

**Epidemiology Report: The Impact of Socioeconomic Disparities on Life Expectancy and Health Outcomes in Ypsilanti, Washtenaw County, Michigan**

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Washtenaw Optimal Wellness President's Report

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## **The Impact of Socioeconomic Disparities on Life Expectancy and Health Outcomes in Ypsilanti, Washtenaw County, Michigan**

### **Introduction**

Scientific literature consistently indicates that socioeconomic factors play a major role in life expectancy and health outcomes (Wirayuda & Chan, 2021). Income inequality is the driver of health disparities. Lower-income individuals have higher morbidity and mortality rates due to limited access to resources (Truesdale & Jencks, 2016). Other contributors to health disparities are education access, health care availability, and housing stability. These factors disproportionately affect racial and ethnic minorities (Dwyer-Lindgren et al., 2024).

The inequalities in life expectancy and health outcomes are evident in Washtenaw County. Washtenaw County is the 8th most economically segregated metro area in the United States. Even though life expectancy and health outcomes appear to be good overall in Washtenaw County compared to the rest of the state of Michigan, the disparities in life expectancy and health outcomes are stark. By most measures, Ann Arbor does exceedingly well with health outcomes, life expectancy, and economic opportunity. However, Ypsilanti's life expectancy and health outcomes are poor, and the economic opportunity is very low (OCED, 2021).

This report examines the impact of socioeconomic disparities on life expectancy and health outcomes in Washtenaw County. It highlights the differences between Ypsilanti and Ann Arbor and analyzes data from various sources from 2017 to 2022. It also highlights the vast differences in life expectancy between White residents in Ann Arbor and Black residents in Ypsilanti.

### **Methodology**

This study is an ecological study design examining the association between socioeconomic factors and health outcomes in Washtenaw County. An ecological study allows for the comparison of health outcomes of a group or population in a geographical area. This design allows for a comparison of Ypsilanti to other more affluent areas like Ann Arbor to understand the impact of socioeconomic factors on life expectancy and health outcomes in Washtenaw County.

The study population consists of all Washtenaw County residents and includes data based on race. The data was collected and assimilated at the census tract, zip code, and minor civil division levels for the years 2017 to 2022. This assimilation allowed for a comparative analysis of socioeconomic factors and health outcomes.

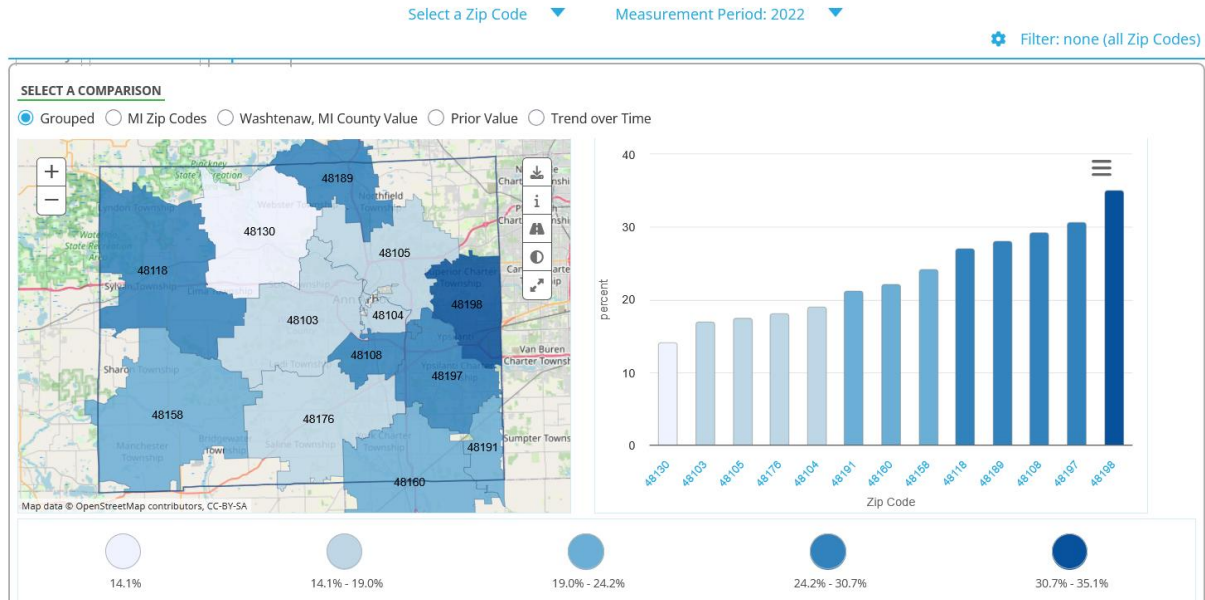
Data was collected and assimilated at the census tract, zip code, and minor civil division levels from the Washtenaw Opportunity Index, ALICE Report, 2020 Census data, and local epidemiology reports from the Washtenaw County Health Department. Since this is an ecological study, descriptive statistics were used, and prevalence rates were calculated to explore population trends for the variables.

