



Research Project

Martinsville and Henry County Data Analysis

2024

Table Of Contents

01

About The
Project

02

Demographic
Analysis

03

Poverty Rates

04

Health

05

Education

06

Economy

About The Project



We were assigned the task of collating data from multiple sources to provide the Harvest Foundation with deeper insights into our community.

Our approach encompassed diverse data streams aimed at comprehensively identifying the primary challenges impacting our community. This dataset serves as an initial step towards identifying trends and pinpointing areas requiring intervention. Our analysis delved deeply into census tract-specific data, while other datasets provided a broader overview of each locality. In this presentation, we will focus on highlighting significant data points rather than presenting every individual piece. Nonetheless, all compiled data will be included in our final report.

This project encompassed an analysis of data pertaining to demographics, poverty rates, health metrics, educational attainment, and information specific to our youth population. Our overall findings show there needs to be a focus on support for young adults and children within the community. For future research, the recommendation would be to look into specific social conditions in the years that show a decline in employment and an increase in poverty rates.



About the Project

Demographic Analysis



02

Demographic Analysis

Martinsville Population by Age Group

Census Tract	Under 5 Years	5-17 Years	18-24 Years	25-64 Years	65-74 Years	75+ Years
1 Clearview Area	8.5%	20.4%	10.9%	41.8%	8.9%	9.7%
2 Albert Harris Area	9.7%	17.1%	6.9%	48.7%	12.3%	5.3%
3 Patrick Henry Area	4.3%	15.1%	10.5%	55.3%	9.1%	5.7%
4 Southside Area	5.8%	25.8%	6.3%	45.7%	11.7%	4.9%
5 Druid Hills Area	7.0%	13.8%	7.8%	50.6%	12.3%	8.5%

Martinsville Population by Age Group

Clearview Area

Census Tract	Under 5 Years	5-18 Years	18-24 Years	25-64 Years	65-74 Years	75+ Years
1	8.5%	20.4%	10.9%	41.8%	8.9%	9.7%

second highest percentage for 18 and under

lowest percentage of working aged residents

Martinsville Population by Age Group

Albert Harris Area

Census Tract	Under 5 Years	5-18 Years	18-24 Years	25-64 Years	65-74 Years	75+ Years
2	9.7%	17.1%	6.9%	48.7%	12.3%	5.3%

highest
percentage of
youth under 5

one of the highest
percentages of
residents nearing
retirement age

Martinsville Population by Age Group

Patrick Henry Area

Census Tract	Under 5 Years	5-18 Years	18-24 Years	25-64 Years	65-74 Years	75+ Years
3	4.3%	15.1%	10.5%	55.3%	9.1%	5.7%

lowest percentage
of children under 5
by 1.5%

highest percentage
of working aged
residents by nearly
5%

Martinsville Population by Age Group

Southside Area

Census Tract	Under 5 Years	5-18 Years	18-24 Years	25-64 Years	65-74 Years	75+ Years
4	5.8%	25.8%	6.3%	45.7%	11.7%	4.9%

highest percentage
of school-aged
youth by 5%

lowest percentage
of college-aged
residents and
elderly residents

Martinsville Population by Age Group

Druid Hills Area

Census Tract	Under 5 Years	5-18 Years	18-24 Years	25-64 Years	65-74 Years	75+ Years
5	7.0%	13.8%	7.8%	50.6%	12.3%	8.5%

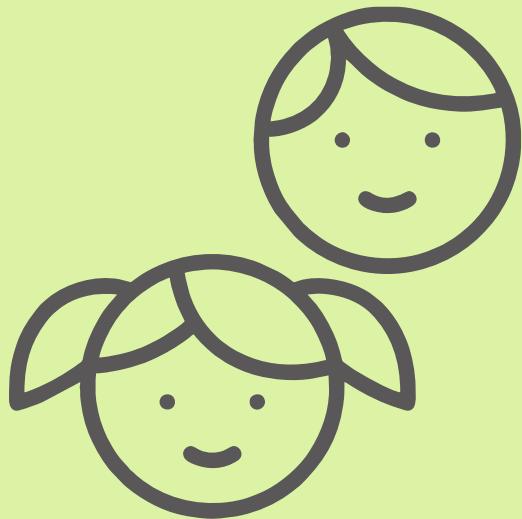
lowest percentage
of school-aged
youth

one of the highest
percentages of
residents nearing
retirement age

Henry County Population by Age Group

Census Tract	Under 5 Years	5-17 Years	18-24 Years	25-64 Years	65-74 Years	75+ Years
101 FCMS Area	7.9%	17.4%	8.7%	48.3%	8.5%	9.1%
102 Kings Mountain Area	1.3%	17.7%	9.2%	50.1%	12.0%	9.8%
103 Mt. Olivet Area	1.1%	15.2%	7.0%	42.5%	22.1%	11.9%
104 Axton Elem. Area	4.3%	15.7%	6.7%	52.6%	14.8%	6.0%
105 Irisburg Area	3.8%	16.5%	4.7%	56.8%	9.1%	9.1%
106.01 Rich Acres Area	3.8%	12.7%	5.3%	57.2%	13.2%	12.0%
106.02 Drewry Mason Area	4.9%	7.2%	10.1%	49.6%	6.1%	22.0%
107 MVHS Area	2.1%	20.6%	6.9%	44.8%	10.5%	15.2%
108 Fieldale/Kohler Area	5.7%	11.1%	7.6%	43.3%	16.3%	16.1%
109 G.W. Carver Area	5.2%	9.1%	8.0%	50.6%	14.7%	12.4%
110 Sanville Area	6.3%	10.6%	4.0%	53.3%	12.4%	13.6%
111 Campbell Court Area	3.5%	15.7%	6.9%	45.5%	11.4%	16.9%
112 West Bassett Area	8.7%	9.1%	10.9%	40.9%	17.1%	13.2%
113 Meadowview Area	6.3%	9.4%	8.1%	51.3%	11.8%	12.9%

Henry County Population by Age Group



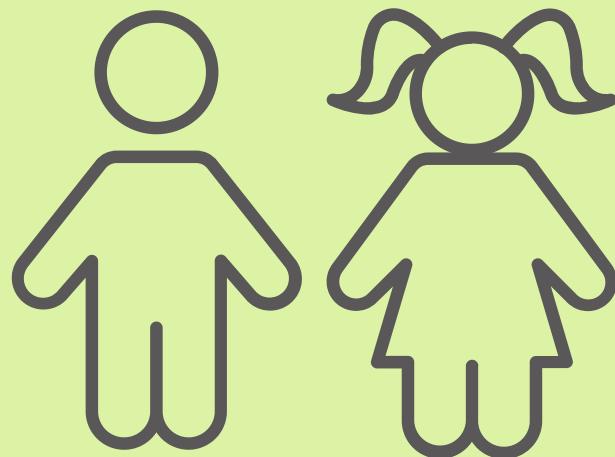
West Bassett and
Fairystone Area
8.7%



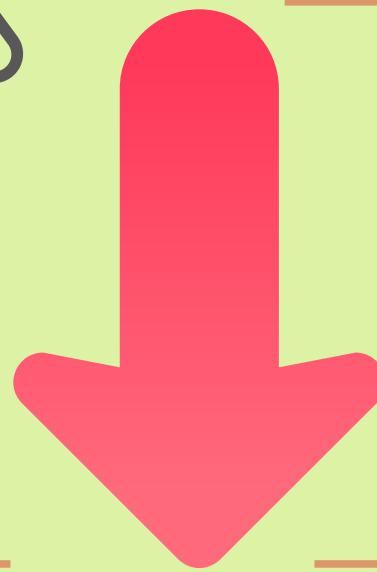
Mt. Olivet Area
1.1%

Under 5
Years Of
Age

Henry County Population by Age Group



Magna Vista Area
20.6%



G.W. Carver and West
Bassett/Fairystone
Area
9.1%



5 - 17
Years Of
Age

Henry County Population by Age Group



West Bassett and
Fairystone Area
10.9%



Sanville Elementary
Area
4.0%

18 - 24
Years Of
Age

Henry County Population by Age Group



Irisburg Area
56.8%



West Bassett and
Fairystone Area
40.9%

25 - 64
Years Of
Age

Henry County Population by Age Group



Mt. Olivet Area
22.1%



FC Middle School
Area
8.5%

65 - 74
Years Of
Age

Henry County Population by Age Group



Campbell Court and
Stanleytown Area
16.9%



Axton Elementary
Area
6.0%

75+
Years Of
Age

Henry County Population by Age Group

General Observations

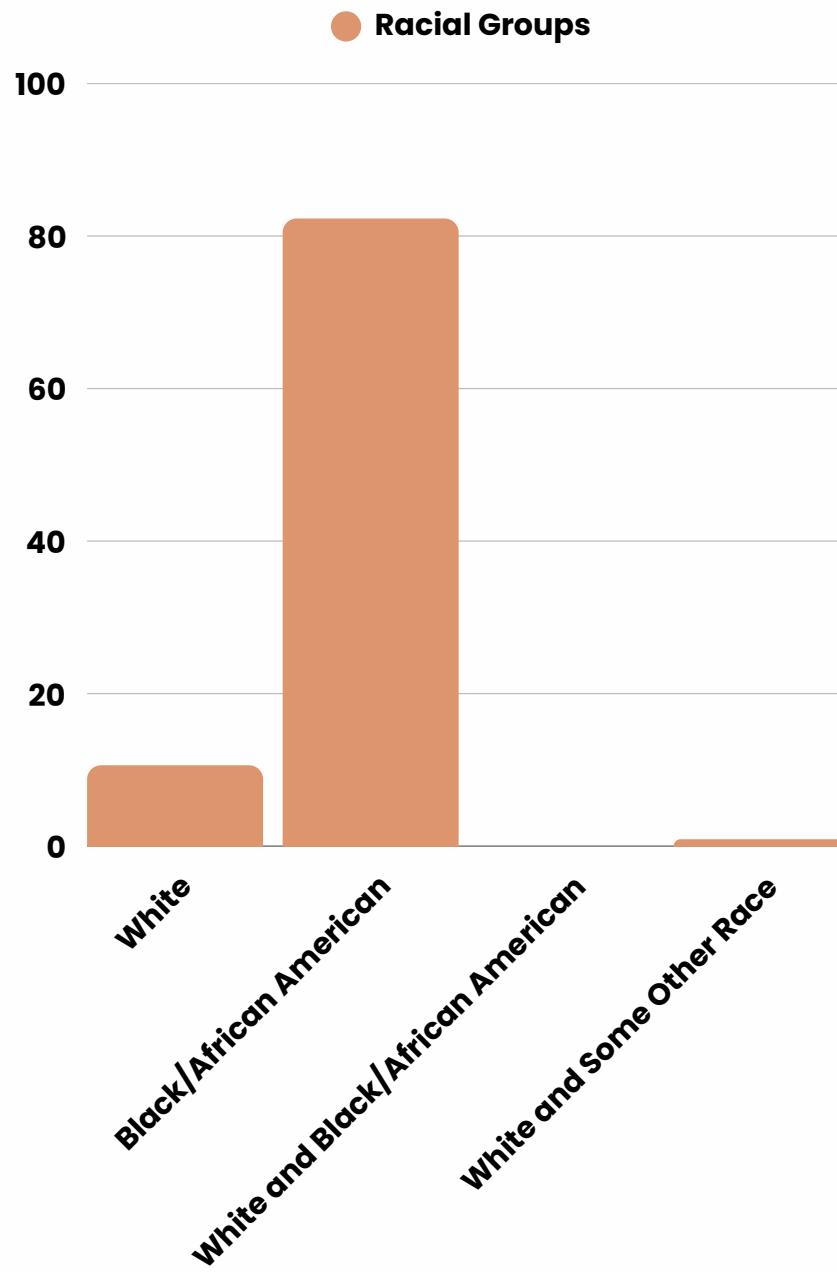
The 25-64 years age group is the dominant demographic across all census tracts.

Mt. Olivet, Fieldale, Campbell Court, and Stanleytown areas have relatively higher percentages of the population aged 65 and above.

West Bassett and Fairystone areas have higher percentages of children under 5 years.

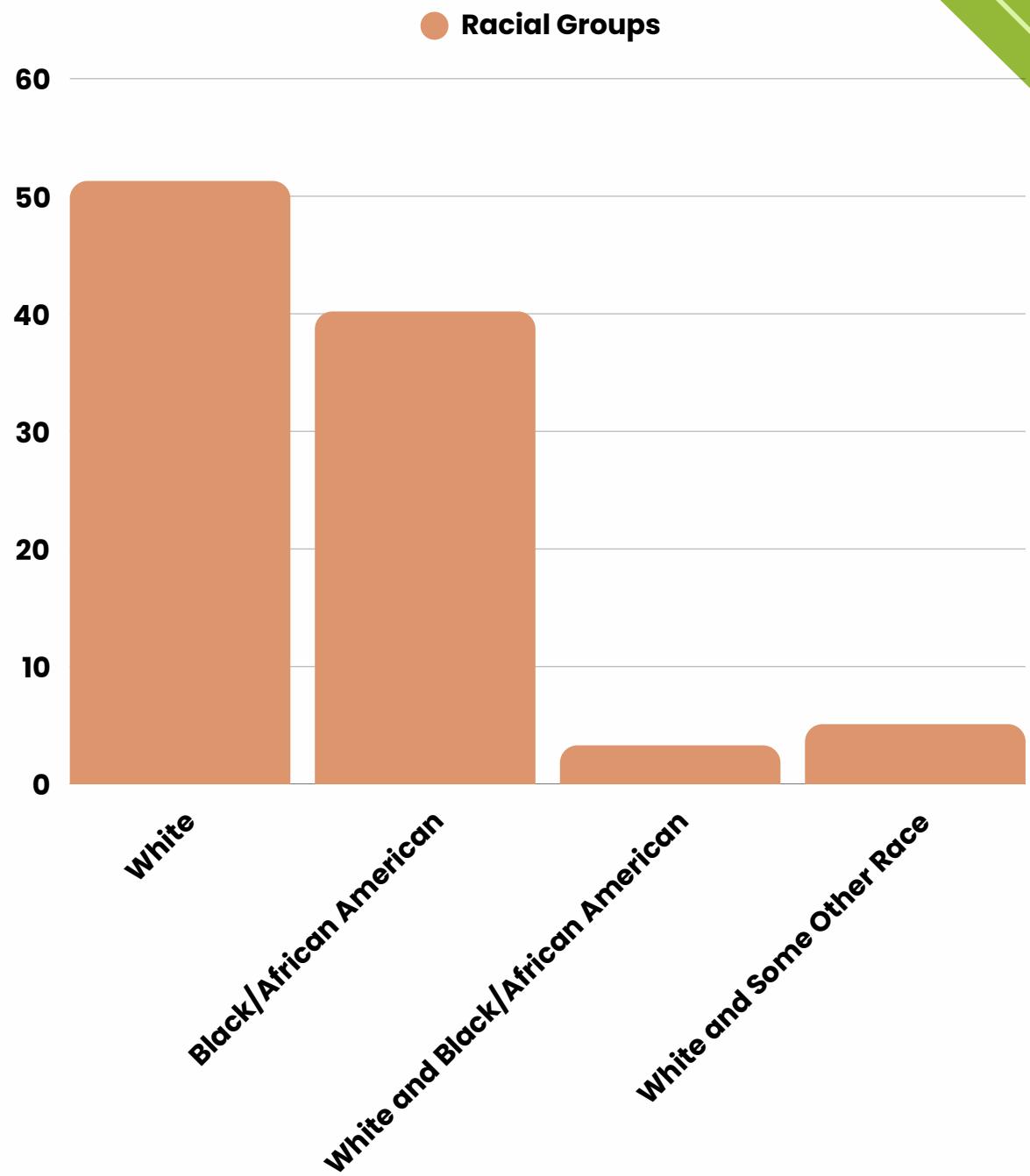
Martinsville Population by Racial Group

Albert Harris Area has one of the highest concentrations of Black/African American residents



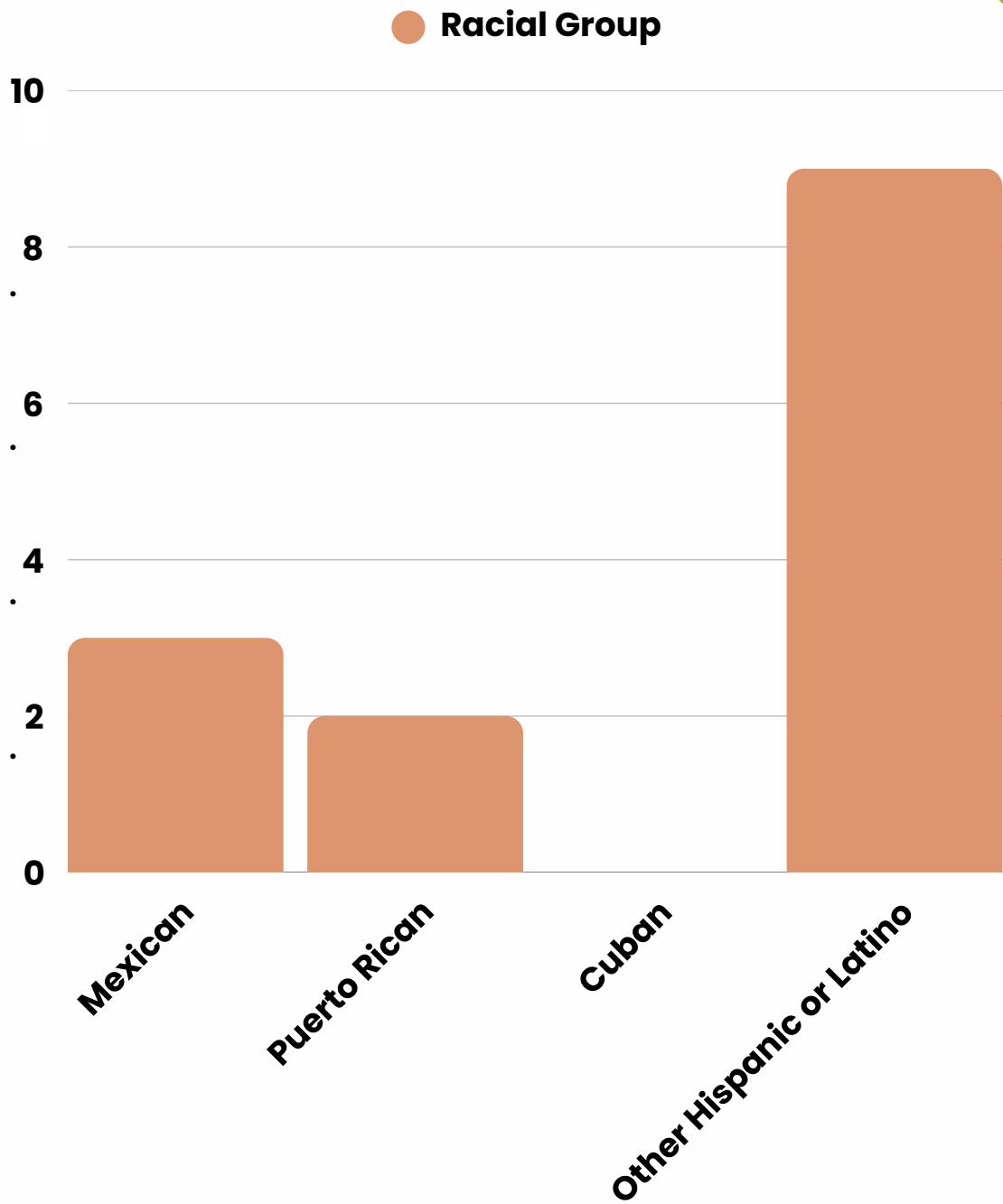
Martinsville Population by Racial Group

Clearview Area has one of the highest concentrations of White residents



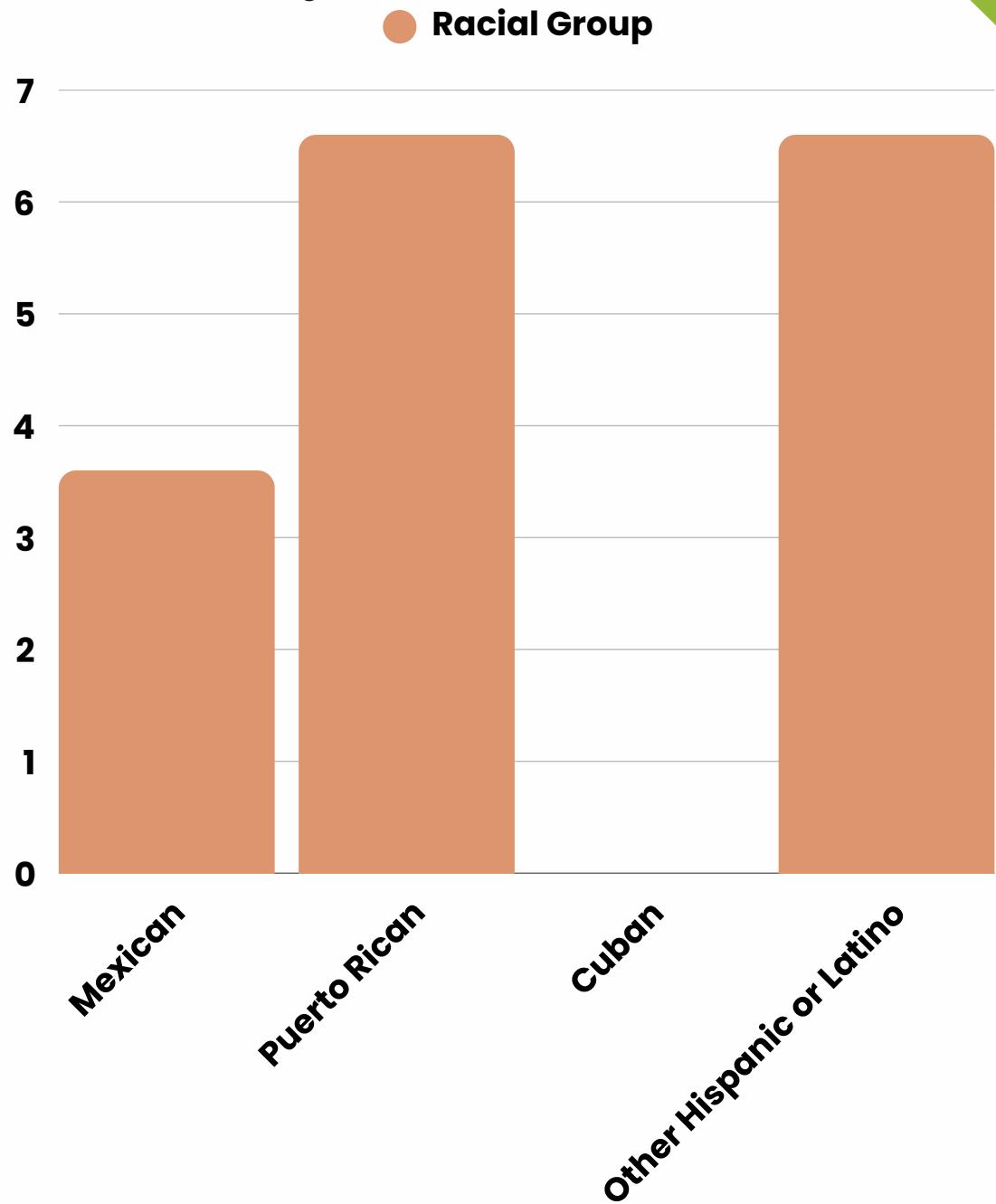
Martinsville Population by Racial Group

Patrick Henry Elementary Area has one of the lowest concentrations of Hispanic/Latino populations

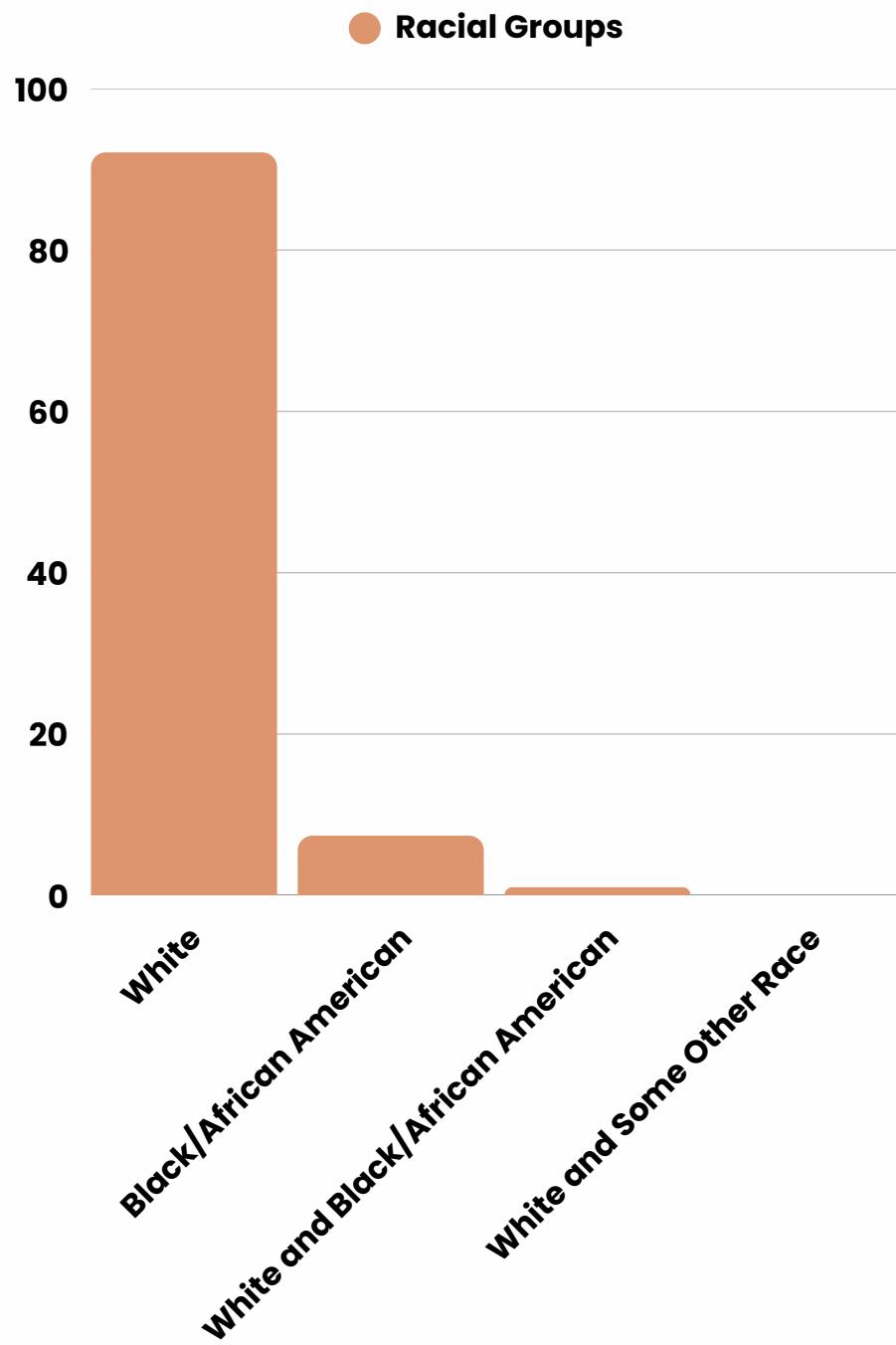


Martinsville Population by Racial Group

Albert Harris Area
has one of the highest
concentrations of
Hispanic/Latino
populations



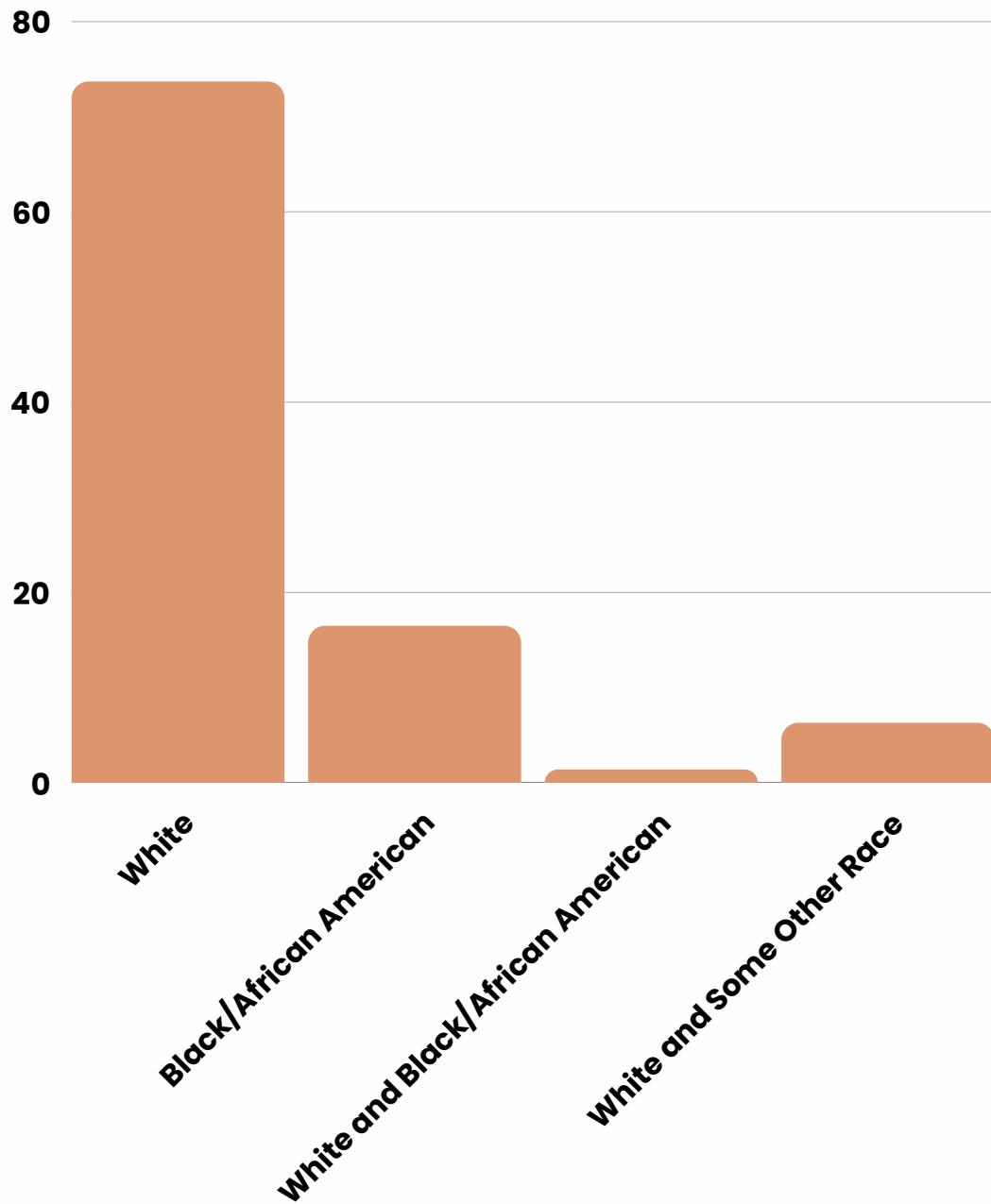
Henry County Population by Racial Group



West Bassett/Fairystone Area
has a predominantly White population with limited demographic diversity.

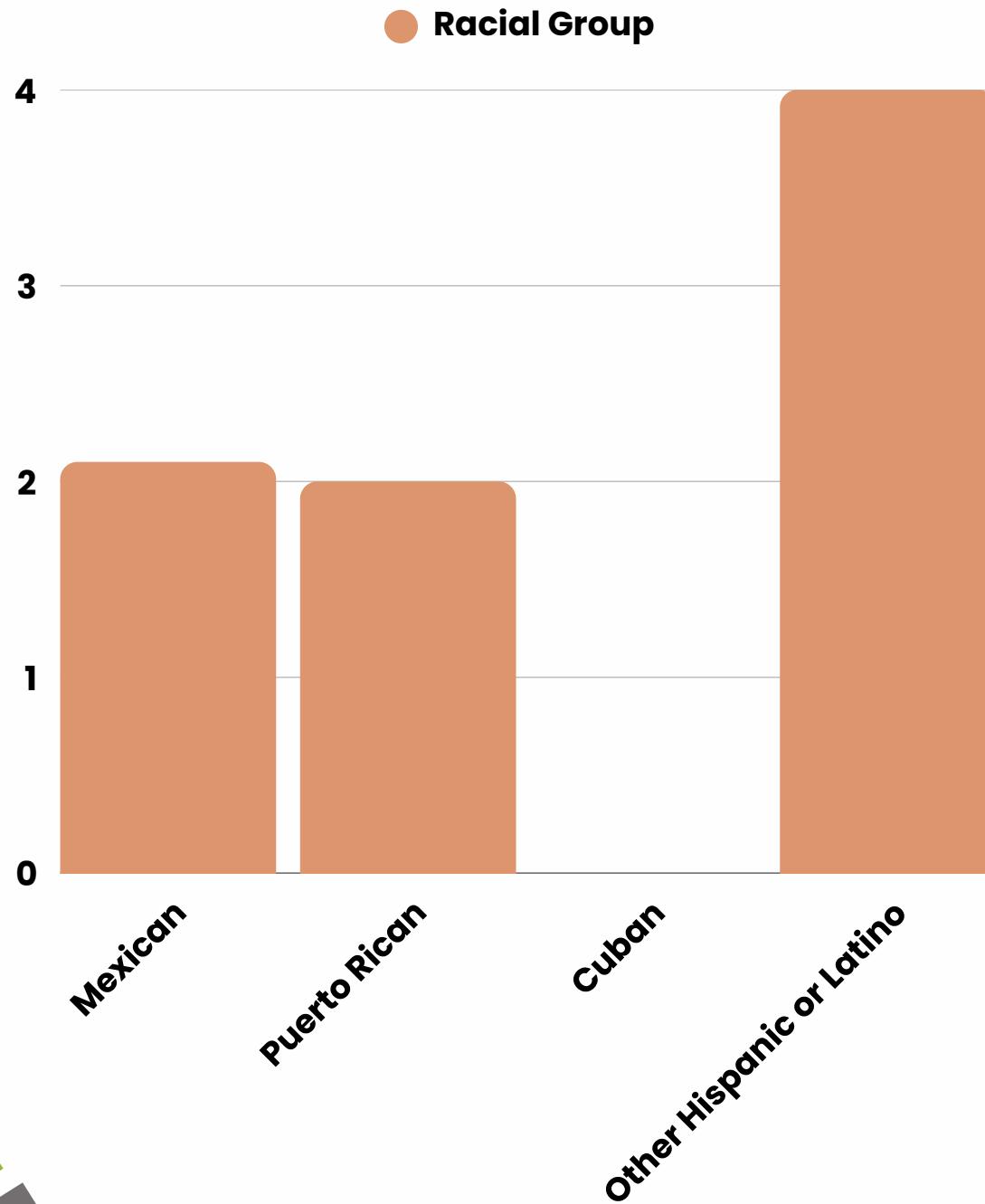
Henry County Population by Racial Group

● Racial Groups



**Meadowview Elementary/
Figsboro Area** has more
diverse distribution.
Majority of the other areas
have a similar distribution
with the White population
being around 70%.

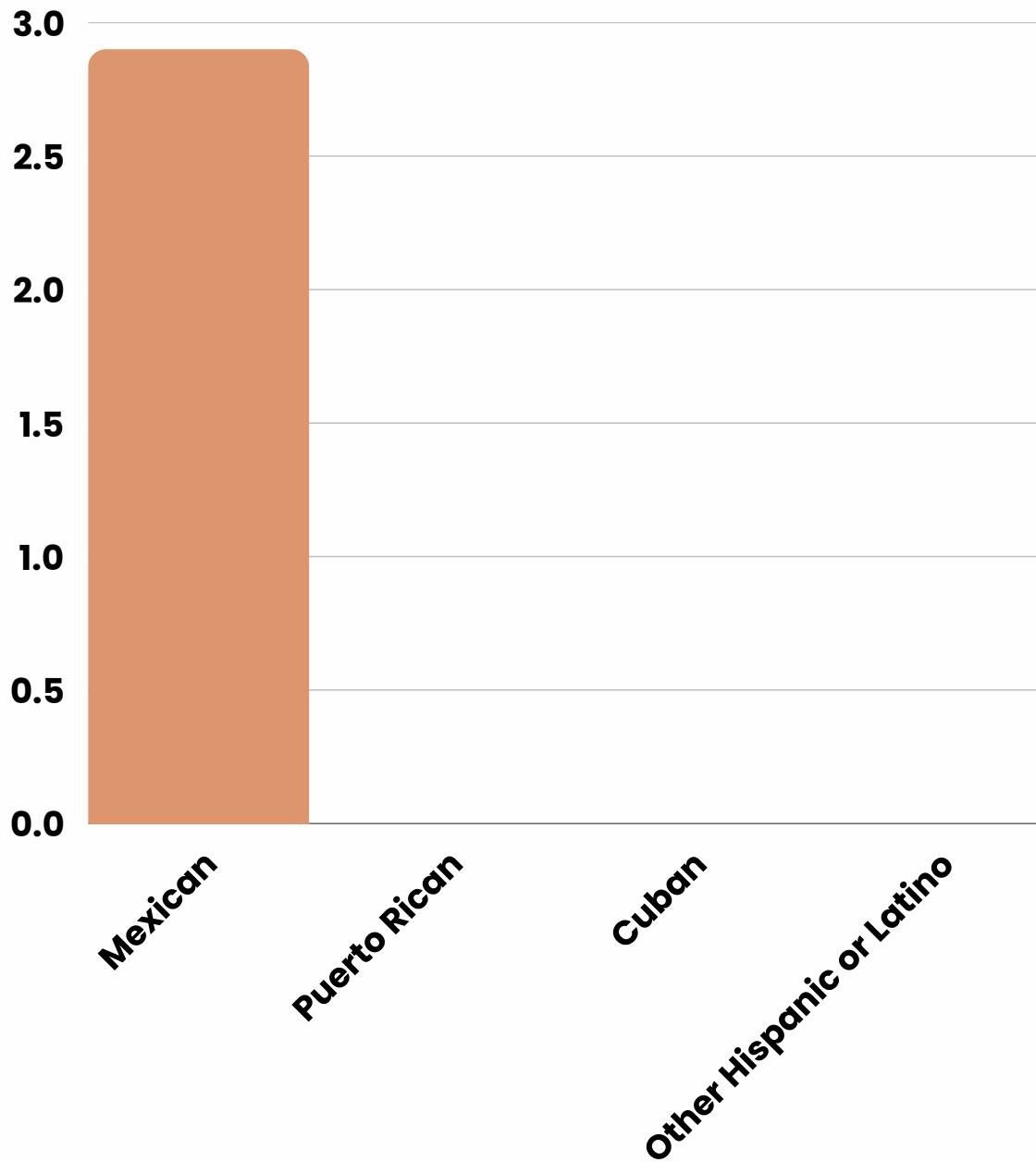
Henry County Population by Racial Group



Kings Mountain Road Area has more dispersed distribution of Hispanic/Latino population.

