



# Health and Its Social Context in Indianapolis' Near Northwest Community

A Baseline Assessment for the Diabetes Impact Project-Indianapolis  
Neighborhoods (DIP-IN)

## **Diabetes Impact Project – Indianapolis Neighborhoods**

The Diabetes Impact Project – Indianapolis Neighborhoods (DIP-IN) is an eight-year partnership to reduce the burden of diabetes that is disproportionately impacting three areas of the city, the Near Northwest, Near West and the Northeast. Partners include community residents, community-based organizations, Eskenazi Health, Marion County Public Health Department, and many others.

For more information about DIP-IN, please visit our website at:

<https://dipin.indianapolis.iu.edu/index.html>



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## Introduction

Communities are much like trees. Healthy communities – like healthy trees – live longer, more flourishing lives. In order to thrive, trees require the right environment, including nutrients in the soil, as well as water and sunlight in the right amount. So, too, do the people of a community.

A quick glance at the appearance of a tree gives us a good indication of its health. A tree full of green, well-shaped leaves, flexible branches, and intact bark are signs of a healthy tree, while wilted leaves, bare patches with dry branches, and marks in the trunk tell us that something could be wrong beneath the surface. We observe similar signs of the health status of a community when we talk about the community's rates of disease or early death.

One such outward sign that the health of the Near Northwest deserves attention came to light in 2017 when multiple partners were convened to address the high burden of diabetes in certain communities of Indianapolis. At that time, the diagnosed diabetes prevalence rates in three neighborhoods, including the Near Northwest, “range(d) from 15% to over 17%, rates that [were] 1.5 to 2 times that of the national and global averages” [DIP-IN 1.0 Proposal to Eli Lilly and Company].



Image source: The Oregonian, 10/21/2010.

[http://blog.oregonlive.com/kympokorny/2010/10/birch\\_trees\\_losing\\_ground.html](http://blog.oregonlive.com/kympokorny/2010/10/birch_trees_losing_ground.html)

Such outward signs rightly draw our attention, but they do not tell us what is at the root of the problem or what remedies are needed. For that we must take a much closer look, examining a range of outward signs— as well as what lies beneath the surface— and throughout the social and physical environment in which the community is embedded.

## Purpose

Where you live should not determine how long you live. Residents living, working, playing, and aging in the Near Northwest community of Indianapolis today deserve the same opportunity for a long and healthy life as other people living around the Indianapolis metropolitan area. The driving purpose of the 8-year project known as the Diabetes Impact Project – Indianapolis Neighborhoods (DIP-IN) is to reduce the burden of diabetes that is disproportionately impacting the three DIP-IN communities and improve the length and quality of life for all residents of the area. We want to close the gap that exists between this community and others here in the Indianapolis metro. In this report, we gather and summarize data that **describes the health and social context for health in the Near Northwest at the start of DIP-IN in 2018**. This report will be updated to reflect changes in the community at the conclusion of the project (2026).

Figure 1. DIP-IN Communities within Marion County

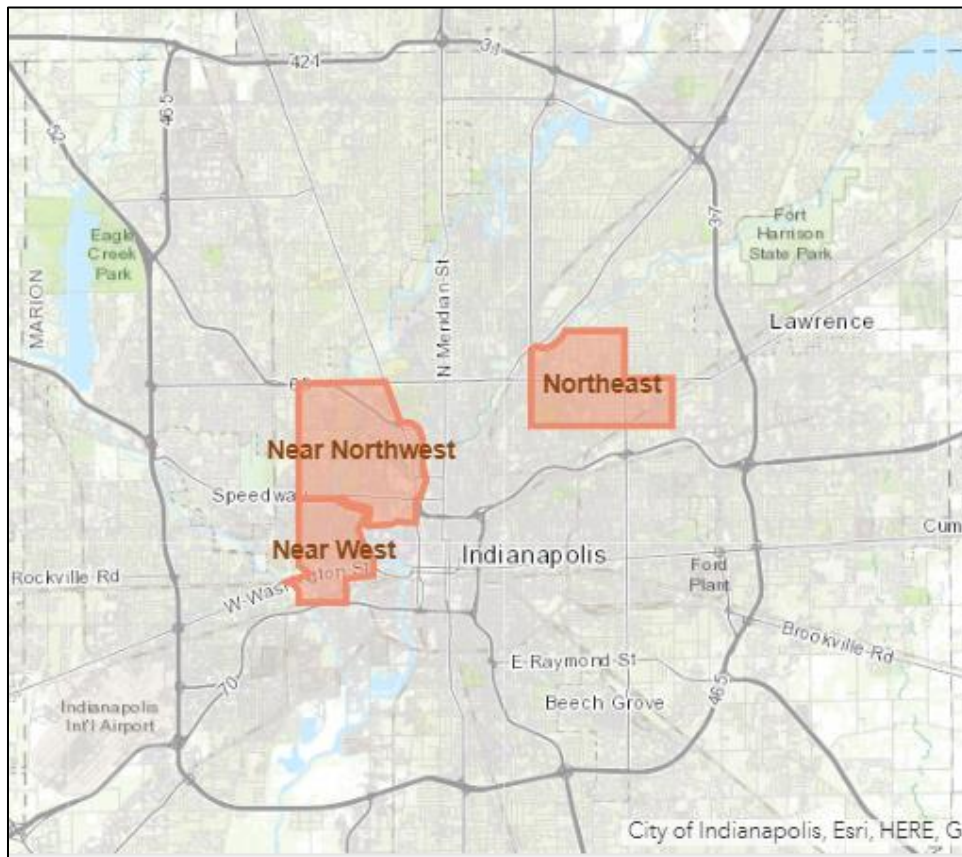


Image source: The Polis Center at IU Indianapolis, SAVI Community Information System, DIP-IN Dashboard (<https://savi.org/apps/dipin/>), retrieved 02/10/2023.

# The Near Northwest Community

## The Place

The Near Northwest community is home to landmarks of historical and cultural significance, including Flanner House, Crown Hill Cemetery, and the Indianapolis Boulevard honoring the Reverend Dr. Martin Luther King Jr. Flanner House has a very rich history in serving residents of the community for well over 100 years, and it continues to operate as a “hub of community innovation, support, and resilience” [1]. The White River winds its way through the Near Northwest, and Riverside Park is an expansive, 861-acre park adjacent to the river that is being revitalized [2]. The Near Northwest community has a vision to become the center for African American arts and culture [3]. This community includes several neighborhoods: Golden Hill, Kessler-Wide@30<sup>th</sup>, Neighbors Helping Neighbors, NW Planners, Riverside Civic League, Rivers Edge, and NW Riverside [4].

The Near Northwest boundaries utilized by DIP-IN were defined by residents serving on the Near Northwest Steering Committee in the first year of DIP-IN (Figure 1). Some other civic groups define the boundaries and names differently than we do. For purposes of this project, we are primarily focused on the area that is bounded by:

- 38<sup>th</sup> Street to the north
- 10<sup>th</sup> Street - White River Pkwy - 16<sup>th</sup> Street to the south
- Martin Luther King Blvd and I-65 to the east
- Tibbs Ave and Lincoln Road to the west

We have attempted to identify and share the best available data to describe the health and social context of the Near Northwest community at the start of DIP-IN (2018), matching as closely as possible to these boundaries. The best match uses a collection of census block groups. Sometimes, however, data are not available for block groups. In this case, we use census tracts or ZIP codes. Because tracts and ZIP codes are larger, they include some areas outside the DIP-IN Near Northwest boundaries. Table 1 lists all the block groups, tracts, and ZIP codes which are associated with the Near Northwest, in full or in part. In addition, available data regarding community resources, such as schools, groceries and libraries, were sometimes incomplete and we supplemented those data with our own knowledge of these places.

Figure 2. Community-Defined Boundaries of the Near Northwest



NORTHWEST  
NEIGHBORHOOD  
BOUNDARY



Northwest

Map created 2/15/2024  
by The Polis Center at IUPUI  
Defined with 2010 Census Geographies

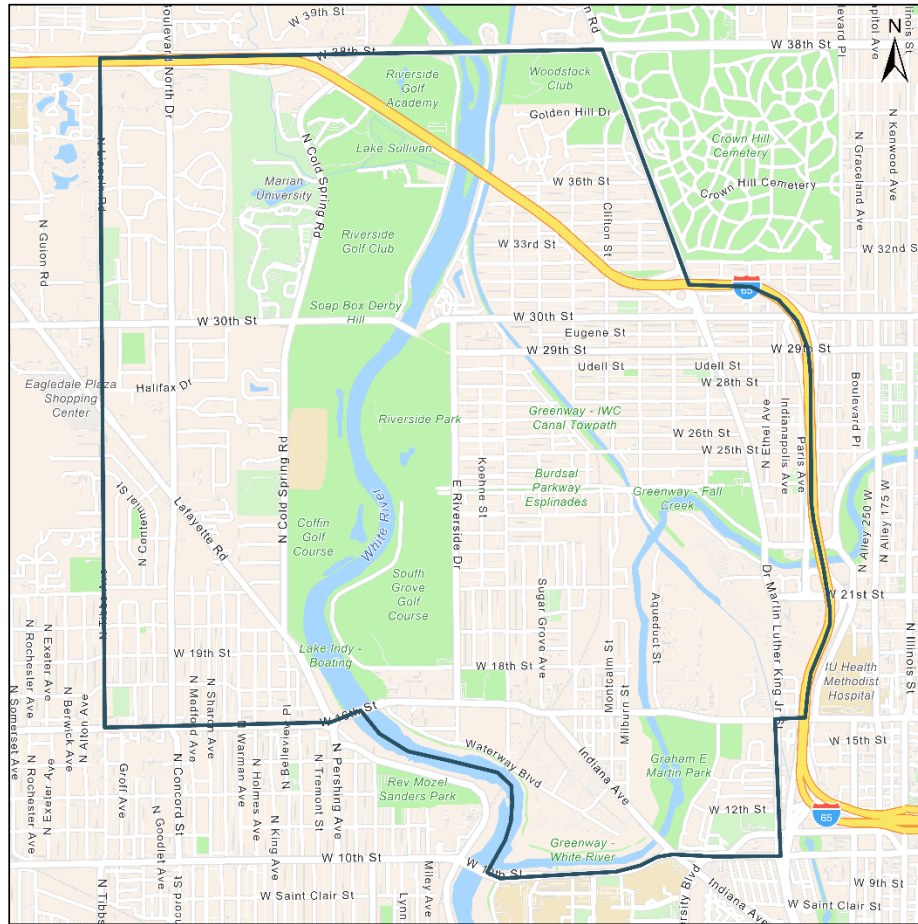


Image source: The Polis Center at IU Indianapolis, SAVI Community Information System (<https://arcg.is/150jGX>), 2024.

Table 1. Block Groups, Tracts, and ZIP Codes of the Near Northwest

Block Groups	Tracts	ZIP Codes
180973405001	180973405	46202
180973406001	180973406	46208
180973406002	180973501	46222
180973406003	180973512	
180973501001	180973535	
180973501002	180973536	
180973512001	180973905	
180973512002		
180973535002		
180973536001		
180973536003		
180973536004		
180973905001		
180973905002		

## The People

There are many ways to describe the people of a community. In this section, we give a general idea of the make-up of the Near Northwest in terms of sex, race/ethnicity, and age distributions. While all these characteristics shape our health and our interactions with each other, these are personal characteristics we generally cannot change. In subsequent sections of this report, we will describe people of the community in other important ways that are changeable, such as the level of education completed. These changeable characteristics are greatly influenced by the larger community and society in which people live.

As detailed in Table 2, the Near Northwest community includes almost 15,000 residents [5]. In comparison to the whole of Marion County, the Near Northwest community:

- Has a lower dependency ratio (fewer youths and seniors per each working-age adult);
- Has a slightly older population, based on median age averaged across block groups;
- Has a higher proportion of residents who belong to a minority racial/ethnic group, with substantially more Black residents and fewer White residents than across Marion County (Figure 3).

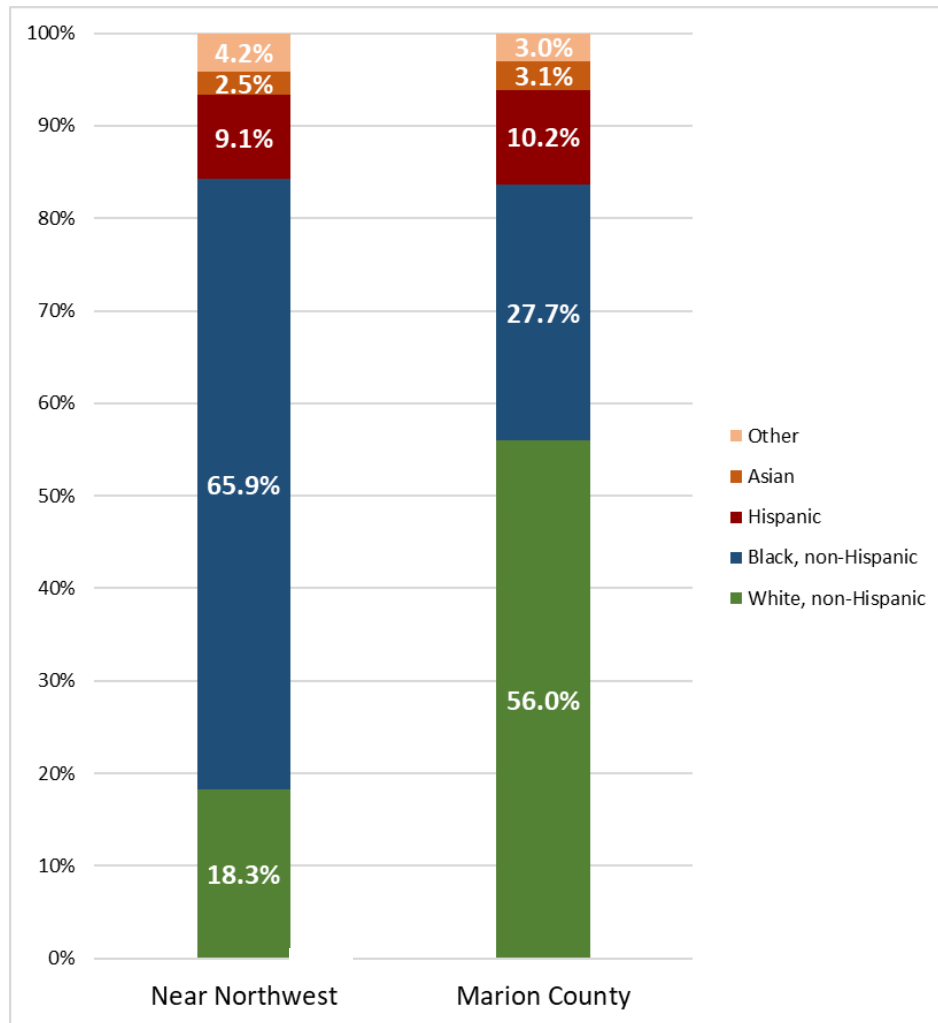
*Table 2. Demographics of the Near Northwest by Block Groups, 2018*

Demographics	Near Northwest Community		Marion County	
	No.	Percent of Total	No.	Percent of Total
<b>Total population</b>	14,813	100%	944,523	100%
<b>Sex</b>				
Male	6,987	47.2%	455,007	48.2%
Female	7,826	52.8%	489,516	51.8%
<b>Age</b>				
Median age	35.0	N/A	34.4	N/A
Dependency Ratio	.48	N/A	.58	N/A
Age <18 years	3,090	20.9%	234,068	24.8%
Age 18-64 years	10,016	67.6%	597,100	63.2%
Age 65+	1,707	11.5%	113,355	12.0%
<b>Race/Ethnicity</b>				
White, non-Hispanic	2,715	18.3%	528,704	56.0%
Black, non-Hispanic	9,755	65.9%	261,724	27.7%
Hispanic	1,354	9.1%	96,260	10.2%
Asian	374	2.5%	29,367	3.1%
Other	615	4.2%	28,468	3.0%

Data source: The Polis Center at IU Indianapolis, SAVI (Classic) Community Information System (<https://classic.savi.org/savi/>), using American Community Survey (ACS) 5-Year Estimates 2018, retrieved 08/05/2023.