### **Results**

Households in Washtenaw County that are the most asset-limited, income-constrained, and employed (ALICE) are primarily located in the Ypsilanti area. Zip codes 48197 and 48198 in

Ypsilanti are above 30% on the ALICE index, whereas most of Ann Arbor is below 20% on the ALICE index (WCHD, 2022).

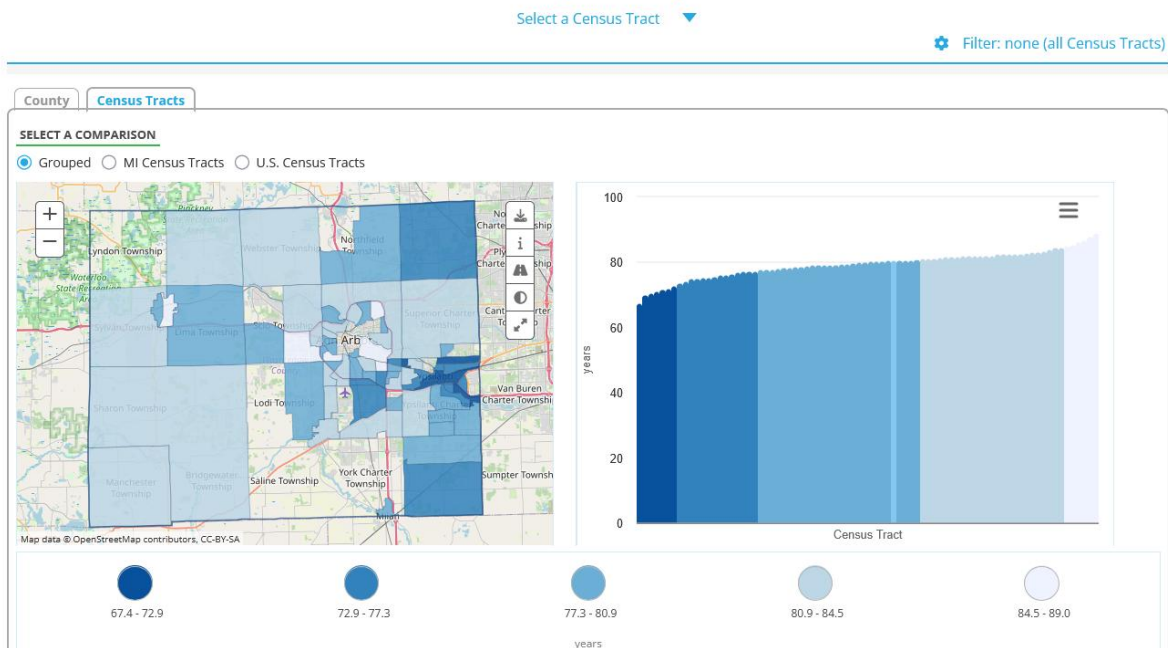
### Households that are Asset Limited, Income Constrained, Employed (ALICE) ▾



[Image Source: [WCHD](#)]

Most of Ann Arbor is above the national average for life expectancy, but almost all of Ypsilanti is below the national average for life expectancy, according to census tract data (WCHD, 2020).