Henry County Population by Racial Group

● Racial Group



**Campbell Court/
Stanleytown Area** has
only one Hispanic/Latino
group. Most areas have
a predominant Mexican
population.

Poverty Rates



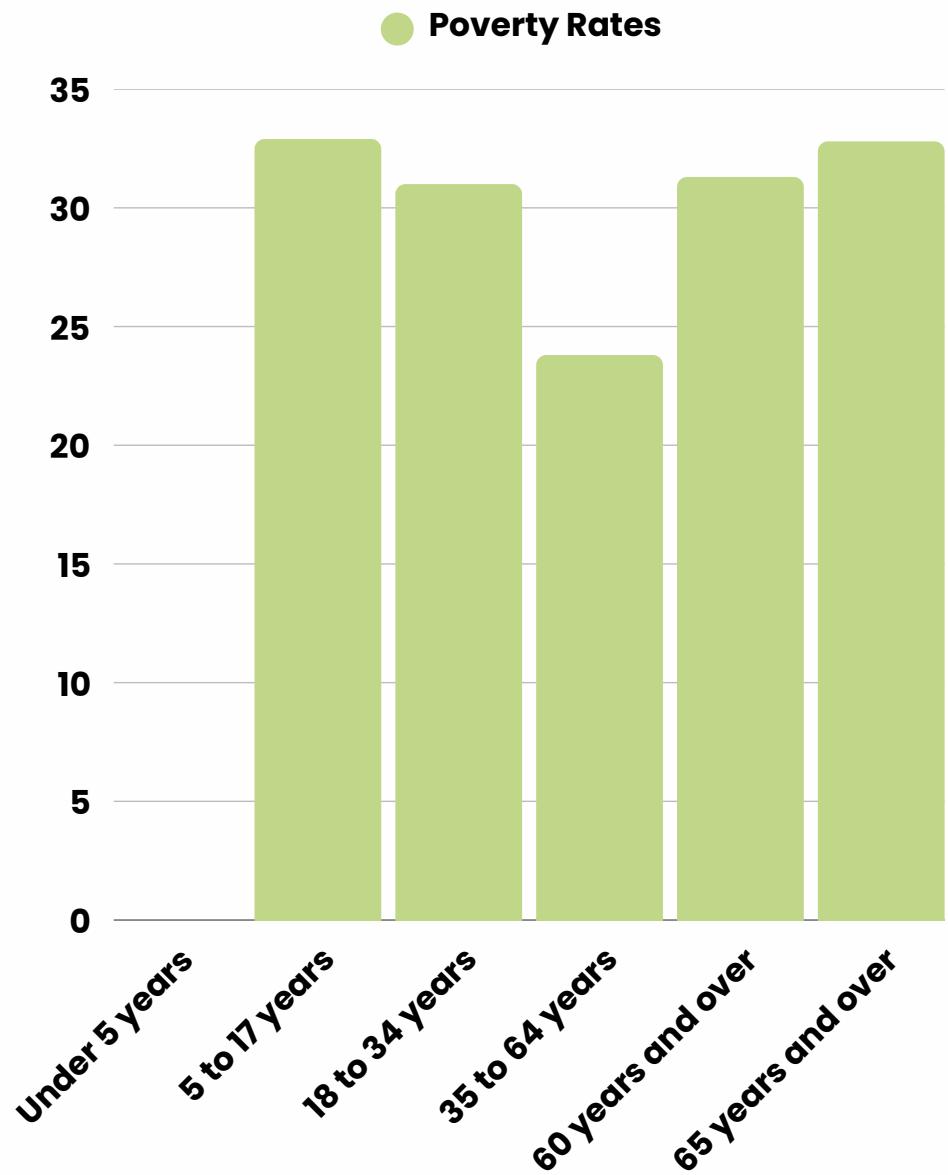
03

Poverty Rates

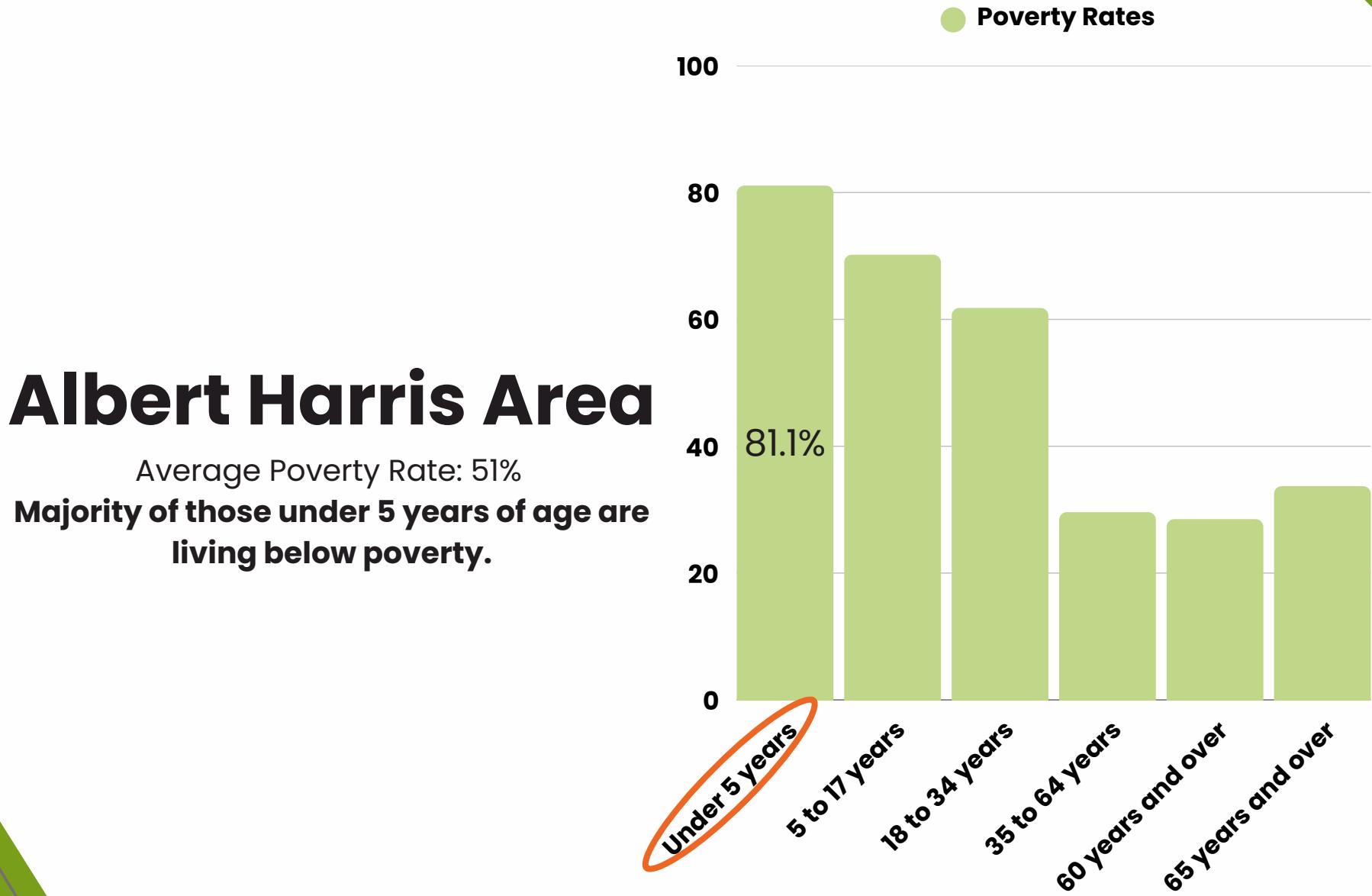
Martinsville Poverty Rates

Clearview Area

Average Poverty Rate: 30%



Martinsville Poverty Rates



Albert Harris Area

Average Poverty Rate: 51%

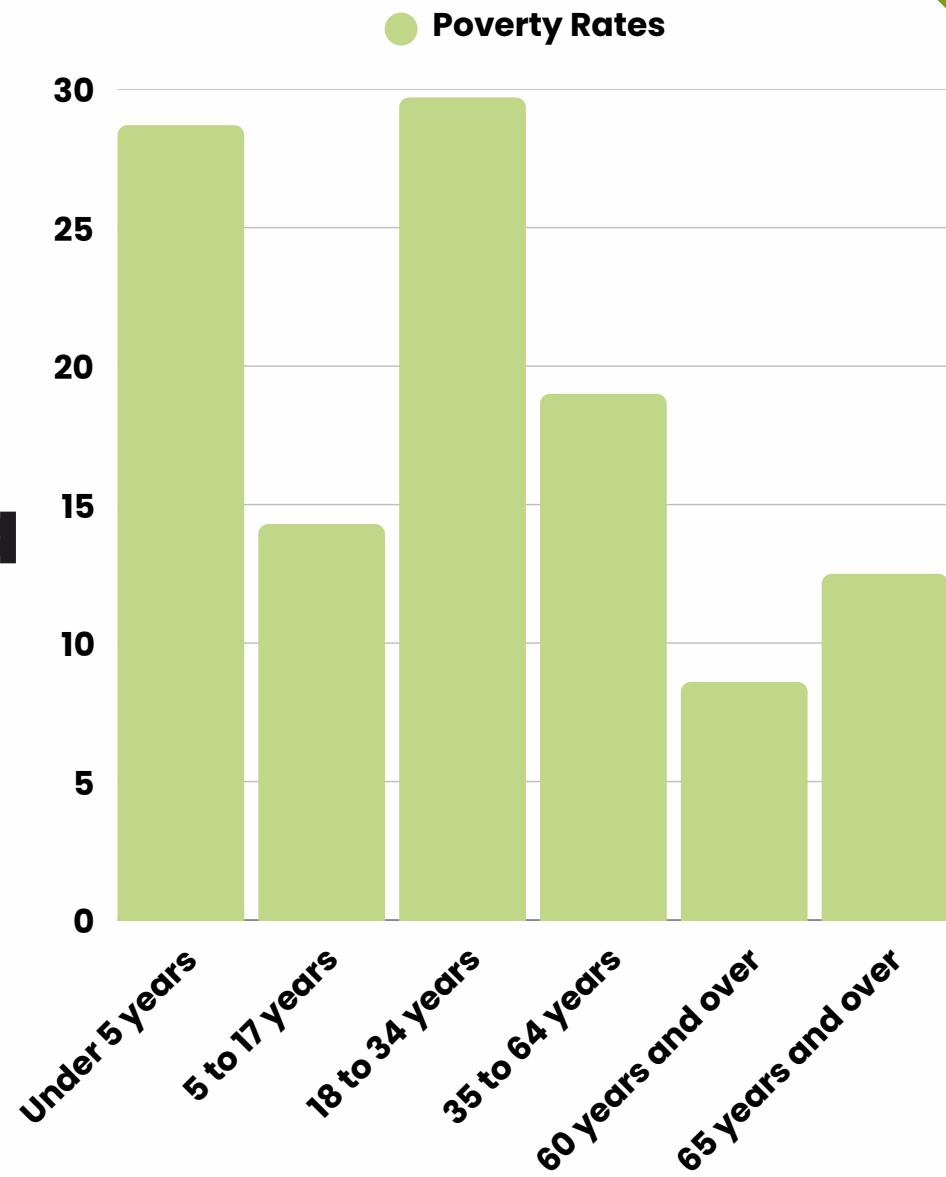
Majority of those under 5 years of age are living below poverty.

This area may need increased social services, educational support, and healthcare services.

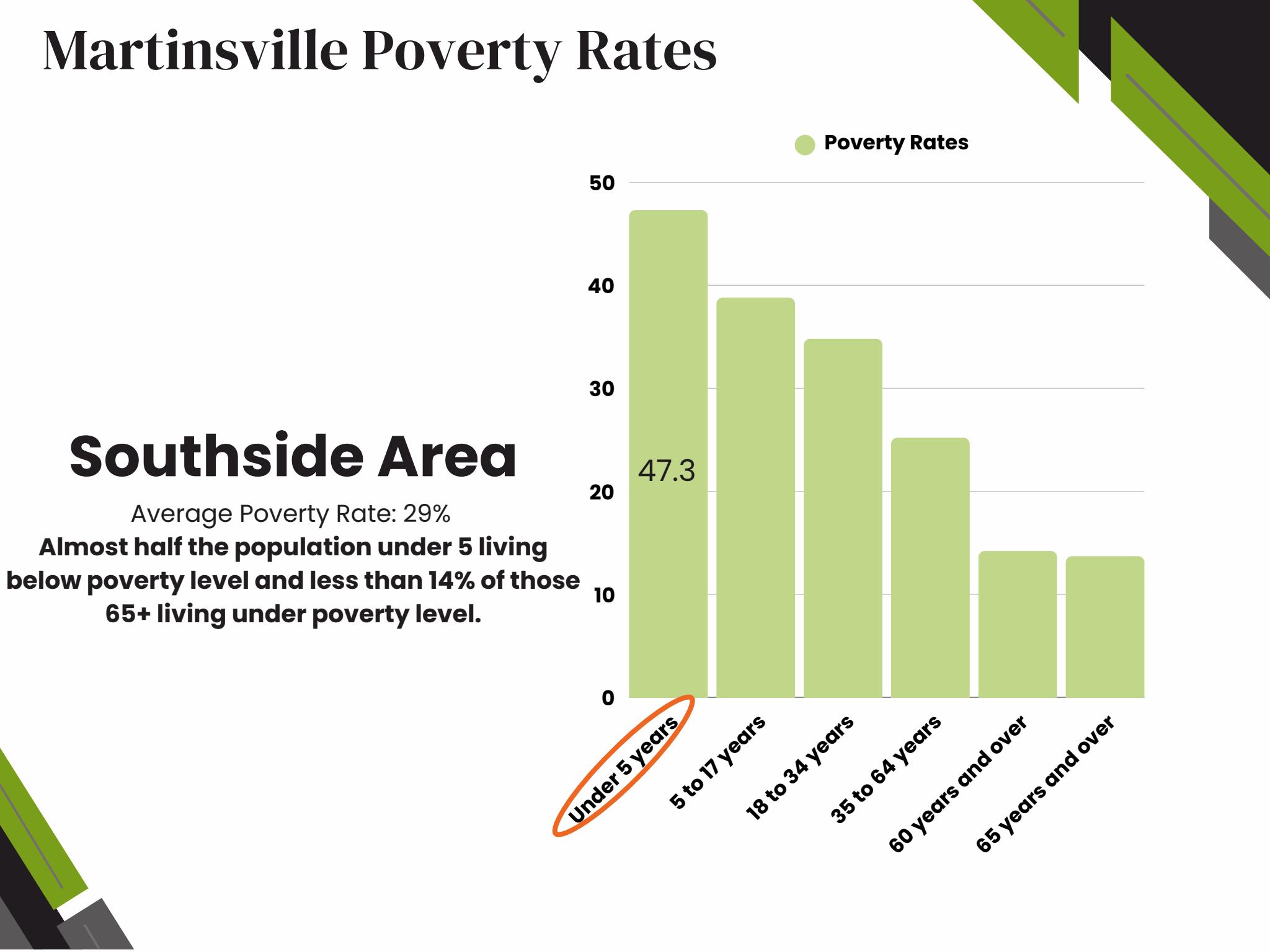
Martinsville Poverty Rates

Patrick Henry Area

Average Poverty Rate: 19%



Martinsville Poverty Rates

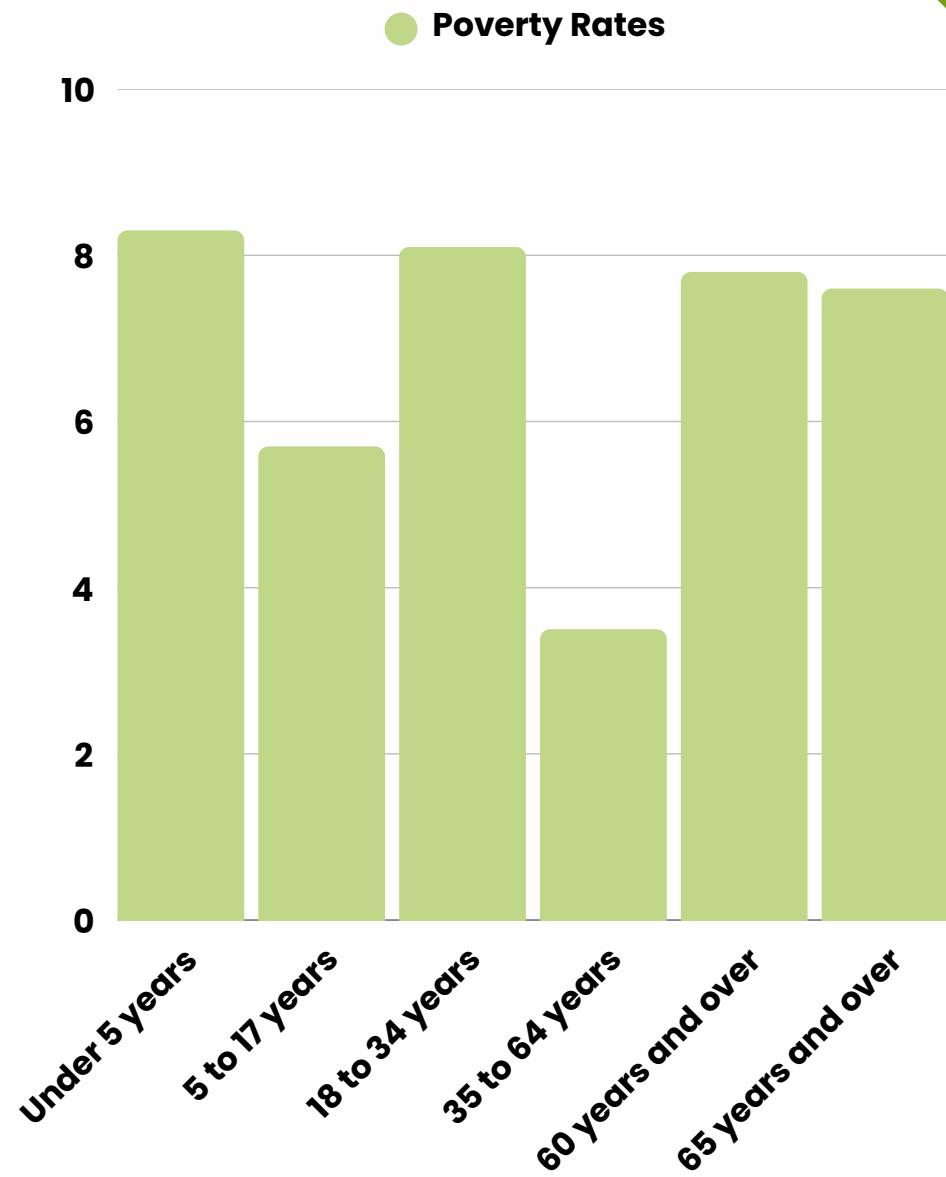


Martinsville Poverty Rates

Druid Hills Area

Average Poverty Rate: 7%

This area shows the most favorable economic conditions, potentially serving as a model or benchmark for interventions in other tracts



Martinsville Poverty Rates

Possible Recommendations::

Implement age-specific programs, especially in Albert Harris and Southside areas, focusing on early childhood education, nutrition, and family support.

Create job opportunities and skill development programs in Patrick Henry area for young adults to address the higher poverty levels in the 18-34 age group.

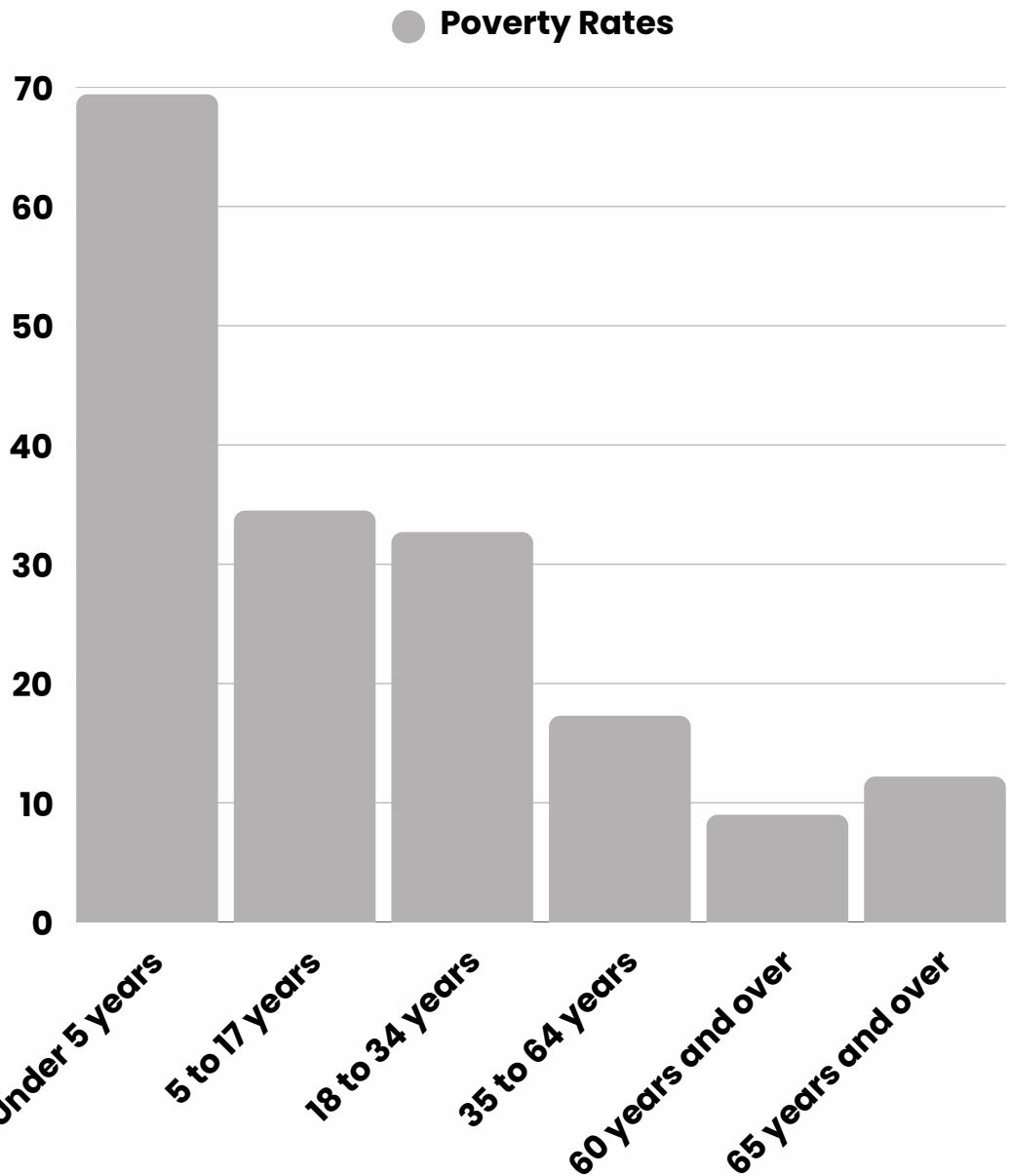
Allocate resources effectively, prioritizing areas like Albert Harris, which exhibit higher poverty rates and more significant social needs.

Henry County Poverty Rates

The following areas had some of the highest poverty rates for youth in Henry County and should be monitored closely to support them, and the schools in the areas, as needed:

1. Campbell Court/Stanleytown
2. G.W. Carver Elementary
3. Kohler

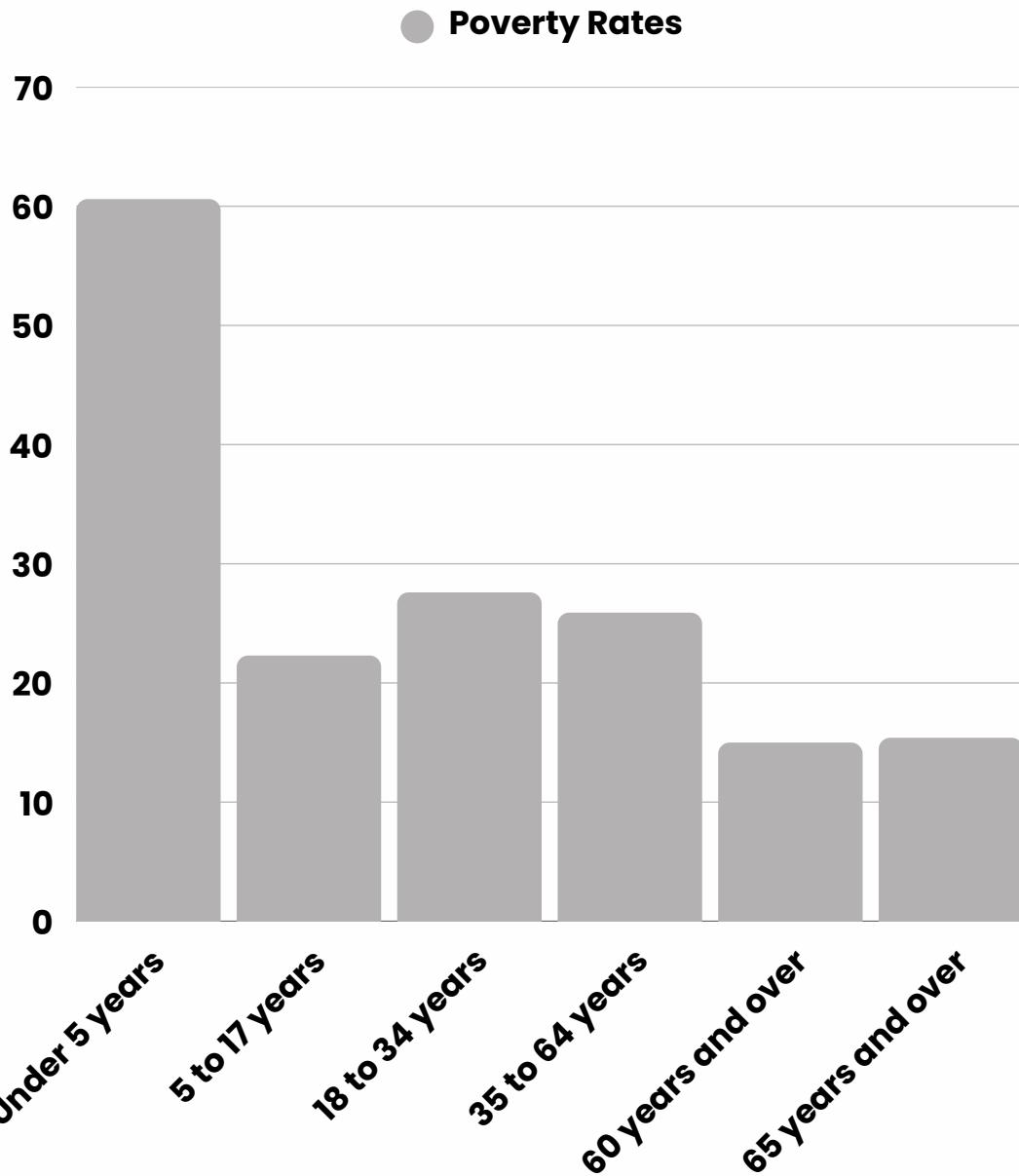
Henry County Poverty Rates



**Campbell Court/
Stanleytown Area**

Average Poverty Rate: 29%

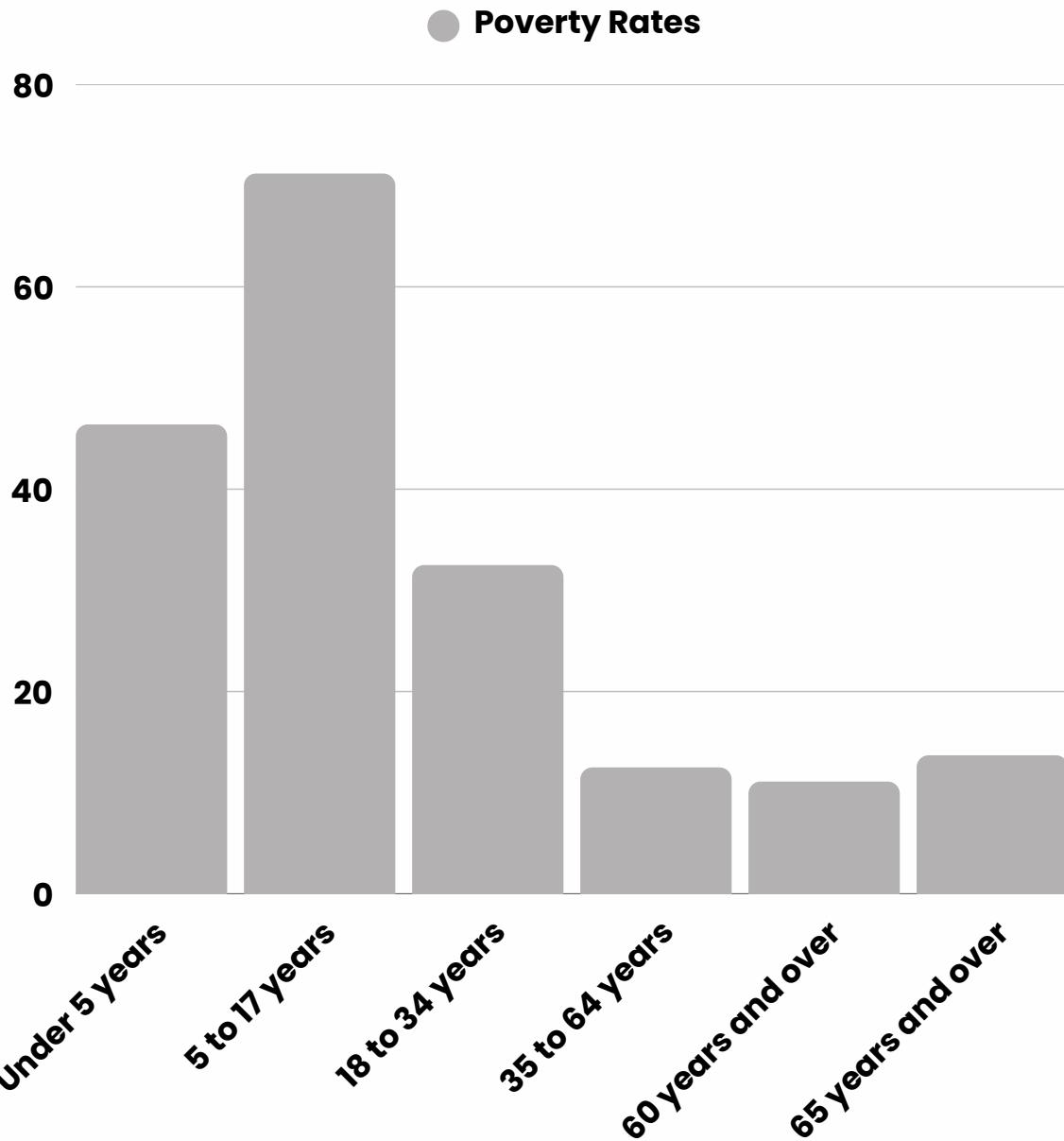
Henry County Poverty Rates



G.W. Carver
Elementary Area

Average Poverty Rate: 28%

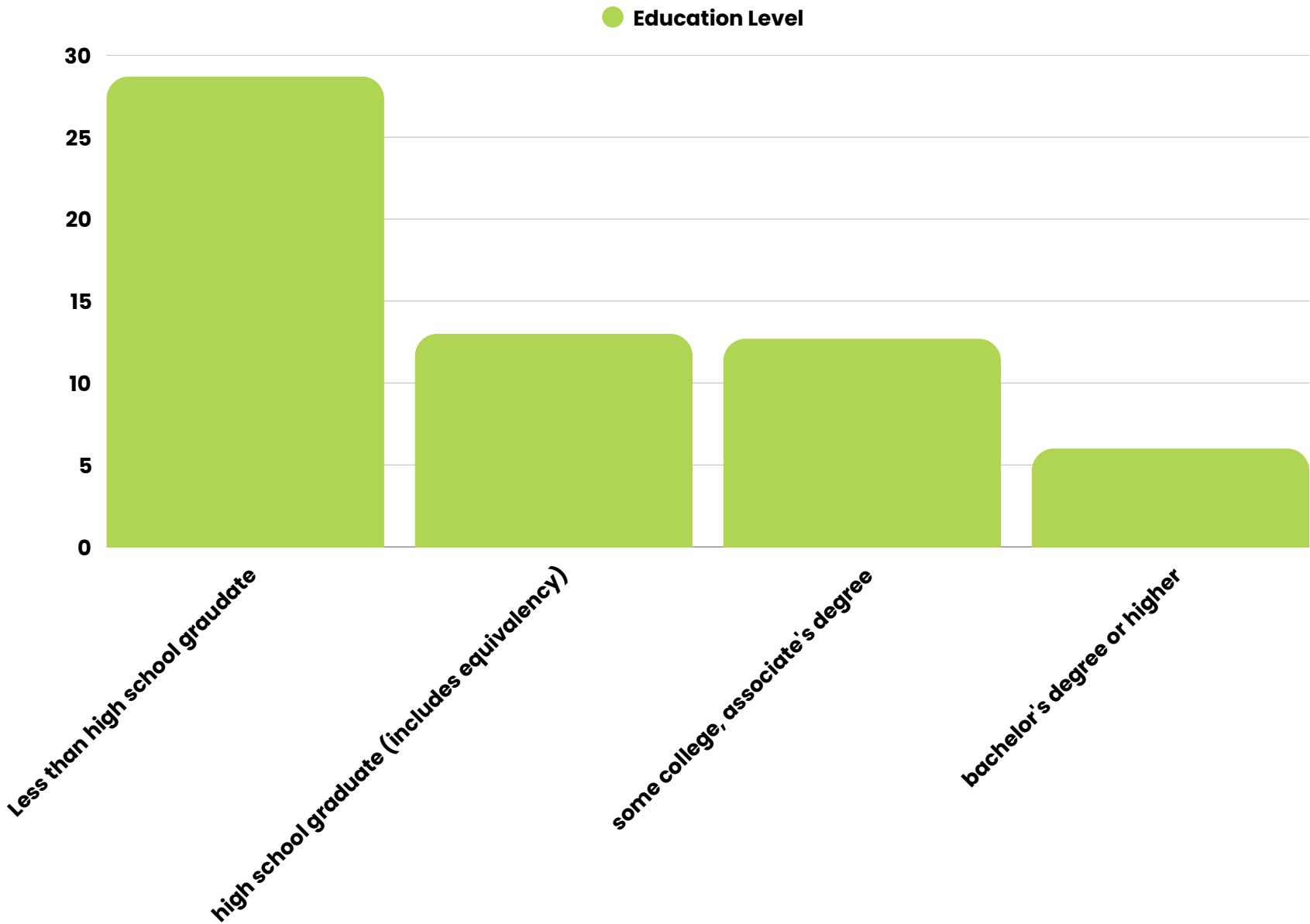
Henry County Poverty Rates



Kohler Area

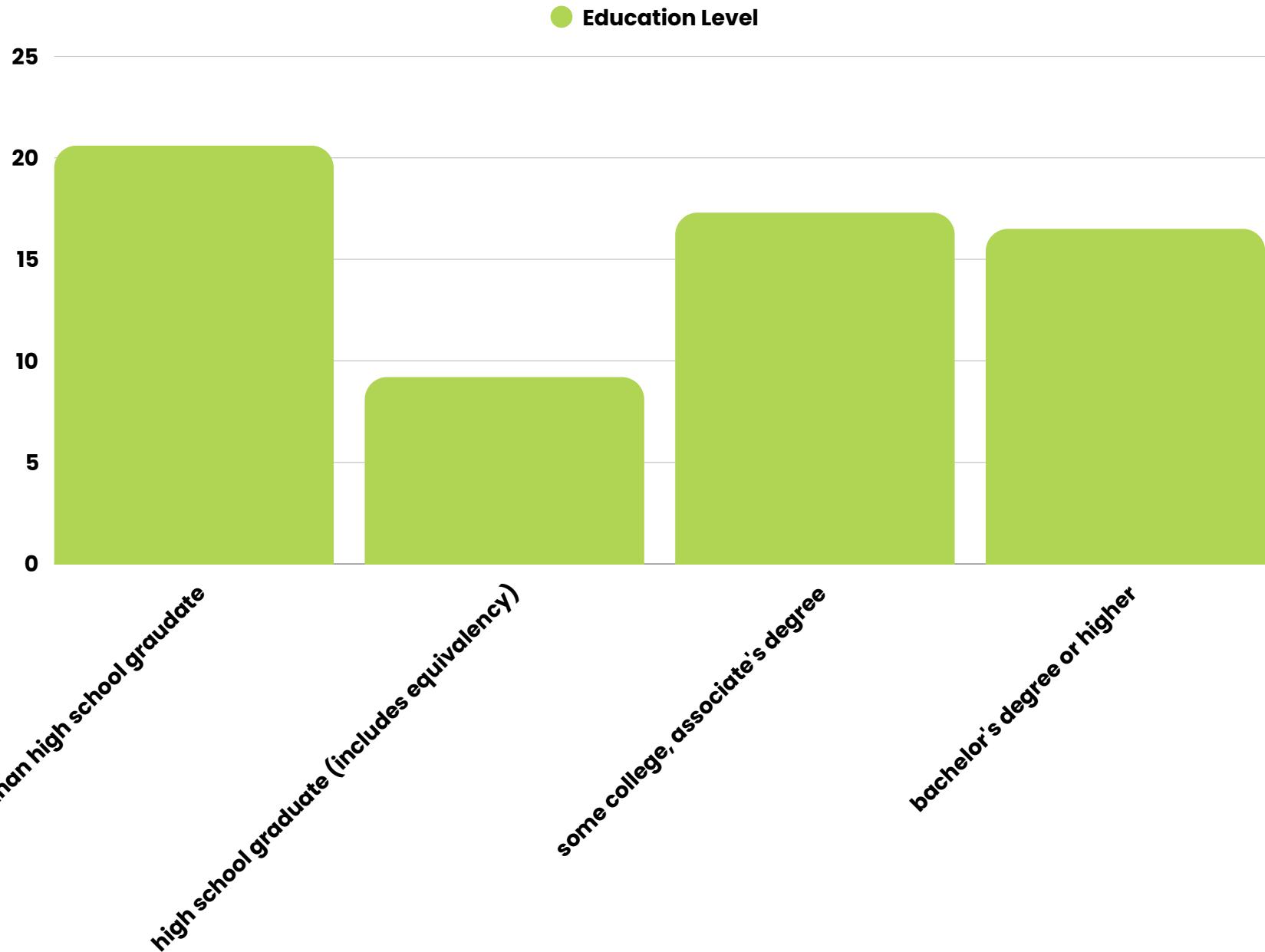
Average Poverty Rate: 31%

Average Poverty Rates by Education Level - Henry County



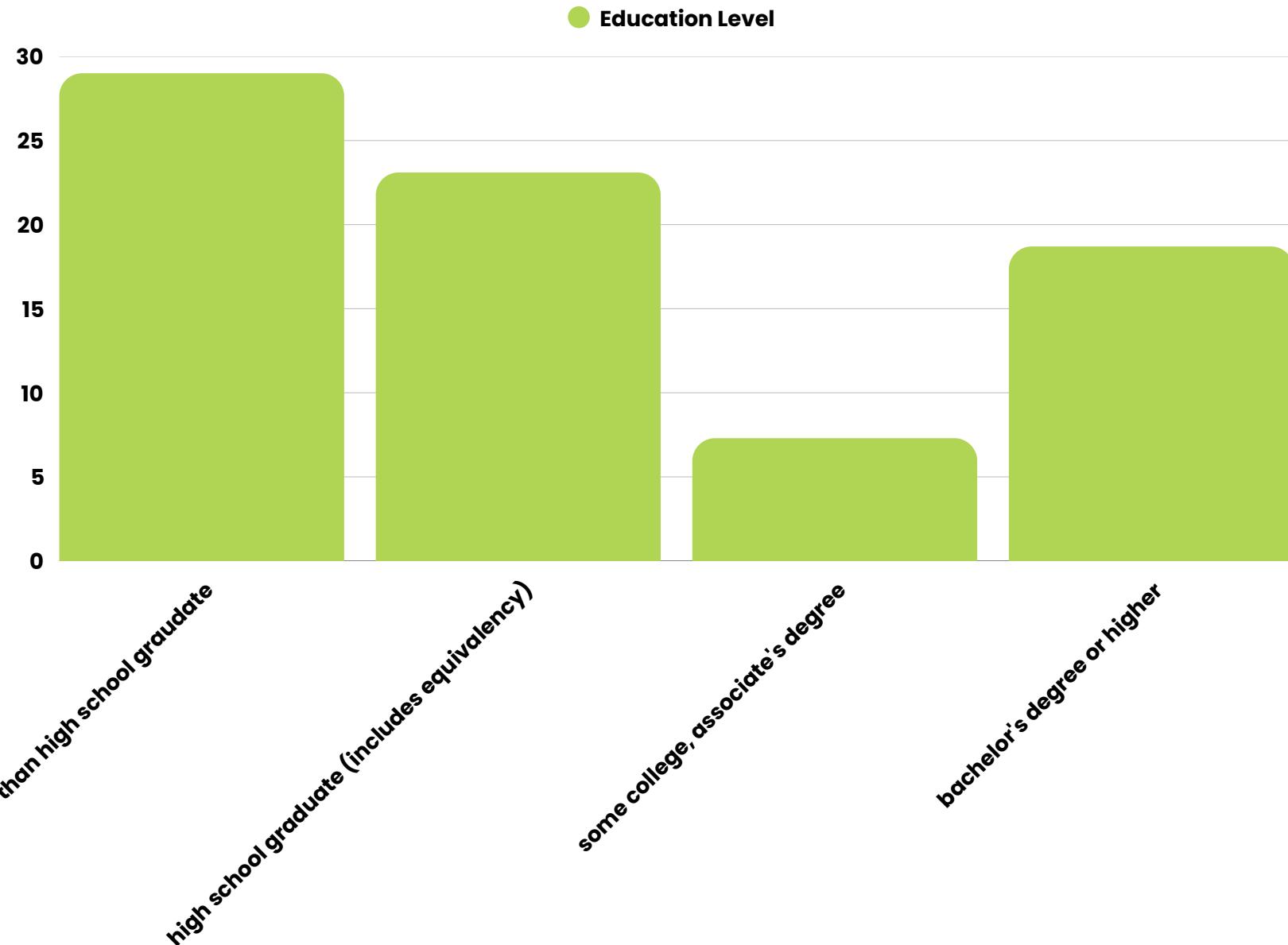
Poverty Rates by Education Level

Magna Vista High School Area



Poverty Rates by Education Level

West Bassett/Faiystone Area



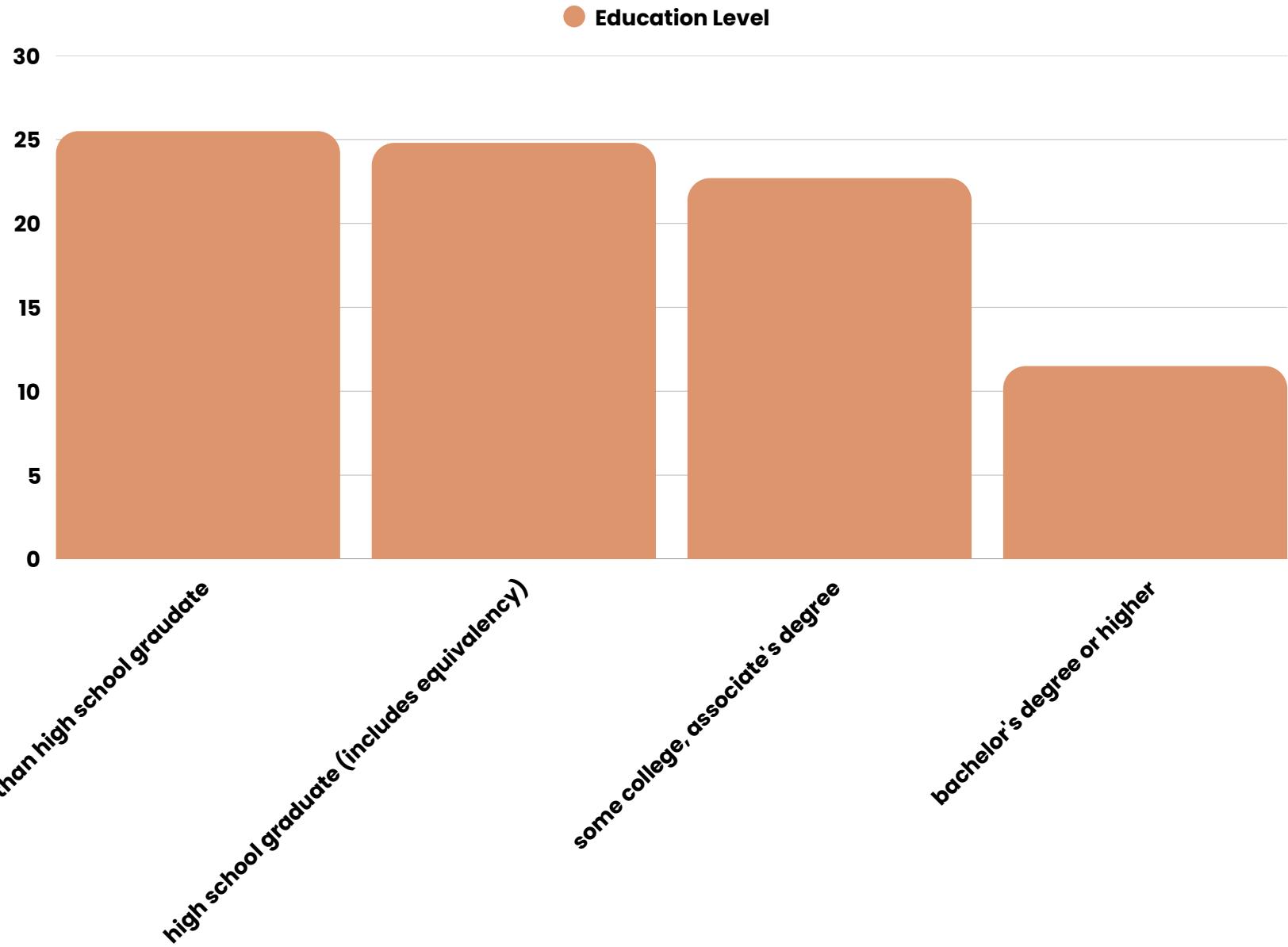
Poverty Rates by Education Level

Kohler Area

● Education Level



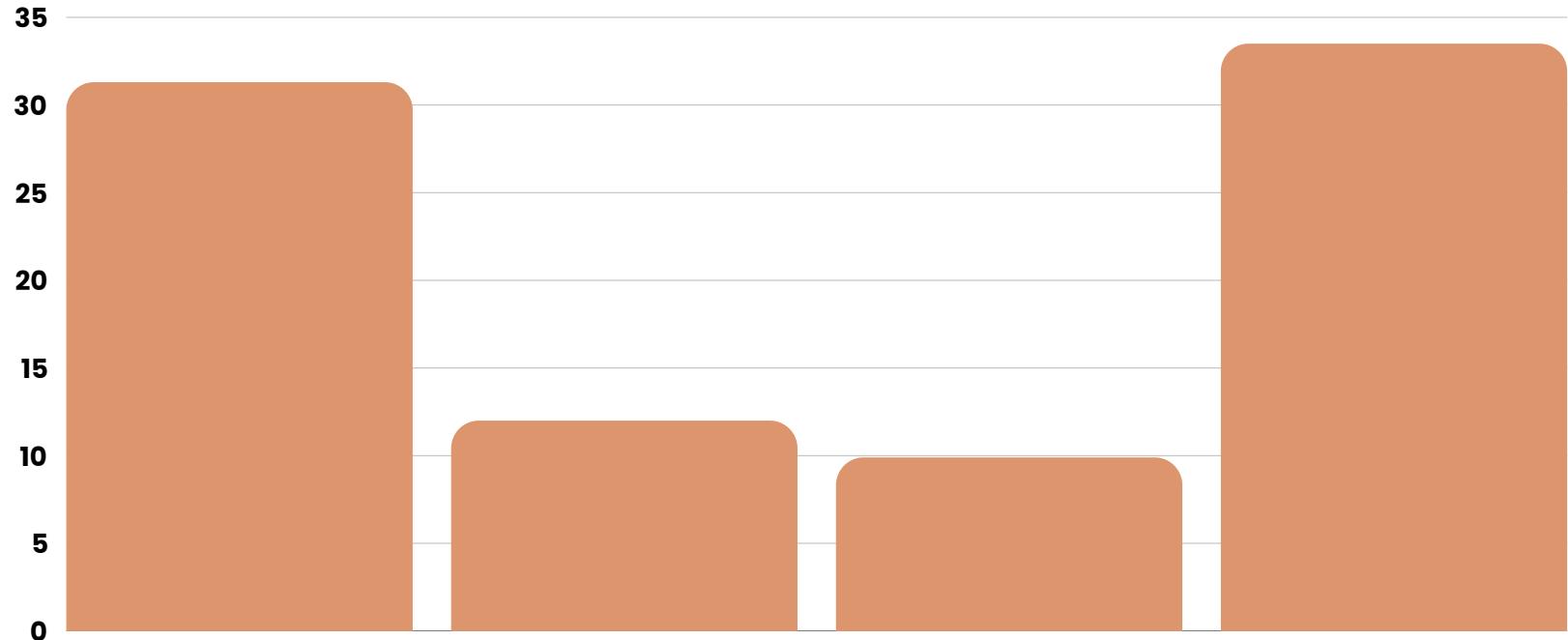
Average Poverty Rates by Education Level - Martinsville



Poverty Rates by Education Level

Patrick Henry Area

● Education Level



Less than high school graduate

high school graduate (includes equivalency)

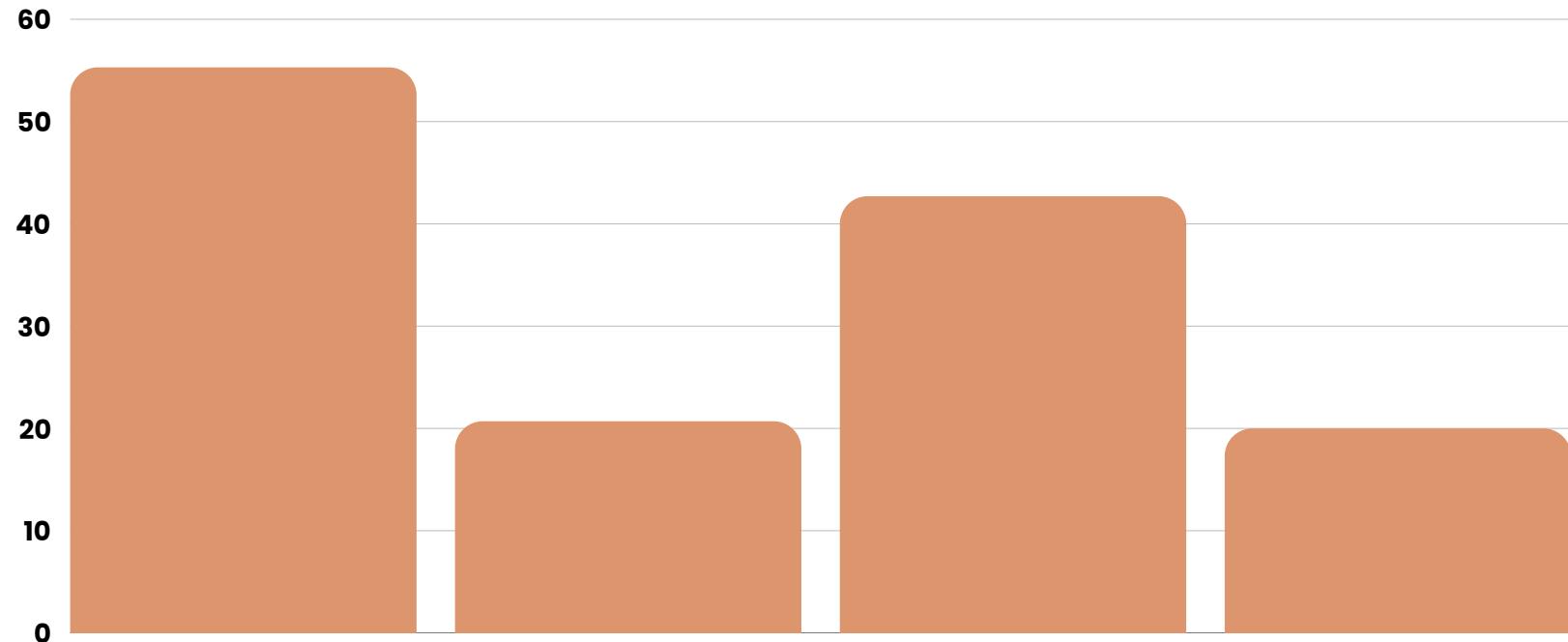
some college, associate's degree

bachelor's degree or higher

Poverty Rates by Education Level

Albert Harris Area

● Education Level



Less than high school graduate

high school graduate (includes equivalency)

some college, associate's degree

bachelor's degree or higher

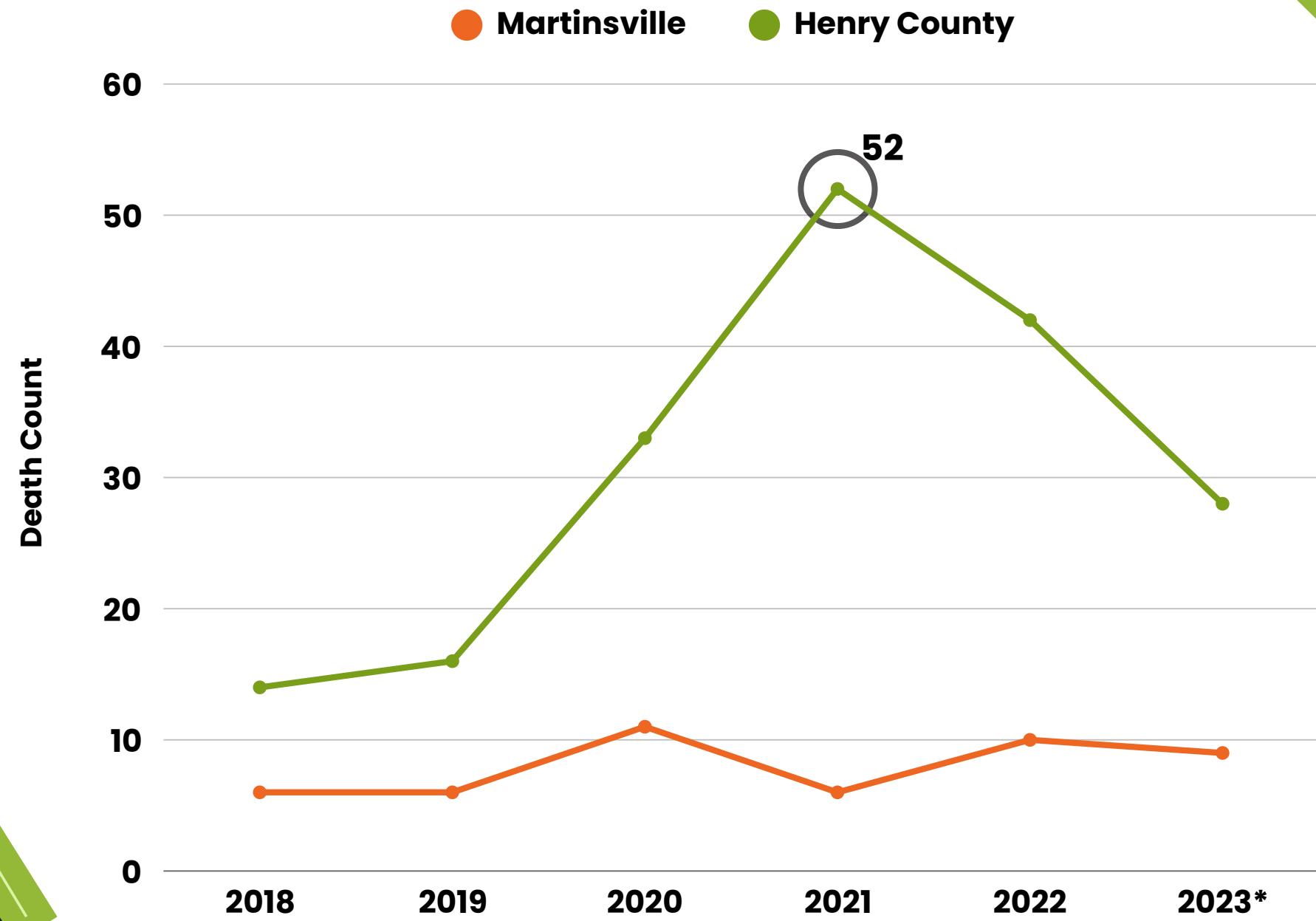
Health Data



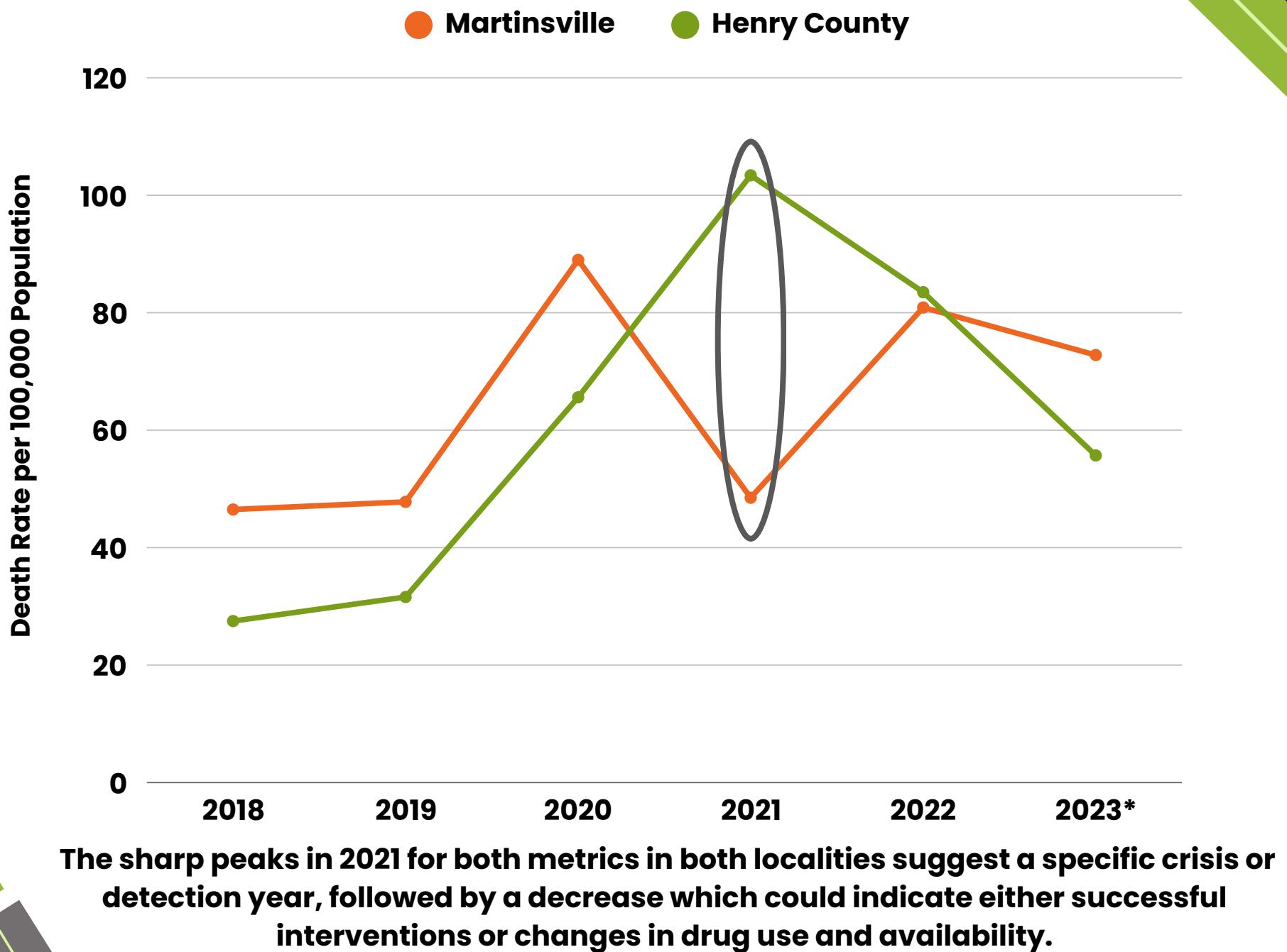
04

Health

Trend of Death Counts (All-drug) by Year:



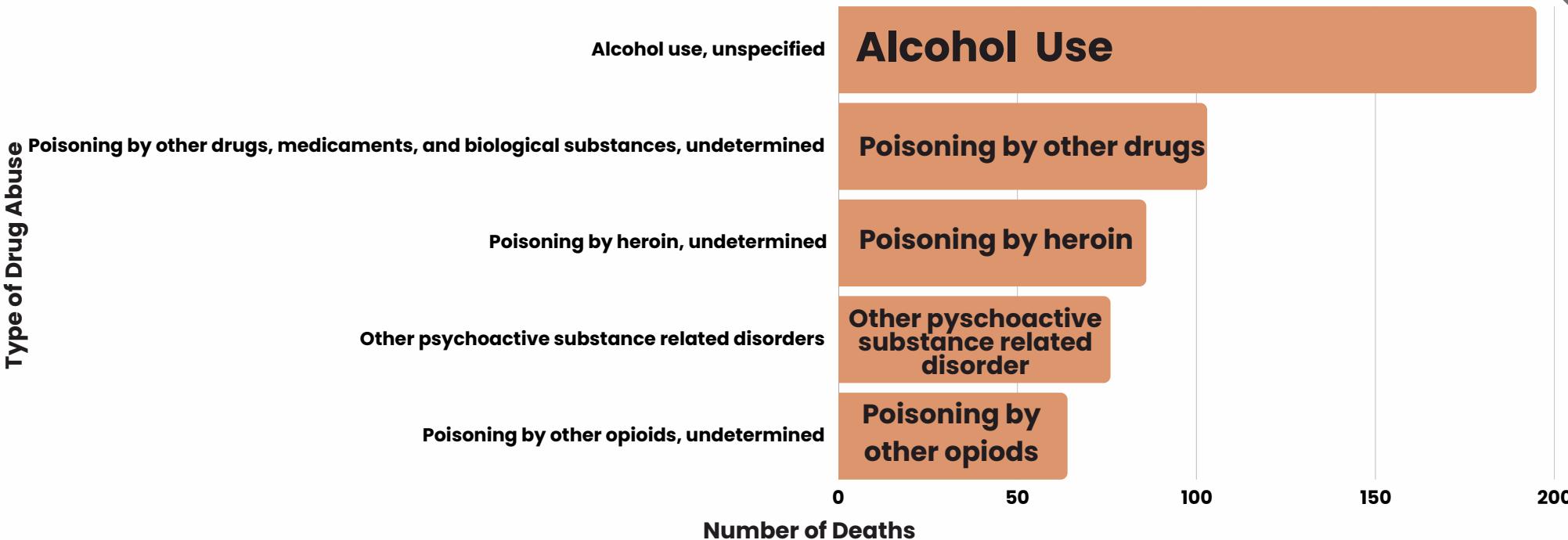
Trend of Death Counts (All-drug) by Year:



Substance Use

Top 5 Types of Drug Abuse in Martinsville City

Type of Drug Abuse



Drug Abuse Type	Most Common Medication
Alcohol use, unspecified	RXNORM or SNOMED code type not specified with Unknown response
Other psychoactive substance related disorders	naloxone with Improved response
Poisoning by heroin, undetermined	naloxone with Improved response
Poisoning by other drugs, medicaments and biological substances, undetermined	naloxone with Improved response
Poisoning by other opioids, undetermined	naloxone with Improved response

Alcohol use constituted the primary presenting complaint among EMS response incidents in Martinsville between 2018 and 2023.

Substance Use

Top 5 Types of Drug Abuse in Henry County

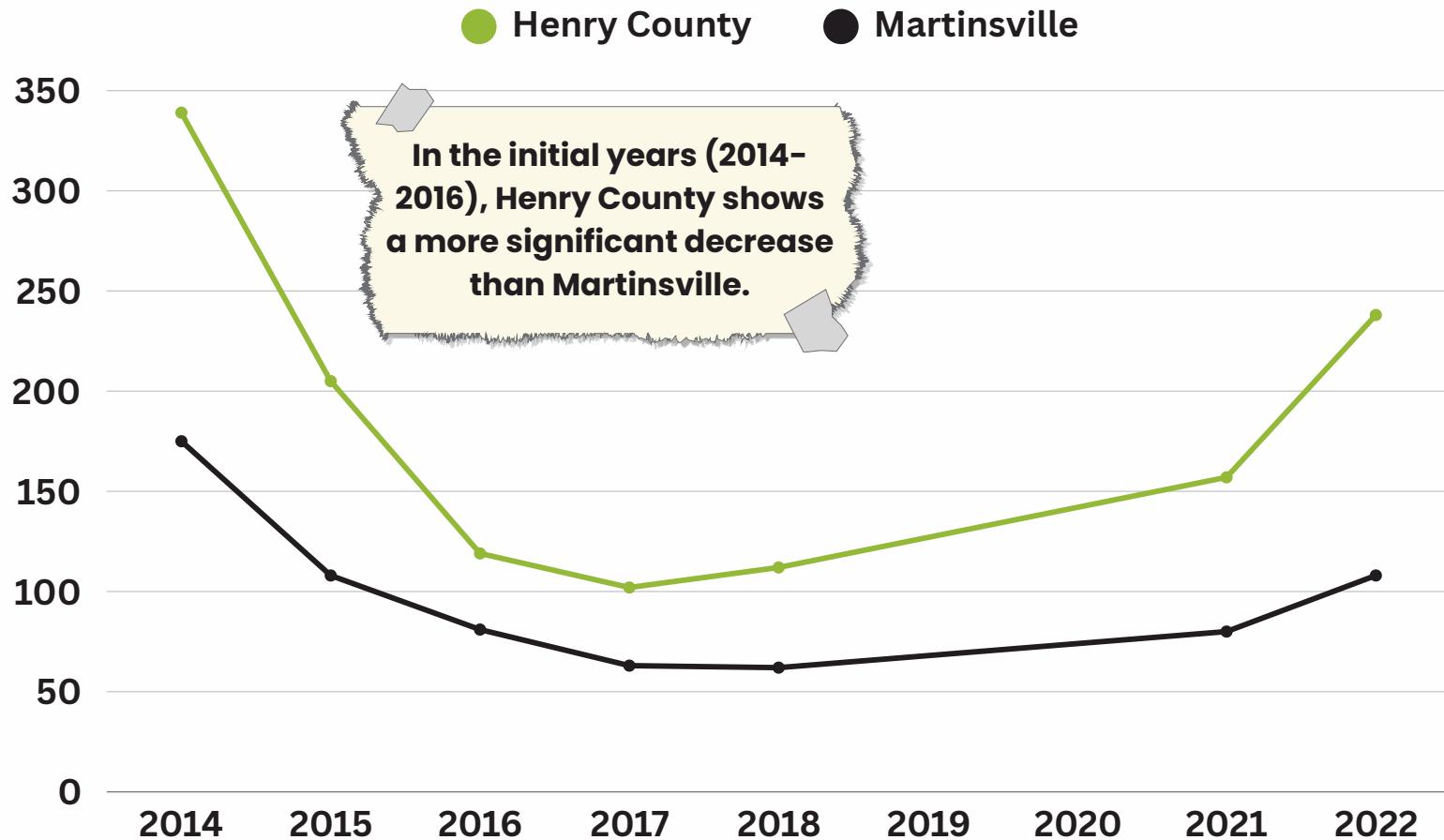
Type of Drug Abuse



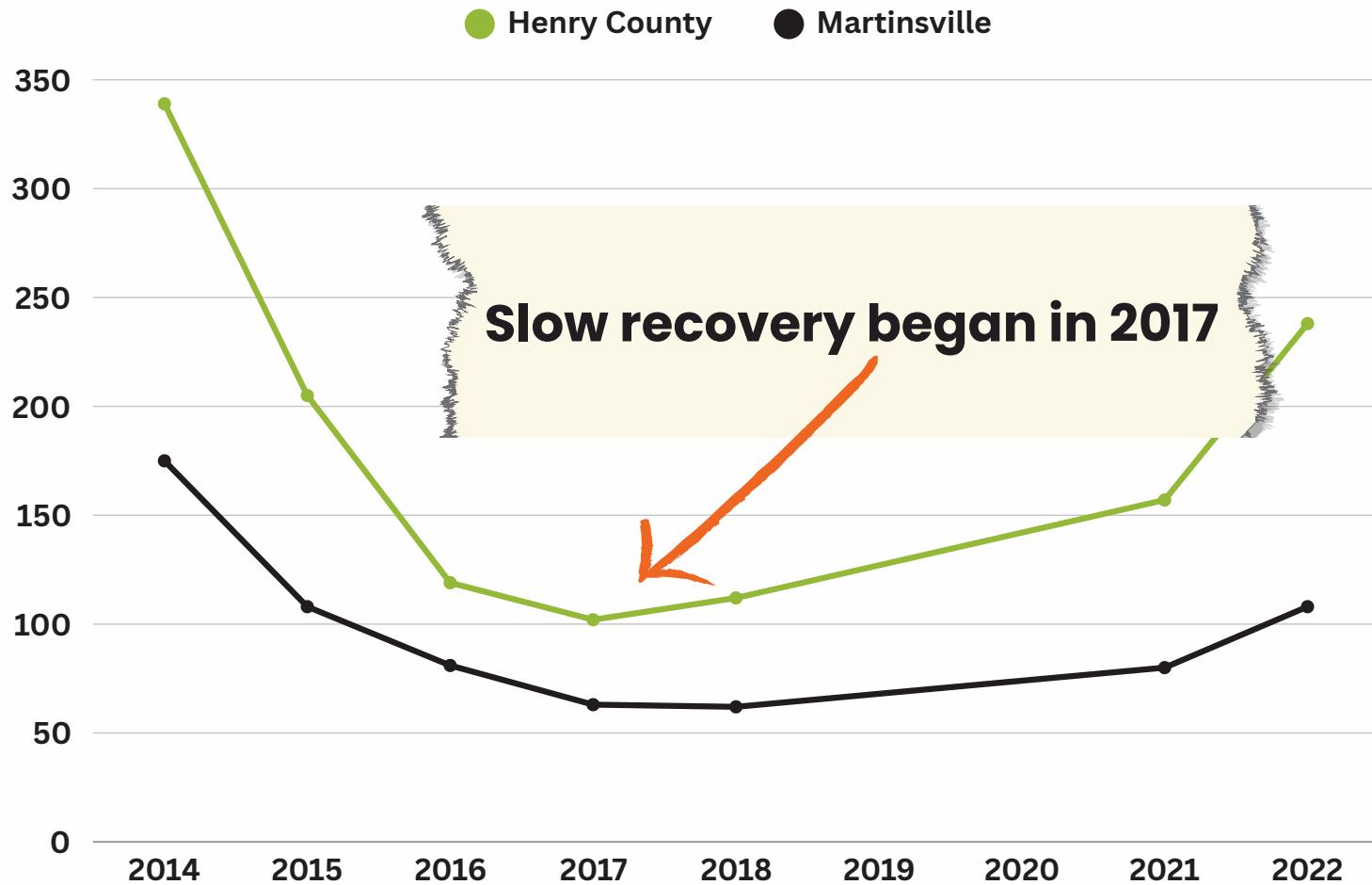
Drug Abuse Type	Most Common Medication
Alcohol use, unspecified	RXNORM or SNOMED code type not specified with Unknown response
Other psychoactive substance related disorders	naloxone with Improved response
Poisoning by heroin, undetermined	naloxone with Improved response
Poisoning by other drugs, medicaments and biological substances, undetermined	naloxone with Improved response
Poisoning by other opioids, undetermined	naloxone with Improved response

Poisoning by heroin constituted the primary presenting complaint among EMS response incidents in Henry County between 2018 and 2023.