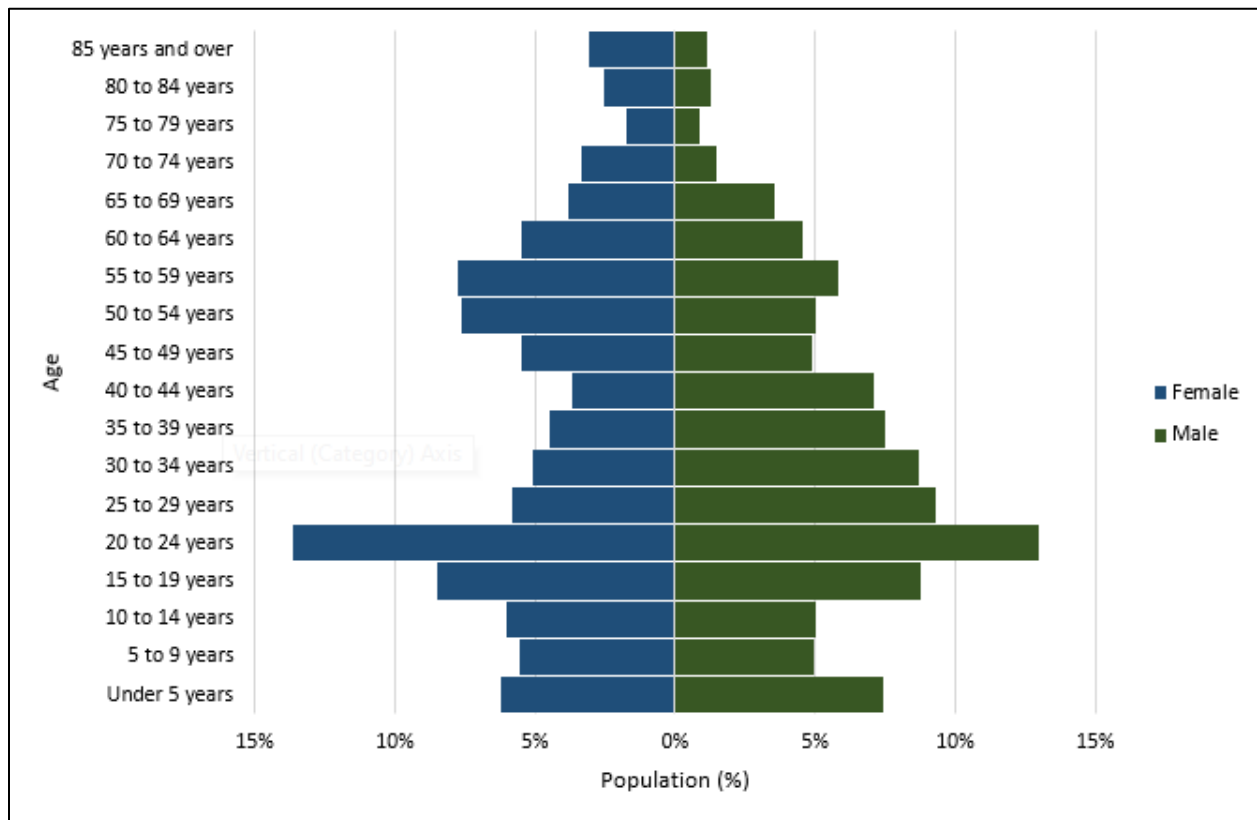
Figure 3. Racial/Ethnic Distribution in the Near Northwest DIP-IN Community Compared to Marion County in 2018



Data source: The Polis Center at IU Indianapolis, SAVI (Classic) Community Information System (<https://classic.savi.org/savi/>), using American Community Survey (ACS) 5-Year Estimates 2018, retrieved 08/05/2023.

In Figure 4 below, we use a population pyramid to show the makeup of residents based on age group and sex, with females shown on the left (blue) and males on the right (green). There are more 20-24 year-olds living in the Near Northwest than any other age group. There are fewer females than males across the ages spanning young adulthood (25-44 years). In older ages (50+), female residents outnumber males. It also stands out that there are fewer school-age children, ages 5-9 and 10-14, than those under age 5. This may indicate that residents are leaving the area when their children reach school age.

Figure 4. Age and Sex Distribution of the Near Northwest's Service Area, 2018



Data source: The Polis Center at IU Indianapolis, SAVI (Classic) Community Information System (<https://classic.savi.org/savi/>), using American Community Survey (ACS) 5-Year Estimates 2018, retrieved 08/05/2023.

# The Visible Tree: What are outward signs of the people's health?

If you are feeling sick and go to see the doctor, they will take a good look at you and ask about your signs and symptoms before making a diagnosis and prescribing treatment. No doubt someone will take your temperature and blood pressure, and possibly run some tests.

Looking at the average length of life and the types of illness that lead to early death in a community likewise serve as signs and symptoms of the community's health on the whole. In a sense, we begin our investigation by starting at the end of life, then we work our way back in time to try to understand neighborhood conditions that may be contributing to patterns of poor health in the community.

## Life Expectancy

Life expectancy is an important measure of health compared across cities, counties, and countries around the world. Life expectancy at birth, the calculation most commonly reported, is a prediction of how long babies born in a specific time and place can expect to live, based on how long past residents of that community have lived. However, it is also a reflection of the conditions of everyday life and the supports that are made available for the community's wellbeing. A 2016 study compared the life expectancy of poor people living across the U.S. [6]. In a ranking of the 100 largest metro areas of the U.S., Indianapolis ranked among the 10 cities where being poor shortens life the most, for both men and women (Chetty et al., 2016; Irwin & Bui, 2016). Poor residents of Indianapolis live shorter lives than residents of New York City, Los Angeles, Chicago, and most of these 100 large metro areas. Why? Most simply stated, these cities differ in the availability of resources that help buffer the effects of poverty on health – resources such as high-quality public schools or a robust public transportation system. Neighborhood conditions and resources affect residents' health and wellbeing on a daily basis.

Our prior analysis of life expectancy among communities of the Indianapolis metro area by ZIP code for the period 2009-2013 [8] brought to light substantial differences in length of life between communities separated only by a short distance. That report raised awareness about the disparities in our own backyard and set in motion a number of efforts to tackle these disparities, including DIP-IN. In the more recent analysis of deaths in the pre-COVID era (2014-2018) – which includes DIP-IN's baseline year of 2018, we found that the gap between the shortest- and longest-living ZIP codes of the metro area had widened to 16.8 years, compared to a gap of 13.6 years for the prior 5-year period (2009-2013) [9]. Residents of the shortest-living ZIP code in the metro area can expect to live only 68.0 years on average, while residents of the longest-living ZIP code have an average lifespan of 84.8 years, as long as the top high-income countries of the world [10]. This growing disparity demonstrates the need to shift

societal attention away from increasing human longevity to increasing *equity* across people in health and length of life [11].

Reported below are the life expectancy values (in years) for each of the three ZIP codes that are part of the Near Northwest (NNW) community, in context with Marion County, the Indianapolis MSA, state of Indiana, and the U.S., based on data through 2018. It is important to remember that shorter life expectancy represents lost years of life averaged across all residents. Not all will live to retirement age – some will live longer, well into their 80s, and some will die in their teens, decades too soon.

**For the five-year period (2014-2018), we found that residents of NNW ZIP codes could expect to live shorter lives than residents across Marion County, the Indianapolis metro area, the state of Indiana, and the U.S. on the whole.**

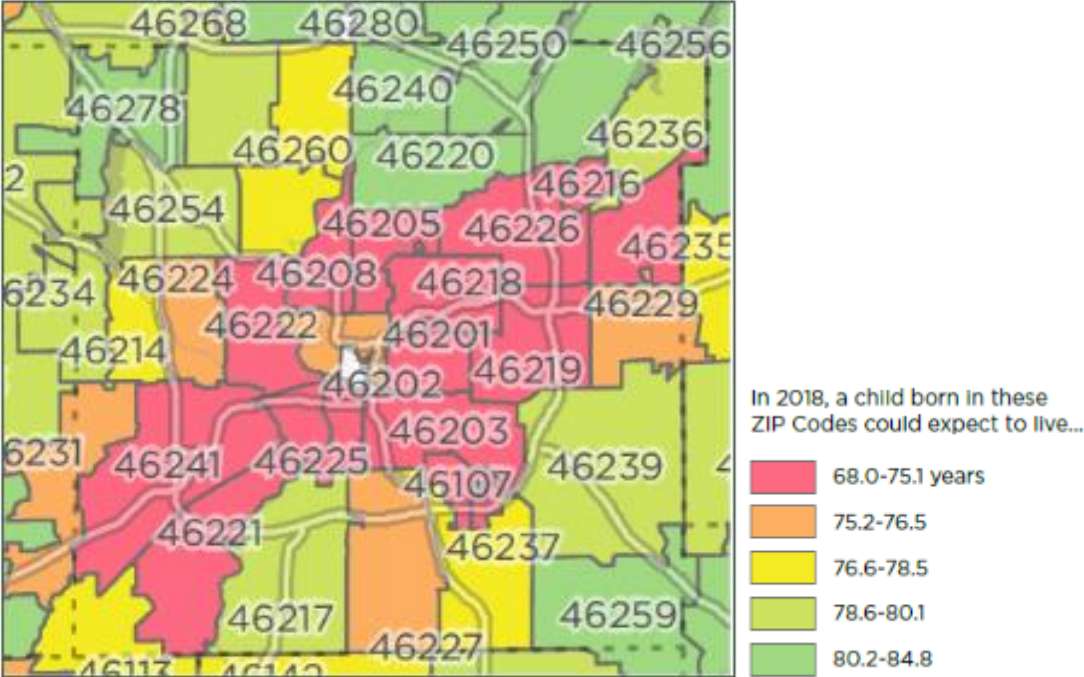
- Life expectancy in these three ZIP codes was 71.5 years – 75.1 years, which indicates that NNW residents lived shorter lives, on average, by 9.7 -13.3 years compared to residents of the longest-living ZIP code of the Indy metro area (at 84.8 years).
- All three of the NNW ZIP codes are within the lowest quintile (20%) for life expectancy at birth (2014-2018) relative to the 104 ZIP codes of the Indy metro area (shaded red in Figure 5).
- While the majority of ZIP codes in the Indy metro lost life expectancy between the two periods, the NNW ZIP code 46208 gained life expectancy between the two time periods, increasing by 1.2 years. At 75.1 years, it falls within the range observed among wealthy, developed nations in the Organisation for Economic Co-operation and Development (OECD).
- Two of the three NNW ZIP codes have life expectancy that is below the range observed across the wealthy developed nations of the world (74.9-83.8 years).

Table 3. Life Expectancies by Place and Time

Place	Community	2009-2013 LE at Birth	2014-2018 LE at Birth	2018 LE Rank (of 104)	Gap from Highest ZIP (Years)	Net change
46202	Near Northwest	75.6	75.1	83	9.7	-0.5
46208	Near Northwest	72.5	73.7	93	11.1	+1.2
46222	Near Northwest	73.1	71.5	99	13.3	-1.6
Metro ZIP with highest LE		84.0	84.8	1	--	+0.8
Marion Co.	Marion County	76.4	75.9		8.9	-0.5
Indianapolis MSA	Indianapolis MSA	77.7	77.5		7.3	-0.2
Indiana	Indiana	77.6	76.8		8.0	-0.8
U.S.	U.S.	78.8	78.6		6.2	-0.2
Developed nations in OECD	Global	Lowest = 74.1 years Highest = 83.4 years	Lowest = 74.9 years Highest = 83.8 years			+0.8  +0.4

Data sources:  
 [1] All data except developed nations in OECD are as reported or cited in Wea [9]  
 [2] Source for developed nations in OECD is [10]

Figure 5. Marion County ZIP Codes by Life Expectancy Quintile (2018)



\* Red = 20% of ZIP codes with lowest life expectancy of metro arealmage source: Weathers et al., 2021

Low life expectancy, simply put, means many residents are dying prematurely. Diabetes is the 6<sup>th</sup> leading cause of death for residents of Marion County, and among the top causes of lost years of potential life due to premature death [12]. Diabetes is contributing to the low life expectancy in these communities, underscoring the importance of addressing these place-based disparities.

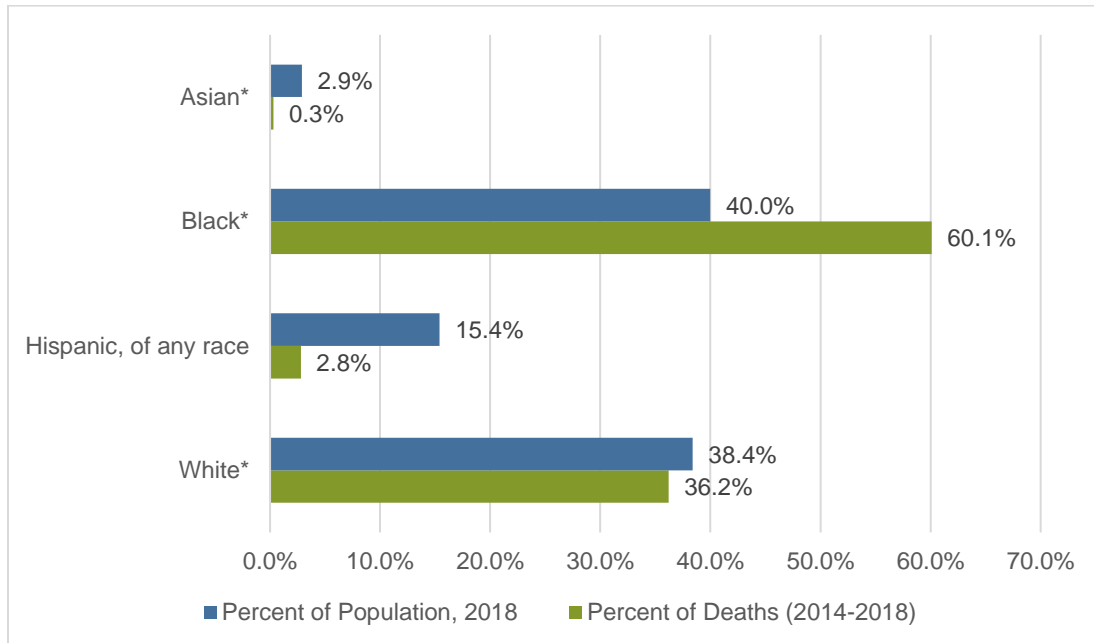
In the latest life expectancy analysis, we also identified significant upstream community-level predictors of life expectancy in metro Indianapolis, which include high racial residential segregation and proportion of residents with low educational attainment, living at/near poverty, and high overall social vulnerability [9]. The DIP-IN ZIP codes are disproportionately affected by these social conditions that, in turn, contribute to poorer health and shorter lives. These are the upstream gaps that DIP-IN aims to address with residents and multi-sector partners through policy, systems, and environmental change in these communities. We will explore these factors and more in the latter half of this report.

## Deaths

Based upon life expectancy, residents of DIP-IN communities are dying earlier than residents of other Indianapolis communities. What are the leading causes of their death? How are the patterns of death different in this community compared to the county? Also, how is the disproportionate burden of diabetes in these communities contributing to premature death?