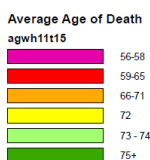
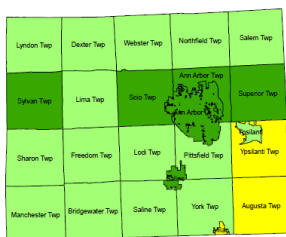
### Life Expectancy ▾



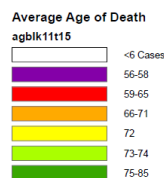
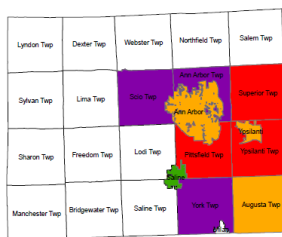
[Image Source: [WCHD](#)]

The Black population's life expectancy is much lower than the White population. According to a 2017 report by the Washtenaw County Epidemiologist, Black residents in Washtenaw County have an average age of death of 56 to 71 years, and White residents have an average age of death of 72 to 85 years (Waller, 2017).

**Average Age of Death - White Residents**  
Washtenaw County Residents by Minor Civil Division  
2011-2015



**Average Age of Death - Black Residents**  
Washtenaw County Residents by Minor Civil Division  
2011-2015



1. Even using the same scale, only Saline City has same age range for Blacks and Whites.
2. All of the minor civil divisions (with the exception of Saline) have average age of death for blacks 4 to 18 years younger than those for Whites' average ages of death.
3. Ann Arbor, Scio and York Townships average ages of death for Black residents are age 56 for all three.
4. MDHHS suppresses cells < 6 cases.



[Image Source: [Waller](#)]

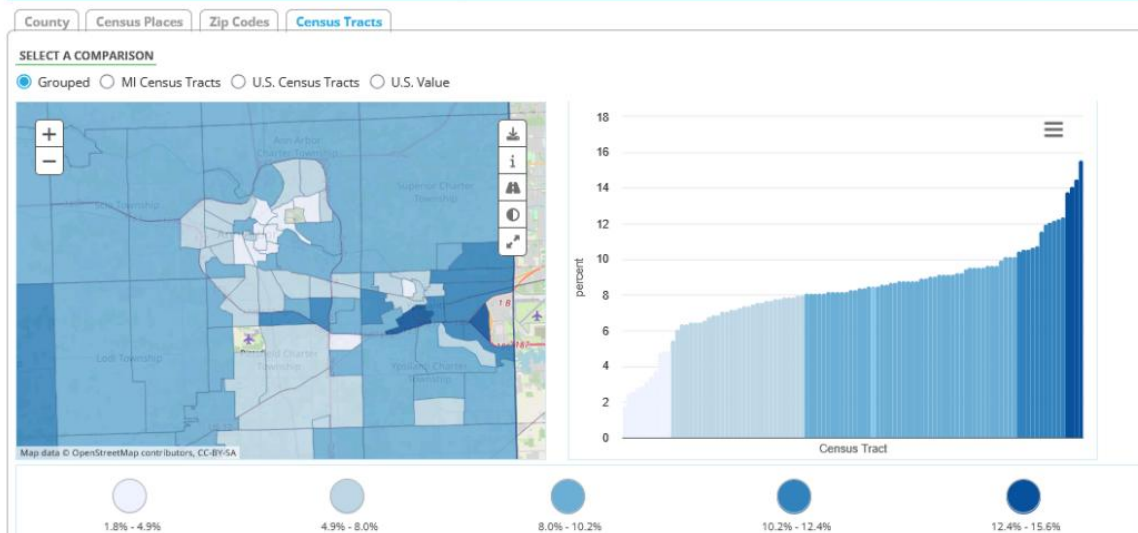
The percentage of adults with diagnosed diabetes is much higher in Ypsilanti (10.2% to 17.4%) compared to Ann Arbor (1.8% to 12.2%), according to census tract data (WCHD, 2022).