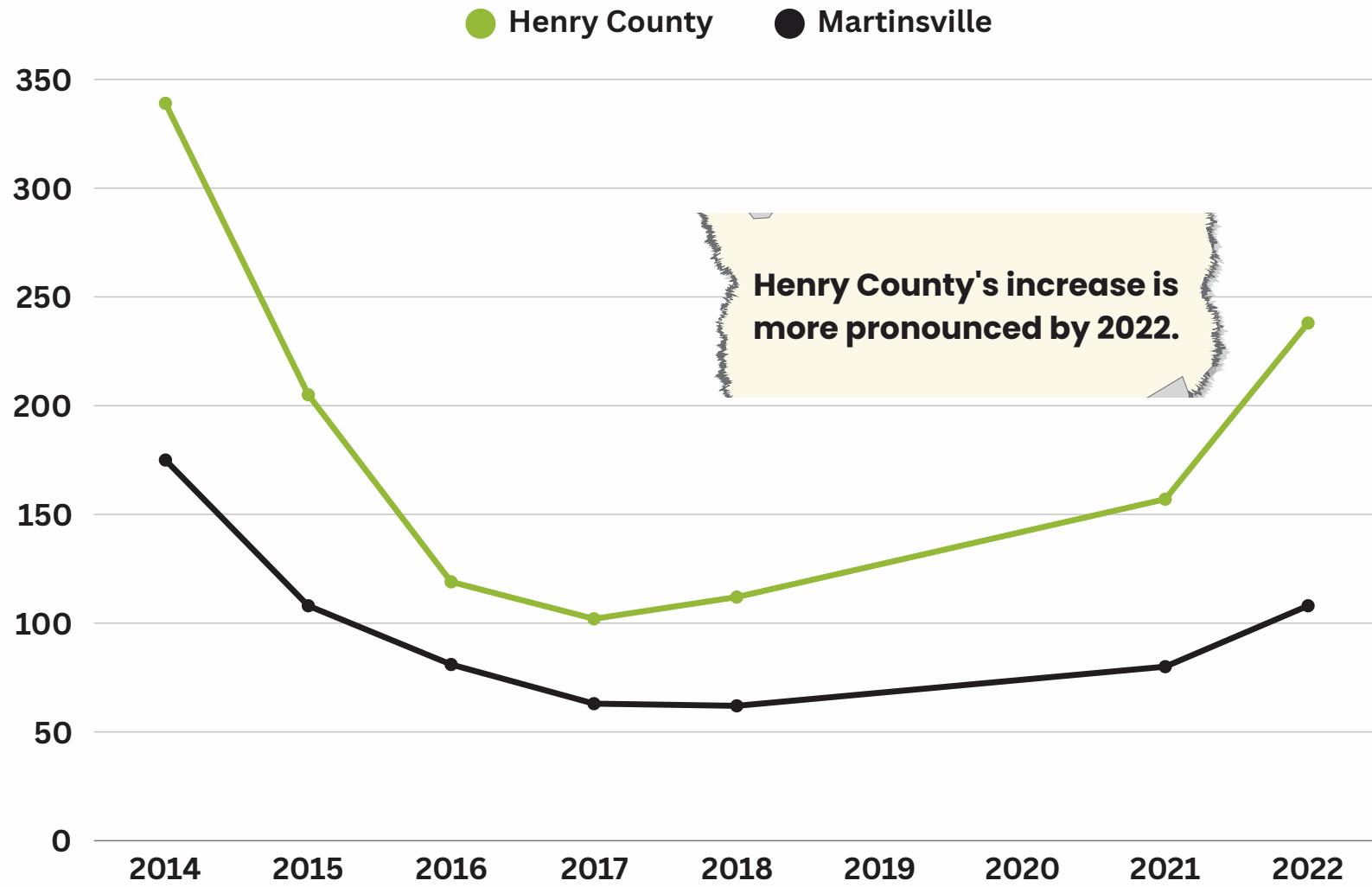
Child Care Assistance Program Participation



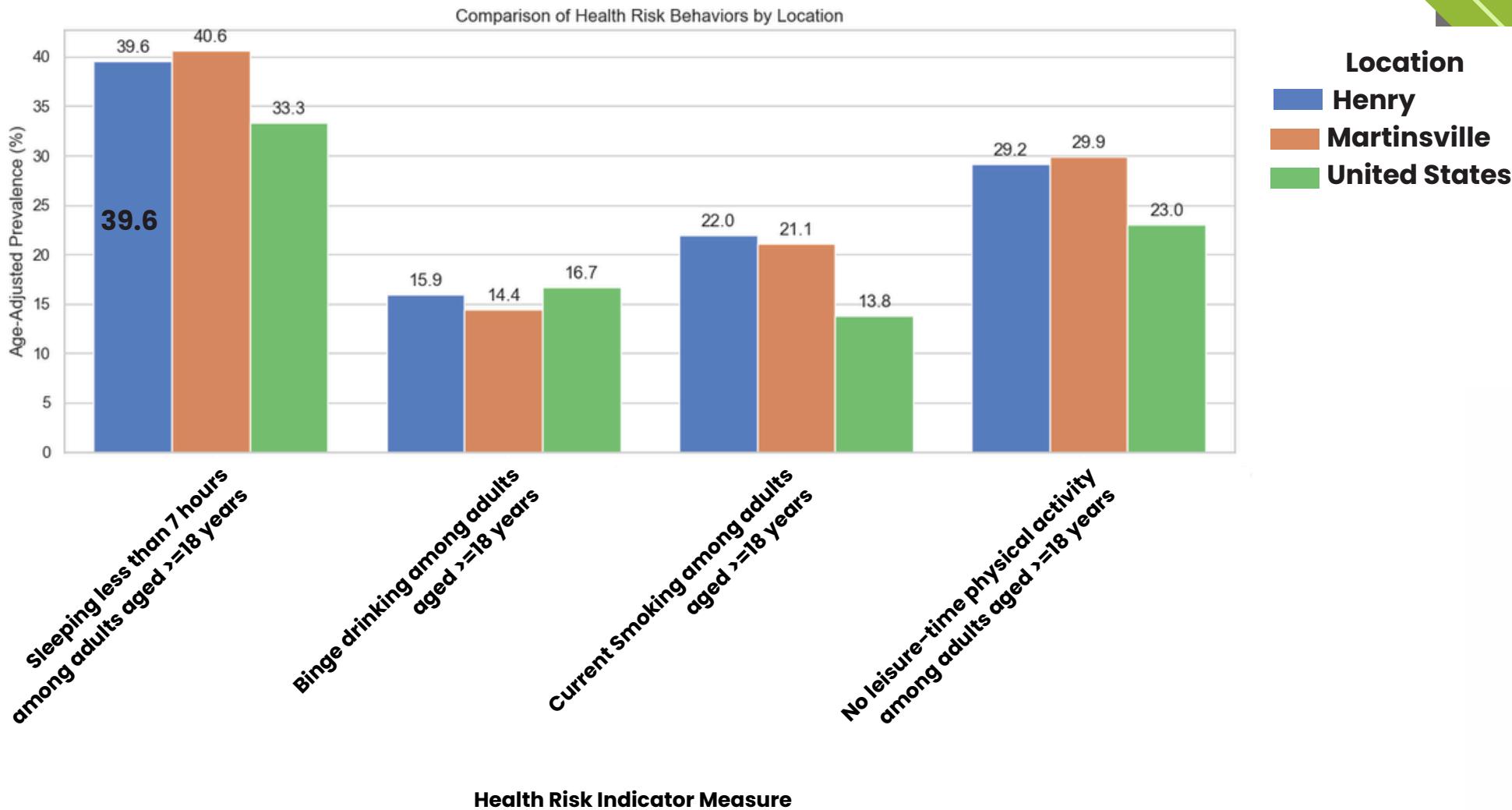
Child Care Assistance Program Participation



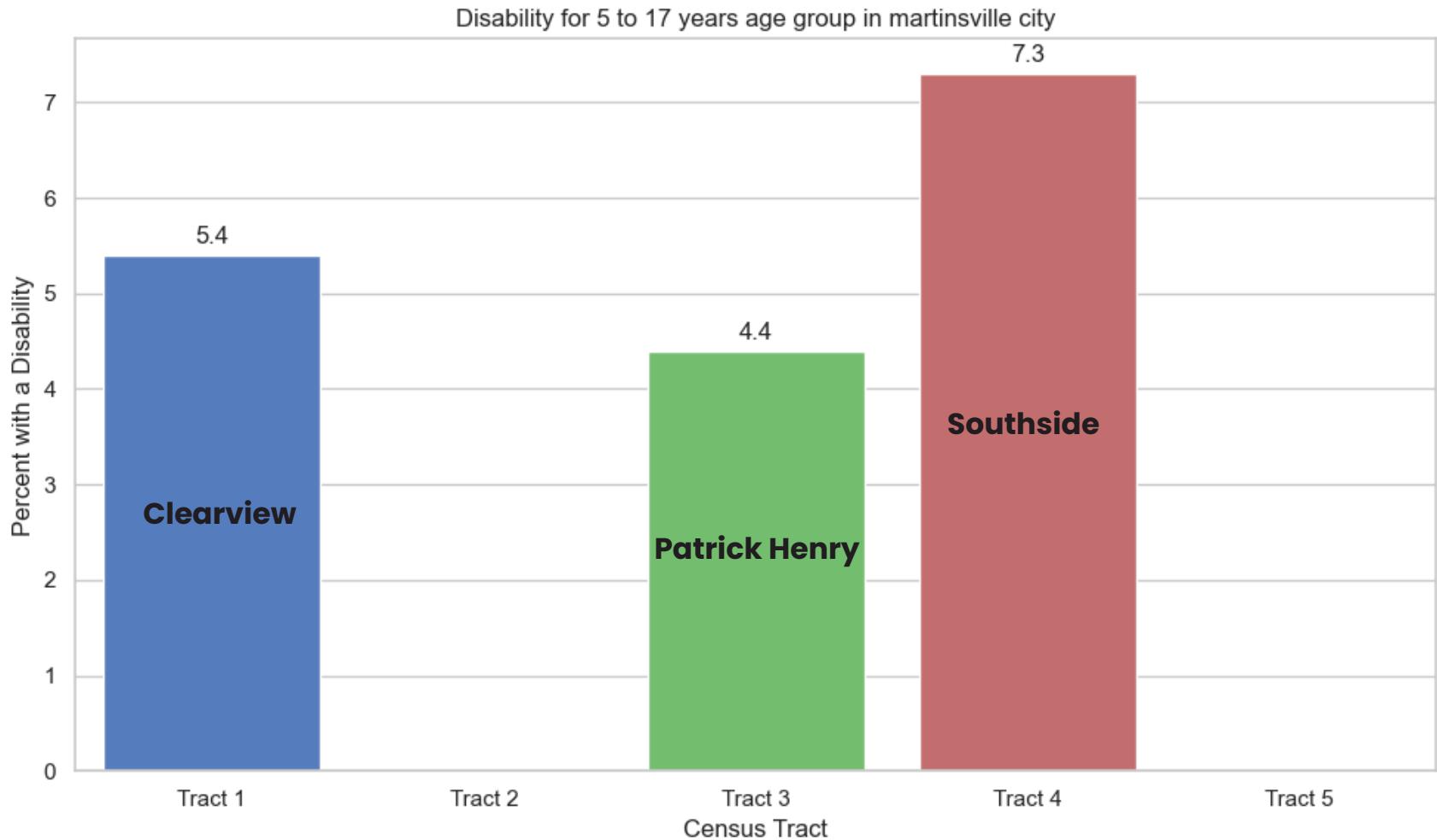
Child Care Assistance Program Participation



Health Risk Behaviors

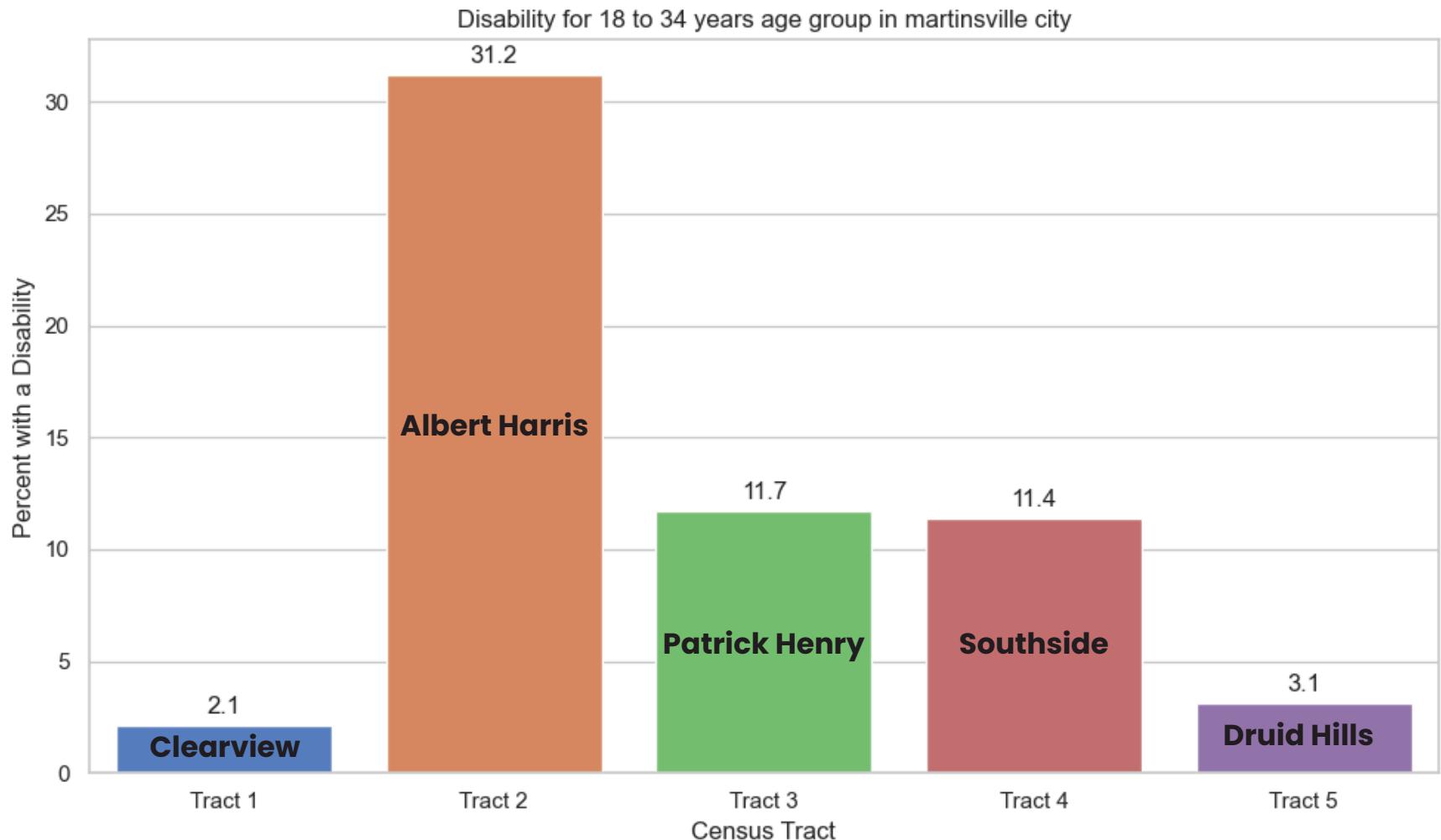


Disability - Martinsville



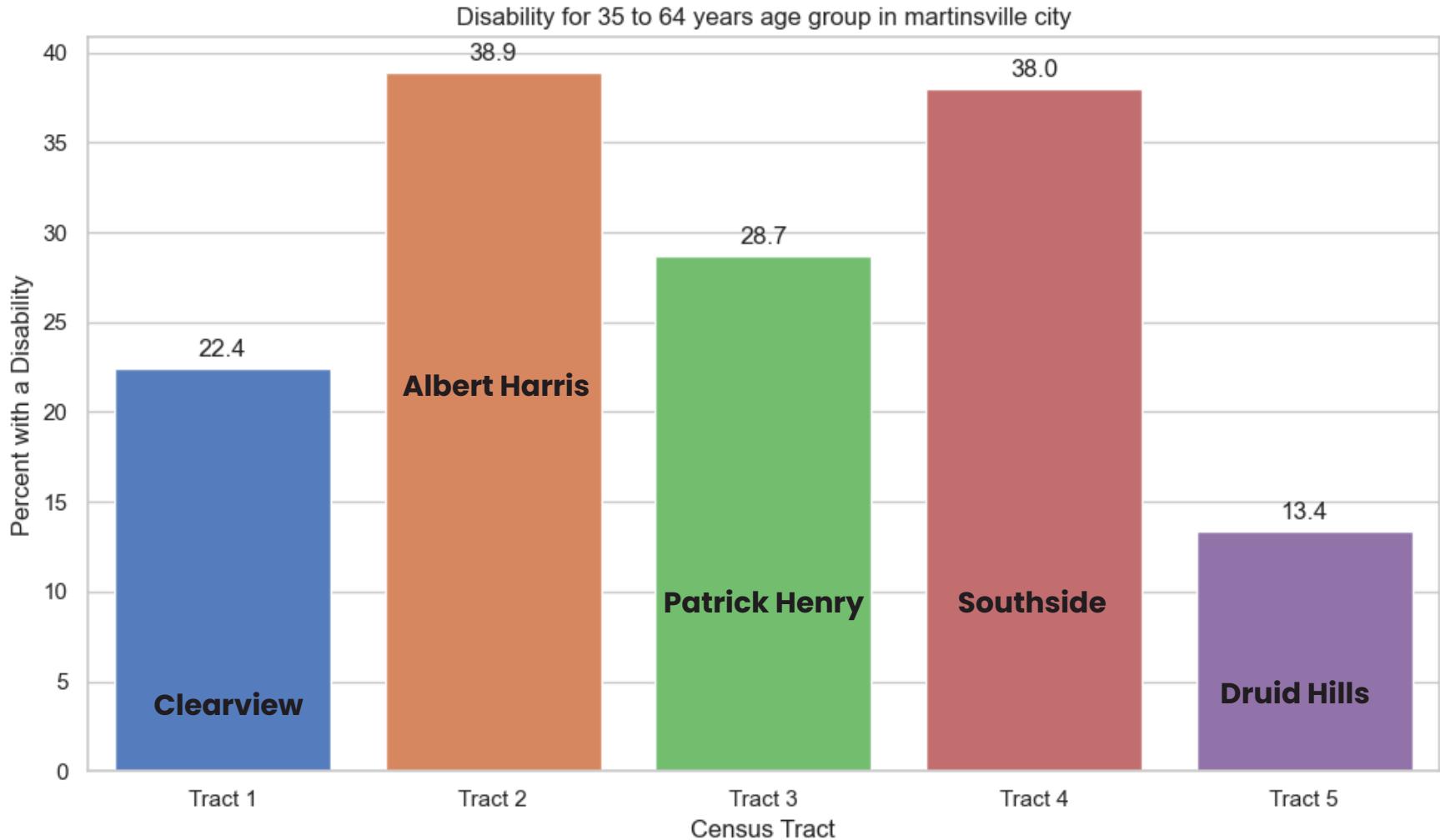
Ages 5 to 17

Disability - Martinsville



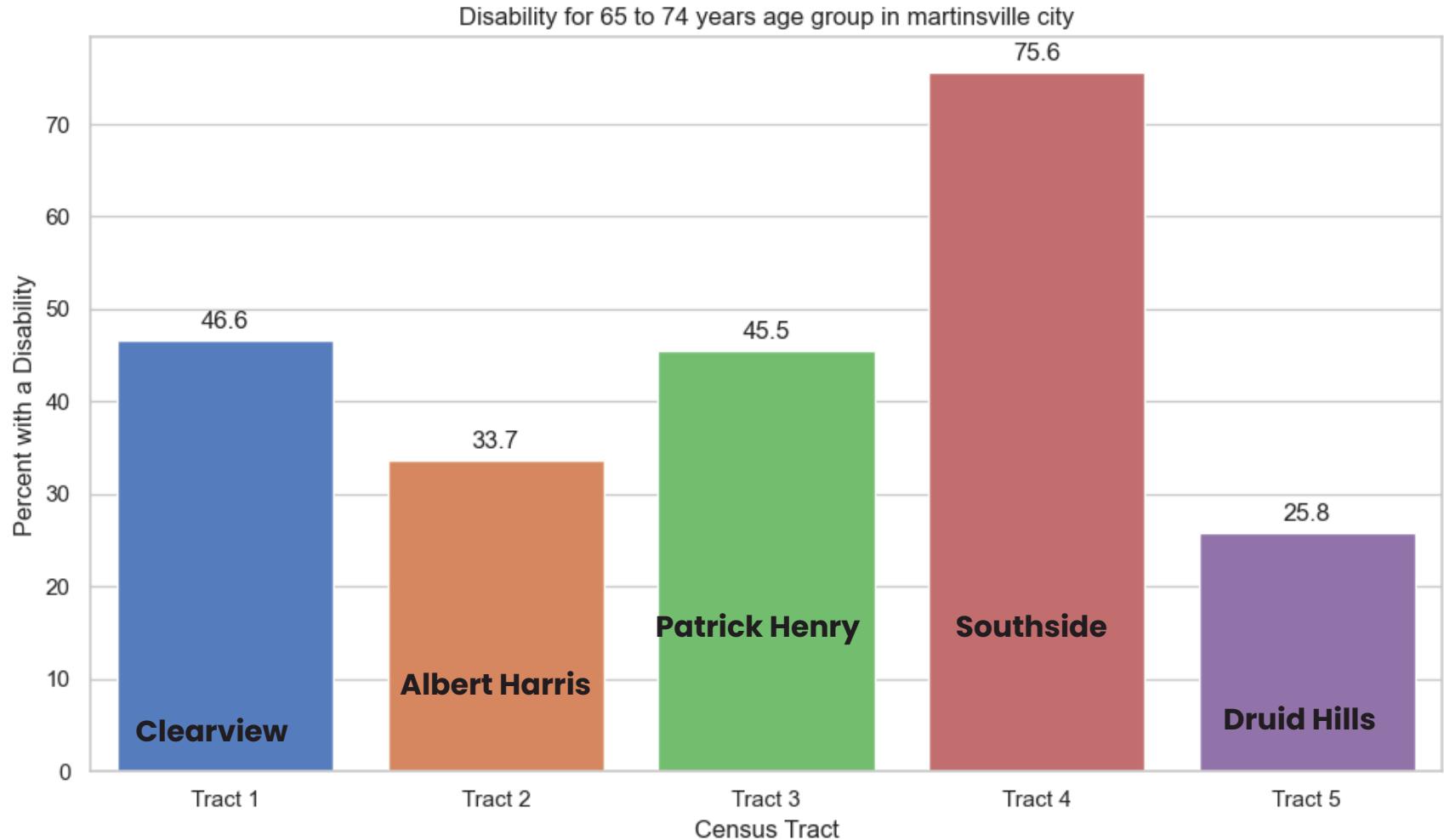
Ages 18 to 24

Disability - Martinsville



Ages 35 to 64

Disability - Martinsville



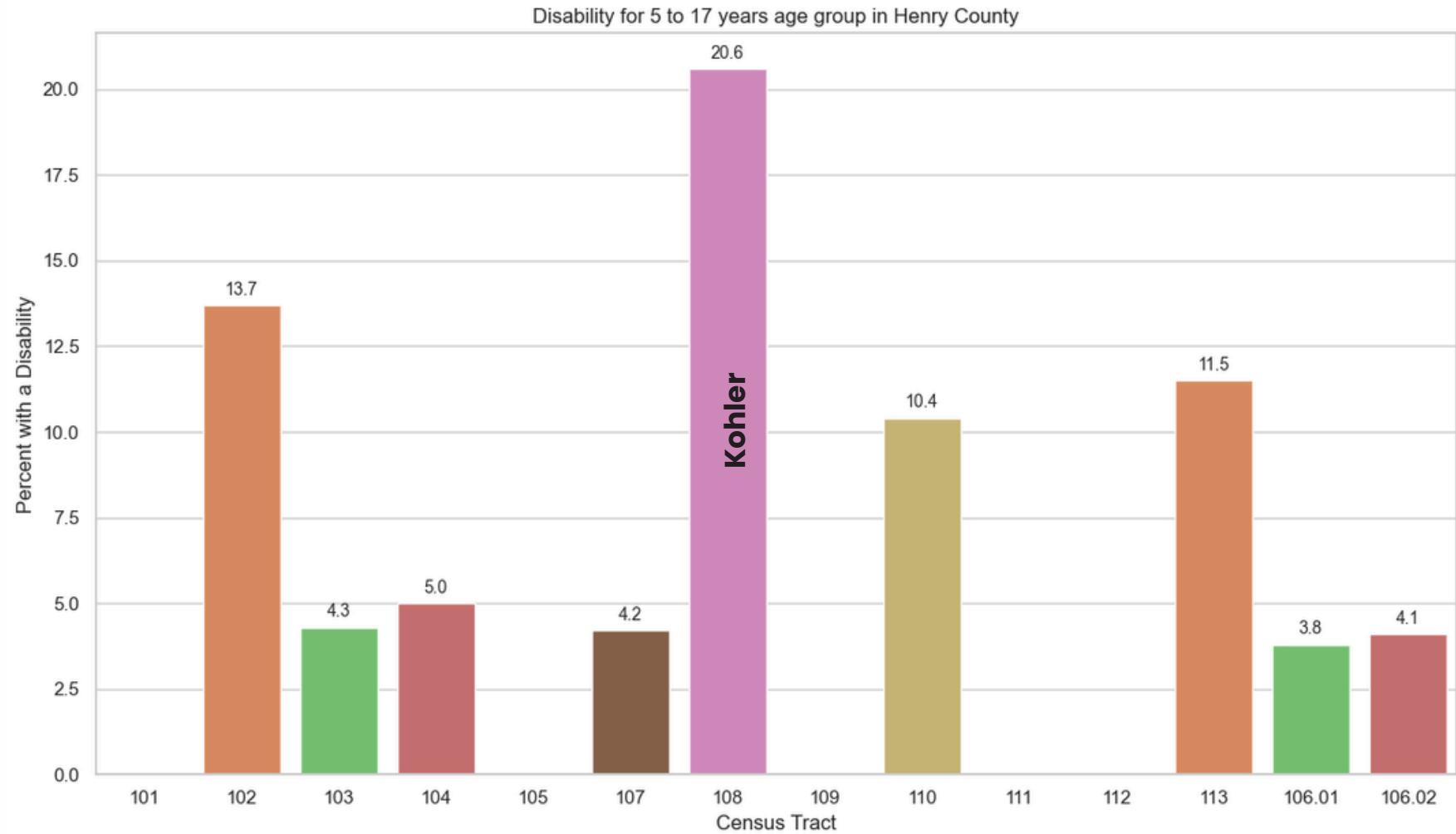
Ages 65 to 74

Disability - Martinsville



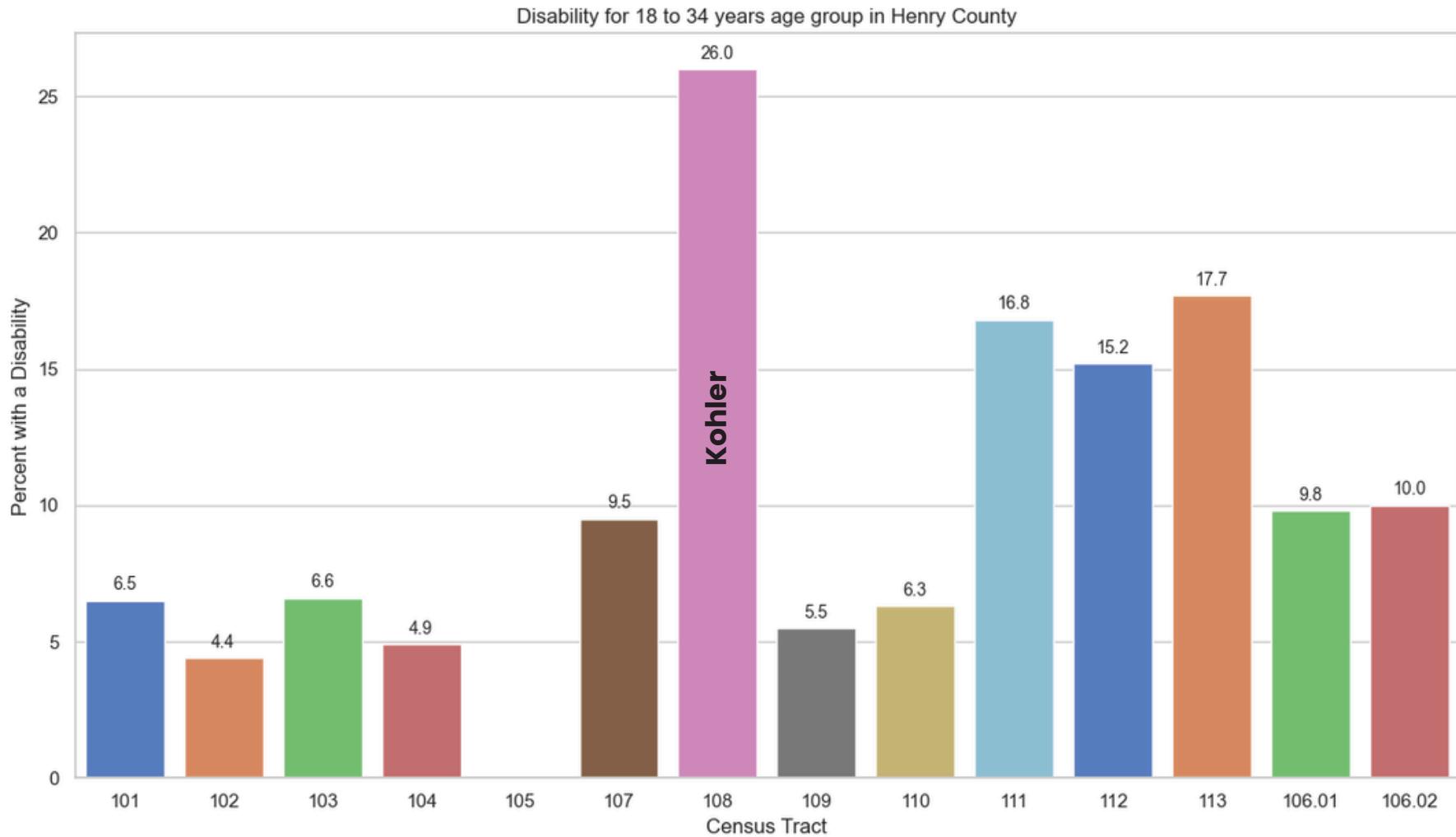
Ages 75+

Disability - Henry County



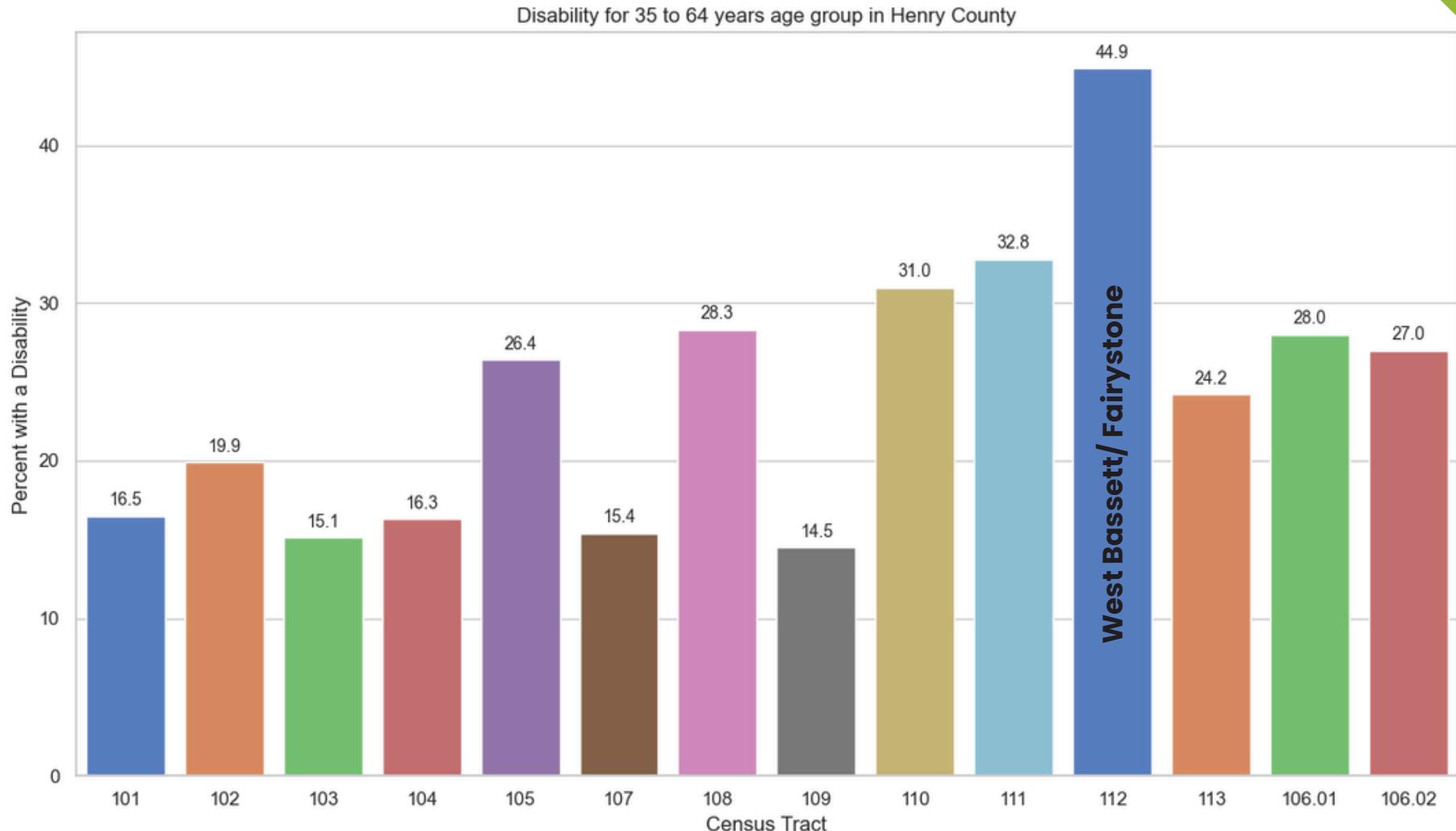
Ages 5 - 17

Disability - Henry County



Ages 18 – 34

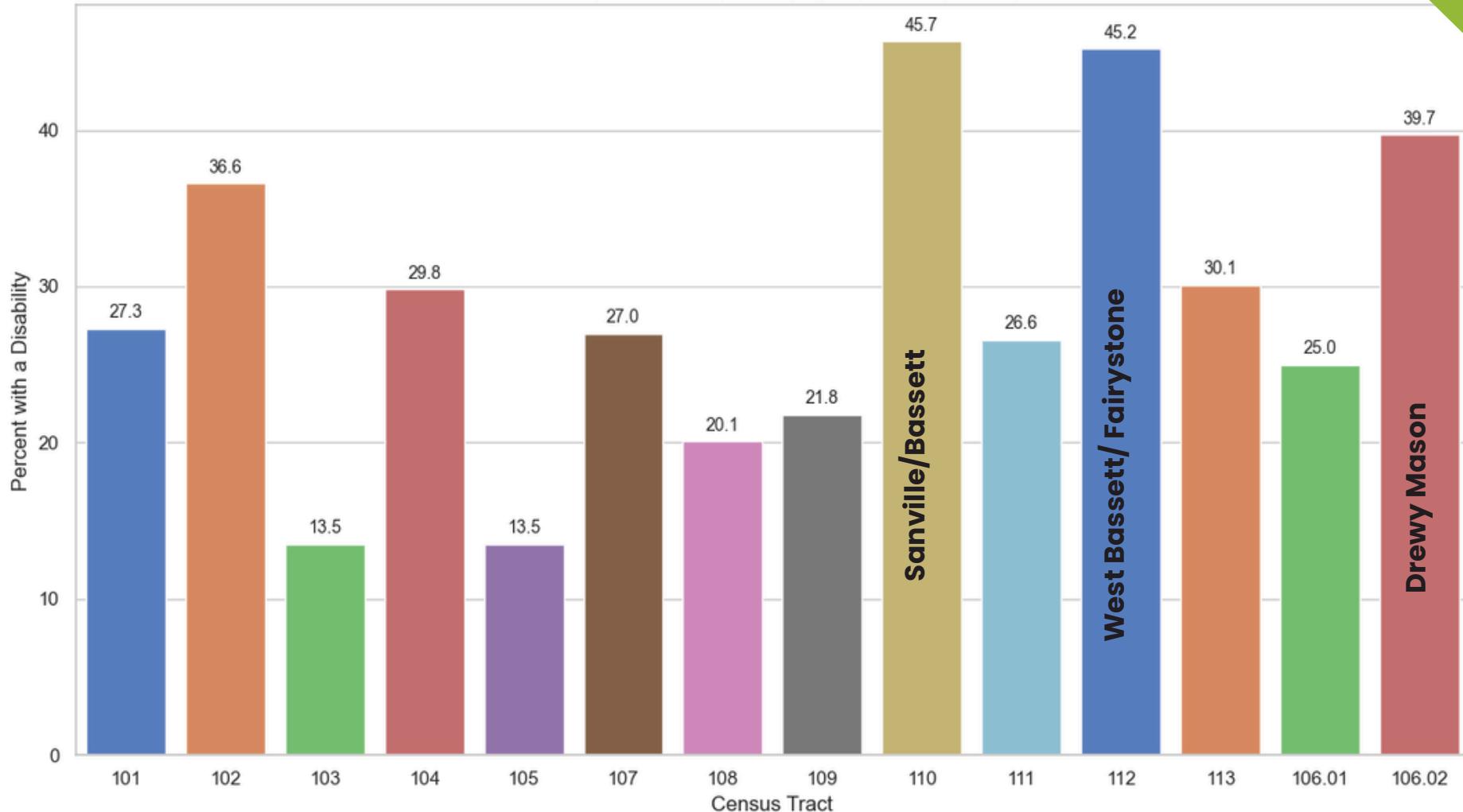
Disability - Henry County



Ages 35 - 64

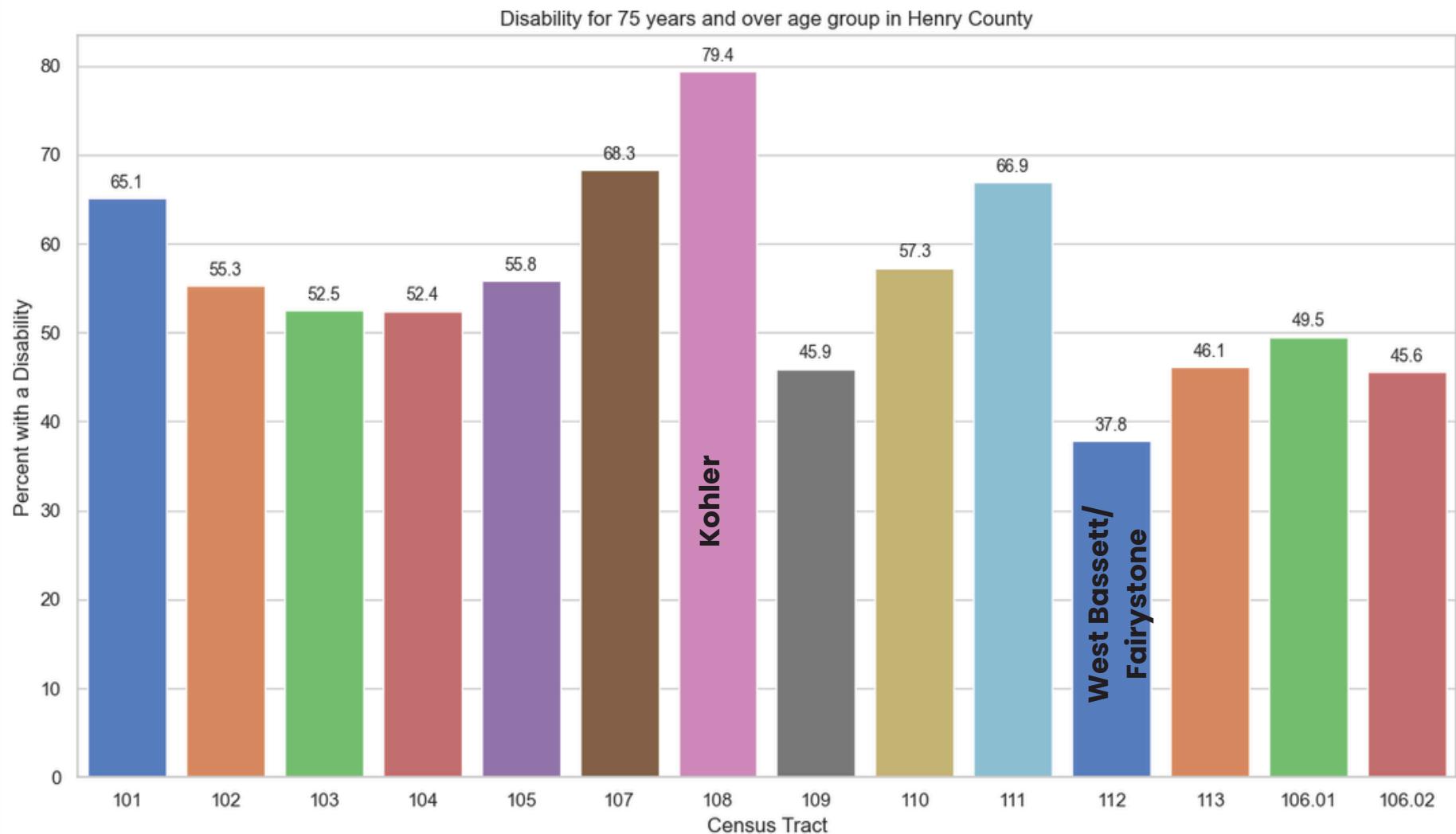
Disability - Henry County

Disability for 65 to 74 years age group in Henry County



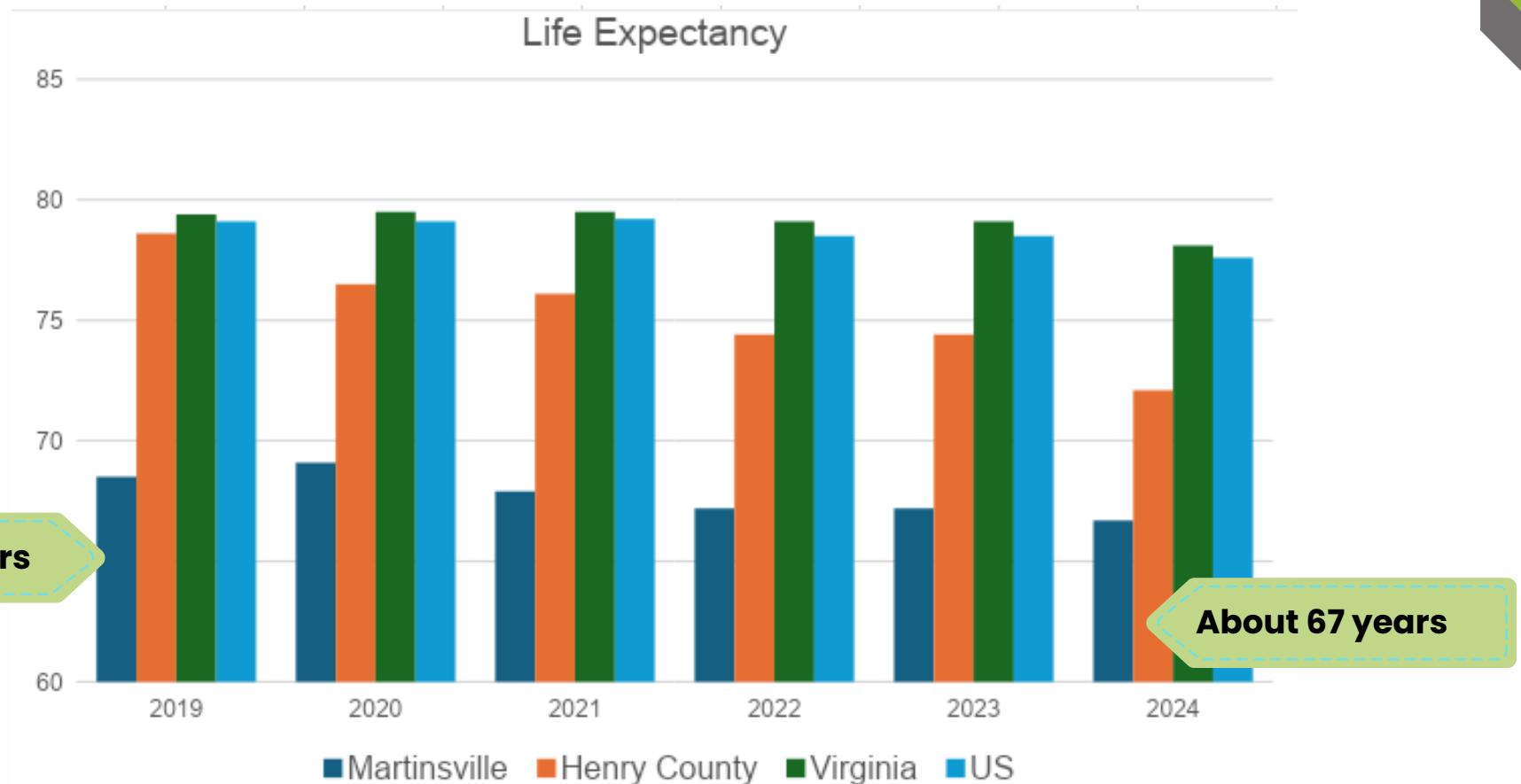
Ages 65 - 74

Disability - Henry County



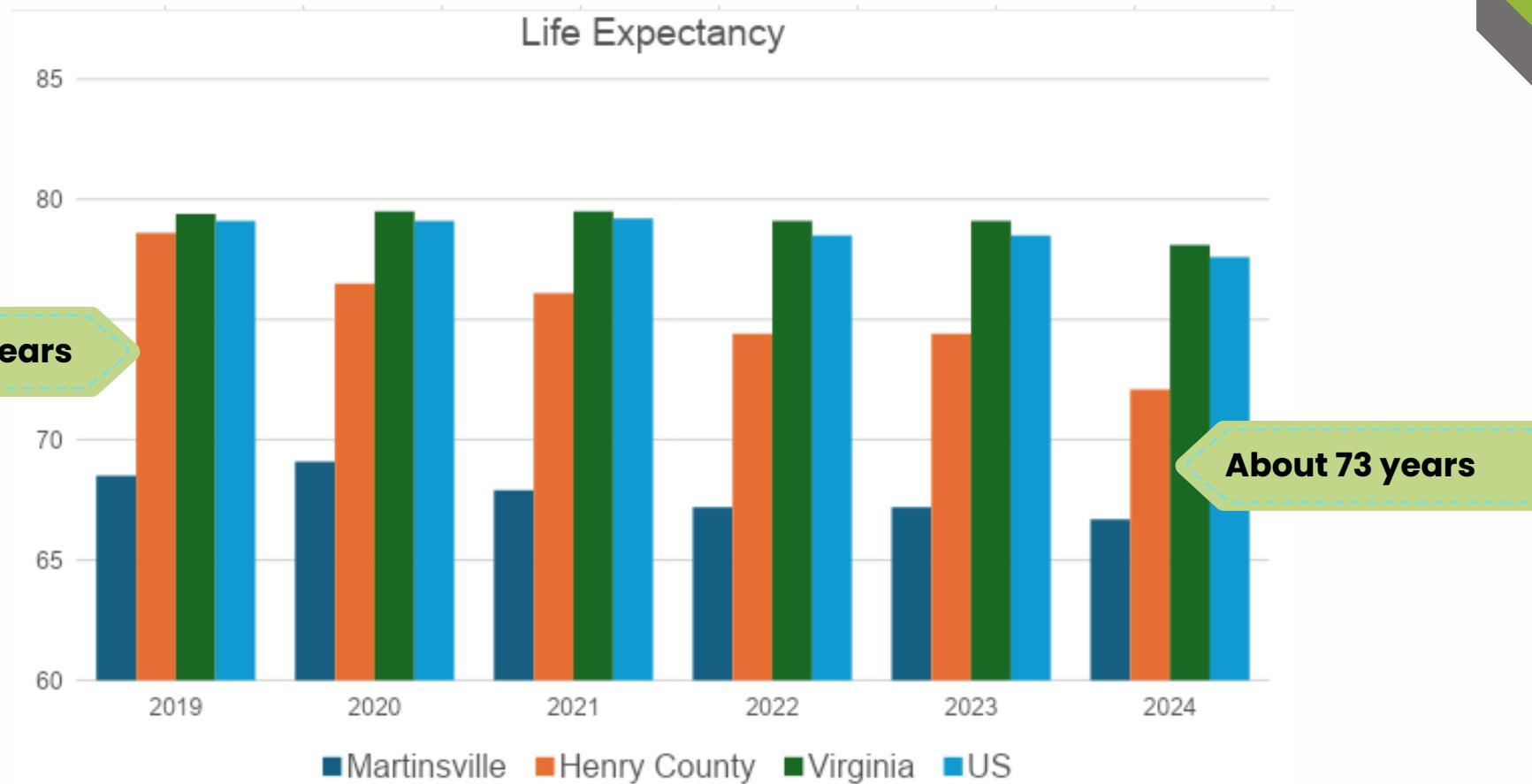
Ages 75+

Life Expectancy – Martinsville



Martinsville has a very low life expectancy.