For the five-year period from 2014-2018, the Marion County Public Health Department recorded 3,042 deaths among residents of ZIP codes in the Near Northwest community (here defined by ZIP codes 46202, 46208 and 46222). **A higher proportion of deaths occurred among male residents (54%) than female residents (46%),** even though males represent 49% of the population (ACS 5-Year Estimates, 2018). **By race/ethnicity, deaths in this community disproportionately occurred among Black residents.** As the figure below demonstrates, 60.1% of all deaths were among Black residents even though Black persons represent just 40.0% of the population by ZIP code. In contrast, deaths among Hispanic persons represented just 2.8% of deaths though they represent 15.4% of the population. The proportion of total deaths among White residents (36.2%) is similar to their representation in the population (38.4%).

Figure 6. Proportion of Deaths and Population by Race/Ethnicity in Near Northwest ZIP Codes (46202, 46208, 46222), 2014-2018



\*Non-Hispanic

Data sources:

[1] Deaths - Marion County Public Health Department

[2] Population - The Polis Center at IU Indianapolis, SAVI Community Information System

(<https://www.savi.org/>) using American Community Survey (ACS) 5-Year Estimates 2018, retrieved 08/13/2023).

In Table 4, the ten leading causes of death are listed in rank order for comparison between Marion County and the Near Northwest ZIPs combined. Causes are shaded red whenever they are ranked higher as a cause in the Near Northwest than in Marion County. Also, in the final column, an “H” indicates a higher proportion of total deaths attributed to that cause in the Near Northwest than in Marion County, based on simple difference in proportions.

*Table 4. Top Ten Causes of Death by Place as Percent of Total Deaths*

Rank	Marion County (2016) <sup>[1]</sup>	Percent of All Deaths	Rank	Near Northwest ZIPs Combined (2014-2018) <sup>[2]</sup>	Percent of All Deaths	NW Higher (H) or Lower (L) than MC
1	Cancer	21.0%	1	Cancer	21.5%	H
2	Heart disease	19.0%	2	Heart disease	19.8%	H
3	Chronic lower respiratory diseases	7.1%	3	Accidents	8.3%	H
4	Accidents	7.0%	4	Chronic lower respiratory diseases	5.8%	L
5	Cerebrovascular disease	4.2%	5/6	Cerebrovascular disease	3.9%	L
6/7	Diabetes	3.2%	5/6	Diabetes	3.9%	H
6/7	Alzheimer’s disease	3.2%	7	Assault (homicide)	3.8%	H
8	Kidney disease	2.7%	8	Kidney disease	3.6%	H
9	Assault (homicide)	2.1%	9	Alzheimer’s disease	2.4%	L
10	Chronic liver disease and cirrhosis	1.9%	10	Septicemia	1.6%	--
	Percentage of Deaths from 10 Top Causes:	71.4%			74.6%	

Data sources:

[1] Marion County – Bowman et al., 2018b

[2] Internal analysis by T.Weathers using death data for Near Northwest, 2014-2018, obtained from Marion County Public Health Department.

**Key findings include:**

- **The top nine causes of death are the same for the NNW ZIP codes as for Marion County overall (2014-2018), differing only in the 10<sup>th</sup> ranked cause of death.**
- The top ten primary causes account for 75% of all deaths in the Near Northwest. The proportion of deaths attributed to these ten causes in the Near Northwest, however, was higher than across the county for all causes except chronic lower respiratory diseases, cerebrovascular disease, and Alzheimer’s disease. (See final column of Table 4.)
- Across the U.S., Marion County, and in ZIP Codes of the NNW, **about half of all deaths are due to cancer, heart disease, cerebrovascular disease** (strokes primarily), **and diabetes**, diseases which increase with age [13]. In the Near Northwest ZIP codes, these causes accounted for 49.1% of all deaths among residents 2014-2018.
- **Notably, diabetes was the primary cause for 3.9% of deaths in the Near Northwest, slightly higher (by 22%) relative to the percentage county wide (3.2%).** However, due to the interrelatedness of diabetes and heart disease, the role of diabetes in



cardiovascular deaths must also be considered. “Cardiovascular disease is the number one cause of death among people living with diabetes, resulting in 2/3 of deaths in people with type 2 diabetes” [14]. Roughly one-fourth of all deaths in the NNW in this period were attributed to heart or cerebrovascular disease.

- **Homicide** accounts for 1.8 times the proportion of deaths in this community as it does county-wide (3.8% vs 2.1%), making it the 7<sup>th</sup> leading cause of death among residents.
- Similarly, **accidents (unintentional injuries)** account for more deaths in the Near Northwest (8.3%) than across the county (7.0%), representing the 3<sup>rd</sup> leading cause of death in the Near Northwest.

### Diabetes-Related Death Rates

Because diabetes is a disease that naturally becomes more prevalent with age, it is important to take into account the ages of people living in a given place to compare two different communities. This is referred to as “age-adjustment.” The age-adjusted death rate applies the same population age distribution to all communities so that differences seen are not simply the result of one community consisting of mostly young people (who would not yet have diabetes) while another consists of mostly older people (who are more likely to have diabetes). Table 5 below, shows the age-adjusted mortality rate for diabetes within the NNW ZIP codes. Calculations are based upon deaths by ZIP from 2009-2018 – a ten-year period – while for the county the 2018 rate is reported.

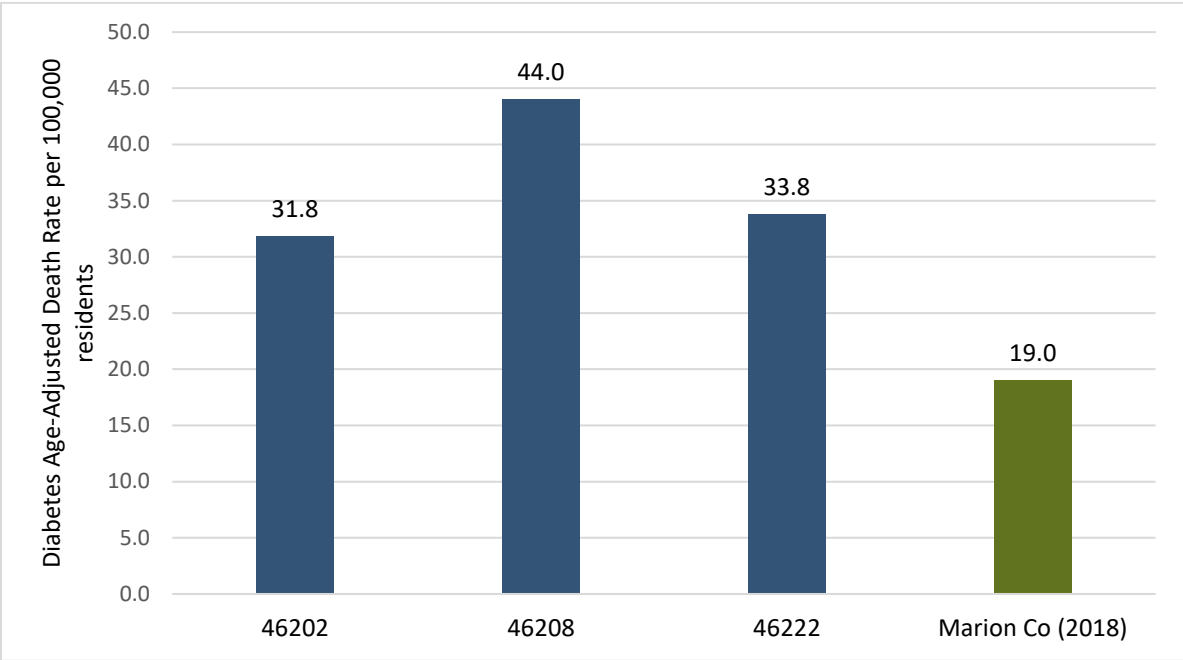
*Table 5. Age-adjusted Diabetes Mortality Rate in NNW ZIP Codes, 2009-2018*

Place	Diabetes Age-adjusted Mortality Rate (per 100,000 residents)	Age-Adjusted Rate Ratio (ZIP/County)
46202	31.8	1.67
46208	44.0	2.32
46222	33.8	1.78
Marion Co (2018)	19.0	<i>(reference group)</i>

Source: Kiehl et al., 2022

**In NNW ZIP codes, the age-adjusted death rate for diabetes is substantially higher than the rate for Marion County residents on the whole.** As indicated in the 3<sup>rd</sup> column, the death rate in these ZIP codes is 1.67 – 2.32 times the diabetes death rate for the county.

Figure 7. Diabetes Age-Adjusted Death Rate for Near Northwest ZIP Codes, 2009-2018



Source: Kiehl et al., 2022

Years of Potential Life Lost

Deaths from conditions like heart disease, diabetes, and Alzheimer’s disease naturally increase with age. However, deaths from other causes, such as accidents or homicide, tend to occur at younger ages, and this appears to be how many lives are cut short in the Near Northwest. Deaths among younger people lower the overall life expectancy of the community more than deaths at older ages. Across the Near Northwest ZIPs, 64.1% of all deaths that occurred from 2014-2018 were considered “premature,” in that they occurred among people less than age 75 years old – the average age of death in the U.S. [15]. In the five year period, premature death took 43,367 years of potential life from residents of the Near Northwest. Of the 1,950 premature deaths among Near Northwest residents, each life was cut short, on average, by more than 20 years.

Table 6 shows the causes of death accounting for the greatest number of lost years of life among residents who died before age 75 – referred to as Years of Potential Life Lost (YPLL). This is not a simple count of premature deaths, but rather a sum of the lost years of potential life. For example, deaths from accidents (unintentional injuries) represented 8.3% of all Near Northwest deaths, but accounted for 17.9% of all the YPLLs for the Near Northwest. This is because accidents often take the life of young people, and, in the Near Northwest, these accidental deaths cut short each affected life by an average of 33 years. We use the measure of Years of Potential Life Lost to better understand what causes of death are driving down the average life expectancy.

In Table 6, the ten leading causes of Years of Potential Life Lost (YPLL) are listed in rank order for comparison between Marion County and the NNW ZIP codes combined. Causes are shaded red whenever they are ranked higher as a cause in the Near Northwest than in Marion County. Also, in the final column, an “H” indicates a higher proportion of total deaths attributed to that cause in the Near Northwest than in Marion County, based on simple differences in proportions.

*Table 6. Top Ten Causes of Years of Potential Life Lost*

Rank	Marion County (2016) <sup>[1]</sup>	Percent of All YPLL	Rank	Near Northwest ZIPs Combined (2014-2018) <sup>[2]</sup>	Percent of All YPLL	NW Higher (H) or Lower (L) than MC
1	Accidents	19.0%	1	Accidents	17.9%	L
2	Cancer	16.0%	2	Cancer	14.9%	L
3	Heart disease	11.0%	3	Heart disease	13.4%	H
4	Assault (homicide)	7.9%	4	Assault (homicide)	11.8%	H
5	Certain conditions originating in the perinatal period (birth)	5.2%	5	Certain conditions originating in the perinatal period (birth)	5.4%	H
6	Suicide	4.4%	6	Suicide	3.8%	L
7	Chronic lower respiratory diseases	3.7%	7	Chronic lower respiratory diseases	3.0%	L
8	Diabetes	3.0%	8	Cerebrovascular diseases	2.9%	H
9	Birth defects	2.7%	9/10	Diabetes	2.6%	L
10	Chronic liver disease and cirrhosis	2.5%	9/10	Birth defects	2.6%	L
	Percentage of YPLL by Top 10 Causes:	75.4%			78.3%	

Data sources:

[1] Marion County – Bowman et al., 2018b

[2] Internal analysis by T.Weathers using death data for Near Northwest, 2014-2018, obtained from Marion County Public Health Department.

### Key findings include:

- The top ten primary causes of premature death account for 78% of all YPLL in the Near Northwest. **Nine of the top 10 causes of YPLL are the same in the Near Northwest as in Marion County.** The two lists differ in that Cerebrovascular Diseases appear on the list for the NNW as the 8<sup>th</sup> ranked cause, but not on the list for Marion County.
- **Accidents (unintentional injuries), which include accidental drug overdose, are the leading cause of Years of Potential Life Lost in the Near Northwest and Marion County.** As mentioned above, accidents accounted for 8.3% of all deaths but 17.9% of the Years of Potential Life Lost among Near Northwest residents from 2014-2018. Accidental drug overdoses related to the “Opioid Epidemic” are considered a main factor in drops in U.S. life expectancy in the past decade [16].

- A main difference that exists between Marion County and the Near Northwest is the impact of **homicide** in the leading causes of YPLL. In Near Northwest ZIPs, homicide accounted for 11.8% of YPLL, 1.5 times the percentage in Marion County (7.9%).
- In addition to homicide, **heart disease and cerebrovascular diseases account for a higher proportion of YPLLs in the Near Northwest than across Marion County.** While these chronic diseases increase with age, they are affecting people at younger and younger ages, and are the number one cause of death among people with diabetes.
- Notably, diabetes as a primary cause of death accounts for only 2.6% of YPLLs in the Near Northwest. **However, of the 70 premature deaths attributed to diabetes in this time period, each person lost, on average, more than 15 years of potential life.**

## Illness

If we are interested in understanding the health of a community, it is vital to understand what diseases that community is facing. Knowing which diseases are the most common in the Near Northwest will help us to consider ways to prevent these illnesses or improve management to lessen their effects on residents' lives, including lost years of life. Some illnesses are more likely to lead to death than others. For example, heart disease is a leading cause of death and lost years of potential life in the U.S. and the Near Northwest, while arthritis is not. However, the various forms of arthritis often make it harder for an affected person to do the things that they find meaningful.

Every year, the U.S. Centers for Disease Control and Prevention (CDC) partners with all 50 states to conduct a phone survey of adults to learn more about their health. Started in 1984, it is the longest-running and largest survey of health conducted in the world [17]. The CDC's 500 Cities project uses these survey results to estimate similar results at the census tract level within cities [18]. The data are reported by Census Tract, not ZIP codes, so we have summarized these data for the Near Northwest by listing the best and worst rates for each measure, as well as the average value of the 7 census tracts within the Near Northwest in the table below. (For a list of the census tracts, see Table 1.)

When comparing the Near Northwest's tract average to the Indianapolis rate, there is no illness that has better/lower rates in the Near Northwest. The Near Northwest has higher/worse rates of high blood pressure, diabetes, asthma, COPD, heart disease, stroke, and chronic kidney disease. (See color code in Table 7.) For all other illness indicators, the area's tract average is similar to the Indianapolis rate.

In Table 7, illness indicators are sorted in order of the Near Northwest Tract Average, highest to lowest. Among adult residents of the Near Northwest, more than two in five residents have diagnosed high blood pressure and one in three have diagnosed high cholesterol. Both of these conditions are in themselves risks for heart disease and stroke. Over a quarter have been diagnosed with a form of arthritis. Almost one in five currently suffer from diabetes, while nearly as many have asthma.

The prevalence rates of these illnesses vary widely across the census tracts of the Near Northwest. In all cases but one, the tract with the worst rate is among the worst 25% of all tracts in Indianapolis. In several cases, the tract with the best rate in the Near Northwest is among the

best 25% of all tracts in Indianapolis, which is true for high cholesterol, arthritis, coronary heart disease, and cancer. Overall, the best rates were concentrated in one tract, while the worst rates were also concentrated in one tract.

Health includes both physical and mental health. Residents of the Near Northwest are slightly more likely to report having  $\geq 14$  poor mental health days in the past month (17.6%) than to have  $\geq 14$  poor physical health days in the past month (16.8%). These rates are both higher than reported for Indianapolis. Everyday quality of life is being impacted by poor health in this segment of the population.

