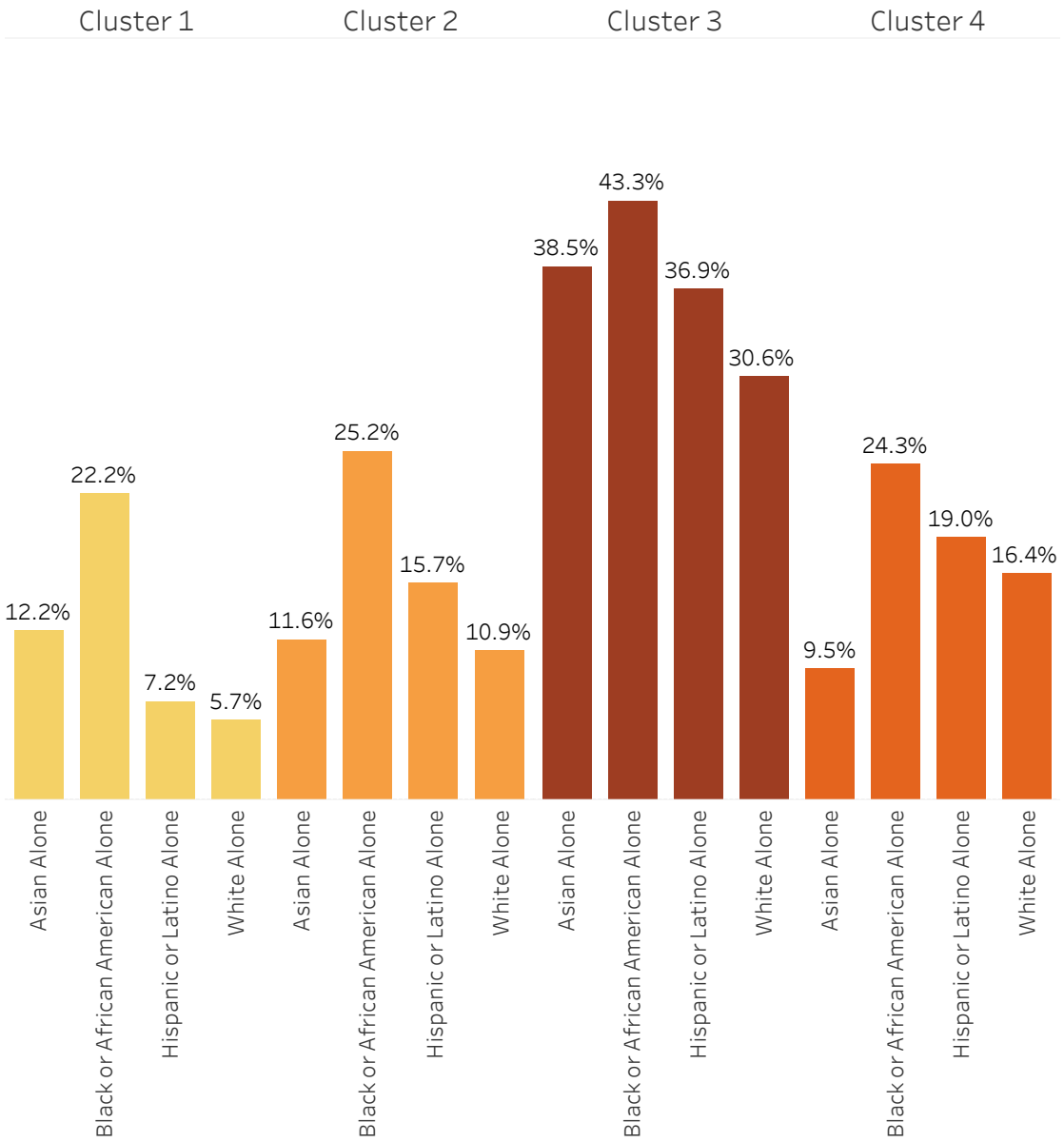
Poverty Level

Median income and households below the 100% poverty line were also indicators that were utilized in developing the clusters. A large disparity in income can be seen between Cluster 1 at the top end (with a median household income of ~$80,000) and Cluster 3 at the lower end (with a median household income of ~$34,000). The 100% poverty line is determined by the federal government and criteria can be found here. Geographic and demographic differences in household income are driven primarily by systemic factors and are heavily influenced by systems of oppression.