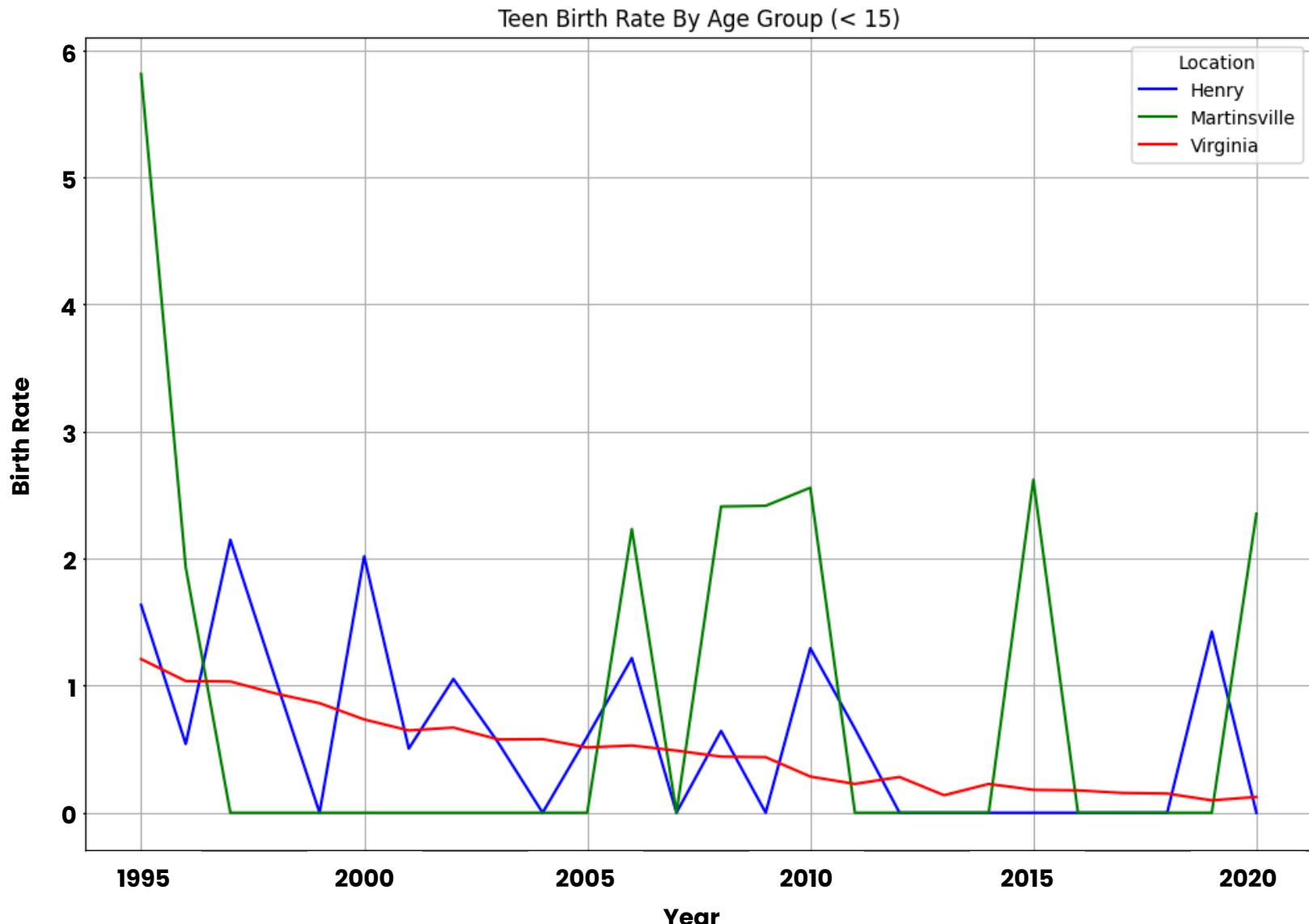
Life Expectancy - Henry County



Henry County has had the most drastic change of life expectancy.

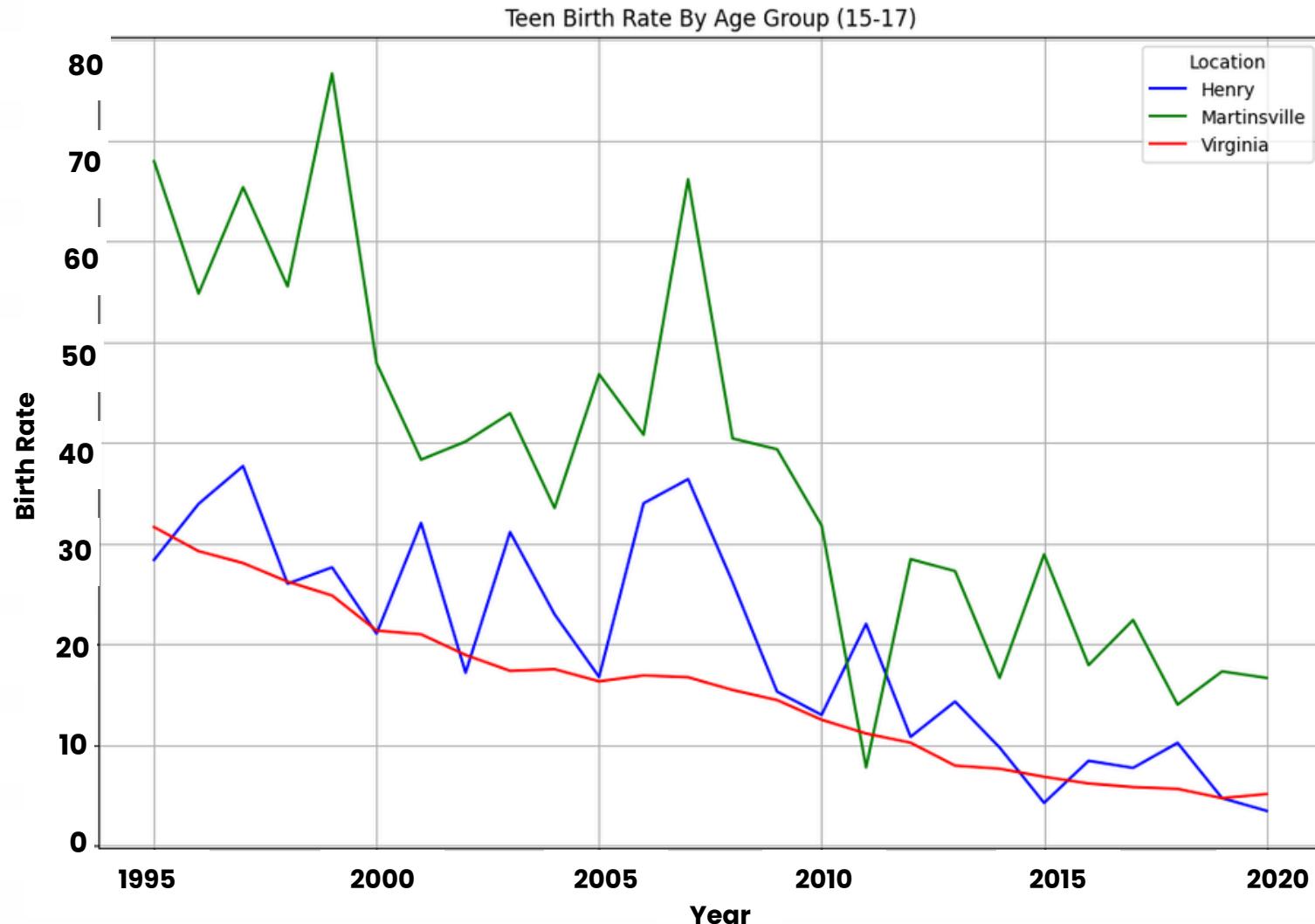
Teen Birth Rate

Less than 15 Years Old



Teen Birth Rate

15 – 17 Years Old

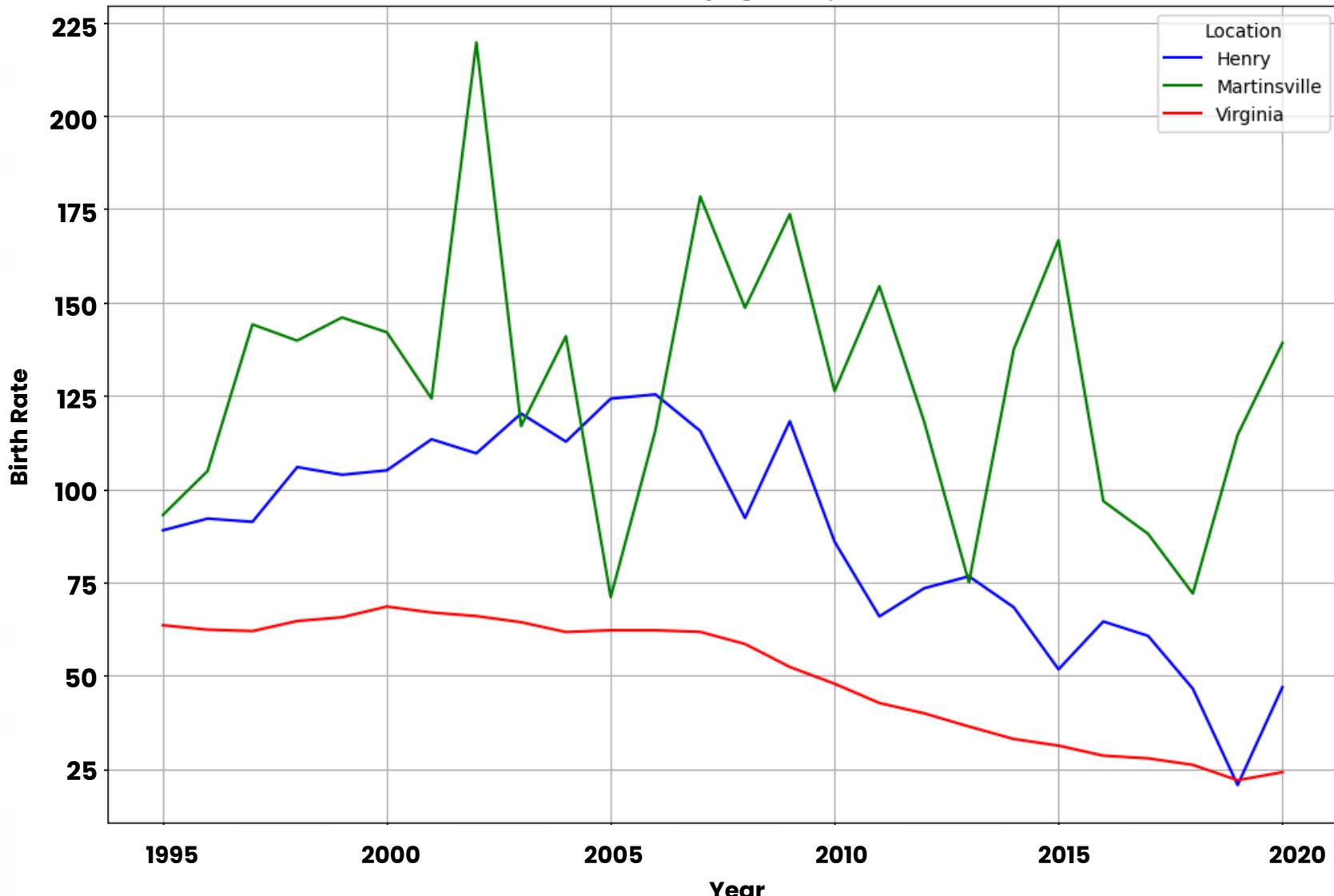


Martinsville has a significantly higher rate of teen pregnancies

Teen Birth Rate

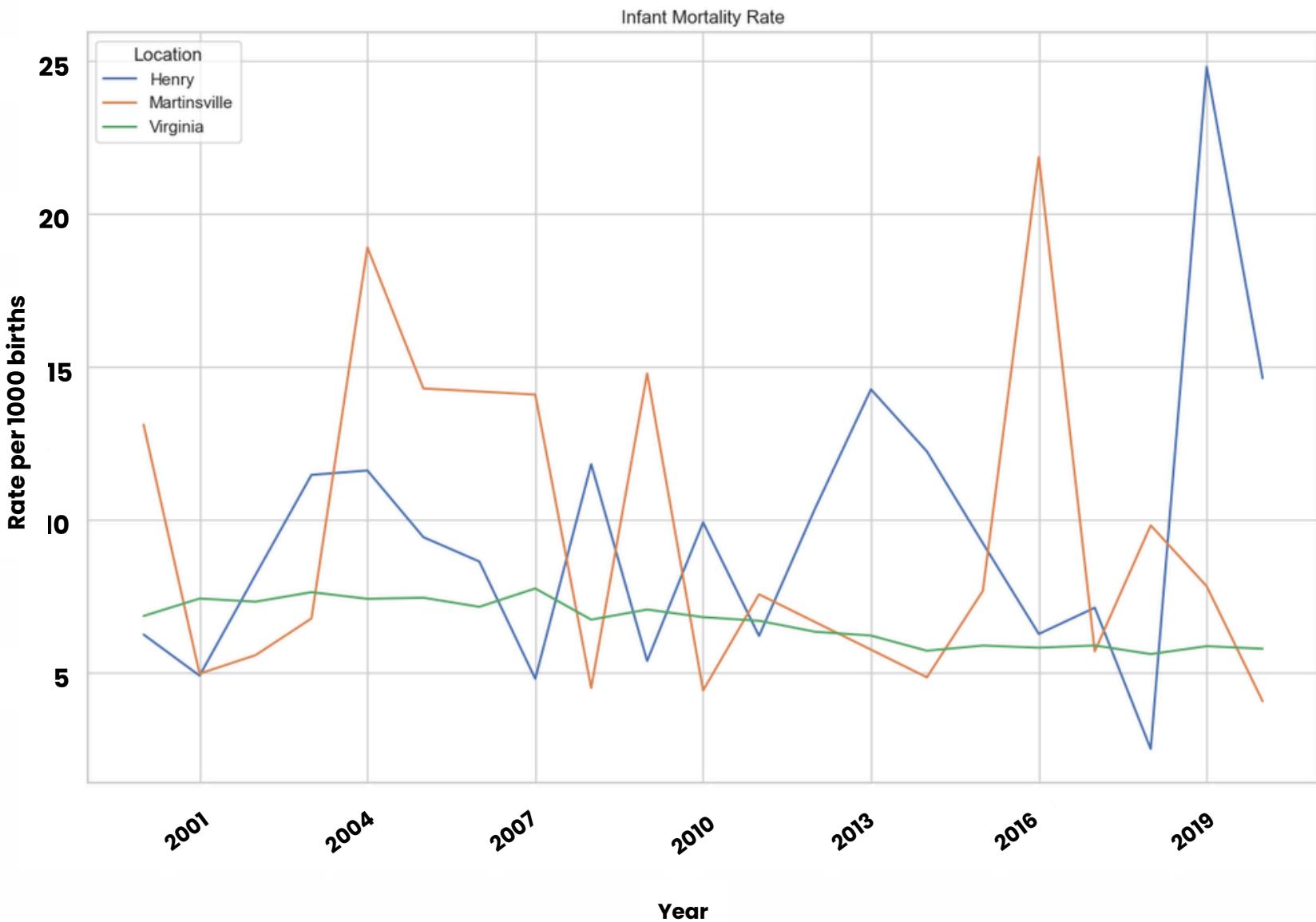
18 – 19 Years Old

Teen Birth Rate By Age Group (18-19)



This age group has the highest rate of teen pregnancies

Infant Mortality Rate



Education



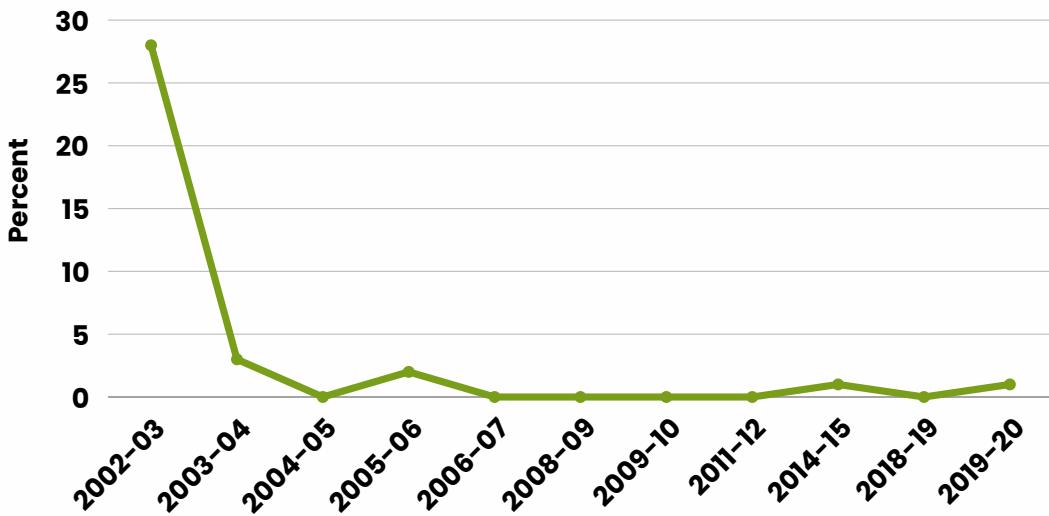
05

Education

K-3 Repeated Trend

K-3 Repeated Trend - Martinsville

Martinsville

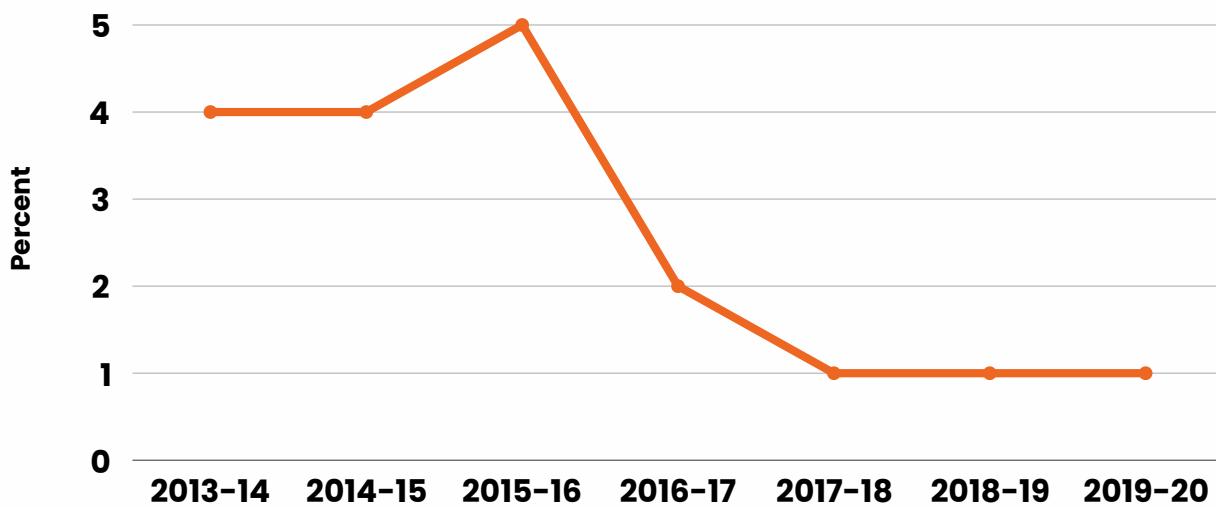


Is there a policy that caused there to be little to no students repeating K-3?

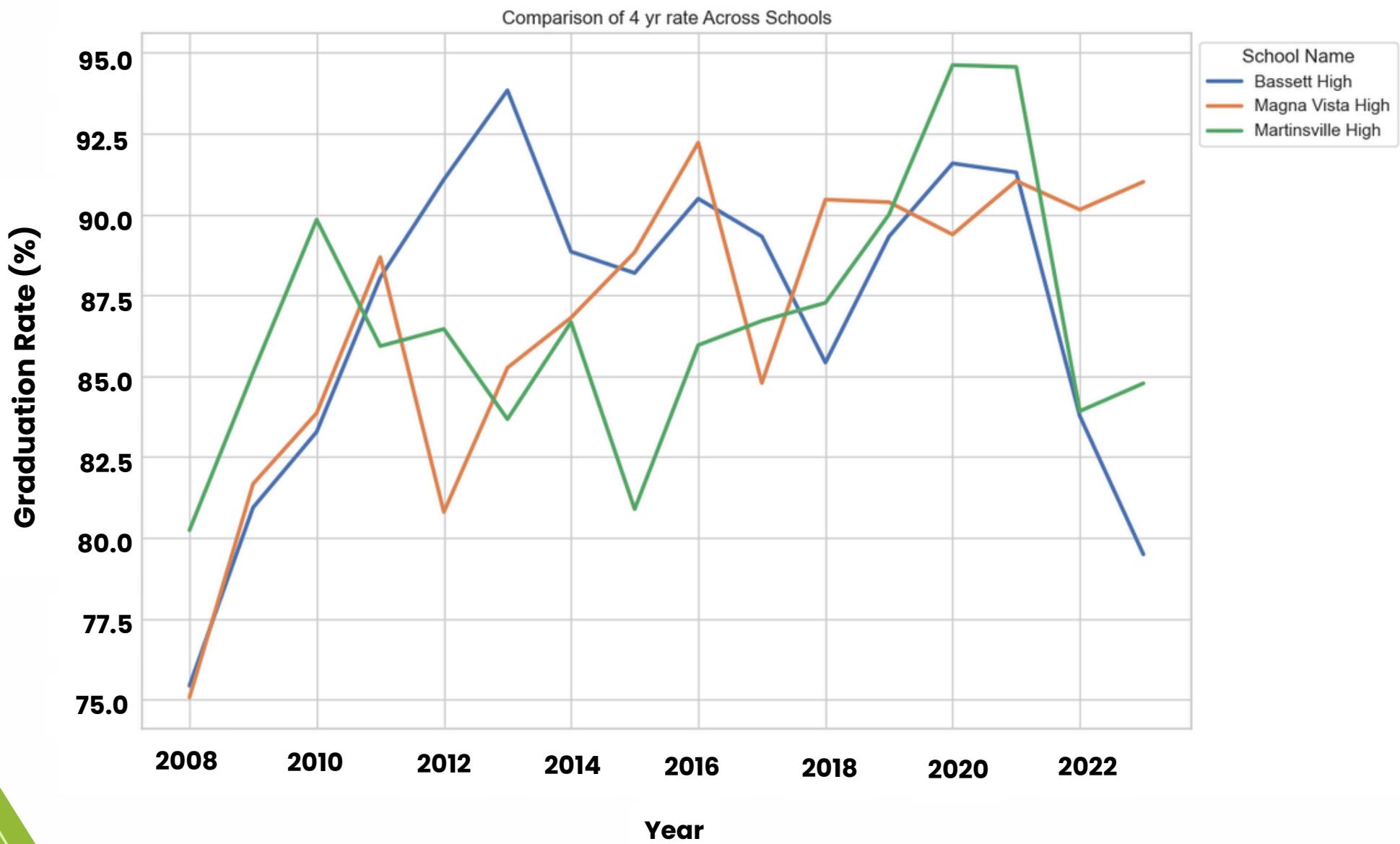
Henry showed a sharp increase initially and then a gradual decline.