### Adults with Diabetes

Select a Census Tract

Measurement Period: 2022

Filter: none (all Census Tracts)



[Image Source: [WCHD](#)]

## Analysis

*Table 1: Comparison of Selected Socioeconomic and Health Indicators for Ypsilanti and Ann Arbor*

Indicator	Ypsilanti	Ann Arbor
ALICE Index (Zip Codes)	>30%	<20%
Life Expectancy (Census Tracts)	Below National Avg.	Above National Avg.
Diabetes Prevalence (Census Tracts)	10.2% - 17.4%	1.8% - 12.2%
Black Residents' Average Age of Death (2017)	56-71 years	Not Directly Comparable
White Residents' Average Age of Death (2017)	72-85 years	Not Directly Comparable

*Table created by the author. Source: Health For All Washtenaw, ALICE Report, 2020 Census data, Washtenaw County Epidemiologist Report.*

## Discussion

The findings of this analysis show stark differences in socioeconomic status that correlate with life expectancy and health outcomes in Washtenaw County. The observed differences in life expectancy and chronic disease prevalence show the inequality experienced by Ypsilanti residents compared to Ann Arbor Residents, especially the African American population. These observations are consistent with broader U.S. trends, which indicate that socioeconomic factors are associated with life expectancy and health outcomes, and Black citizens are disproportionately impacted by these disparities (Macias-Konstantopoulos et al., 2023).

Washtenaw County has a history of discriminatory housing practices, and Ypsilanti has had limited economic opportunities. These factors are likely to contribute to the current socioeconomic divide and its associated health consequences. Systemic racism likely continues to play a role in perpetuating these inequities.

Ecological studies have limitations. An ecological study examines associations at a population level, so causality cannot be established. In addition, the use of secondary data may include biases or limitations and may contain inaccuracies. The strengths of this study are its use of multiple reputable sources to provide a solid overview of disparities.

## Conclusion

This study demonstrates the impact of socioeconomic disparities on life expectancy and health outcomes in Washtenaw County. It reveals a stark contrast between Ypsilanti and Ann Arbor. Ypsilanti residents are experiencing significantly lower life expectancy, higher diabetes prevalence, and greater economic challenges as measured by the ALICE index. Most concerning is the substantial gap in average age of death between Black residents (56-71 years) and White residents (72-85 years), highlighting how these disparities disproportionately affect racial minorities.

The findings of this study have important implications for public health in Washtenaw County. They indicate a need for policies and interventions that address the root causes of health

disparities. Poverty, systemic racism, and lack of access to education, healthy food, and healthcare are targets for interventions and policy changes. Achieving health equity in Washtenaw County requires a multi-pronged approach that tackles social determinants of health (Thornton et al., 2016). By addressing the root causes of these disparities, we can work toward a future where life expectancy and health outcomes are not determined by zip code or race in Washtenaw County.

### **Recommendations**

Addressing the socioeconomic disparities' impact on health in Ypsilanti requires a multi-tiered approach. Investing in poverty reduction programs, implementing policies that reduce poverty, improving access to healthcare, addressing systemic racism, and building community-based programs to promote healthy lifestyles are necessary to improve life expectancy and health outcomes in Ypsilanti.

Targeted interventions that are culturally appropriate for Ypsilanti are needed.

Additional data monitoring and surveillance of health outcomes and socioeconomic conditions are needed to track progress and identify additional or emerging disparities.

Additional studies are needed to address other factors that may contribute to lower life expectancy and poor health outcomes in Ypsilanti. Other factors that may contribute to these disparities may be environmental, cultural factors, access to healthy foods, access to healthcare, access to education, and the impact of systemic racism.

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