Table 7. Estimated Rates of Illness, 2017

Illness Indicator	Worst Near Northwest Census Tract		Best Near Northwest Census Tract		Near Northwest Tract Average	Indianapolis Rate	Color Code
High blood pressure	53.6%	*	32%		43.2%	34.2%	
High cholesterol	37.3%	*	26.4%	*	33.0%	32.3%	
Arthritis	32.4%	*	19.1%	*	26.4%	23.9%	
Poor mental health days ( $\geq 14$ in past 30)	19.5%	*	16.1%		17.6%	15.1%	
Diabetes	23.8%	*	10.6%		17.4%	11.7%	
Poor physical healthy days ( $\geq 14$ in past 30)	21.7%	*	12.7%		16.8%	13.7%	
Current asthma	14.8%	*	11.8%		13.3%	11.3%	
Chronic obstructive pulmonary disease (COPD)	12.8%	*	6.7%		9.6%	8.0%	
Coronary heart disease	10.4%	*	4.6%	*	7.7%	6.1%	
Stroke	8.0%	*	3.1%		5.5%	3.5%	
Cancer	6.4%		3.9%	*	5.2%	5.7%	
Chronic kidney disease	5.8%	*	2.8%		4.3%	3.1%	

Data source: CDC, 500 Cities Project, 2017 (released in 2019)

\*Census track ranked in the worst/best 25% of all census tracts in Indianapolis

Meaning	Color Code
The Near Northwest Tract Average is WORSE than the Indianapolis rate. (Rate Ratio $>1.10$ )	
The Near Northwest Tract Average is SIMILAR to the Indianapolis rate. (Rate Ratio $=0.9-1.10$ )	
The Near Northwest Tract Average is BETTER than the Indianapolis rate. (Rate Ratio $<0.9$ )	

## Diabetes Prevalence

Utilizing prevalence rates produced by CDC Places by census tract, the following estimates of diabetes prevalence in the Near Northwest in 2017 and 2019 were developed by population weighting the prevalence of the 7 constituent census tracts.

As Table 8 demonstrates, the estimated prevalence of diagnosed and undiagnosed diabetes in the Near Northwest in both 2017 and 2019 is substantially higher than in Marion County, Indiana, or the U.S. In fact, diabetes prevalence in the NNW in 2017, prior to the start of DIP-IN, was 1.4 times the prevalence in Marion County.

Table 8. Diabetes Prevalence Estimates

Diabetes Prevalence Estimates	Near Northwest		Marion County		Indiana		U.S.	
	2017	2019	2017	2019	2017	2019	2013-2016	2017-2020
Adult Population <sup>[1]</sup>	16,530	17,336						
Diagnosed Diabetes Prevalence <sup>[2]</sup>	17.4%	18.5%	11.9%	12.7%	11.8%	12.4%	10.2%	11.3%
Undiagnosed Diabetes Prevalence <sup>[3]</sup>	2.8%	3.4%	2.8%	3.4%	2.8%	3.4%	2.8%	3.4%
Total Prevalence	20.2%	21.9%	14.7%	16.1%	14.6%	15.8%	13.0%	14.7%

Data sources:

[1] ACS 5-Year Population Estimates for years ending 2017 or 2019

[2] CDC PLACES Tract Estimates of Crude Diagnosed Diabetes Prevalence

[3] CDC 2020 and 2022 National Diabetes Statistics Report, data for 2013-2016 or 2017-2020 respectfully

## Health Risk Behaviors

Diseases such as diabetes and heart disease develop over years. Before disease is diagnosed, often there are warning signs of increased risk for disease. For example, it is now well known that smoking increases risk for various cancers, heart disease, and COPD, among other things. One might say that a person dies from smoking, rather than lung cancer. Health risk behaviors have been referred to as the “actual causes of death.” When U.S. deaths are analyzed based on the health risk behaviors that contribute to death, the leading causes of death are: 1) tobacco use, 2) obesity, and 3) physical inactivity [19].

Diet, physical activity, and smoking are examples of health risk behaviors, but a person’s behavior choices do not happen in a vacuum. These choices are influenced and often limited by factors outside a person’s control. For example, eating a healthy, nutritious diet is far more difficult if living paycheck to paycheck where “choices” depend on the money in hand and what’s in stock at the corner store, especially when there are no full-service groceries nearby. Furthermore, the chronic stress of daily life can increase the likelihood of obesity through various pathways, including changes in the way the body processes food [20]. Behaviors can be altered through both individual *and* community actions to reduce risk and prevent related deaths. A simple example impacting diet and obesity is the policy change allowing SNAP

benefits to be used at fresh farmer’s markets. We focus more attention on contextual influences in the latter half of this report.

As with the disease rates reported above, we draw from the CDC’s 500 Cities Project to review rates of health risk behaviors among adult residents of the Near Northwest. Again, the health risk behaviors are sorted in Table 9 from most common to least common.

Table 9. Prevalence of Health Risk Behaviors [1]

Health Behavior	Worst Near Northwest Census Tract		Best Near Northwest Census Tract		Near Northwest Tract Average	Indianapolis Rate	Color Code
Obesity (2017)	50.8%	*	35.7%		43.2%	35.4%	
Sleeping <7 hours/night (2016) [2]	46.6%	*	39.0%		42.6%	36.4%	
No physical activity (2017)	44.9%	*	30.7%		37.0%	29.6%	
Current smoking (2017)	30.4%	*	19.2%		25.5%	22.1%	
Binge drinking (2017)	17.6%		10.7%	*	13.9%	17.6%	

Data sources:

[1] CDC, 500 Cities Project, 2017 (released in 2019)

[2] CDC, 500 Cities Project, 2016 (released in 2018)

\*Census tract ranked in the top/bottom 25% of all census tracts in Indianapolis.

Meaning	Color Code
The Near Northwest Tract Average is WORSE than the Indianapolis rate. (Rate Ratio >1.10)	
The Near Northwest Tract Average is SIMILAR to the Indianapolis rate. (Rate Ratio=0.9-1.10)	
The Near Northwest Tract Average is BETTER than the Indianapolis rate. (Rate Ratio <0.9)	

**The Near Northwest tract(s) ranked among the worst 25% in the city for all health risk behaviors except binge drinking.** Around 40% of adults in the Near Northwest (based on tract average) are getting too little sleep and physical activity and are obese. Over a quarter (25%) of adults in the Near Northwest are currently smoking, and 14% percent engage in binge drinking.

Smoking is a risk in relation to heart disease, stroke, certain types of cancer and chronic lung disease, and it is cited as the “leading cause of preventable death” [19]. Separately it has been reported that the rate of smoking among pregnant women in the Near Northwest is 10% [5], similar to the Marion County rate reported for 2017 [12,21]. The maternal smoking rate in the Near Northwest is significantly lower than the state average, but it is higher than the national average of 7.2% [21]. Smoking during pregnancy increases risk of low birth weight and prematurity which can lead to infant death [22].

Additionally, physical *inactivity* is higher on average in the Near Northwest (37.0%) and in all 7 tracts compared to Indianapolis as a whole (29.6%) [23]. The CDC defines physical inactivity as adults aged 18 years old or older having no leisure-time physical activity in the past month [24].

All of these behaviors place residents at higher risk of poor health and disease, and all may impact diabetes risks and management [25]. According to the American Diabetes Association,

individuals who smoked two packs per day had a 45% higher incidence rate of type 2 diabetes for men and 74% higher for women compared to those who never smoked [25]. Additionally, in the United States, 70% of the risk for type 2 diabetes is linked to overweight and obesity, with each 2.2 pounds of weight gain over 10 years increasing the risk by 4.5% [25]. Modest weight loss and increased physical activity have been shown to reduce the risk of type 2 diabetes [25].

**Overall, there is a clear connection between these health risk behaviors and many of the leading causes of lost years of potential life identified in the Near Northwest.**

## Preventive Health Care

Regular doctor’s visits and health screenings are vital to preventing disease before it happens or treating it to minimize its severity. However, not everyone has access to health care and screenings. This section, also using self-reported data from the Behavioral Risk Factor Surveillance System (BRFSS), demonstrates the degree to which Near Northwest adults are receiving preventative care. It points to types of preventive care where improvements to access and uptake are most needed.

Table 10. Preventive Healthcare Use and Access

Health Behavior	Worst Near Northwest Census Tract		Best Near Northwest Census Tract		Near Northwest Tract Average	Indianapolis Rate	Color Code
Pap smear (2016)	74.2%	*	80.8%	*	78.6%	78.0%	
Mammography (2016)	77.4%		79.8%	*	78.3%	74.9%	
Cholesterol screening (2017)	72.2%	*	81.9%	*	77.0%	78.3%	
Annual Checkup (2017)	68.4%		76.7%	*	72.3%	67.3%	
Colorectal cancer screening (2016)	52.2%	*	58.4%		56.4%	62.1%	
Dental Visit (2016)	36.7%	*	51.8%		45.1%	57.6%	
Population without Health Insurance <sup>†</sup> (2016)	23.0%	*	15.2%		18.9%	15.0%	

Data sources:

[1] CDC, 500 Cities Project, 2017 (released in 2019)

[2] CDC, 500 Cities Project, 2016 (released in 2018)

<sup>†</sup>A higher percentage of the population without health insurance is worse for health

\*Census track ranked in the worst/best 25% of all census tracts in Indianapolis

Meaning	Color Code
The Near Northwest Tract Average is WORSE than the Indianapolis rate. (Rate Ratio >1.10)	
The Near Northwest Tract Average is SIMILAR to the Indianapolis rate. (Rate Ratio=0.9-1.10)	
The Near Northwest Tract Average is BETTER than the Indianapolis rate. (Rate Ratio <0.9)	



The rates of dental visits, as well as lack of insurance, among Near Northwest tracts on average are worse than the Indianapolis rate, while all other preventive care measures among Near Northwest tracts on average are similar to the Indianapolis rate.

The highest rates of preventive care in the Near Northwest are among women, with almost 80% getting a pap smear and mammography. The rates fall from there, with 77% of adults receiving a cholesterol screening and 72% receiving annual checkups. Dental visits occurred in less than half of residents. Nineteen percent of adults in the Near Northwest lacked health insurance.

## Key Takeaways: Outward Signs of the Community's Health

**In the preceding section, we have taken a close look at the outward signs of health and illness among residents of the Near Northwest, likening this to what can be known about the health of a tree by looking at its leaves, branches, and trunk. Key findings are summarized here.**

### Life Expectancy

Life expectancy is an important measure of health compared across cities, counties, and countries around the world. Life expectancy is partly a reflection of the conditions of everyday life and the supports that are made available for the community's wellbeing.

- For the 5-year period (2014-2018), residents of NNW ZIP codes could expect to live shorter lives than residents across Marion County, the Indianapolis metro area, the state of Indiana, and the U.S. as a whole.
- In the three ZIP codes of the NNW, life expectancy ranged from 71.5 years – 75.1 years, and this was 9.7-13.3 years less than the longest-living ZIP code of the metro area.
- All three of the NNW ZIP codes are within the lowest quintile (20%) for life expectancy at birth (2014-2018) relative to the 104 ZIP codes of the Indy metro area.

### Leading Causes of Death & Years of Potential Life Lost (YPLL)

Given the overall shorter lives of Near Northwest residents compared to the county, metro, state, and nation, we reviewed causes of death among Near Northwest residents compared to Marion County at large and also identified which causes of death accounted for the largest proportion of lost years of life among those dying prematurely (prior to age 75).

- Similar to the county and U.S., about half of all deaths among Near Northwest residents are due to cancer, diabetes, cerebrovascular disease, and heart disease. Likewise, nine of the ten leading causes of death were the same for the NNW as for Marion County.
- **Accidents (unintentional injuries)** account for more deaths in the Near Northwest (8.3%) than across the county (7.0%), representing the 3rd leading cause of death in the Near Northwest.
- **Homicide** accounts for 1.8 times the proportion of deaths in this community as it does county-wide (3.8% vs 2.1%), making it the 7th leading cause of death among residents.
- **Diabetes** was the primary cause of 3.9% of deaths in the Near Northwest, ranking as the 5<sup>th</sup> leading cause of death, somewhat higher (22%) relative to the percentage county wide (3.2%). However, this alone underestimates the impact of diabetes on death. Most

deaths among people with diabetes are attributed to cardiovascular disease [14], and roughly one-fourth of all deaths in the NNW in this period were attributed to heart or cerebrovascular disease.

The top 5 causes of Years of Potential Life Lost (YPLL) account for almost 65% of lost years of life in the Near Northwest: accidents, cancer, assault (homicide), heart disease, and certain conditions originating in the perinatal period (birth). Nine of the top 10 causes of YPLL are the same in the Near Northwest as in Marion County.

- **Accidents (unintentional injuries)**, which include accidental drug overdose, are the leading cause of Years of Potential Life Lost in the Near Northwest and Marion County. As mentioned earlier, accidents accounted for 8.3% of all deaths but 17.9% of the Years of Potential Life Lost among Near Northwest residents from 2014-2018. Accidental drug overdoses related to the “Opioid Epidemic” are considered a main factor in drops in U.S. life expectancy in the past decade [16].
- A main difference that exists between Marion County and the Near Northwest is the impact of **homicide** in the leading causes of YPLL. In Near Northwest ZIPs, homicide accounted for 11.8% of YPLL, 1.5 times the percentage in Marion County (7.9%).
- In addition to homicide, **heart disease and cerebrovascular diseases** account for a higher proportion of YPLLs in the Near Northwest than across Marion County. While these chronic diseases increase with age, they are affecting people at younger and younger ages, and are the number one cause of death among people with diabetes.
- Notably, **diabetes** as a primary cause of death accounts for only 2.6% of YPLLs in the Near Northwest. However, of the 70 premature deaths attributed to diabetes in this time period, each person lost, on average, 15 years of potential life.

### Prevalence of Illness & Health Risk Behaviors

Knowing which diseases are the most common in the Near Northwest helps us to consider ways to prevent these illnesses or improve management to lessen their effects on resident’s lives, including lower quality of life and/or lost years of potential life.

- Health includes both physical and mental health. Residents of the Near Northwest are more likely to report having many days ( $\geq 14$ ) of **poor mental or physical health** per month (17.6% and 16.8% respectively). These rates are higher than reported for Indianapolis (15.1% and 13.7% respectively). Everyday quality of life is being impacted by poor health among a large segment of the Near Northwest adult population.
- When comparing the Near Northwest’s tract average to the Indianapolis rate, the Near Northwest has higher/worse rates of **high blood pressure, diabetes, asthma, COPD, heart disease, stroke, and chronic kidney disease**. The area’s tract average for cancer, arthritis, and high cholesterol are similar to the Indianapolis rate.
- The estimated prevalence of diagnosed and undiagnosed **diabetes** in the Near Northwest in both 2017 and 2019 is substantially higher than in Marion County, Indiana, or the U.S. In fact, diabetes prevalence in 2017, prior to the start of DIP-IN, was 1.4 times higher in the Near Northwest than in Marion County.

Diseases such as diabetes and heart disease develop over years. Certain health risks and behaviors are associated with increased disease risk over time.

- More than a third of adults in the Near Northwest are getting too little sleep and physical activity and are obese. About a quarter of adults currently smoke, and 14% engage in binge drinking. All of these health risk behaviors place residents at higher risk of poor health and disease.
- The NNW tracts ranked among the worst 25% in the city for all **health risk behaviors** except binge drinking. These include rates of obesity, inadequate sleep, physical inactivity, and current smoking.
- Notably, the *maternal* smoking rate reported for the NNW is similar to the county rate and lower than the state rate.

Overall, there is a clear connection between these health risk behaviors and many of the leading causes of lost years of potential life identified in the Near Northwest.