K-3 Repeated Trend - Henry County

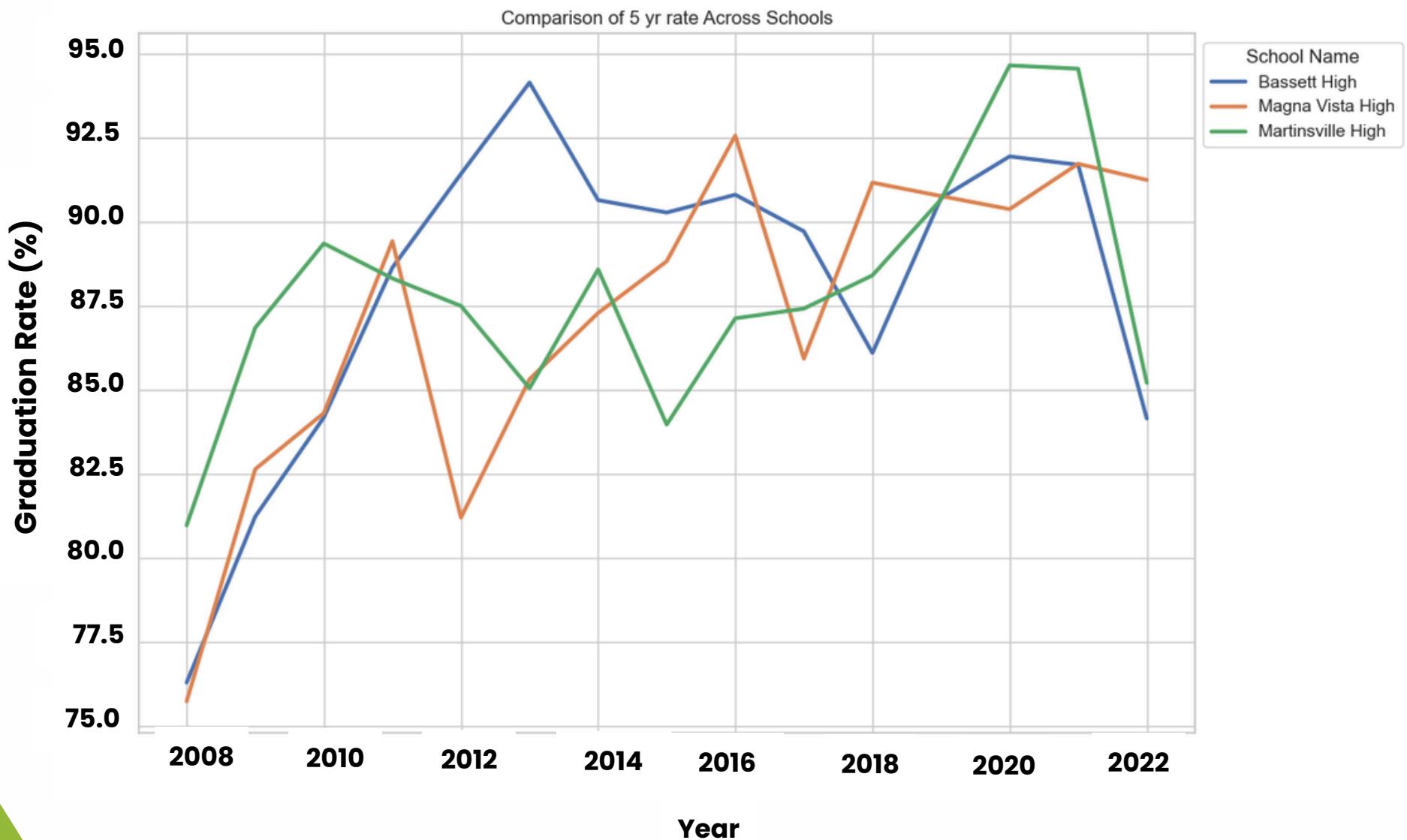
Henry County



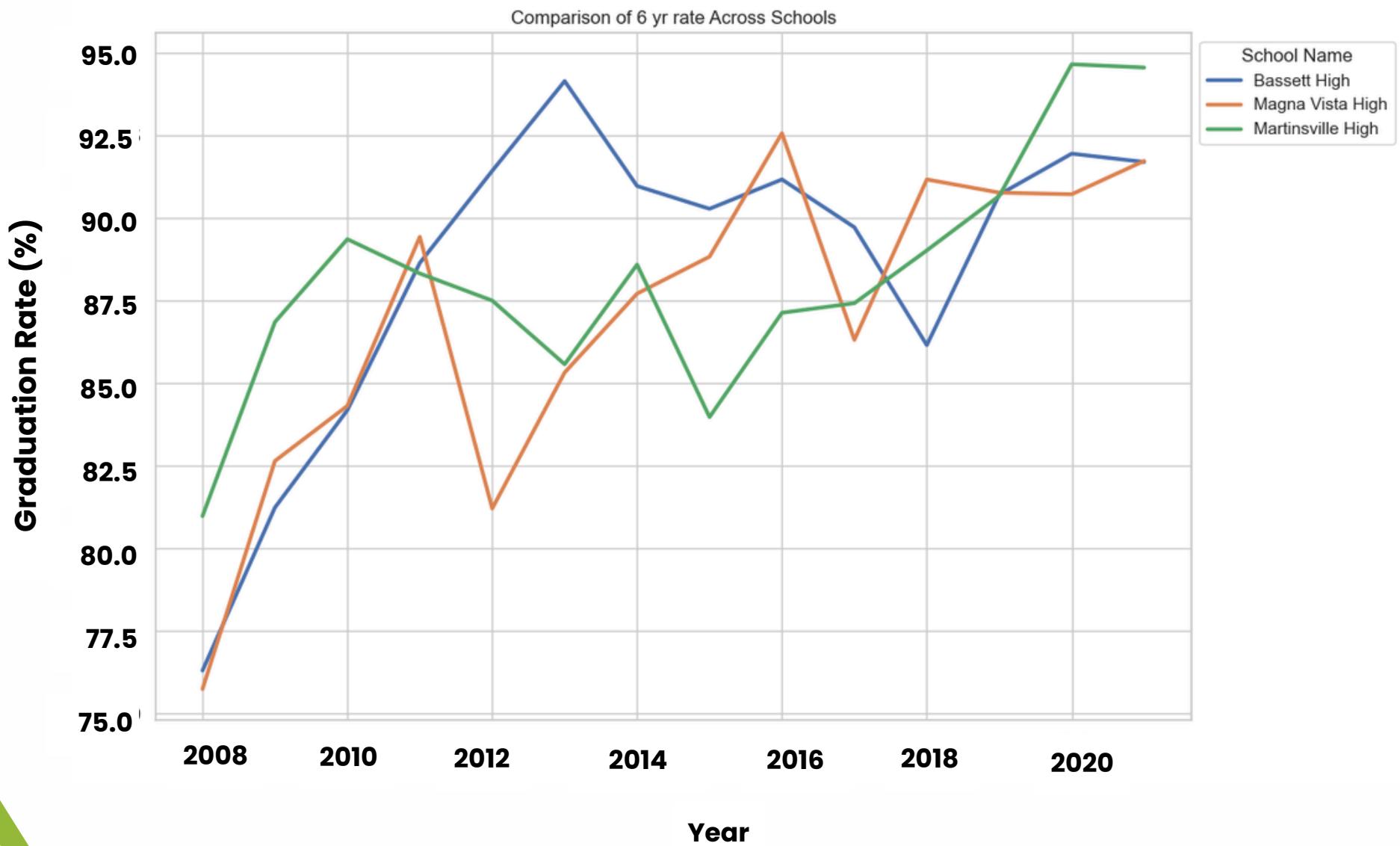
Graduation Rates - 4 Year



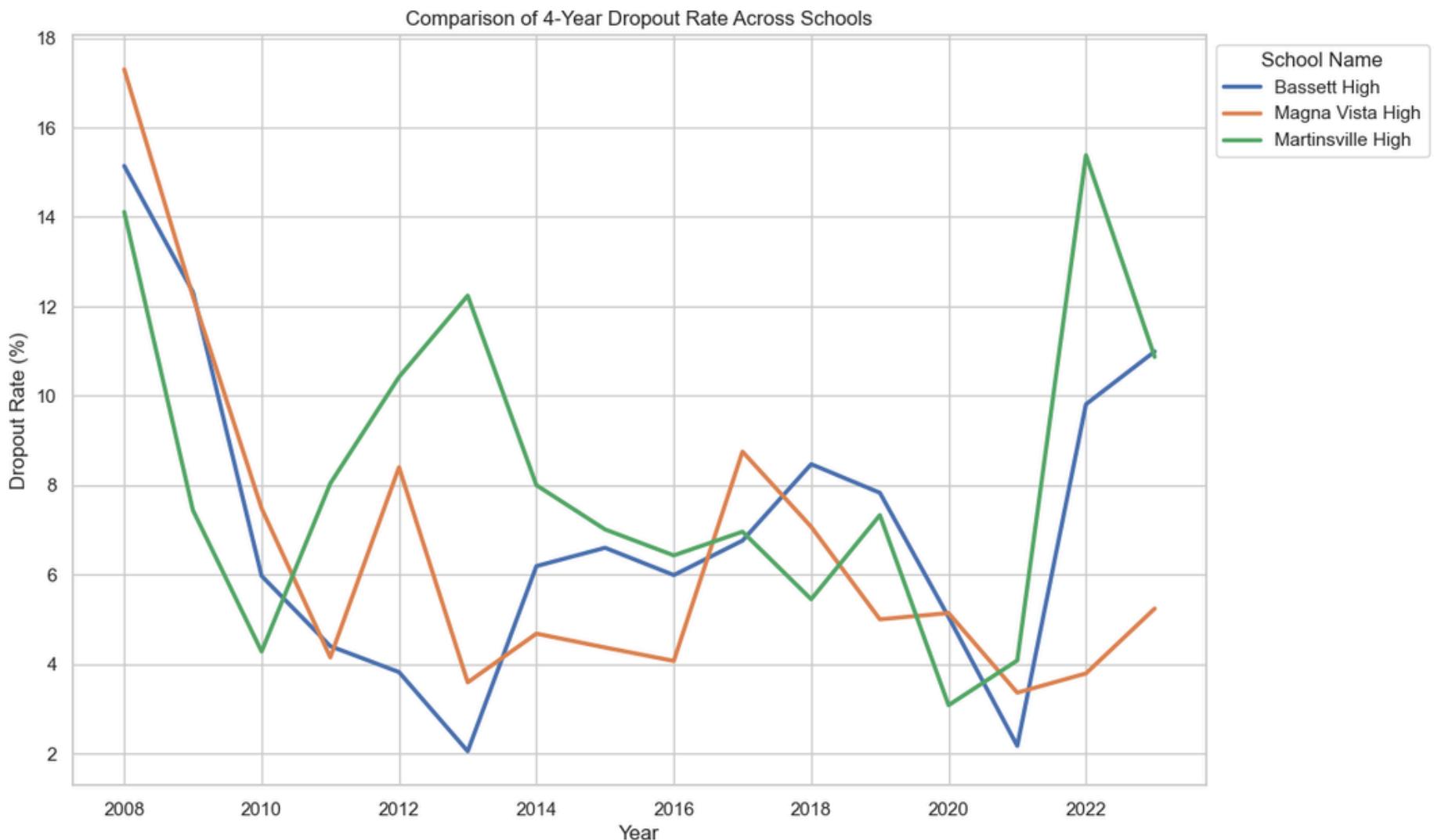
Graduation Rates - 5 Year



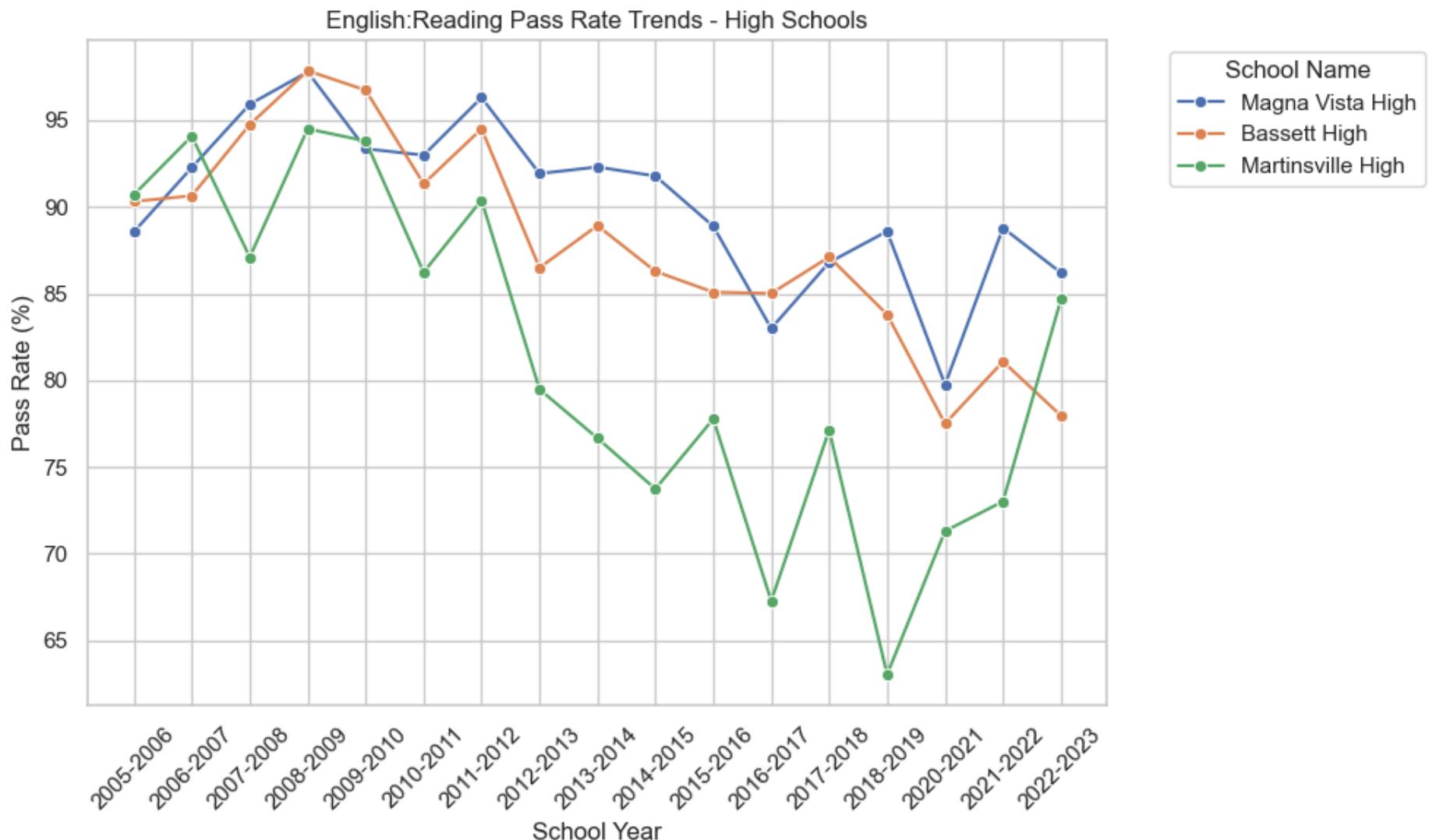
Graduation Rates - 6 Year



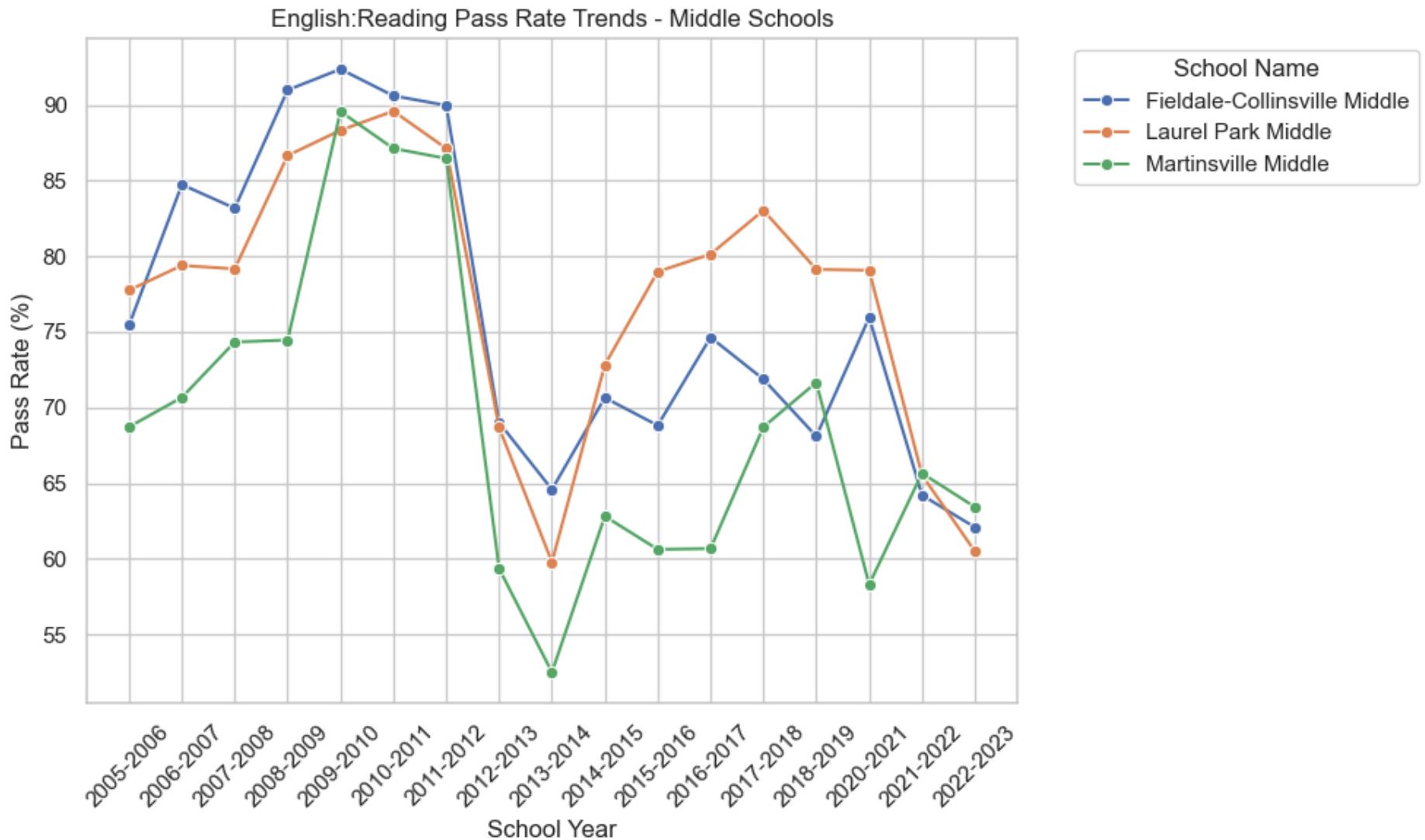
Dropout Rates



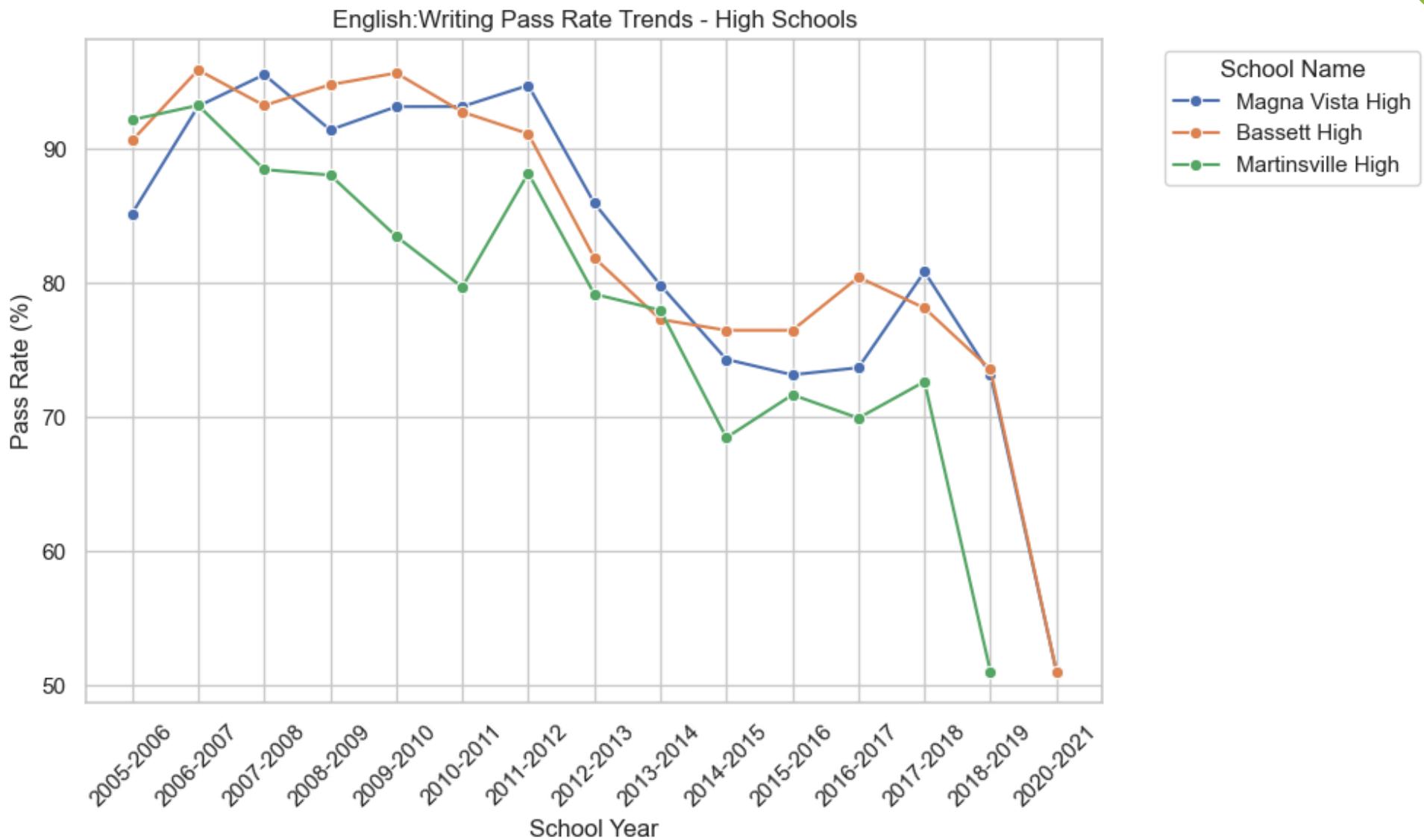
High School Reading Scores



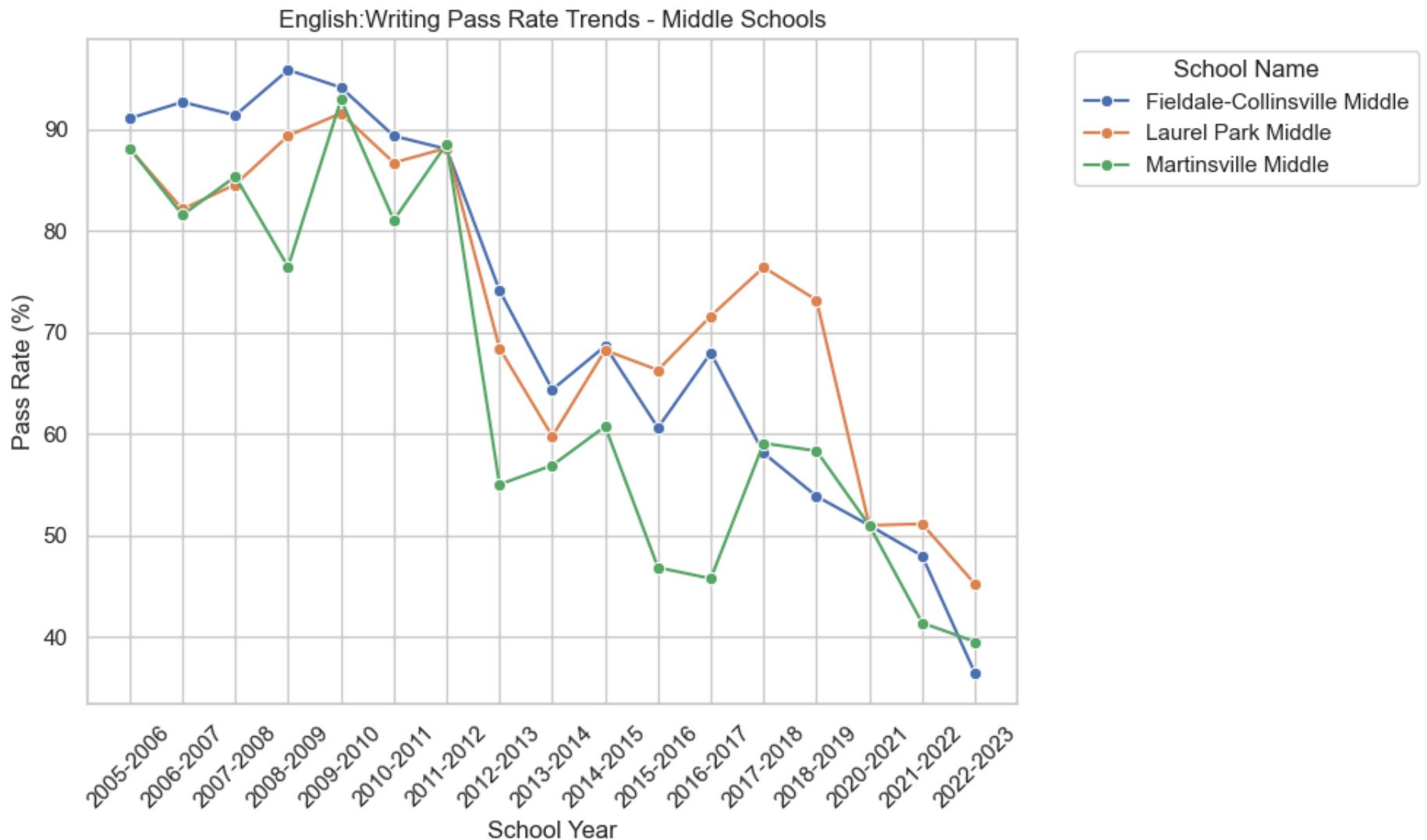
Middle School Reading Scores



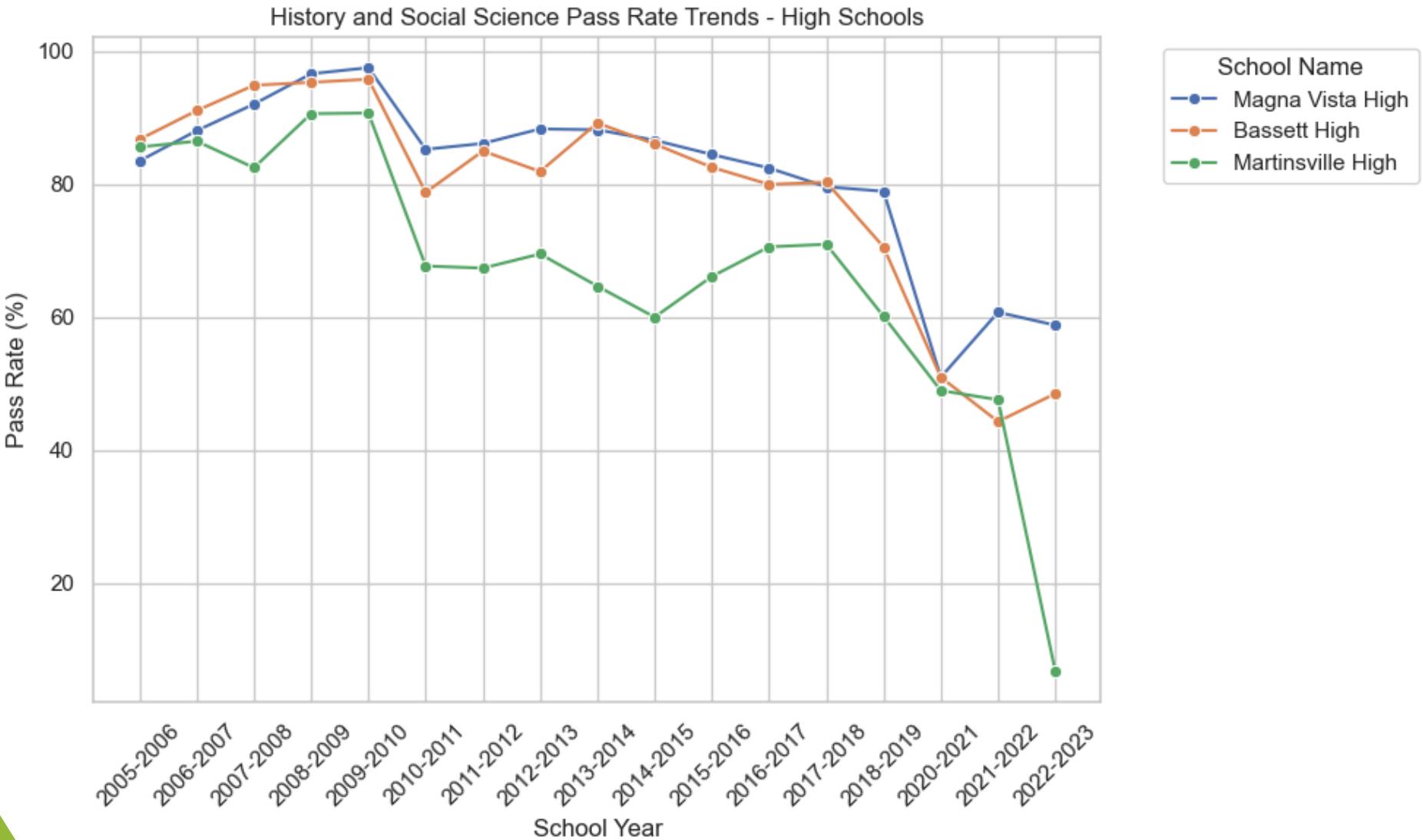
High School Writing Scores



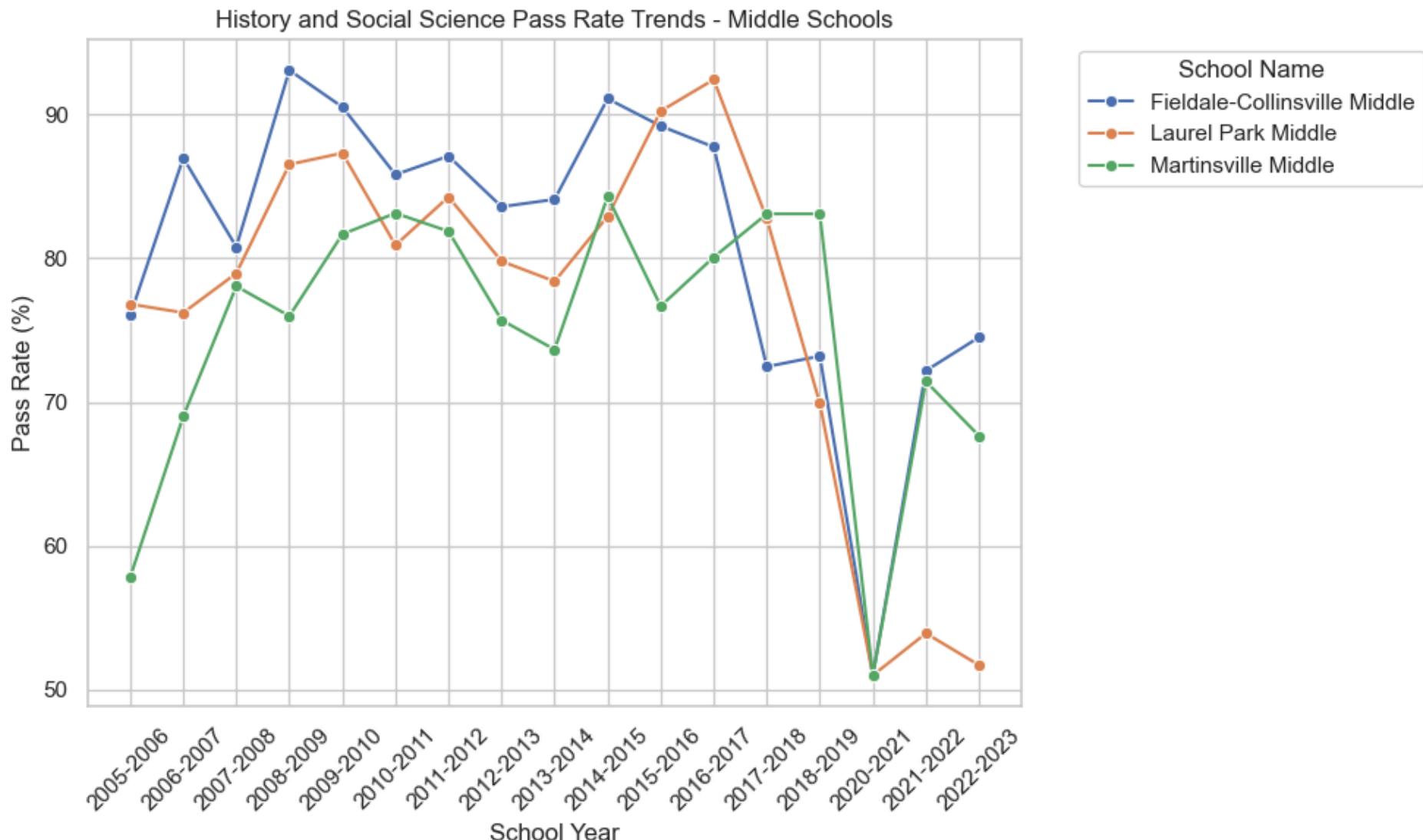
Middle School Writing Scores



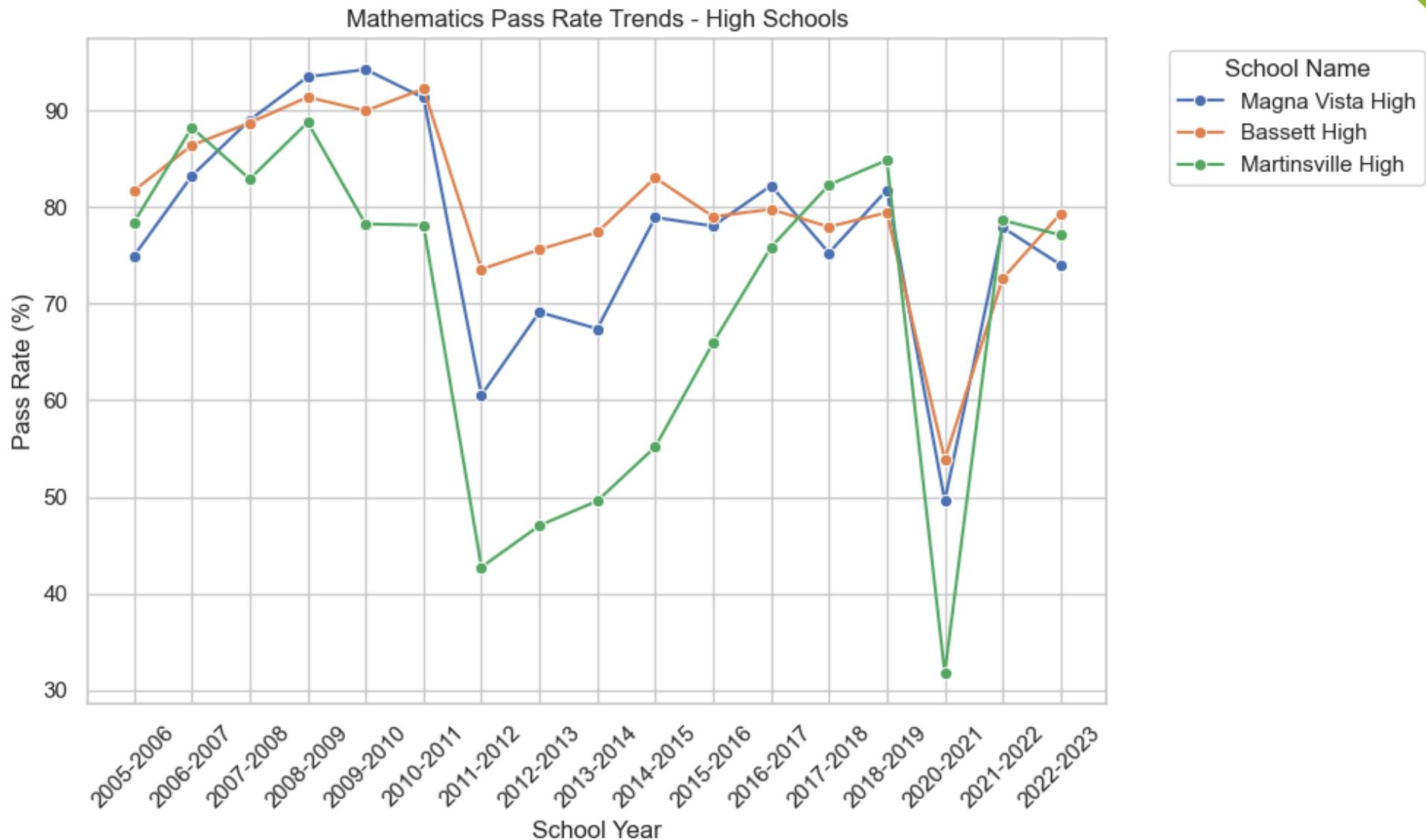
High School History and Social Studies Scores



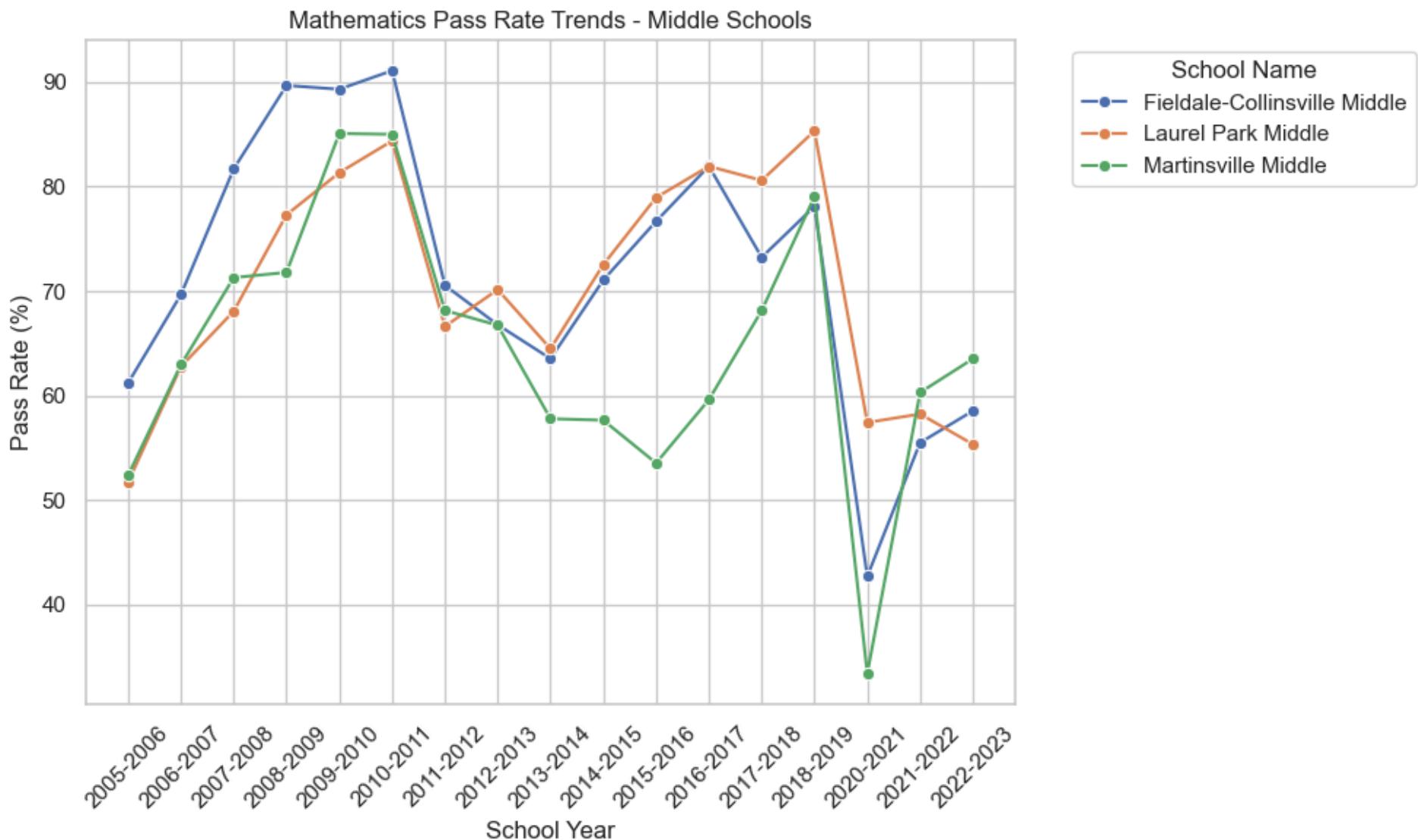
Middle School History and Social Studies Scores