Median Household Income



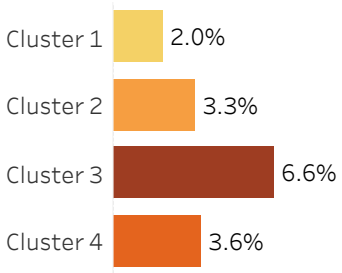
Households Under the 100% Poverty Line



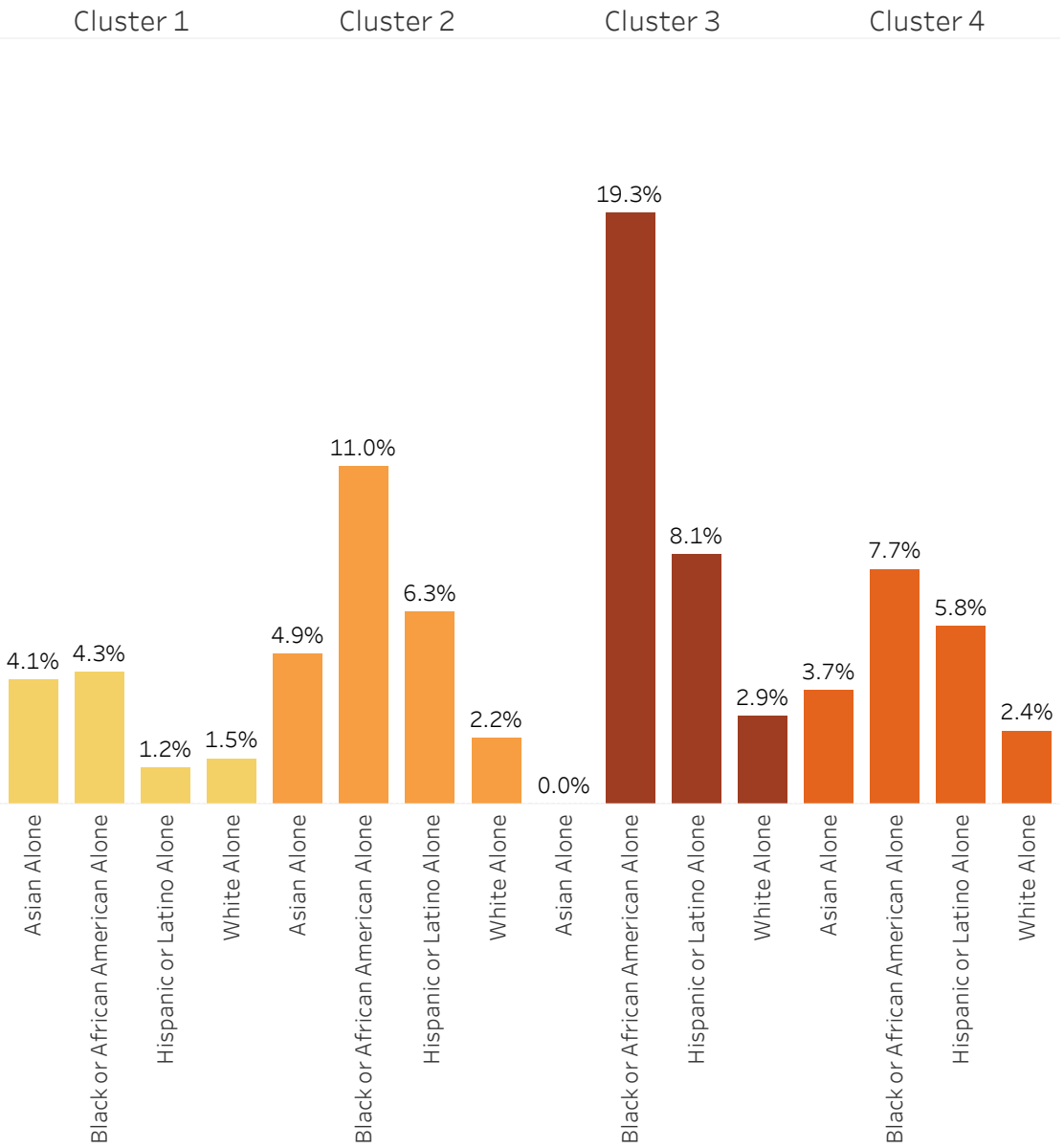
Unemployment

Unemployment rates were calculated using the percent of residents 16 and over who were part of the civilian workforce (meaning not in the military, not retired, or not having voluntarily left the workforce) who were not employed. These numbers are from the latest ACS data, which was collected pre-COVID. As such, 2020 and 2021 unemployment rates are different and likely have exacerbated equity concerns. Using the 2019 ACS 5-year estimates, Cluster 3 has the highest overall average umeployment rate per census tract, at 6.5%. The chart at below shows the unemployment rate within each race/ ethnicity group and indicates a disparity in unemployment by race, which is again highly influenced by systemic oppression factors.