### Preventive Health Care

Regular medical care and health screenings help to prevent disease or minimize its severity. However, not everyone has access to health care and screenings.

- Among Near Northwest residents, **dental visits** occurred in less than half, and 19% of adults were **uninsured** (2016). These rates reflect less access to care than reported for Indianapolis. All other preventive care measures among Near Northwest tracts, on average, are similar to the Indianapolis rate.
- The highest rates of **preventive care** in the Near Northwest are among women, with almost 80% getting a pap smear and mammography. Rates for cholesterol screening and getting annual checkups are a bit lower, but still exceed 70%.

**In summary, this review of the community's health indicates specific causes of death that are cutting the lives of residents and community members short. Next, we turn to the role of the community's physical and social environment in the health of its residents, which may further guide next steps.**

# The Environment & Root System: How is the place itself supporting health?



Earlier, we described the ways that communities, much like trees, require the right environment to thrive. Having now taken a close look at the outward signs of health among the *people* of the Near Northwest, we turn our attention to the *place* that is the Near Northwest. What can we learn about how this *place* is affecting the health of its *people*, for good or for bad?

Health is kept or lost over a lifetime through the accumulation of experiences we have every day – at home, at work, at school, or wherever we interact with our world. In fact, about 75% of the factors that affect our health are part of our everyday living experiences (called “social determinants of health”), not our individual biology, genetics, or health behaviors [26]. Therefore, while maintaining one’s health takes personal action, it is influenced by the greater social and physical environment in which we live our lives (Figure 9). This includes other people in our social circle; organizations where we may work, learn, volunteer, or worship; the community’s overall values and norms; the built environment surrounding us (buildings, streets, stores, sidewalks); and importantly, the policies that are put in place by governments or leaders that either support or hinder health. That’s why we consider these conditions of life to be like the “environment” and the “root system” necessary to nourish healthy communities.

Figure 9. The Socio-Ecological Model of Health

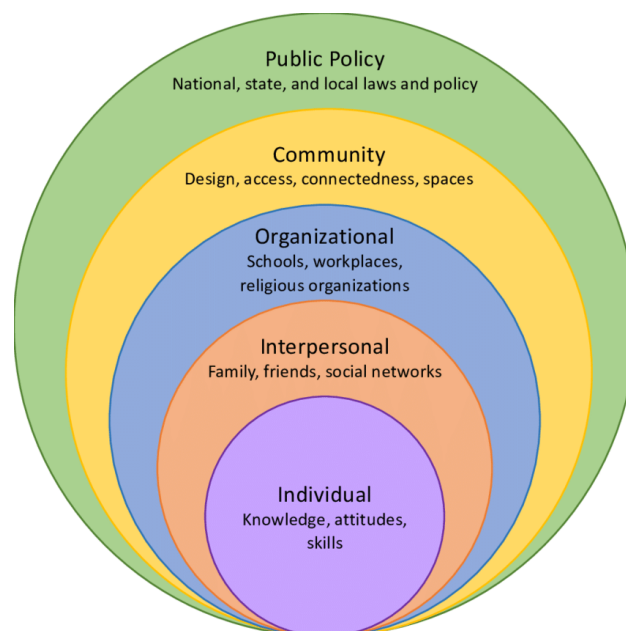


Image source: Creative Commons Attribution 4.0 International

In our review of residents' health, we looked at the "leading causes of death" (such as heart disease and diabetes), and "actual causes of death," (those behaviors like smoking and lack of physical activity which increase the risk for such diseases). Now, let's take one step further to look at the social conditions that contribute to death. In a nationally-published study, Galea and his co-authors combined data from 47 studies to identify the leading social causes of death [27]:

1. Low education
2. Racial residential segregation
3. Low social support (from other people in one's life)
4. Poverty (when experienced personally)
5. Income inequality (the size of the gap between the top 20% of wage earners and the bottom 20% of wage earners in a given place)
6. Area-level poverty (when one lives in a community where many people are poor, even if the individual is not)

These social causes of death, like poverty, account for a similar number of deaths as the diseases we tend to think of first, like heart disease. People are exposed to these social conditions, and over time, disease develops which ultimately cuts life short. In fact, there is a well-known social gradient when it comes to the distribution of health and length of life. It works like a ladder: each step up the ladder increases access to health-promoting environments (with safe housing, quality schools, parks and groceries) and each step down increases exposures and vulnerabilities to health-*harming* conditions [28,29]. This demonstrates the *connection* between disease and the social causes of death.

Therefore, societies as a whole can put in place policies that help to reduce health differences based on one's social position on this ladder. There are likely important differences in the conditions of daily life in the Near Northwest compared to longer-living areas of the city; in this section, we will take a close look at the characteristics of the community as a whole to identify clues which may explain the life expectancy gap and high diabetes burden and guide further action. We want to identify those characteristics that may be increasing residents' vulnerability to illness and affecting life expectancy overall.

## Community-Wide Social Context

We begin by taking a look at a few key indices (scores derived by combining several data items) that reflect the community context in which health is embedded, like soil to a tree. These indices are used nationally for ease in comparison of one place to another.

## Social Vulnerability

The Social Vulnerability Index (SVI) describes an area's overall vulnerability in times of crisis, as calculated by the U.S. Centers for Disease Control and Prevention. Through the combination of 15 data points (Figure 10), the SVI identifies communities likely to require assistance in the event of an emergency, such as a natural disaster [30].

Figure 10. Indicators in the Social Vulnerability Index

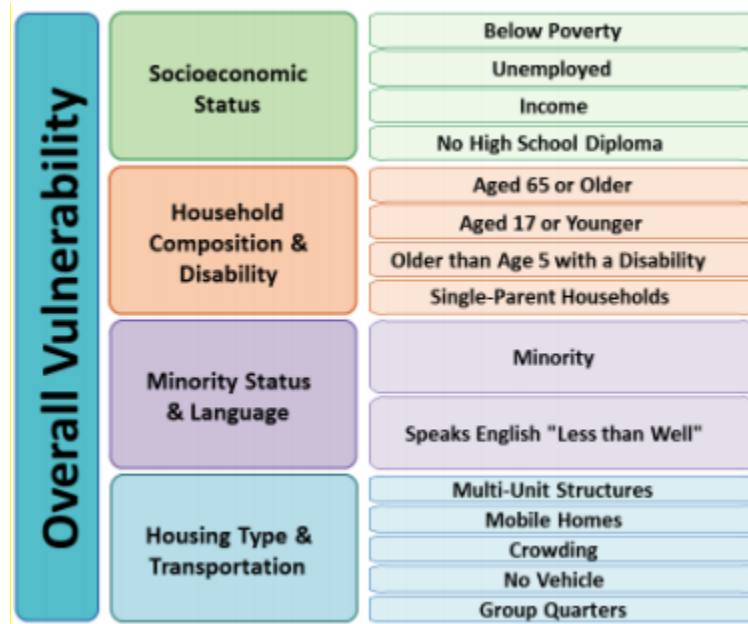


Image source: Centers for Disease Control & Prevention, SVI Documentation, 2020.

### Of the 7 tracts within the Near Northwest (Figure 11):

- Five out of the 7 census tracts are considered to have high vulnerability, as shaded by the dark blue.
- Another two tracts, shaded in aqua, are considered to have medium–high vulnerability.
- There are no tracts in the boundaries of the Near Northwest with a low–medium or low level of vulnerability, which would be shaded pale green or yellow.

**This shows a concentration of social vulnerability in the Near Northwest which raises the risks for poor health and lost years of potential life in times of both crisis and normalcy.**

Figure 11. Social Vulnerability Index Map of Marion County Tracts, 2018

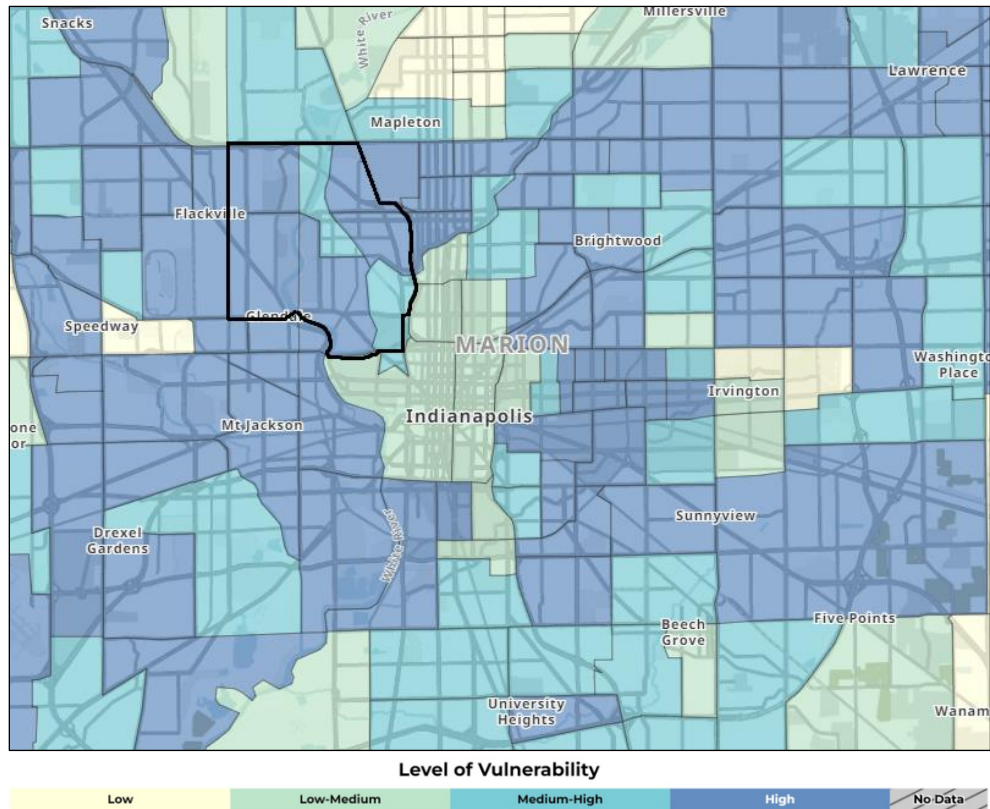


Image source: Centers for Disease Control & Prevention, SVI, 2018 Documentation. Retrieved 02/10/2023 from <https://svi.cdc.gov/map.html>.

Note: Near Northwest boundary outlined in black by M. Altman

## Opportunity

The degree of opportunity presented to children in their communities today is associated with their overall life expectancy as adults. Neighborhoods affect a child’s quality of education and wellbeing, their expectations for the future, and their chances of moving up the social ladder. The Child Opportunity Index 2.0 compares and ranks each census tract in the U.S. on 29 different measures that affect the opportunity for children to thrive in the area. Acevedo-Garcia and colleagues describe the dimensions of neighborhood opportunity captured in the Child Opportunity Index (COI) (Figure 12).

Figure 12. Dimensions of the Child Opportunity Index 2.0

**The COI 2.0 indicators capture:**

- Availability and quality of neighborhood institutions (e.g., early childhood education centers and schools)
- Peer and adult influences that help shape children’s norms and expectations (e.g., high school graduation rate and adults with high-skill jobs)
- Neighborhood social structure and economic resources (e.g., neighborhood poverty and employment)
- Environmental quality (e.g., air pollution)
- Resources for healthy living (e.g. green space, healthy food outlets, walkability)

Recreated from Acevedo-Garcia et al., 2020 by M. Altman

Across all metros in the United States, people living in areas of very-low child opportunity have a life expectancy that is 7 years shorter than residents of very-high child opportunity [31]. Furthermore, the Indianapolis metro ranks among the top ten metros with the widest (worst) life expectancy gap between very high and very low opportunity areas (Acevedo-Garcia et al., page 43).

The following page shows two maps of the COI: first, across the Indianapolis metro area (Figure 13) and second, focused on the Near Northwest (Figure 14). Both maps are shaded to indicate where a census tract falls in the five opportunity levels, from very low (lightest color) to very high (darkest color).

- In Figure 13, the pattern of child opportunity for the Indianapolis metro is similar to the area’s maps of life expectancy [8]: the lowest opportunity areas are concentrated near the urban core, while the highest opportunity areas form a ring in the suburban transition, just outside the I-465 loop.
- In Figure 14, all tracts within the black-outlined area of the Near Northwest reflect very low child opportunity levels.

Overall, these results reflect a neighborhood environment in the Near Northwest that potentially impedes upward mobility along the ‘ladder’ of the social gradient for children living in the Near Northwest— **low childhood opportunity places the future health of children living in the Near Northwest at risk.** Without improving opportunity for children in the area, cycles of poor health and shortened lives are likely to continue from one generation to the next.



Figure 13. Map of the Child Opportunity Index 2.0 in Metropolitan Indianapolis, 2015

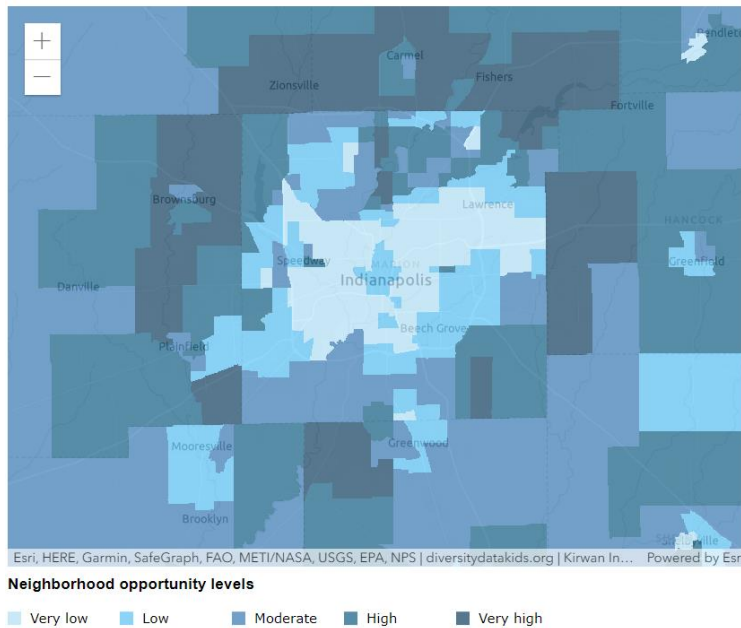


Image source: Child Opportunity Index 2.0 database

Figure 14. Map of the Child Opportunity Index 2.0 in the Near Northwest, 2015



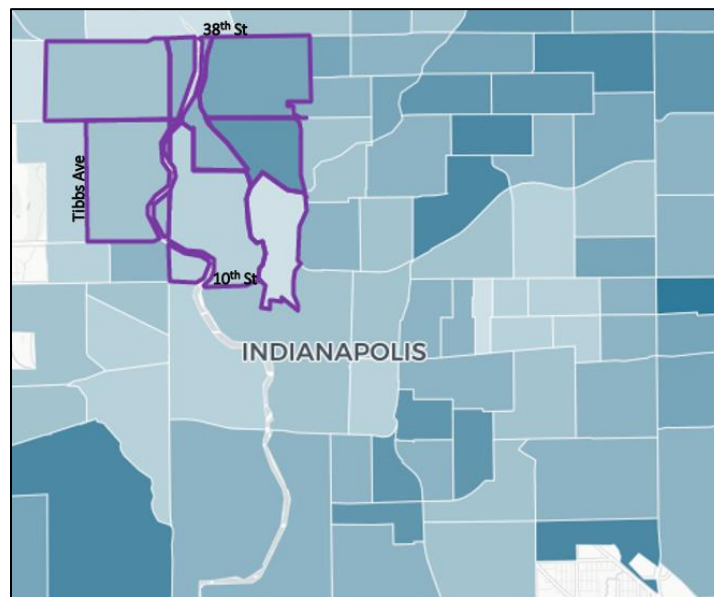
Image source: Child Opportunity Index 2.0 database.  
 Note: Near Northwest streets labeled and boundary outlined in black by M. Altman

## Diversity

The legacy of redlining and racial residential segregation in Indianapolis and the United States persists today. While areas of greater racial and ethnic diversity experience longer life expectancy, historically segregated neighborhoods have shorter life expectancy [32].