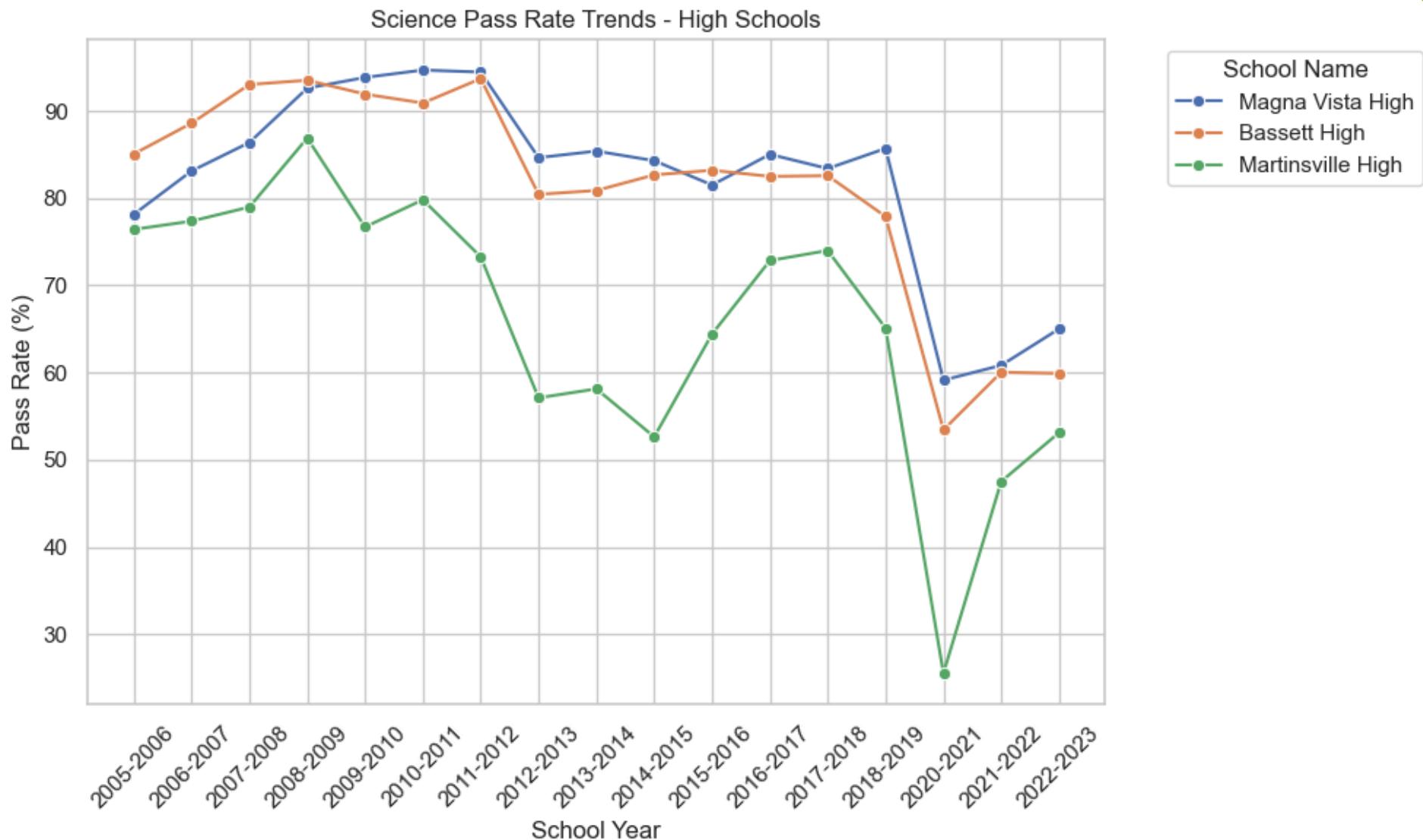
High School Math Scores



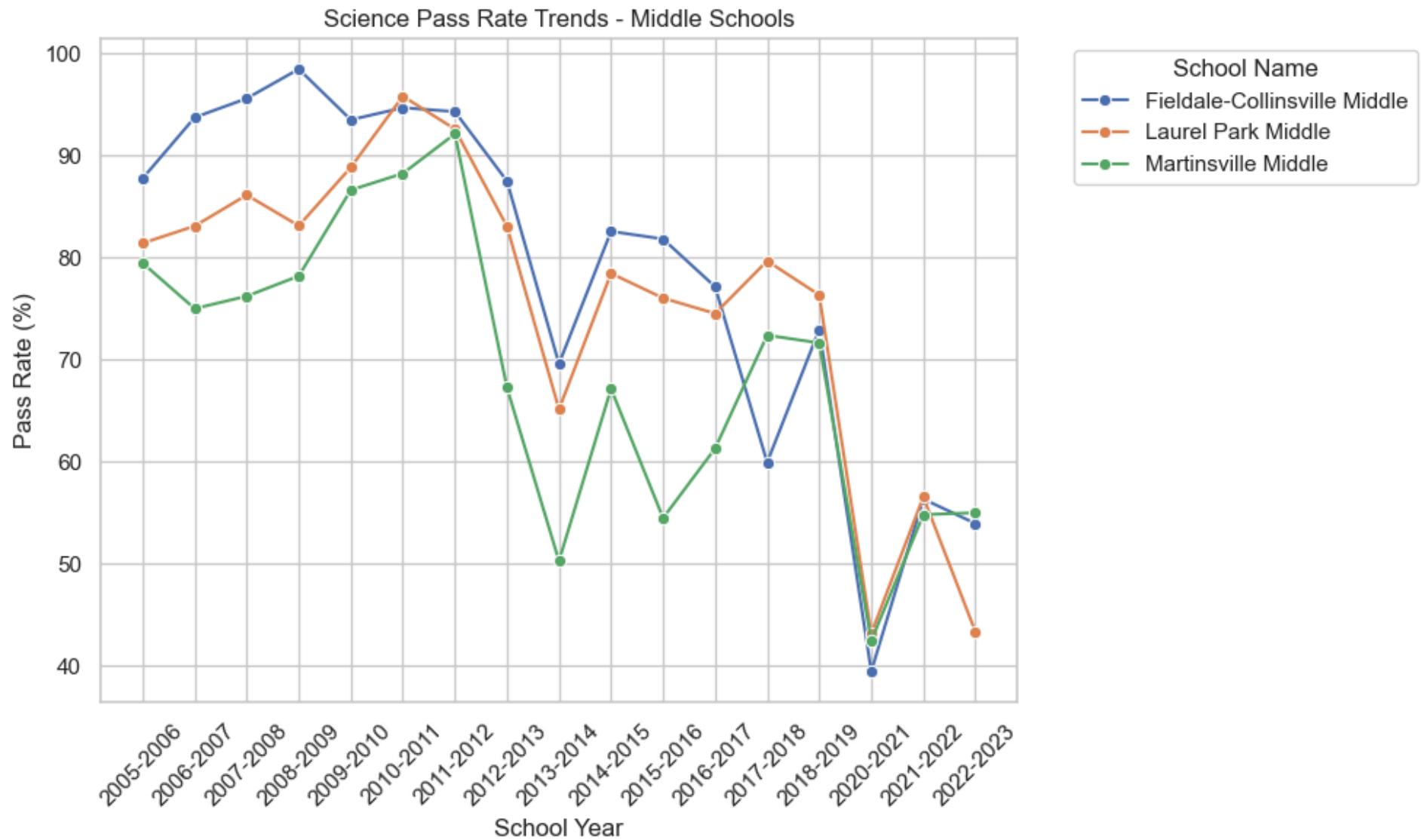
Middle School Math Scores



High School Science Scores



Middle School Science Scores

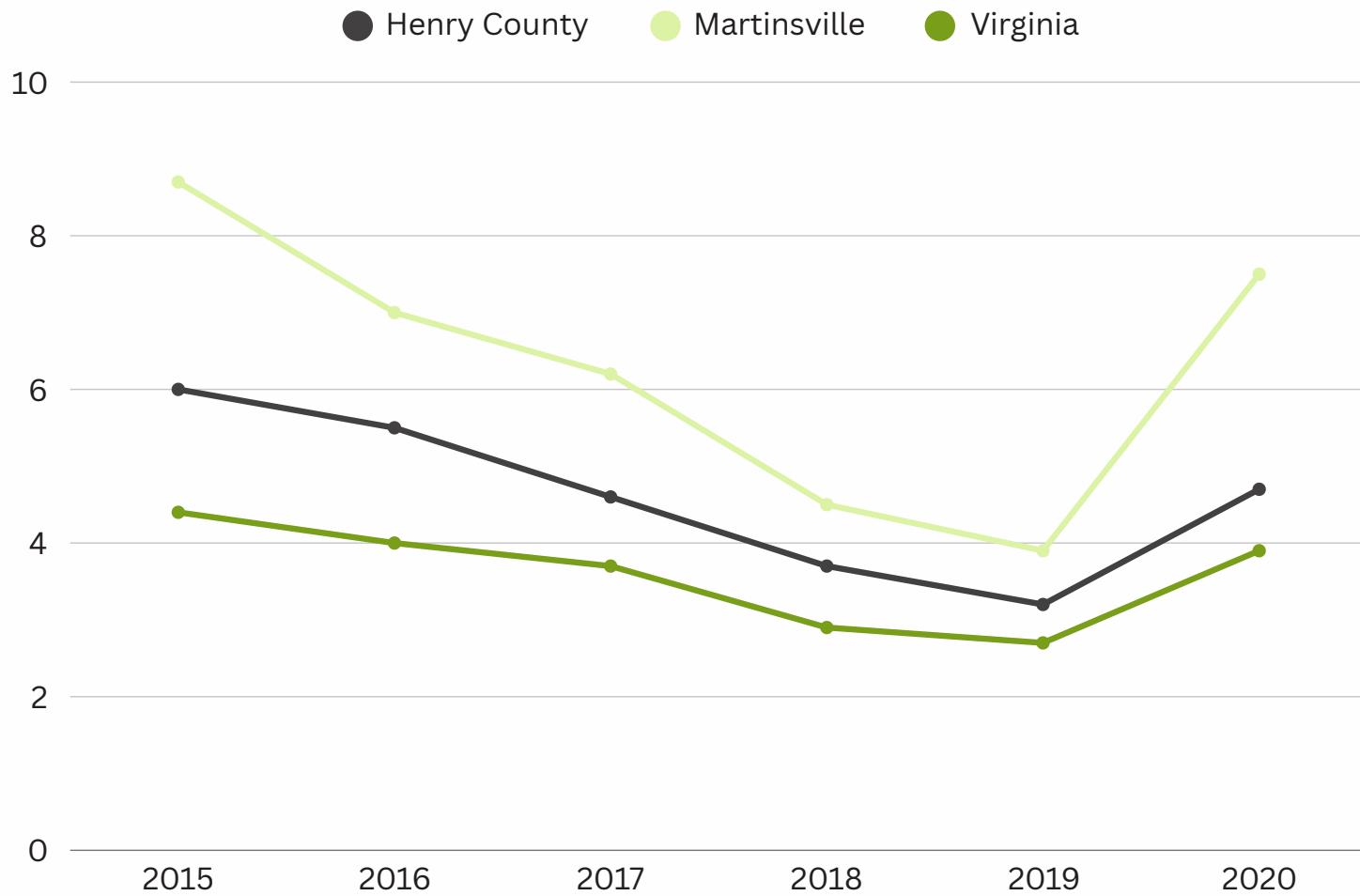


Economy



Economy

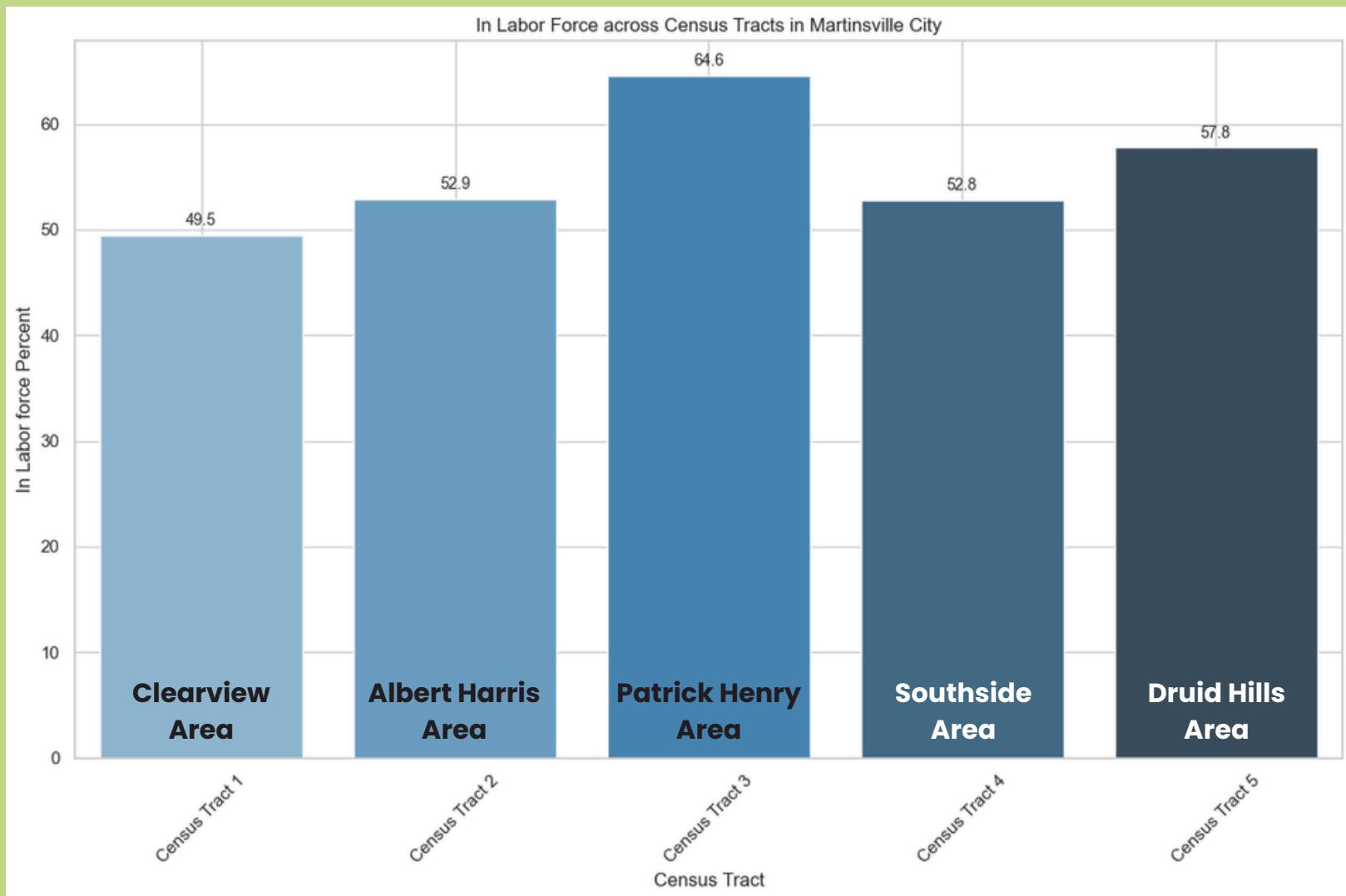
Unemployment



Recommendation:

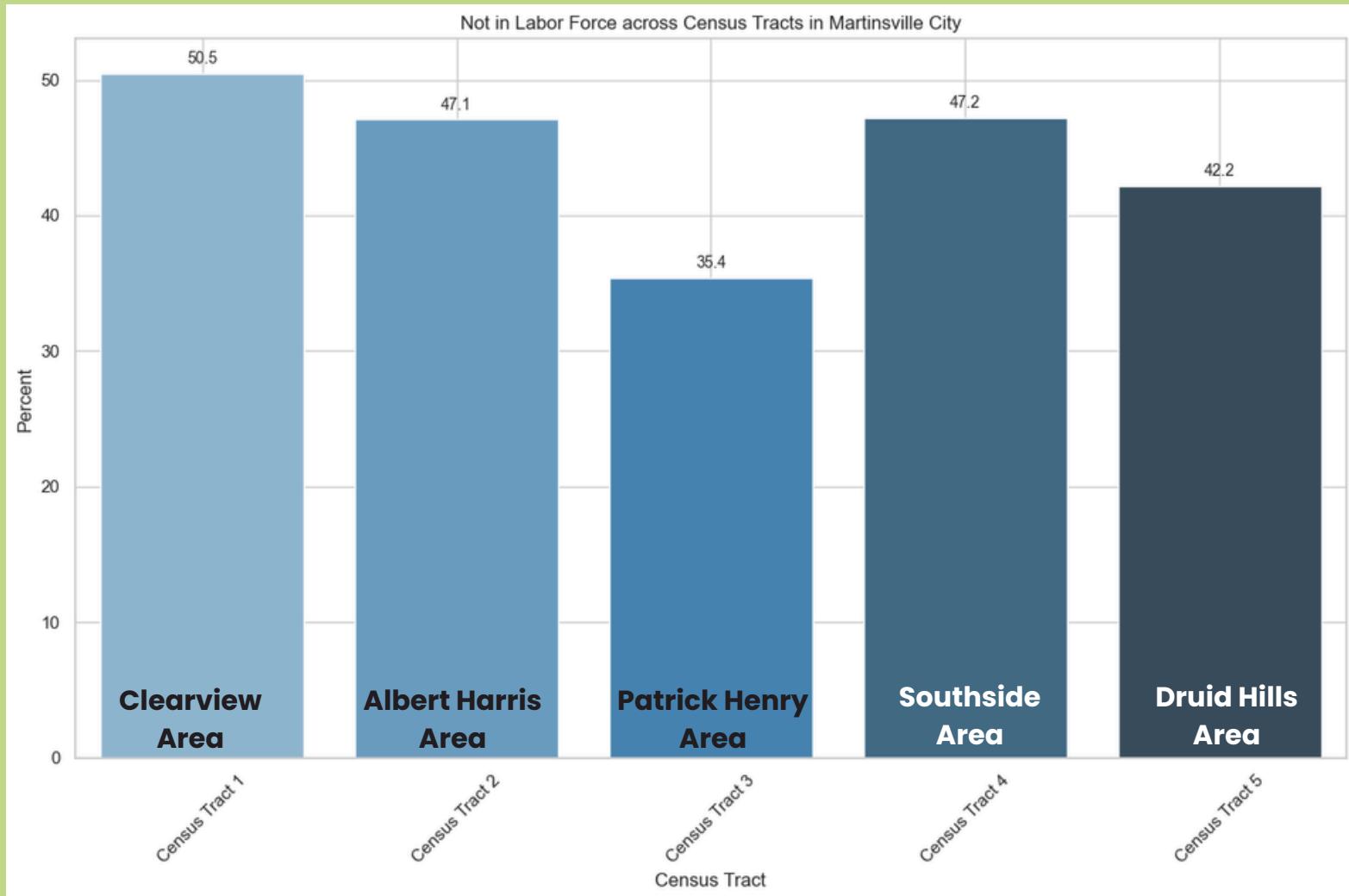
- Use Virginia's performance as a model for policy implementation and support mechanisms in Henry County and Martinsville.

In Labor Force - Martinsville



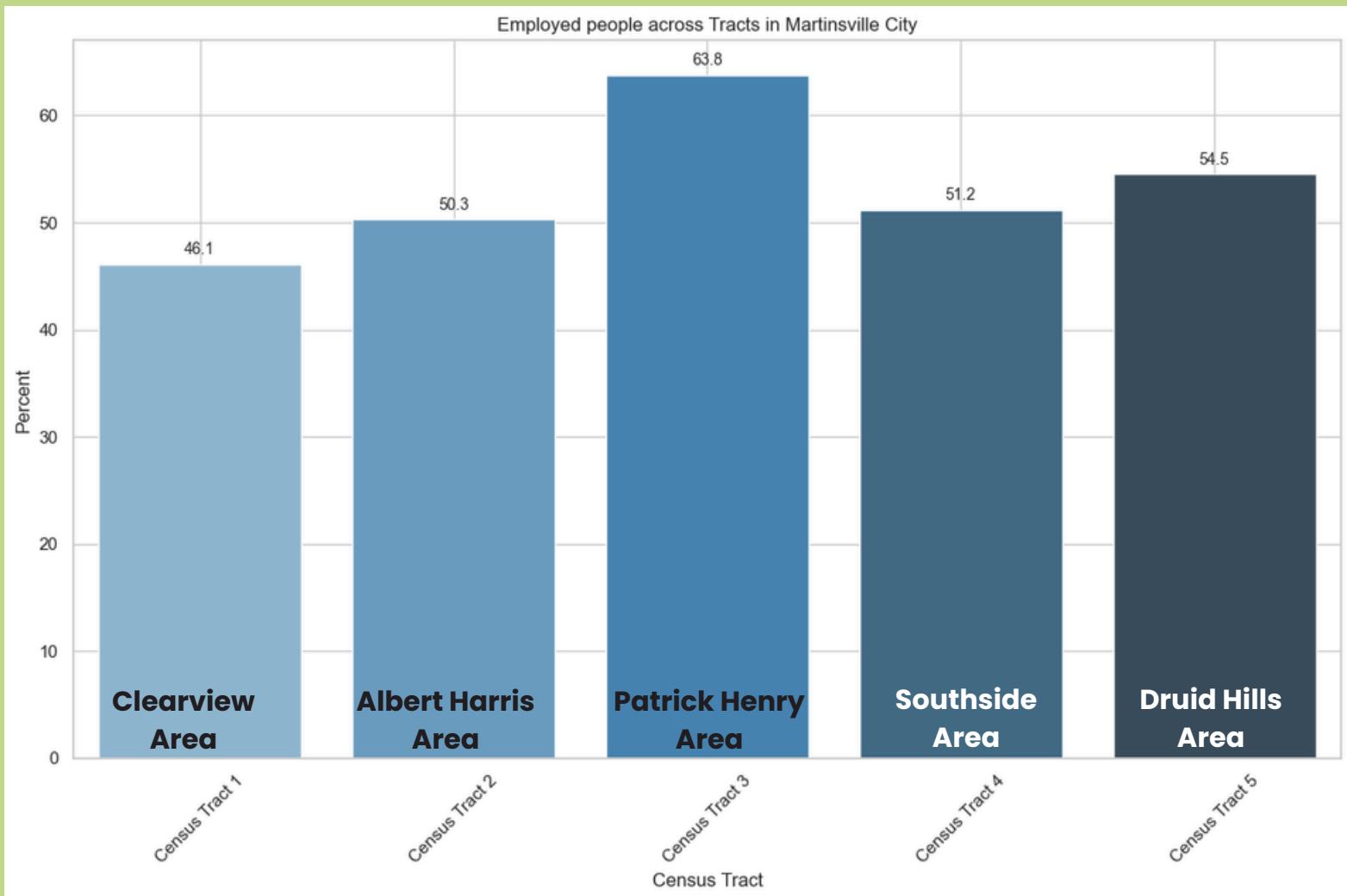
On average, about half of the population in each area is participating in the labor force in Martinsville.

Not In Labor Force - Martinsville



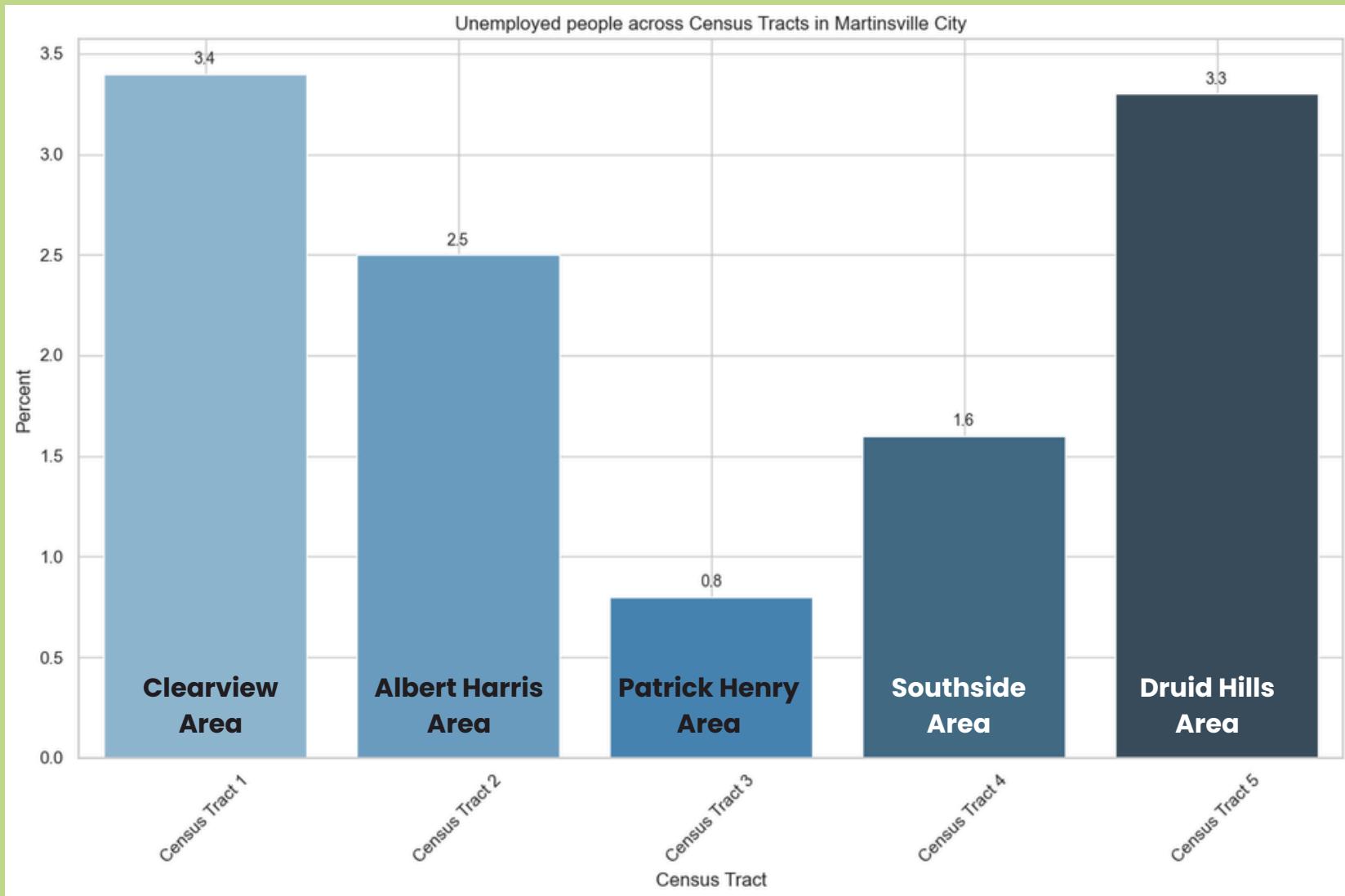
On average, about half of the population in each area is not participating in the labor force in Martinsville.

Employed Residents - Martinsville



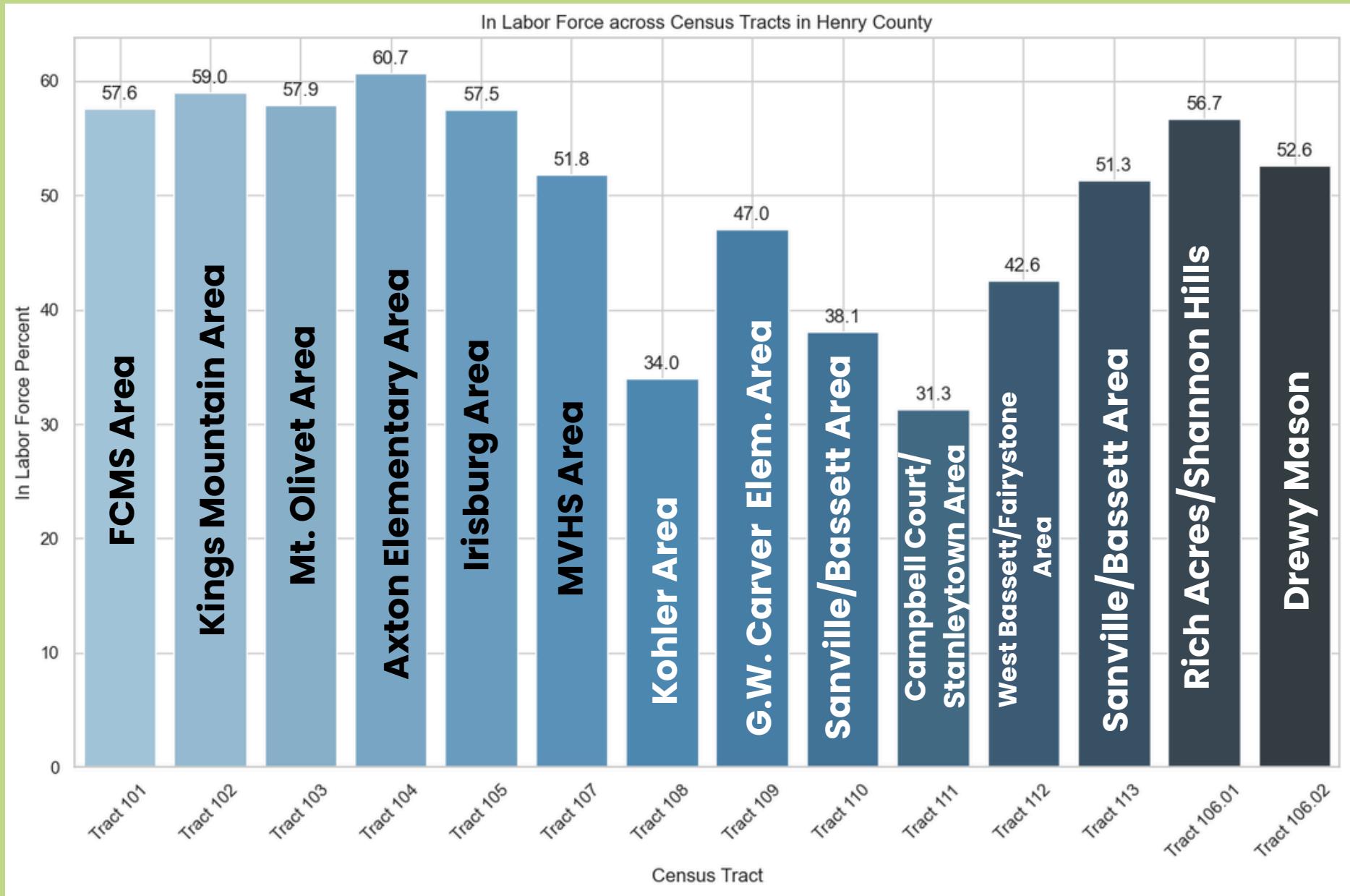
On average, over half of the population in each area of Martinsville is employed.

Unemployed Residents - Martinsville

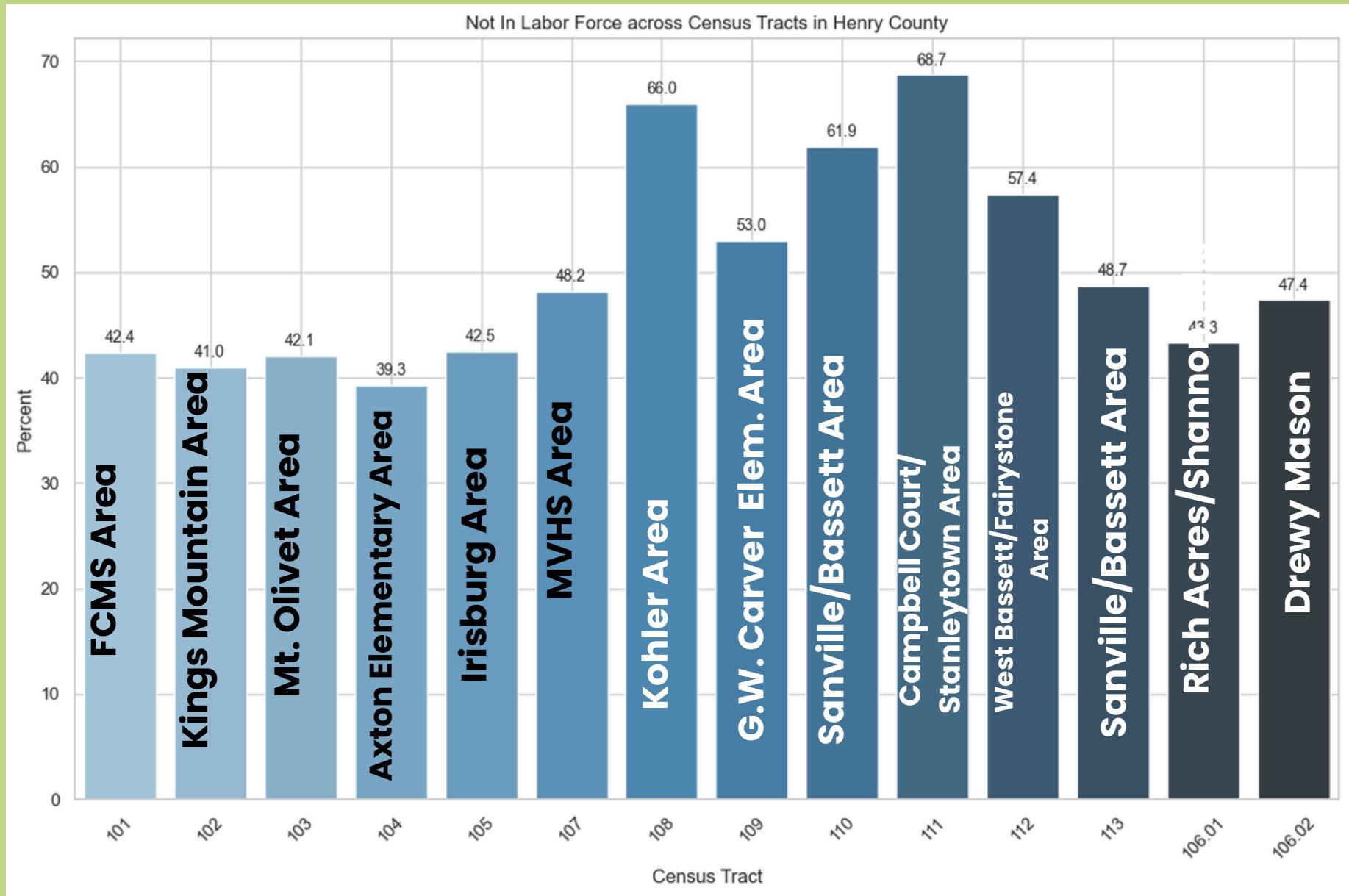


Less than 4% of the population in Martinsville is unemployed.

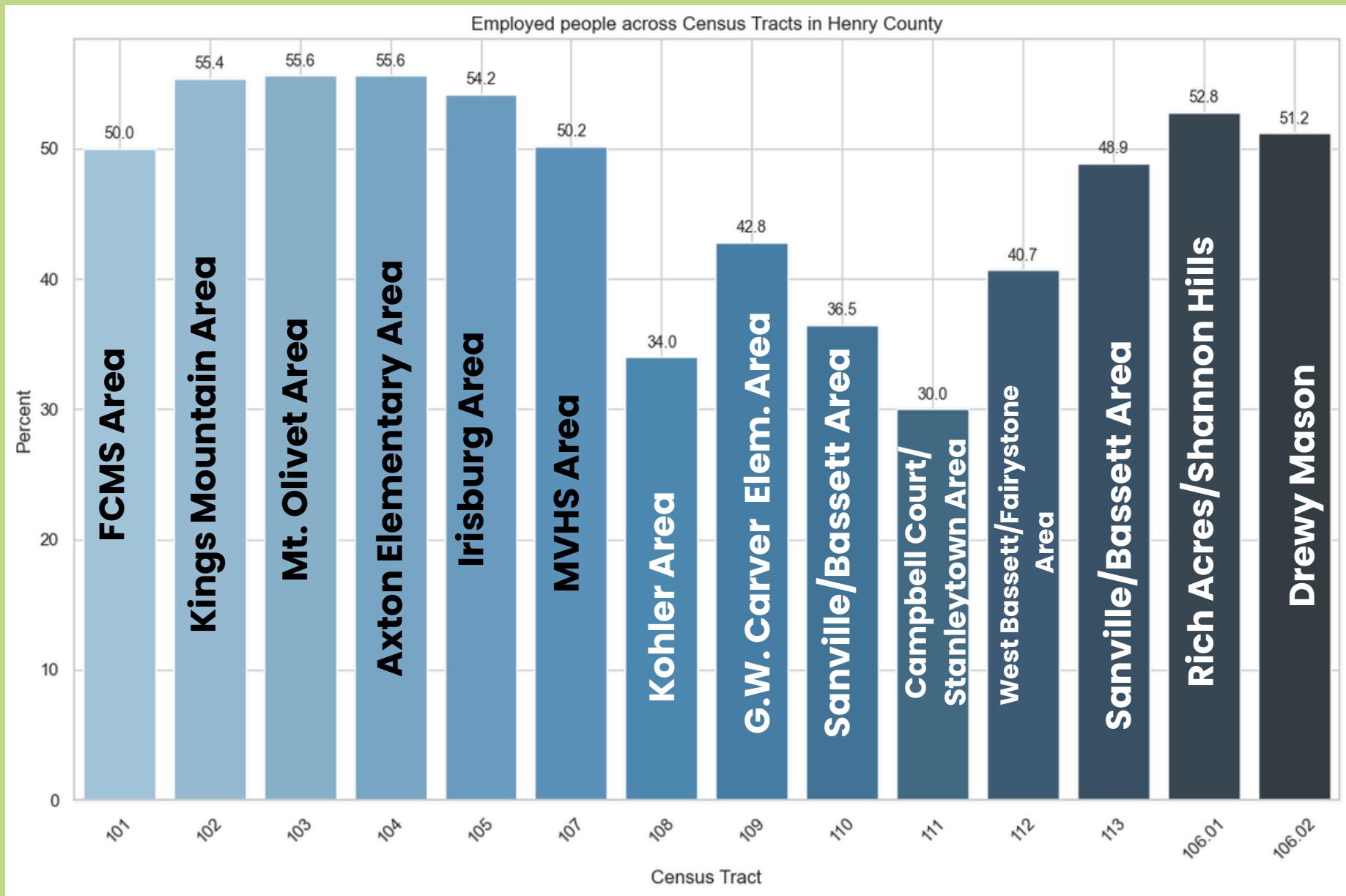
In Labor Force - Henry County



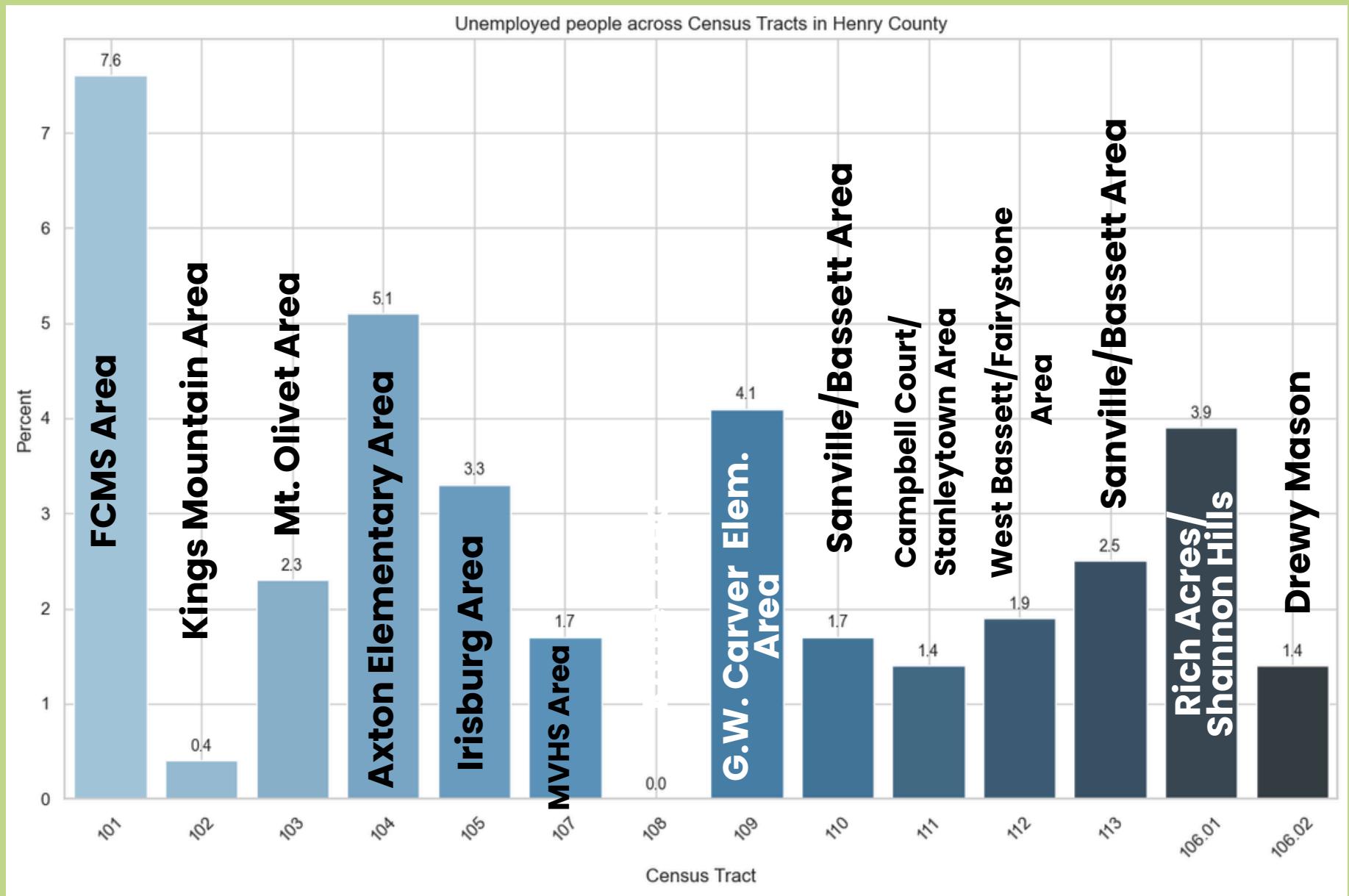
Not In Labor Force - Henry County



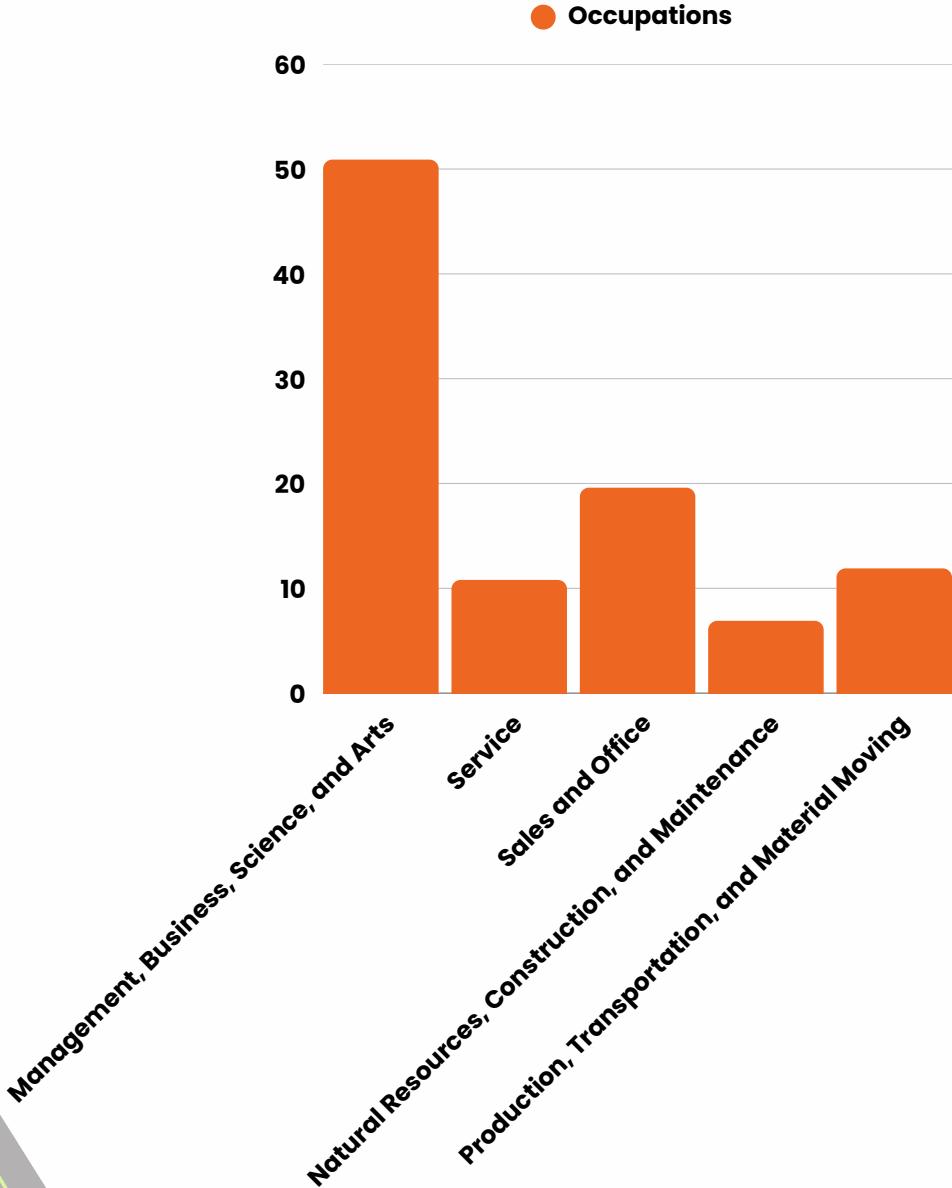
Employed - Henry County



Unemployed - Henry County



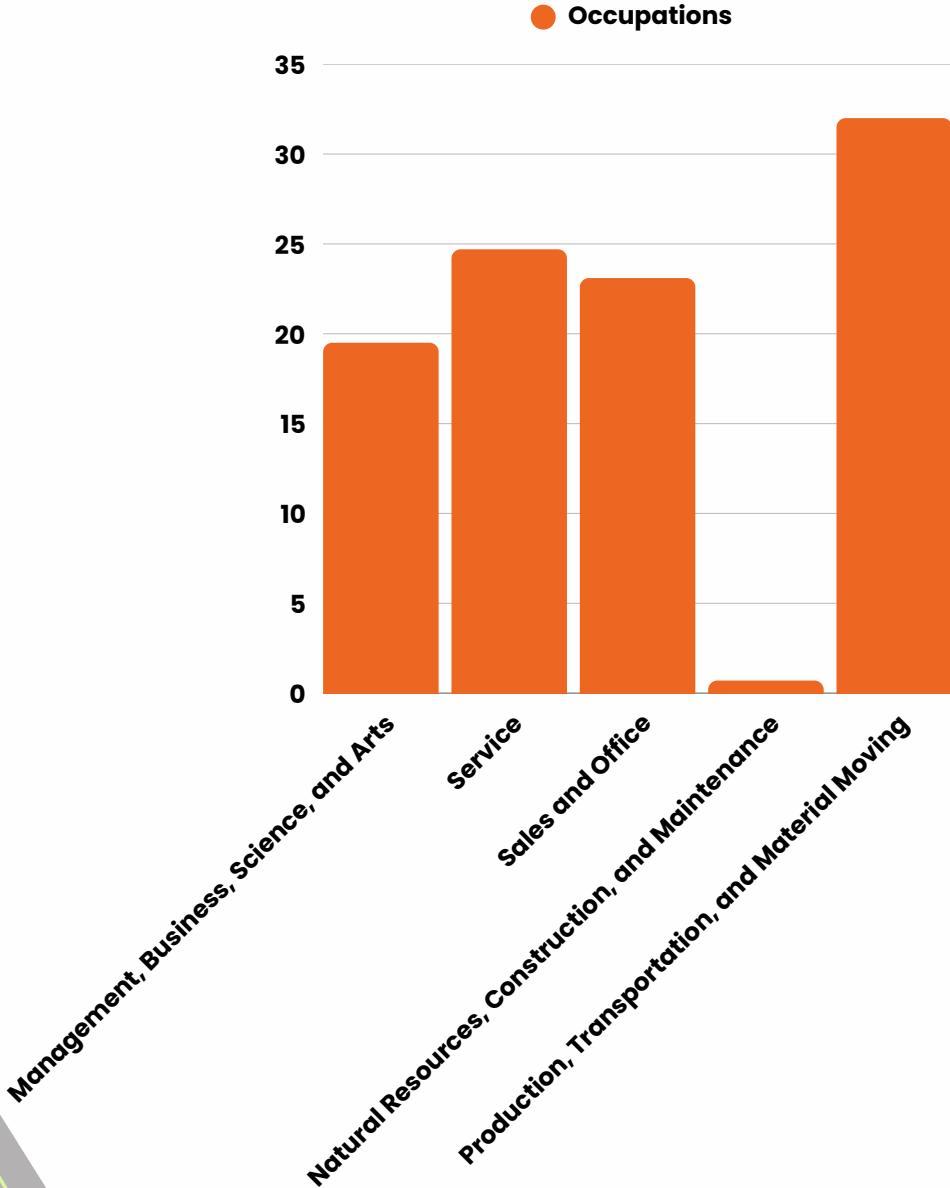
Occupations - Martinsville



Druid Hills Area

highest concentration of individuals employed in Management and Business occupations.