Average Unemployment



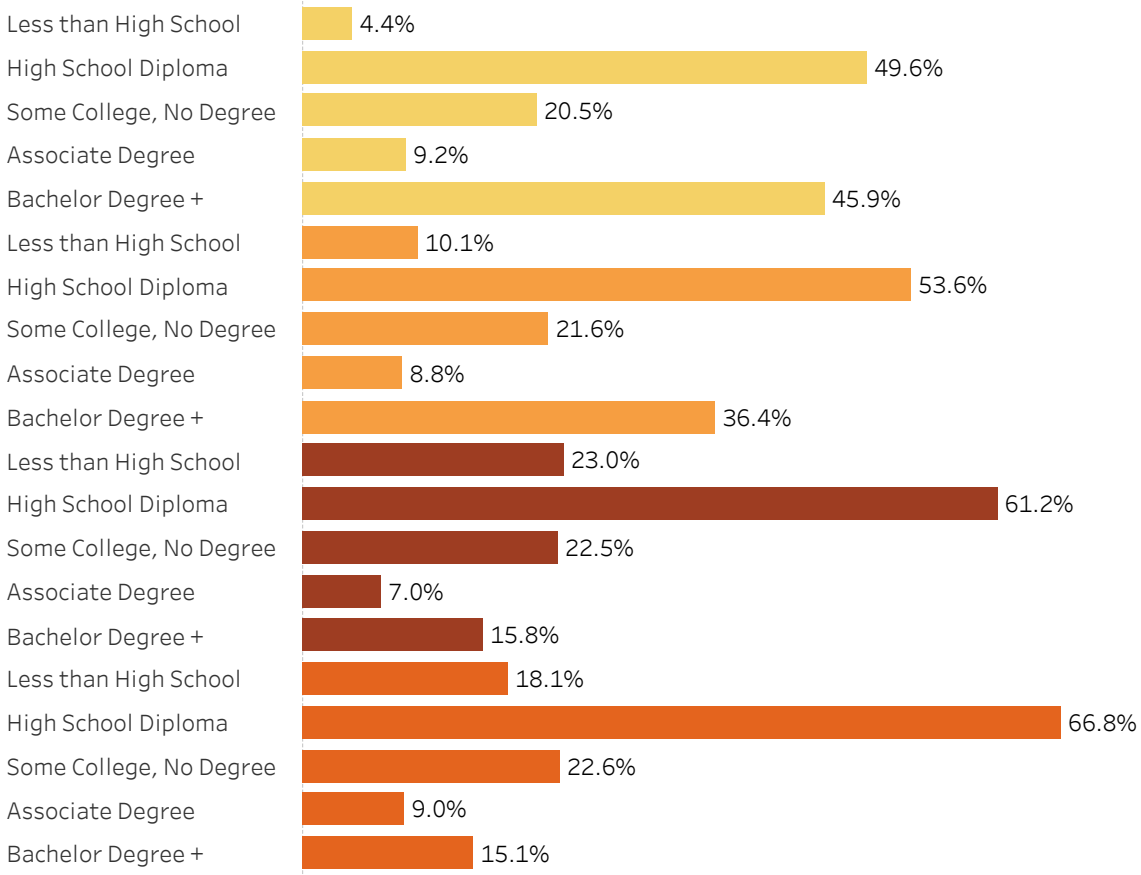
Unemployment within Race & Ethnicity



Education

The percent of residents with at least a high school diploma (or equivalent) was also a significant clustering variable. Cluster 1 had the highest average percent of residents with a diploma or greater at 96%, while Cluster 3 had the lowest average at 77%. It appears there are greater educational needs for adults in the central and southern portions of the city of Grand Rapids and into Wyoming than there are in outlying areas of the county.