The Near Northwest is a historically and culturally significant community for the African American community in Indianapolis, with a 2020 vision to “become the hub for African American arts and culture” [3]. We reviewed the racial/ethnic diversity index published online by the City Health Dashboard to document the area’s level of diversity. This scale ranges from 0 to 100, where 0 describes a community made up entirely of one racial group (no diversity), and 100 describes a community that has equal representation of all racial/ethnic groups. Overall, the 7 tracts in the Near Northwest are less diverse than the city of Indianapolis on the whole, with a score of 62.1 vs 70.5 (2018). However, within the NNW, there are large differences in diversity from tract to tract. The most diverse Near Northwest tract scored an 82.3, while the least diverse tract scored a 31.2. The figure below shows racial and ethnic diversity throughout Indianapolis in 2018, with the Near Northwest areas outlined in purple (Figure 15).

Figure 15. Racial/Ethnic Diversity by Tract, 2018



### Racial/Ethnic Diversity in 2018

Indianapolis had an estimated racial/ethnic diversity score of **70.5** (out of 100) in 2018, compared to an average of **59.7** across the Dashboard’s cities.

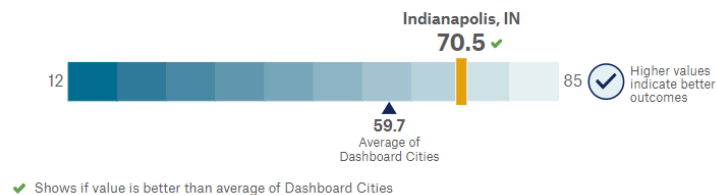


Image source: City Health Dashboard using American Community Survey Survey 5 year estimate data.  
Note: Near Northwest tracts outlined in purple. Streets labeled in black by M. Altman

Consistent with the tract-level variation in racial/ethnic diversity score, the proportion of the residents by tract who are people of color also varies greatly. Even with a relatively high racial and ethnic diversity value, the high percentage of people of color living in the Near Northwest indicates that there is still a significant amount of racial residential segregation.

- Eleven of the 14 block groups in the Near Northwest had over 75% people of color as the percentage of the total population
- The most racially segregated tract (11% of the Near Northwest population) was made up of 98.3% people of color.
- The least segregated tract (11% of the Near Northwest population) was made up of 58.3% of people of color.

### Neighborhood Change

Research on the relationship between urban development and health indicates that “neighborhood change processes likely have both detrimental and beneficial effects on health” [33]. Several neighborhoods near the downtown center have drawn developers’ interest in recent years with the opportunity to buy and renovate properties. Unfortunately, these tend to be sold at a price that is unaffordable to most long-time residents of the area, raising concerns about gentrification. Rising housing costs and property taxes may displace long-time residents who can no longer afford to live within the community, with resulting harmful impacts on their health and disruption of social ties within the community [34,35].

According to the Index of Neighborhood Change reported by the SAVI Community Information System, the socioeconomic composition of the Near Northwest has remained stable overall comparing 2020 to 2015. This index factors in the change in proportion of population that are White (as increases may signal minority displacement), change in percent of population with a 4-year college degree, and change in per capita income (as both of these may signal displacement of people with lower socioeconomic status due to rising cost of living in a gentrified area).

When comparing 2020 to 2015, the Near Northwest experienced an increased percentile rank for educational attainment relative to other areas of the Indianapolis MSA, and small counterbalancing changes in income level and White proportions. Thus, when considered together as an index, the average or net change falls into the “Stable” window.

Figure 16. Index of Neighborhood Change, 2019

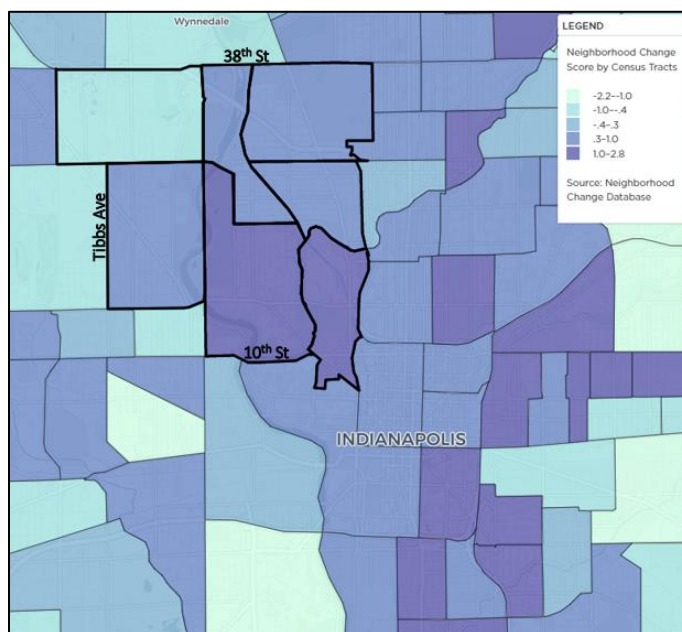


Image source: The Polis Center at IU Indianapolis, SAVI Community Information System, The Polis Center (<https://www.savi.org/>), retrieved 02/15/2023.

Note: Near Northwest streets labeled in black by M. Altman

## Education

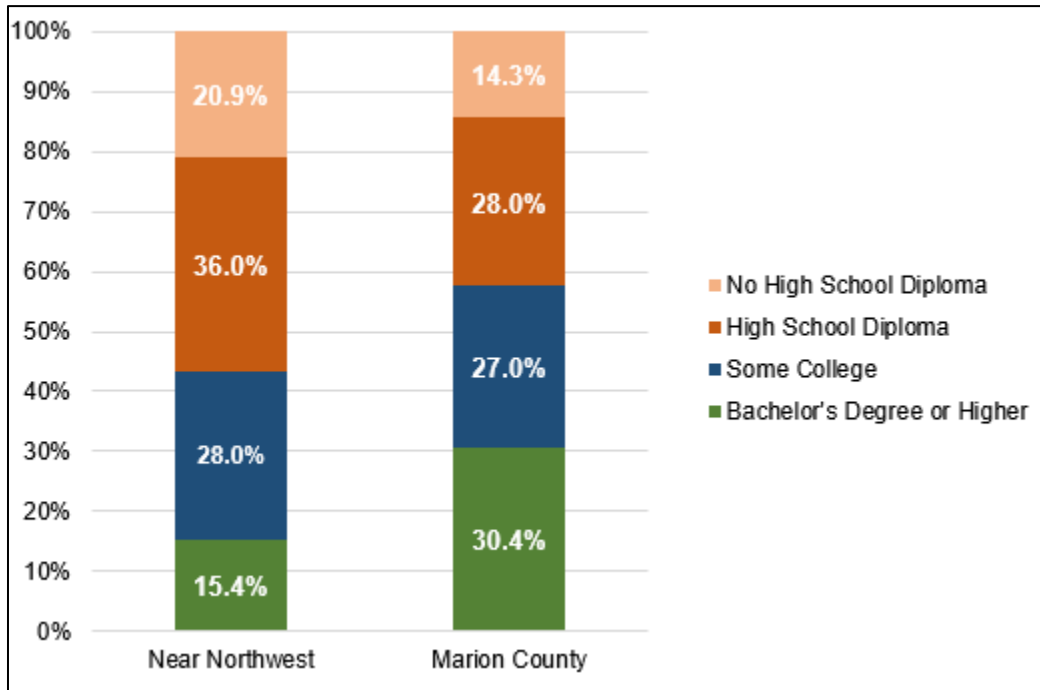
Educational attainment is a key indicator of social class and a powerful predictor of adult health [36]. Across the U.S., the quality of one's health rises in step with education level. Within Indiana, 35.6% of those who have not completed high school are in fair or poor health, compared to just 7.9% of those with college degrees – 4.5 times as many. Conversely, 65.0% of those who completed college are in very good or excellent health, compared to only 29.9% of those who have not completed high school [37]. The effects of education compound over a lifetime, impacting health at every stage. Opportunities to obtain a quality education are not fairly available to all, as demonstrated by the Child Opportunity Index, and this has lasting, widespread consequences [31].

One way we assessed the educational landscape of the Near Northwest was by comparing Near Northwest adults aged 25+ (beyond usual age of school completion) to those living across Marion County in terms of the highest level of education they have received.

- As Figure 17 demonstrates, the percentage of Near Northwest adults without a high school diploma is 1.5 times the rate across Marion County (20.9% compared to 14.3%).
- Conversely, the percentage of Marion County adults aged 25+ with a college degree is 2 times the rate among adults of the Near Northwest.

**These data indicate that the lower educational attainment of Near Northwest adults compared to those across Marion County is likely an important root cause of the poorer health and shorter lives of residents.**

Figure 17. Near Northwest Adults by Highest Level of Education, 2014-2018



Data source: The Polis Center at IU Indianapolis, SAVI Community Information System, The Polis Center (<https://www.savi.org/>), using American Community Survey data, retrieved 03/01/2023.

In Table 11, we summarize the state and federal school ratings for public schools located within the geographic boundaries of the Near Northwest, as an indication of the quality of education available to students in this area, relative to schools across the state or nation. Federal rankings are meant to reflect a school’s overall achievement with respect to performance, while state rankings are calculated by performance, growth, and multiple other measures, like actions taken to prepare students for their next steps [38].

Among the youngest learners, the Near Northwest has seven public elementary and junior high schools (Table 11). Two of these schools, Cold Spring and Riverside, received A-grades in both the state and national ratings. Two others had mixed ratings (B by state, C by federal). The remaining three schools received C ratings or lower, falling short of state and/or federal expectations.

Crispus Attucks High School and Herron-Riverside High School are the only two public high schools located inside the Near Northwest boundary operating in 2018. Herron-Riverside High School is a public charter school that just opened in 2017, and thus does not report state or federal ratings or a graduation rate for 2017-2018. Herron-Riverside High School was awarded as a gold medal school in 2018 by the U.S. News and World Report. Crispus Attucks is one of four Indianapolis Public School (IPS) All-Choice high schools. It has been open since 1927 and was assessed by the state as a B-rated school and graded federally as a C-rated school in 2018 (Table 11). Between 2014-2018, the 4-year graduation rate for students of Crispus Attucks was consistently ranked higher than the county, metro, or state rate with an average graduation rate of 96.4% compared to an average of 86.3% for Marion County, 90.8% for the Indy metro, and

90.6% for Indiana. It is important to note that these Near Northwest rates are based on all students who attend a school that is physically located within the Near Northwest, but it can include students who live elsewhere. Likewise students who live in the Near Northwest but attend a school outside the area are *not* reflected in these rates. For example, there are students living in the Near Northwest who attend Herron High School; however, that school’s graduation rate is not shown here because it is not physically located within the Near Northwest. Even so, the public high school performance metrics for school(s) located within the community boundaries is informative, as this reflects the quality of high school opportunities available to residents locally.

Table 11. Public Elementary, Junior High, and High Schools in the Near Northwest, 2018

Public Schools	School Type	State Grade	Federal Grade 2018-2019
<b>Elementary/Junior High Schools</b>			
Cold Spring School	Traditional	A	A
Elder W. Diggs School 42	Charter	C	D
Ernie Pyle School 90	Traditional	B	C
George Washington Carver School 87	Traditional	B	C
Global Preparatory Academy	Charter	No Grade	F
Riverside School 44	Traditional	A	A
Vision Academy	Charter	D	D
<b>High Schools</b>			
Crispus Attucks	Traditional	B	C
Herron-Riverside	Charter	No Grade	No Grade

Data sources:

[1] The Polis Center at IU Indianapolis, SAVI Community Information System, The Polis Center (<https://www.savi.org/>), retrieved 04/20/2023.

[2] Indiana Department of Education

**The educational landscape is mixed in the Near Northwest**, and is situated within evolving educational environments city-wide. While there are two highly ranked elementary/junior high schools in the area to help the youngest children make a healthy start, there are several schools that do not meet state and federal expectations, and are thus not supporting long-term health. With the opening of Herron-Riverside High School, the opportunity for a quality high school education was expanded in the Near Northwest, complementing the stable presence of Crispus Attucks.

# Employment

Employment provides people and families with the pay required to provide for their needs in life. It also conveys meaning and identity as we contribute skills and effort to society. On the other hand, unemployment is not good for health. Not only does it leave one without income and other benefits like health insurance, the stress of unemployment has also been linked to poor physical and mental health outcomes [39].

According to 2018 estimates, **unemployment was higher overall in the Near Northwest than across Marion County.** In the Near Northwest, Black persons have the highest unemployment rate at 12.7%, in line with Marion County. Consistent with the strong connection to educational attainment, unemployment falls with increasing levels of education - both in the Near Northwest and across the county. Near Northwest residents without a high school diploma are unemployed at a rate 3.2 times the rate of those with a college degree.

*Table 12. Unemployment Rate within Demographic Groups, 2014-2018*

Demographics, 2014-2018	Near Northwest	Marion County
	Percent of Total	Percent of Total
Total Unemployed	9.9%	7.0%
<b>Sex</b>		
Male	10.0%	7.0%
Female	10.0%	7.0%
<b>Education</b>		
No High School Diploma	14.2%	12.0%
High School Diploma	11.4%	8.9%
Some College/Associates Degree	7.5%	5.2%
Bachelor’s Degree or Higher	4.4%	2.7%
<b>Race/Ethnicity</b>		
White, non-Hispanic	7.3%	5.0%
Black, non-Hispanic	12.7%	12.6%
Hispanic	1.2%	5.3%
Asian	0.0%	3.9%

Data source: The Polis Center at IU Indianapolis, SAVI Community Information System, The Polis Center (<https://www.savi.org/>), using American Community Survey data, retrieved 04/24/2023.

# Income

Money is a fundamental resource needed to provide for basic needs and to sustain health [40]. For most, money comes through wages earned on the job as income. Multiple studies show a strong and consistent relationship with income and health: as income increases, the likelihood of disease and premature death decreases [41].

The Near Northwest has a much lower median income than Marion County (Figure 18). Individually, lower income is easily linked with an inability to afford healthcare/insurance or the basic necessities required to maintain a healthy lifestyle [42]. These effects, however, are not just important to individuals. Area-wide low income can lead to “economic segregation,” where a lower tax base results in less financing for public resources [43]. This cascades into having

limited access to high quality, health-promoting resources in the neighborhood, such as access to nutritious food, housing, transportation, quality school systems and employment opportunities, and clean air and water [42].