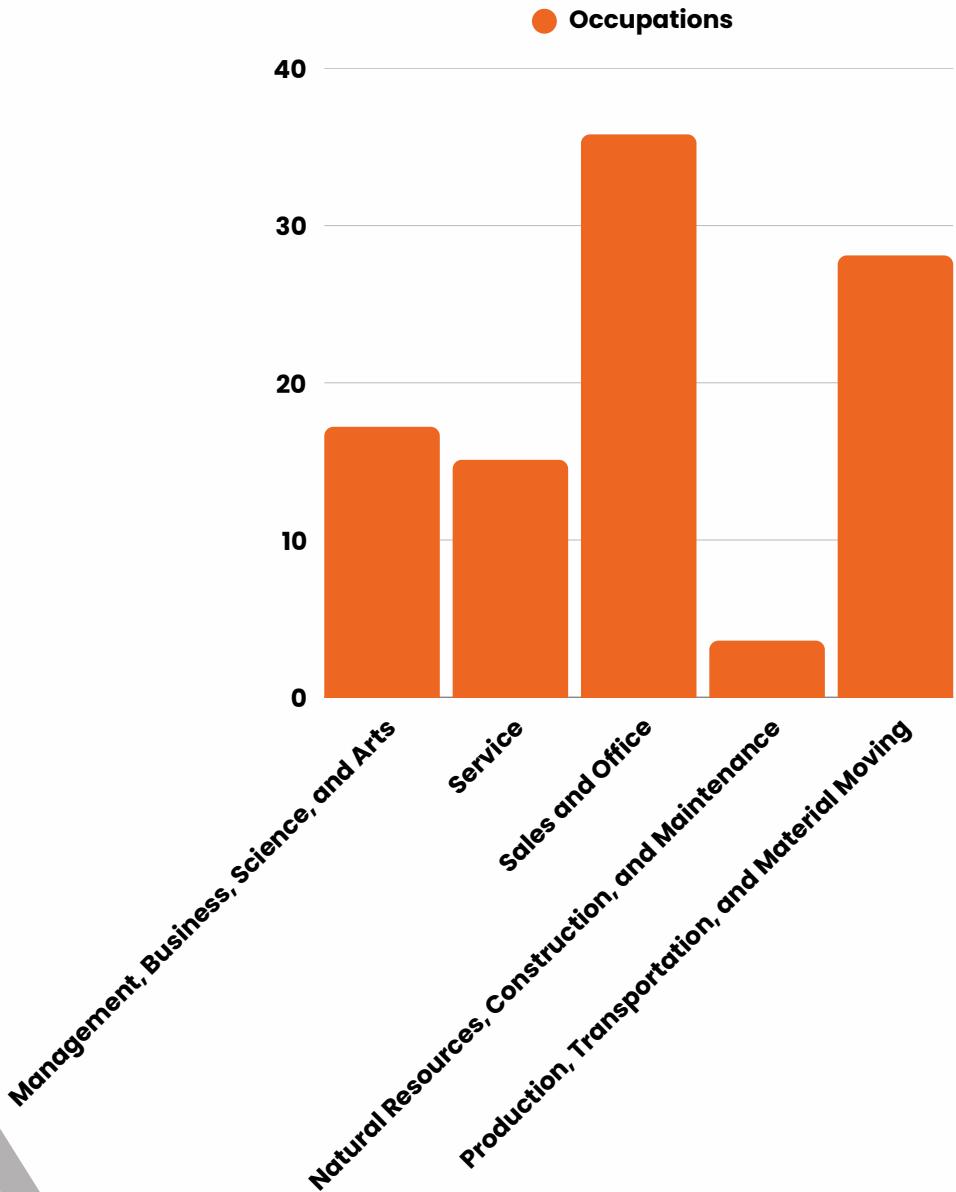
Occupations - Martinsville



Patrick Henry Area

highest concentration of individuals
employed in Production and
Transportation occupations.

Occupations - Martinsville



Albert Harris Area

most diversified occupational profile

Industries - Martinsville

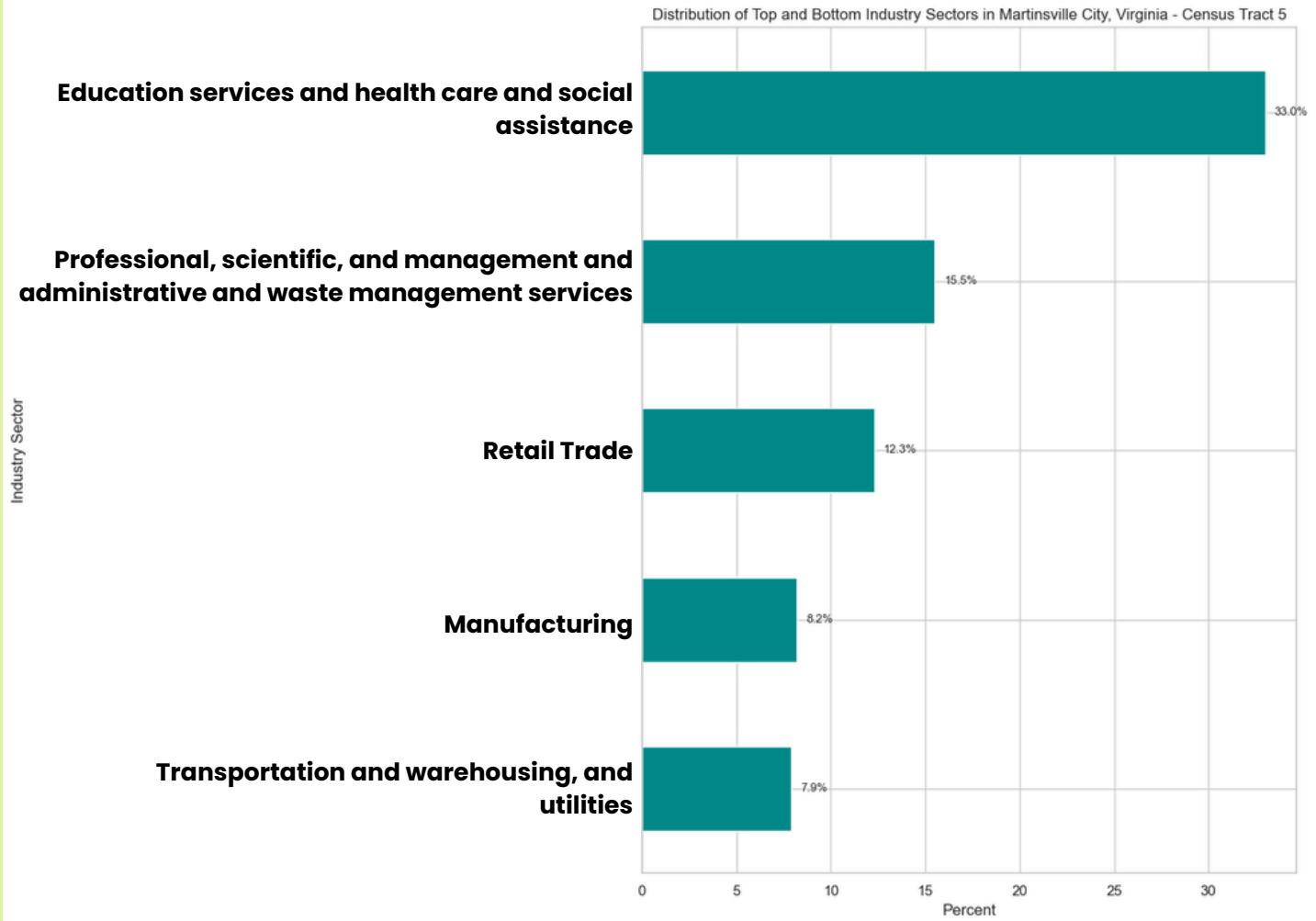


**Information and Agriculture
sectors exhibit minimal
representation across all analyzed
Martinsville areas.**



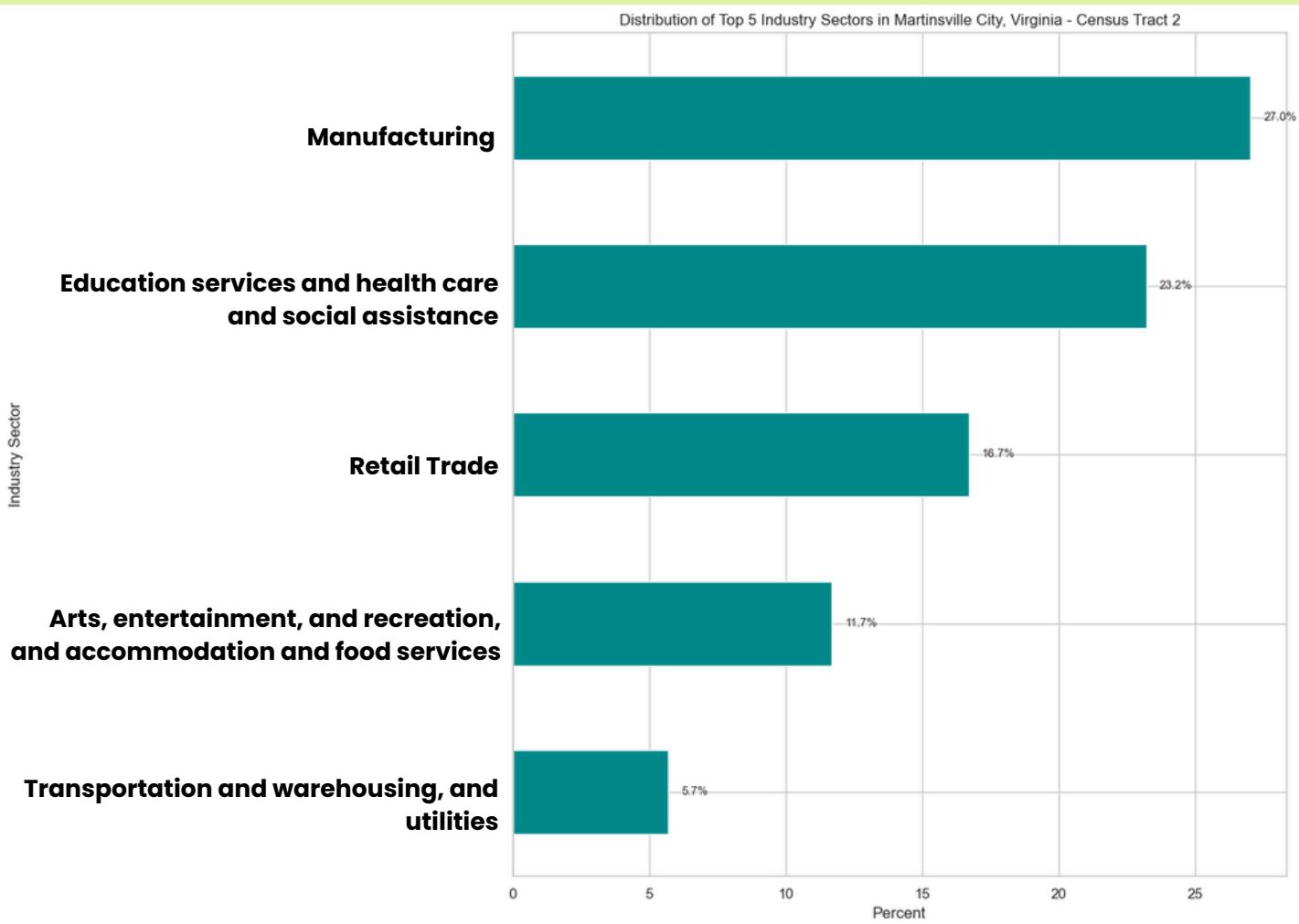
Industries - Martinsville

Druid Hills Area

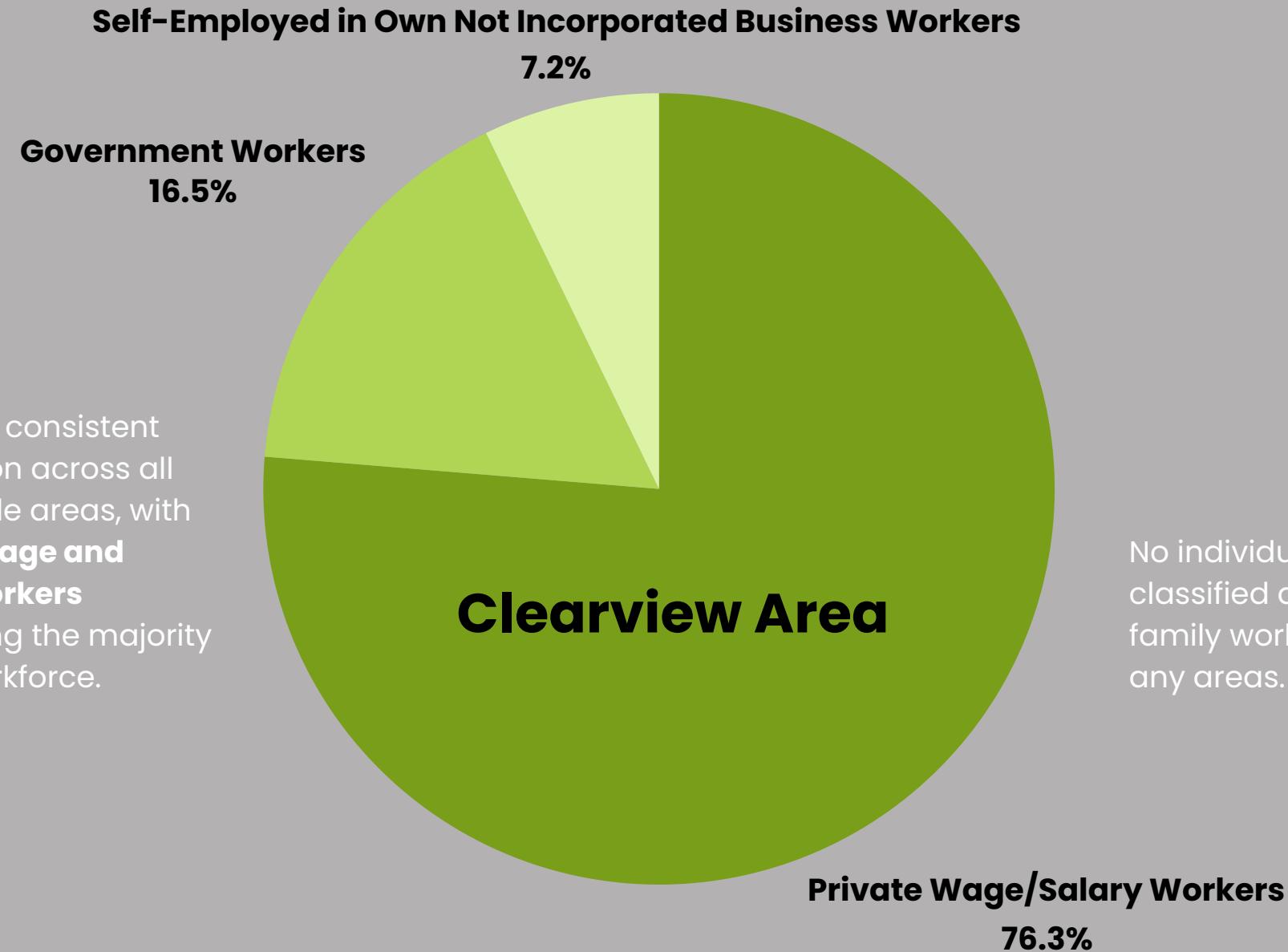


Industries - Martinsville

Albert Harris Area



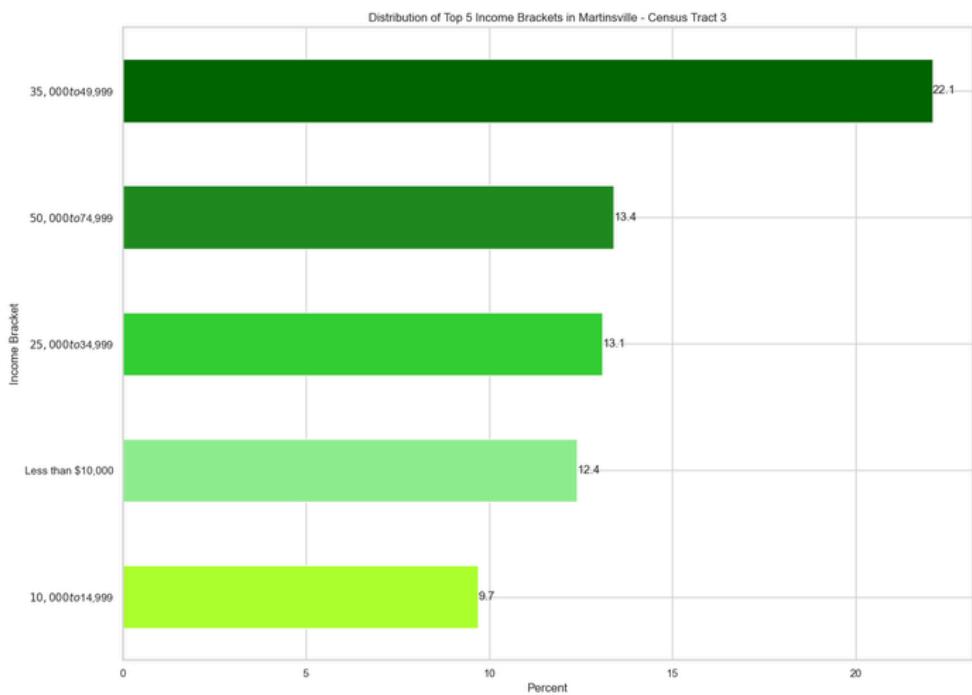
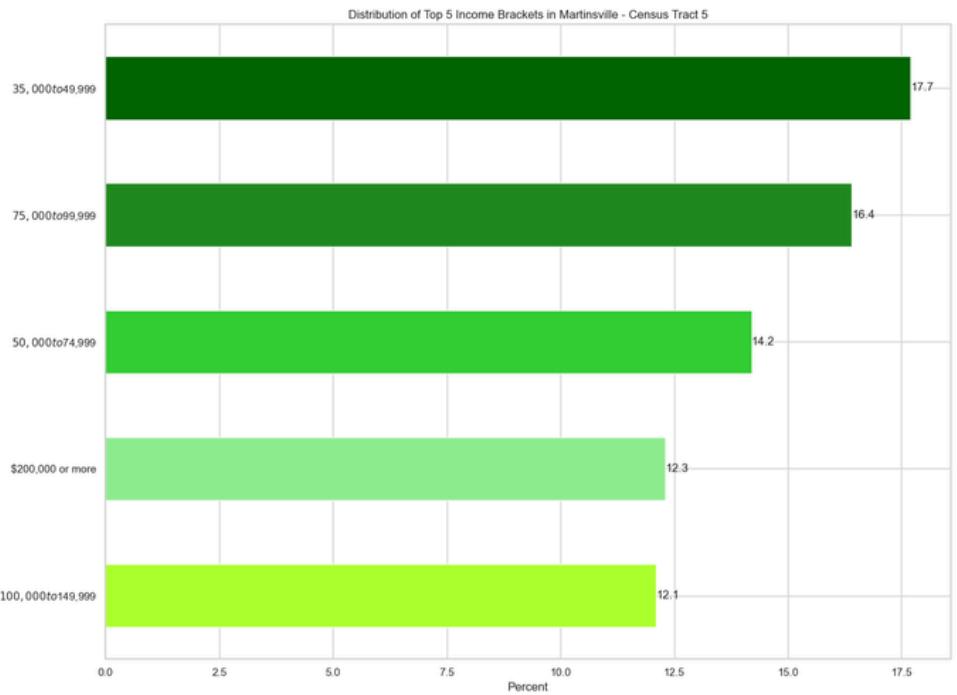
Employment Categories - Martinsville



Income - Martinsville

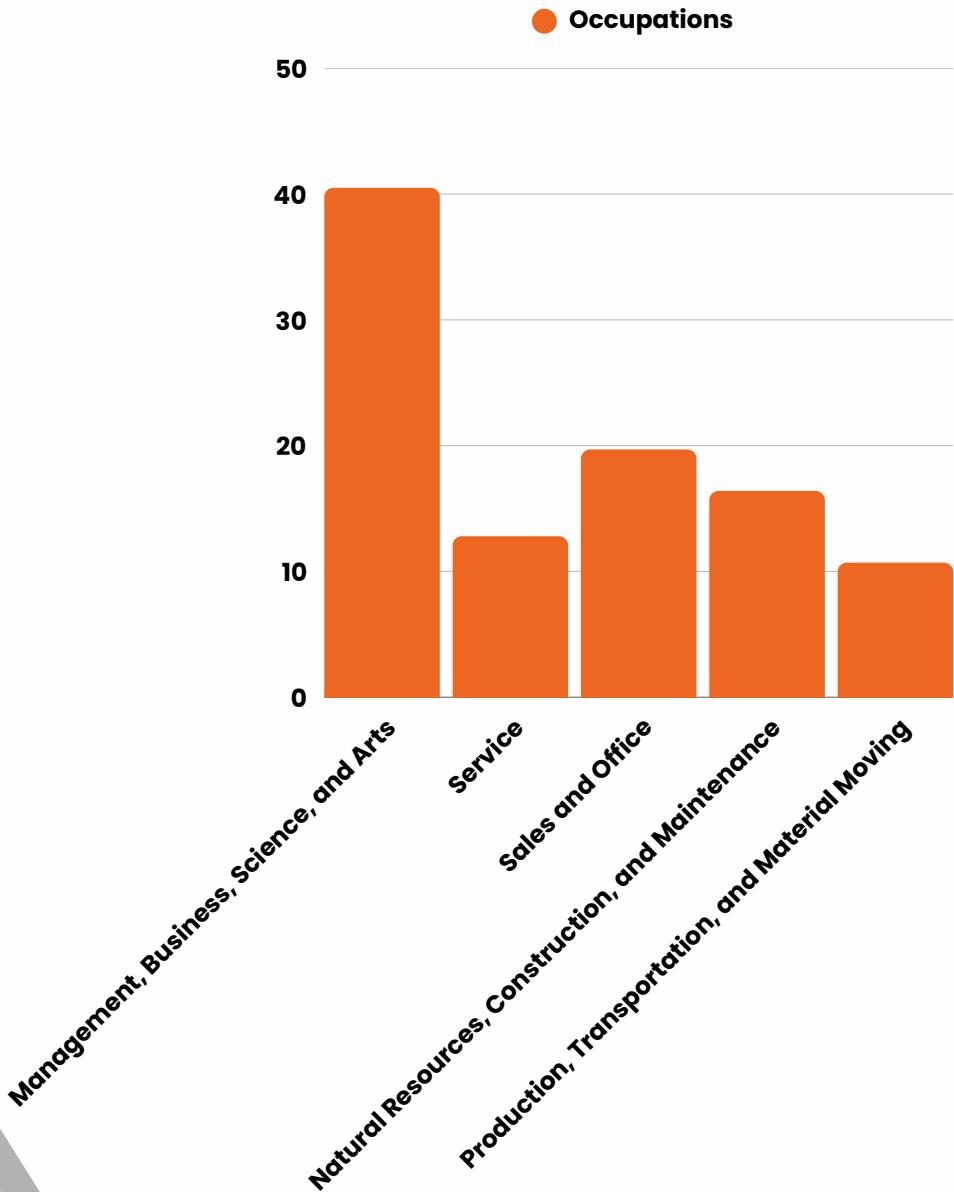
Census tract 5 exhibits a higher concentration of high-income residents compared to other areas. Census tract 2 displays a larger proportion of lower-income individuals. However, it is noteworthy that census tract 2 also includes a higher percentage of households earning \$200,000 or more annually.

Druid Hills



Patrick Henry

Occupations - Henry County



Kings Mountain Road Area

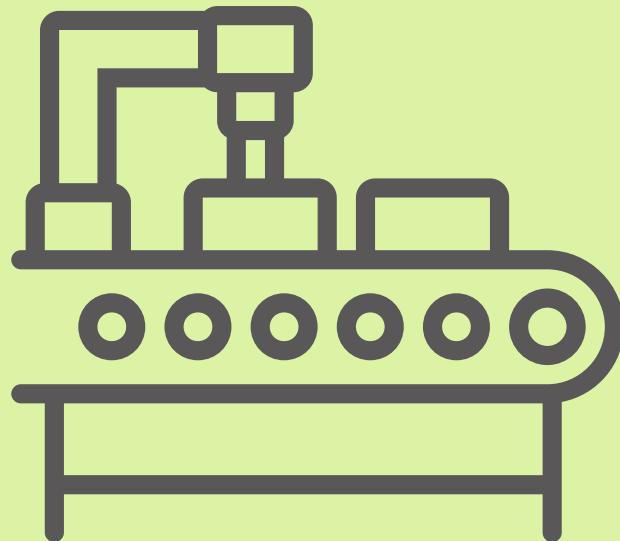
all areas in Henry County share a similar distribution

Industries - Henry County

Primary Industries in Henry County



Education Services



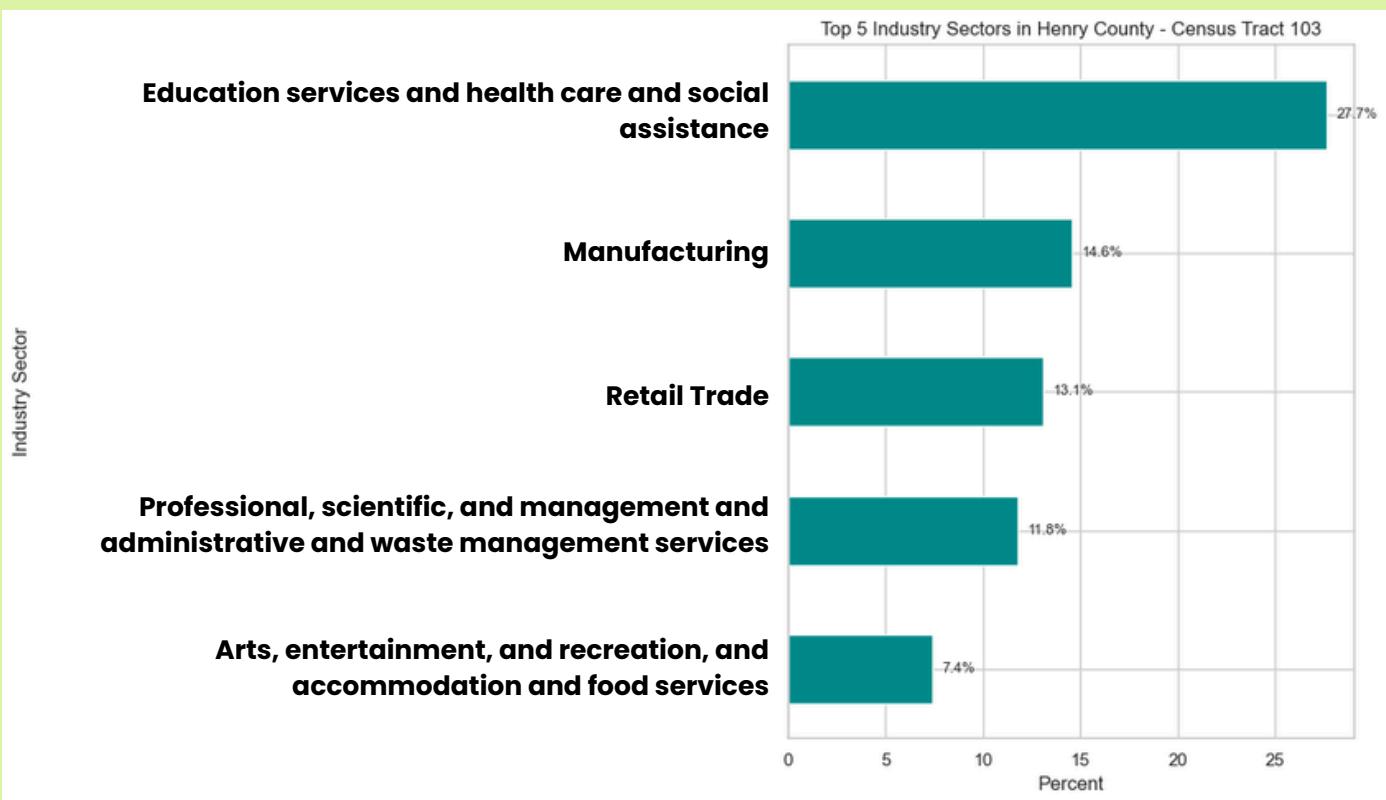
Manufacturing



Trade

Industries - Henry County

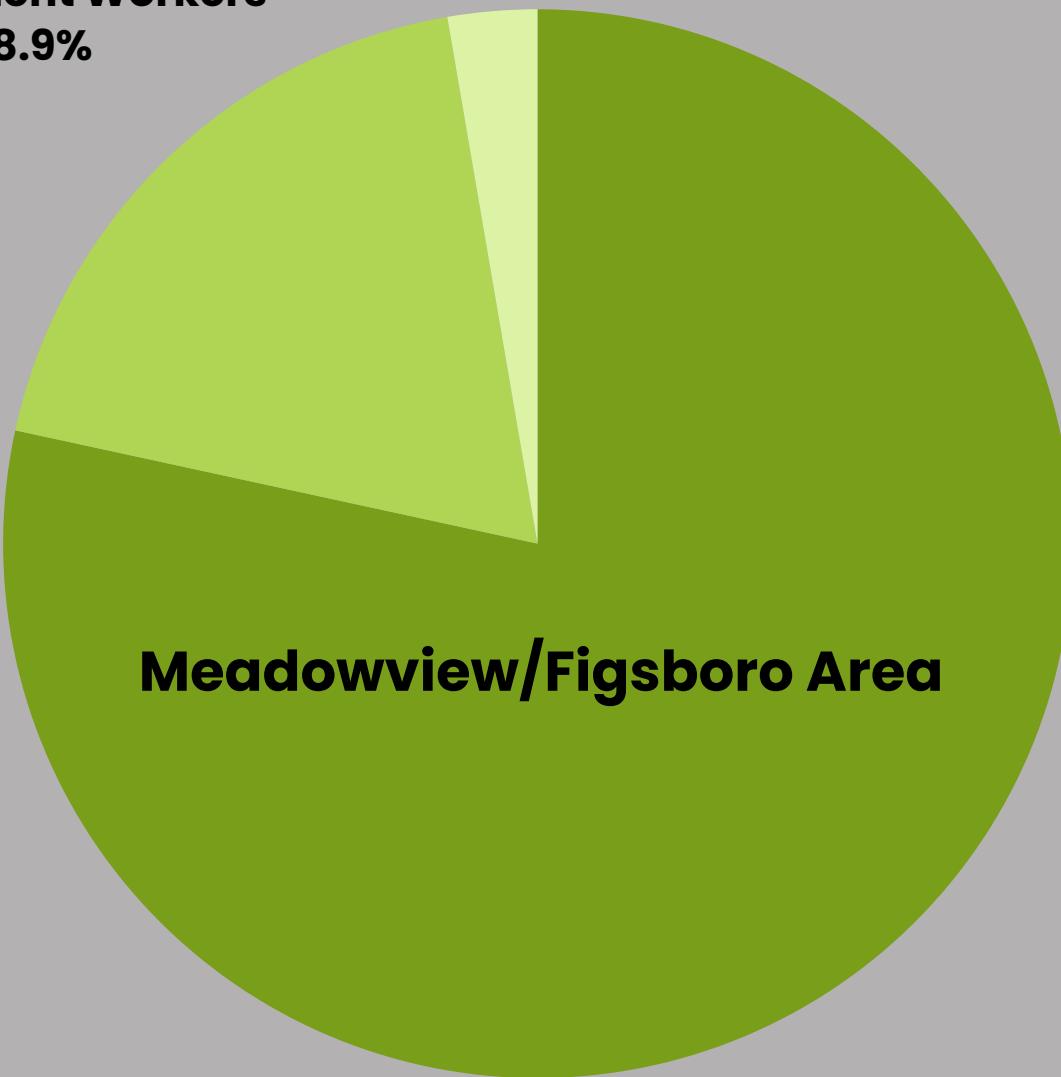
Mt. Olivet Area



Employment Categories - Henry County

Government Workers

18.9%



There is a consistent distribution across all Martinsville areas, with **private wage and salary workers** comprising the majority of the workforce.

No individuals were classified as unpaid family workers within any areas.

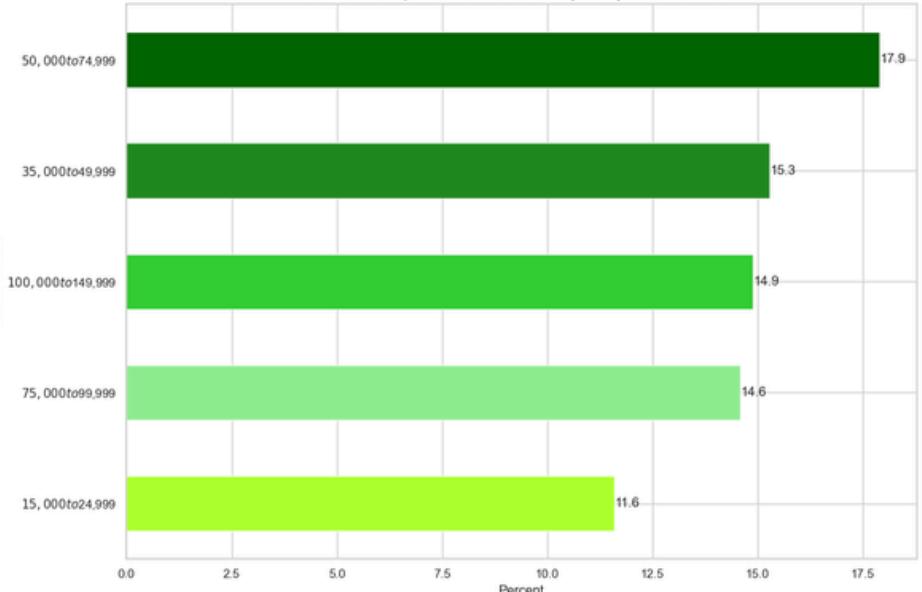
Private Wage/Salary Workers

78.4%

Income - Henry County

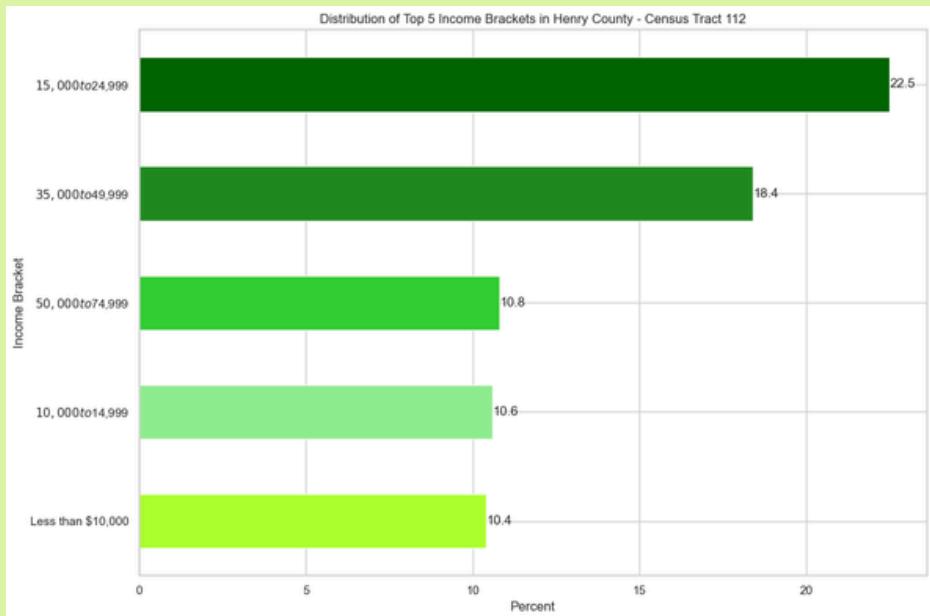
Axton

Distribution of Top 5 Income Brackets in Henry County - Census Tract 104



West Bassett/Fairystone

Distribution of Top 5 Income Brackets in Henry County - Census Tract 112



Future Work

Predictions:

Utilize machine learning algorithms to predict future trends based on existing data, allowing us to stay ahead. More historical data is needed to enhance the accuracy of these predictions. Given the limited time, further research is necessary to gather this data.

Interactive Dashboards:

Develop interactive dashboards to showcase all visualizations, enabling better data exploration and insight generation.

Statistical Testing:

Conduct rigorous statistical tests to validate assumptions. For instance, the assumption that the dropout rate was higher in 2021 due to COVID-19 needs statistical evidence to be substantiated.

Correlation Analysis:

Perform correlation analysis to explore and confirm relationships between variables. For example, while we suspect a high poverty level in certain areas may be linked to disability, correlation analysis can help strengthen this argument and provide clearer insights.

Thank You