Educational Attainment



Residents with at least a High School Diploma

Cluster 1

95.6%

Cluster 2

89.9%

Cluster 3

77.0%

Cluster 4

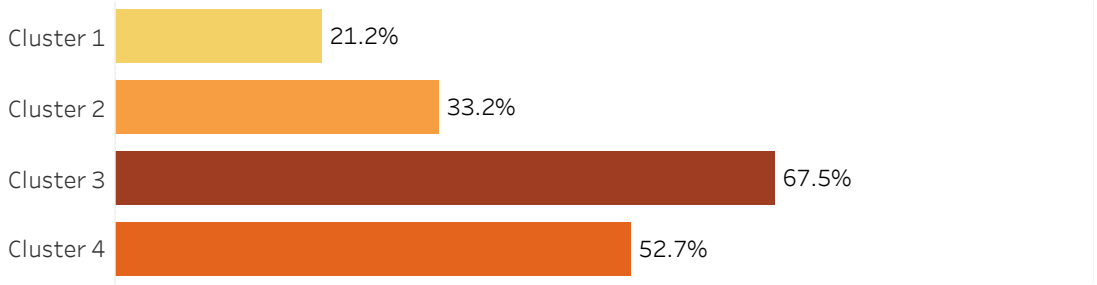
81.9%

Single Parent Households

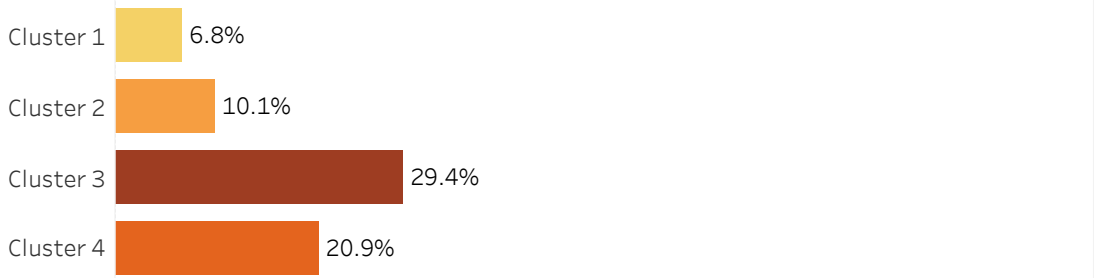
This indicator includes any households with children under the age of 18 and one adult/ parent, regardless of gender. The first chart at right shows households with children that are led by a single parent as a percent of households with children. The second chart shows households that are single parent led as a percent of all households (with or without children). The third chart shows households with children as a percent of all households.

Clusters 3 and 4 have the highest average rate of single parent households, at 29.3% and 20.9% of all households respectively. Of all households that have children in them in Cluster 3, 67.5% of them are single parent led. Similarly, 52.5% of all households with children in Cluster 4 are single parent led. This indicates that resources provided in Clusters 3 and 4 will likely need to have more considerations for childcare needs than services in other clusters. This is another indicator that is heavily influenced by systemic factors and is often used as a proxy outcome for several other indicators rather than as a predictive factor.

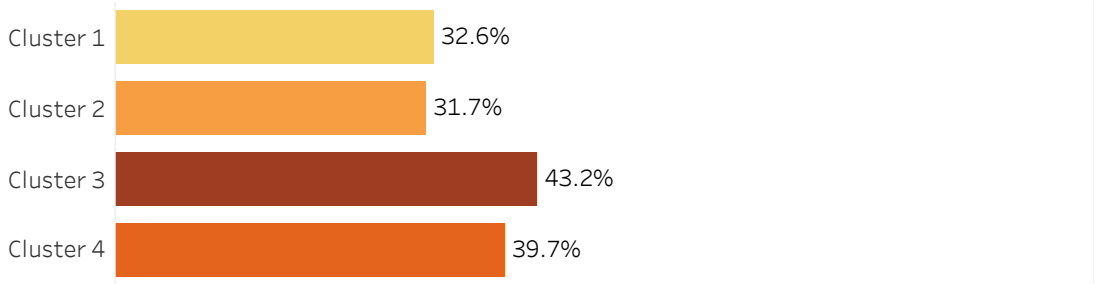
Households with Children that are Single Parent Led



Households that are Single Parent Led



Households with Children



The hope for this information is threefold:

1 - To help inform stakeholders or support their existing knowledge of the scope, magnitude, and disparity of economic and workforce development needs in Kent County.

2 - To allow service providers who are serving communities with similar needs to collaborate and share practices they have learned to best serve the community.

3 - To act as a contextual backdrop for the service analysis. The service analysis looks at what types of services are offered, to what populations, at what locations, and the capacity of those services. By overlaying these data, ENTF partners can assess where there are overlaps and gaps in services in order to better collaborate to serve the community.

If you have any questions about these data, please contact Emily Madsen at ENTF (emadsen@hwmuw.org) or Jodi Petersen at Petersen Research Consultants (jodi@petersenresearchconsultants.com).

This report is also availble online with the addition of an interactive indicator dashboard.
https://public.tableau.com/views/WFDClusterAnalysis/2021byPetersenResearchConsultants

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