Figure 18. Median Household Income, 2018

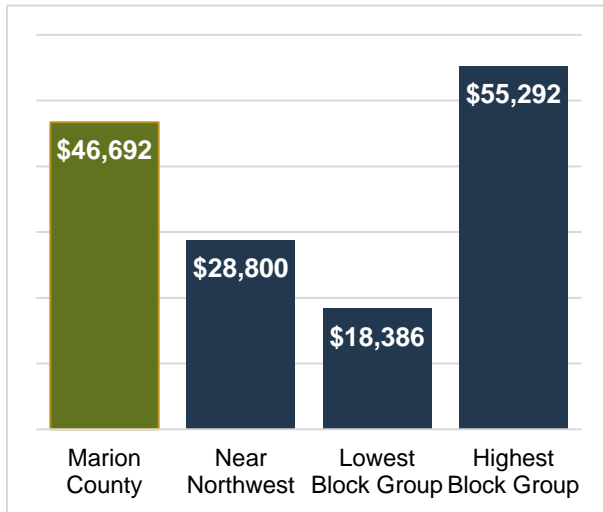
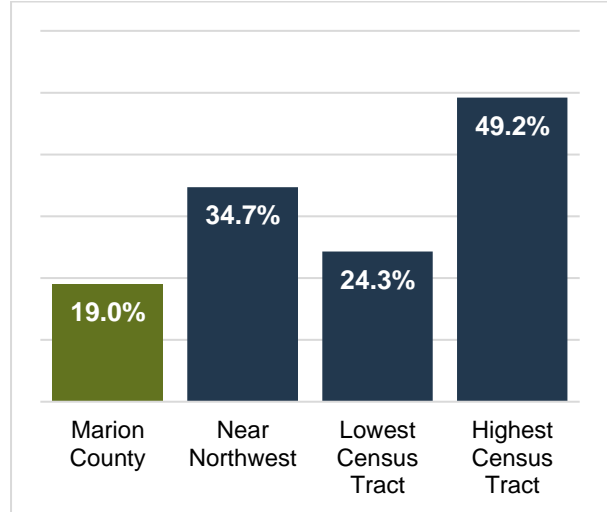


Figure 19. Poverty Rates, 2018



Data sources:

[1] The Polis Center at IU Indianapolis, SAVI Community Information System, The Polis Center (<https://www.savi.org/>), using American Community Survey data, retrieved 04/24/2023.

[2] Source for lowest and highest block group data is The Polis Center at IU Indianapolis, SAVI (Classic) Community Information System, The Polis Center (<https://classic.savi.org/savi/>), using American Community Survey data, retrieved 04/25/2023.

The poverty rate in the Near Northwest trended upward from 2010 to 2018, rising from 27.3% in 2010 to 34.7% in 2018, even while median household income increased from 2016-2018. The poverty rate in the Near Northwest is significantly higher than that of Marion County as a whole (Figure 19). Even the tract with the lowest poverty rate in the Near Northwest has a higher rate than Marion County. **These comparative data reveal that income is lower and poverty is higher in the Near Northwest, which can contribute to community-level disinvestment and increased health risks.**

## Housing

Housing is a fundamental building block to health. Stability and security are interrupted when affordable housing is inaccessible [44]. When a household spends more than 30% of their income on housing, they become housing cost-burdened. Housing insecurity affects all individuals living in the household, and housing cost-burden has been linked to poor mental and physical health and financial stress, as well as requiring individuals to often share already small spaces [45,46]. Yet, there is a far greater demand for affordable housing than is met across the country [47].



A safe and stable home is health promoting, and lack of one is health damaging. The data below demonstrate that affordable housing is further limited for residents of the Near Northwest, which can be due to lower incomes and higher rental costs. Lower rates of home ownership, higher rates of housing-cost burden, and slightly higher rates of eviction are all threats to health and wellbeing among residents.

- In 2018, fewer residents of the Near Northwest were homeowners (40.2%) compared to Marion County (54.0%) [48].
- In 2018, more residents of the Near Northwest were housing cost-burdened (46.5%) - paying >30% of their income toward housing costs - than residents of Marion County (33.4%) [48].
- According to the Eviction Lab at Princeton University, the eviction judgment rate in the Near Northwest was similar to Marion County in 2018, while much higher than Indiana rates. The average eviction judgement rate among Near Northwest block groups was 6.0% of renters compared to 5.8% for Marion County and 3.8% for Indiana [49].

Home ownership is positively correlated with health and upward mobility, but these effects are diminished when foreclosures occur [45,50,51]. Foreclosure, eviction, and housing cost burden can all affect health negatively, which each substantially impact the Near Northwest area. This makes it harder for residents of the Near Northwest to reap the health benefits that housing affords, and they instead face the individual and community consequences of destabilized housing across generations.

## Food Access

Both low access to healthy food and food swamps are challenges to healthy nutrition. Food swamps are places where there is an overabundance of unhealthy food, like fast food or gas stations/convenience stores, while healthy options are harder to come by. Low access to healthy food is defined as a low-income census tract where “a significant number or share of individuals in the tract is far from a supermarket” [52]. These areas are commonly referred to as food deserts [53]. In neighborhoods with low healthy food access, residents may rely upon small markets – even gas stations – in their neighborhood for food, and these stores often charge higher prices for much fewer healthy options [54].

The percentage of the Near Northwest population with low access to healthy food (per SAVI, live more than 1 road mile from a grocery store) was 12.7% in 2015, much lower than reported for Marion County on the whole (27.1%) [5]. While this is favorable news, this still represents more than 2,500 people in the Near Northwest with low food access, and those most likely to be affected are those without transportation or in poverty [5].

A chronic lack of access to food will contribute to poorer nutrition and poorer health for those with limited food access. There was only one full service grocery store, a Safeway, located in the Near Northwest in 2018 (Figure 20). Figure 20 layers access to food establishments with the percent of the population in poverty. Within the Near Northwest (outlined in black in Figure 20), the two block groups with at least 47% of their population living in poverty are far from the full-service grocery store, with only convenience stores nearby. Easy access to fast food and

convenience stores is associated with a higher prevalence of diabetes among low-income and minority populations [55].

Figure 20: Retail Food Establishments by Percent of the Population Below 100% of the Federal Poverty Guideline, 2018

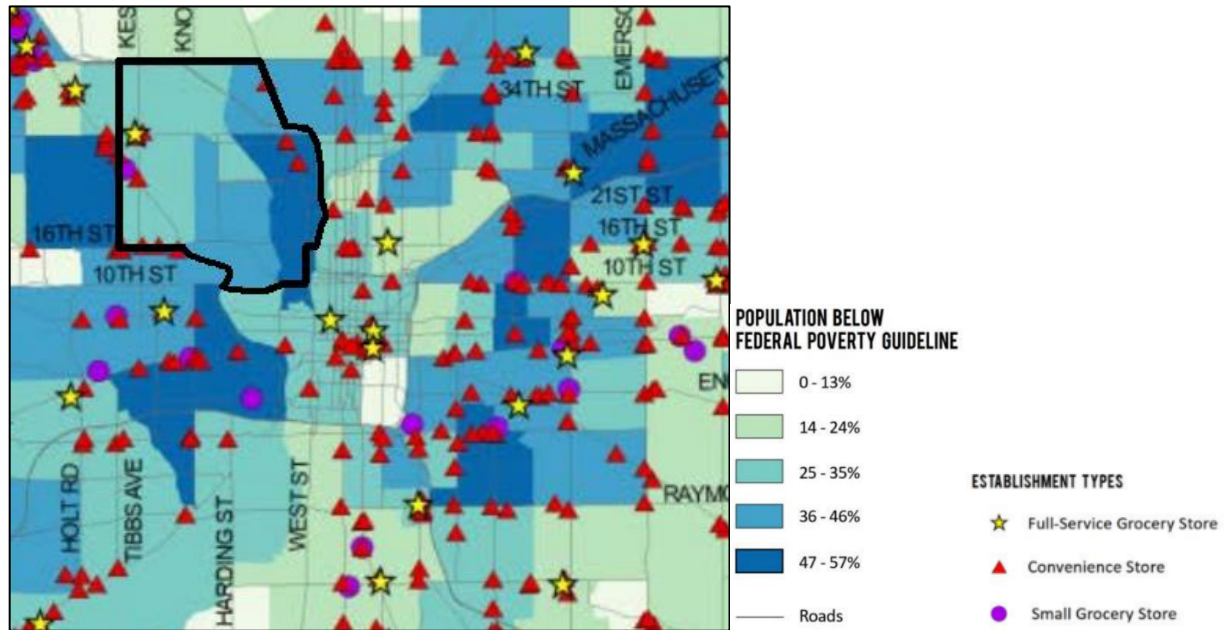


Image source: 2018 Health Equity Report: Census Bureau, 2012-2016 American, DR3428 and MCPHD, 2017 Food and Consumer Safety & Chronic Disease, DR3576  
 Note: Near Northwest boundary outlined in black by M. Altman

Even if people have a grocery nearby, being able to provide enough food for one’s household is a challenge for many. A proxy for measuring food insecurity is the proportion of people enrolled in the Supplemental Nutrition Assistance Program (SNAP), often referred to as SNAP benefits. **In the Near Northwest 24.4% are enrolled in this program compared to 14.6% in Marion County.** This ranges throughout the census tracts in the Near Northwest, where it reaches as high as 43.3% [56].

Whereas 15.3% of Marion County residents are defined as food insecure [57], higher SNAP enrollment in the Near Northwest indicates a higher level of food insecurity overall. A wide variety of studies have linked such food insecurity to poor physical and mental health outcomes [58], including an increased risk for type 2 diabetes [59]. In fact, food insecure adults are 2 to 3 times more likely to have diabetes compared to adults who are not food insecure [59].

Eating nutritious foods is an important factor when managing blood sugar levels and can contribute to prevention of type 2 diabetes [59]. Unfortunately, healthy eating can be expensive. For people who already suffer from diabetes, buying nutritious food can compete with their healthcare costs of buying medicines and supplies [59]. People with diabetes spend twice as much on health care expenses than those who do not have diabetes [59]. These extra costs can lead to people with diabetes experiencing food insecurity, which can adversely affect how well they are able to manage their disease [59]. Having diabetes while food insecure can lead to

diabetes-related complications, higher A1c levels, poor mental health, and hospitalizations [59]. Without steady access to nutritious food, maintaining good health is challenging.

## Transportation

Everyone needs a way to get from place to place - to get to work, to buy groceries, to visit the doctor. For those who may not have the resources to own a car, public transportation or “active” transportation (walking and biking) are necessary to go about life. Therefore, this leads to three necessary measures for understanding transportation options which affect health in the Near Northwest: car use, public transportation access, and walkability. Communities that can offer residents easy access to reliable public transportation and walkable or bikeable streets boost their ability to participate fully in life through increased physical activity and mobility.

In 2018, 14.5% of Near Northwest workers got to work without using a car [48]. Figure 21 displays the variation between the Near Northwest tracts when accounting for non-car work commuters. In one tract, this percentage reached 36.1%, with the percentage generally being higher the closer the tract was to the center of the city. This is a higher percentage than across Marion County (5.2%); therefore, these residents of the Near Northwest require greater access to public or active transportation.

Figure 21. Non-Car Work Commuters by Census Tracts, 2018

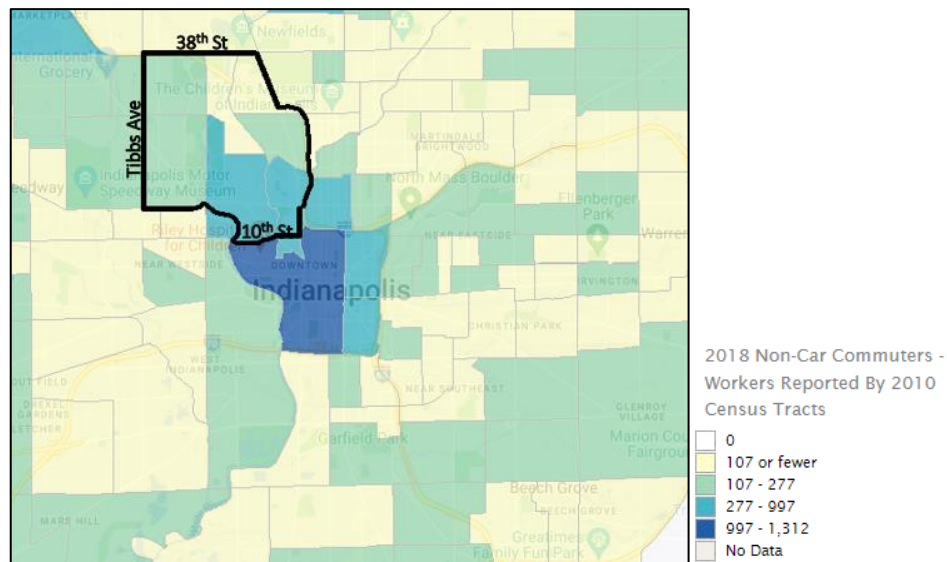


Image source: The Polis Center at IU Indianapolis, SAVI (Classic) Community Information System, The Polis Center (<https://classic.savi.org/savi/>), retrieved 04/26/2023.

Note: Near Northwest streets labeled and boundary outlined in black by M. Altman

Easy access to public transit is especially helpful to low-income workers living in urban areas, where getting around by car involves additional expenses, such as parking fees and increased insurance rates. In the map below (Figure 22), the Transit Access Score is shown for census tracts in Marion County, where the darker shades indicate better access to public transportation in the area. This score represents the total miles of bus service in a week per square mile in

each tract. **The map shows that the Near Northwest block groups have only a moderate level of transit access, despite very close proximity to the city center.**

Figure 22. Transit Service Density by Census Tracts, 2019

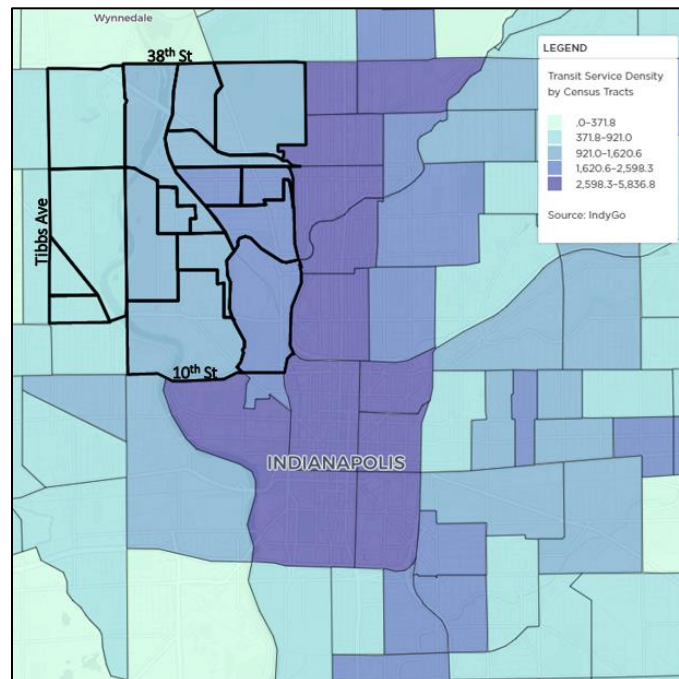


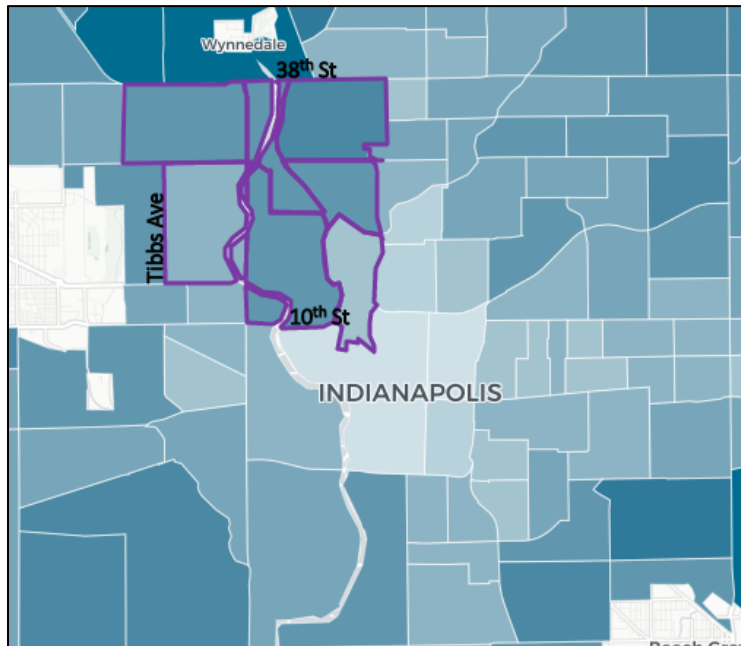
Image source: The Polis Center at IU Indianapolis, SAVI Community Information System, The Polis Center (<https://www.savi.org/>), using IndyGo data, retrieved 04/26/2023. Near Northwest streets labeled in black by M. Altman

There is a moderate to low level of walkability in the Near Northwest. The map in Figure 23 shows walkability in 2019, with lighter shades reflecting greater walkability. The walkability metric by the City Health Dashboard (Figure 23) scores walkability for over 750 U.S. cities considering neighborhood amenities that are accessible by walking [60]. This metric was calculated by the Walk Score® Index giving a score between 0 and 100 [61]. A score of 90-100 represents a “walker’s paradise” where daily errands do not require a car, a score of 70-89 means most errands can be accomplished by foot, a score of 50-69 indicates that some errands can be completed by foot, 25-49 is when a car is required for most errands, and a score of 0-24 means almost all errands require a car [61]. Compared to other cities, Indianapolis on the whole has a below-average walkability score of 30.5.

The purple outline in Figure 23 approximates the geographic boundaries that enclose the Near Northwest. Five out of the seven Near Northwest tracts scored between 25.7 and 39.5, suggesting that these areas are car-dependent areas, since a car is necessary to complete most errands. The other two tracts had scores of 51 and 64.7, which means they are somewhat walkable. The average weighted walk score for the Near Northwest as a whole was 42, indicating that it is a car-dependent community.

Walkability is also important for promoting health and social engagement across communities. It not only provides residents with another option to reach desired destinations, while also encouraging physical activity across the community [62].

Figure 23. Walkability in 2019



### Walkability in 2019

Indianapolis had a walkability score of **30.5**, compared to an average of **41.3** across the Dashboard's cities.

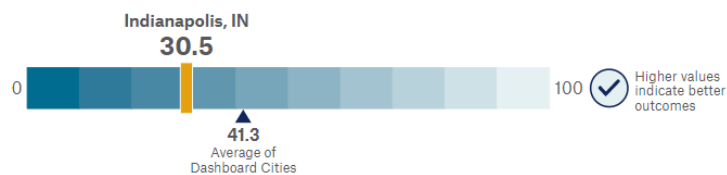


Image source: City Health Dashboard using Census Tract Maps Data

Note: Near Northwest boundary outlined in purple. Near Northwest streets labeled in black by M. Altman

## Pollution

The physical environment has a significant impact on one's health. The Near Northwest has current and past commercial and industrial actions that have contributed to ongoing environmental concerns throughout the community [63]. For decades the Near Northwest has been home to numerous dry cleaners, salvage yards, and machine shops that are tied to a history of environmental pollutants in the air, water, and soil [64].

Furthermore, many homes within the Near Northwest are regularly exposed to vehicle exhaust due to their close proximity with a major highway, I-65, as well as two busy roadways, 38<sup>th</sup> Street and Dr. Martin Luther King Jr Street. Exposure to air pollutants from vehicle exhaust has been linked with both asthma and heart disease [65,66]. Prior to the removal of lead from gasoline, vehicle exhaust also contributed to the settlement of lead into the soil near these roadways – those lead deposits are still a potential source of lead poisoning today [67].

The following map (Figure 24) was developed by researchers with the IU Fairbanks School of Public Health to summarize an area's pollution burden [68]. Following the rough outlines of the Near Northwest (outlined in black), one of the tracts falls into the second highest score of pollution burden (81-90%), while the least pollution-burdened tract in the area is considered to be low to moderately polluted (21-30%). Since most of the tracts have a moderate level of pollution burden, the data suggest that exposure to various environmental pollutants presents potential health risks to residents of the Near Northwest.

Figure 24. Pollution Burden in the Near Northwest, 2016

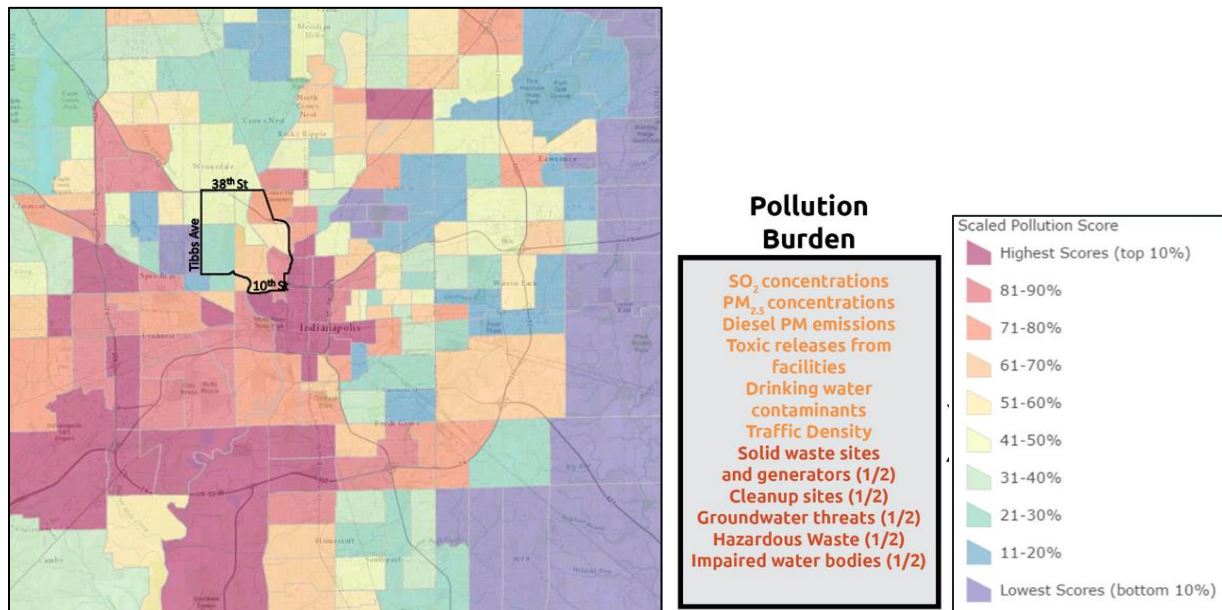


Image & data source: Healthy Environment and Community Assessment Partnership (HECAP), Multi-Layer Data Community Action Tool (MDCAT) Version 2, 2016. Note: Near Northwest streets labeled and boundary outlined in black by M. Altman

Finally, because elemental lead (Pb) exposure is a potent toxin to young children causing lifelong and irreversible damage; we review the degree of lead exposure risk within the Near Northwest. Though lead was removed from new paint production in 1971 and in gasoline in 1996, it never goes away from the environment, and neither do its effects on children's health [67]. Children can be exposed through old paint chips or dust, soil, and even water (through the leeching of lead from old pipes). As was seen in the Flint Michigan disaster, the effects on developing children are devastating and can alter lifelong health trajectories [69].

The map below (Figure 25) highlights five levels of lead exposure risk where tracts were ranked to show where lead exposure is potentially greatest for children [12]. These levels were calculated by considering five metrics: the percent of children under the age of 5; the number of children that have been lead poisoned in the past five years; percent of housing built before 1980; people employed in industries with lead exposure risk; and the percent of families living in poverty [12]. Following the rough outlines of the Near Northwest (outlined in black) in Figure 25, there is one tract with below average risk for lead exposure, three tracts with an average risk, and three tracts where there is a high risk of childhood lead exposure. The three out of the seven Near Northwest tracts deemed as high risk for lead exposure presents potential negative health impacts for children residing in these areas.

Figure 25. Marion County Lead Risk Index by Census Tract, 2011-2015

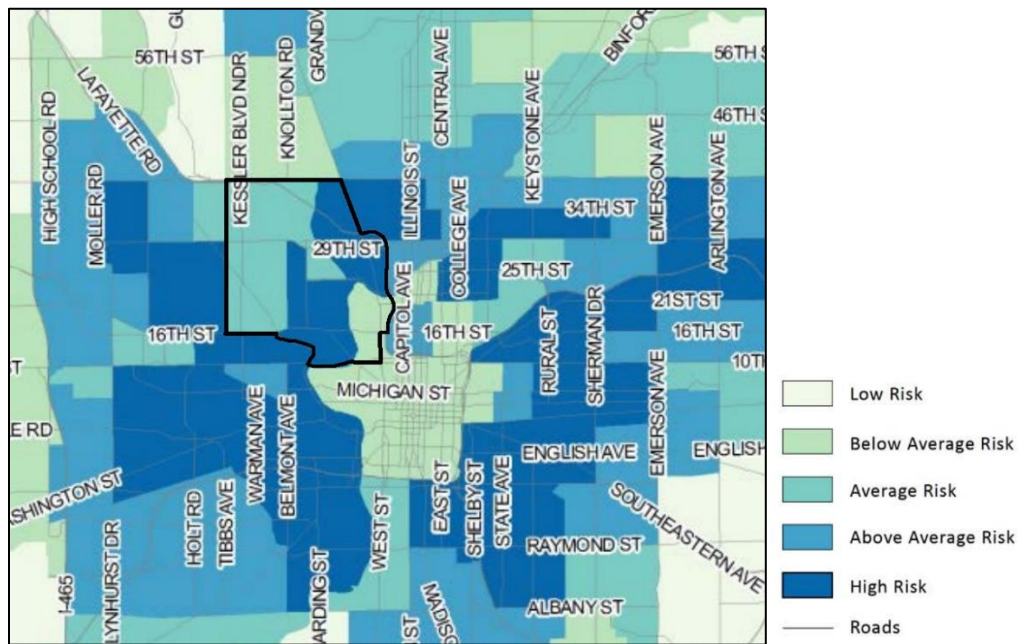


Image source: 2018 Health Equity Report: Census Bureau, 2011-2015 American Community Survey and Marion Co. Lead Statistics, DR3235. Note: Near Northwest boundary outlined in black by M. Altman

## Community Safety

Prevalent crime in the community can affect the physical and mental wellbeing of victims, witnesses, and perpetrators [70]. Crime is both a symptom and a cause of poor community health. Safety concerns, even among those who have not been directly involved in a crime, can keep people from freely getting outside for exercise or connecting socially with friends and neighbors. Victims and witnesses of a crime often experience trauma, especially among children. This experience has been shown to affect health into adulthood, and safety concerns can loosen the important ties between neighbors and the community to look out for one another and keep violence in check.

Individuals who have themselves been victimized, or who lack support in life, are more likely to have difficulty planning for the future and finding work, leaving them vulnerable to the underground economy and the criminal justice system. This not only affects the incarcerated individual, but the security of their family and the likelihood that their children, in turn, will have a healthy and productive life [71].

Table 13. Crime Rates of Near Northwest and Marion County, 2018

Crime	Near Northwest <sup>[1]</sup>	Marion County <sup>[2]</sup>
	Rate per 1,000 residents	Rate per 1,000 residents
Juvenile Charges (Charges ages 5-17)	17.0	18.6
Property Crime	51.2	41.3
Violent Crime	25.4	12.7

Data sources:

[1] The Polis Center at IU Indianapolis, SAVI (Classic) Community Information System (<https://classic.savi.org/savi/>), retrieved 03/10/2023.

[2] Federal Bureau of Investigation, 2018

In comparison to Marion County, the Near Northwest has a lower rate of juvenile charges per 1,000 residents (2018). The Near Northwest has a higher rate of property and violent crimes compared to Indianapolis [72], which is shown in Table 13. As a positive trend, the violent crime rate slightly dropped each year in the Near Northwest between 2013 and 2018 [48]. Figure 26 displays the violent crime rates by census blocks for all tracts in the Near Northwest (outlined in black) in relation to Marion County. As shown, the block groups of the Near Northwest vary widely in the violent crime rate. There are 3 block groups that are represented by the darkest shade in the legend below in Figure 26, indicating they fall within the highest bracket for violent crime rates relative to other blockgroups of the city.

Figure 26. Violent Crime Rate by Census Blockgroups, 2018

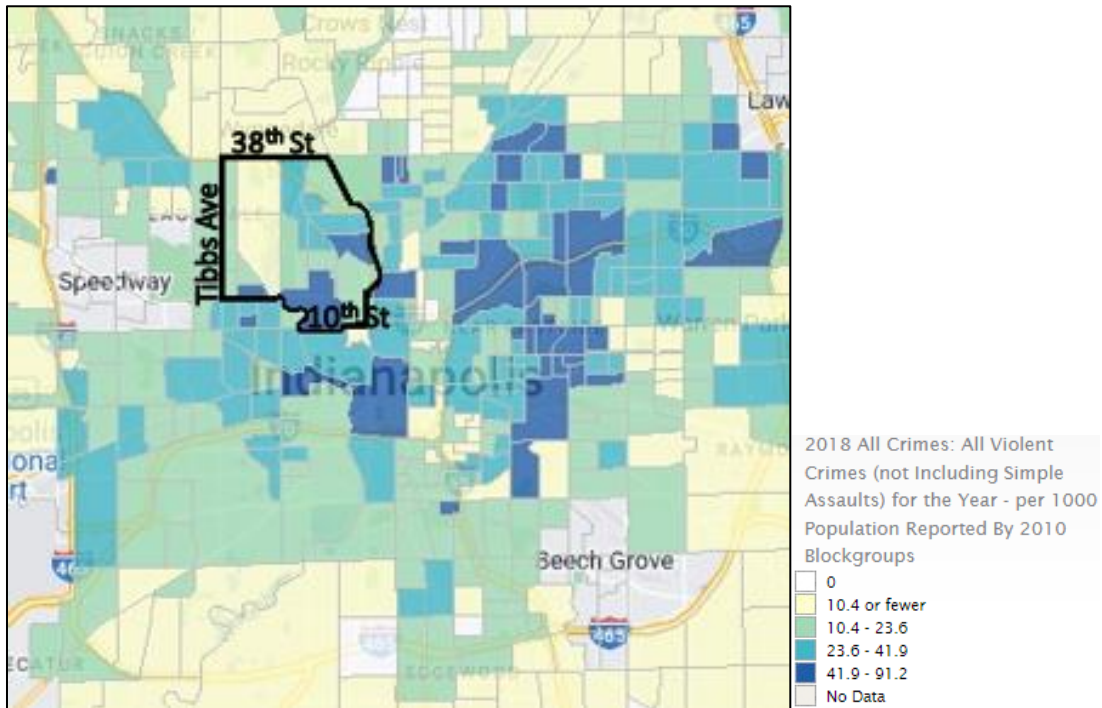


Image source: The Polis Center at IU Indianapolis, SAVI (Classic) Community Information System (<https://classic.savi.org/savi/>), using data from Indianapolis Metropolitan Police Department / National Archive of Criminal Justice Data, retrieved 04/29/2023.

Note: Near Northwest streets labeled and boundary outlined in black by M. Altman



## Other Community Resources

Places within community where all people can access shared resources and interact with neighbors are essential to a community's vibrancy. The social ties within a community are themselves a strong influence on health. Often referred to as "social cohesion," these ties are reflected in the level of trust neighbors have for one another: their sense of belonging, willingness to help each other, engaging in community activities, and holding shared values/norms. A community's level of social cohesion has been associated with many health outcomes among residents, including diabetes, heart disease, and all-cause mortality [73].

The Near Northwest community has been described as a place of prominence, ingenuity and tremendous affluence, with social life that was supported by many anchoring institutions such as churches, parks, and the community center [74]. Over time these ties were disrupted by changes including the construction of highways and loss of long-time residents.

The Near Northwest has one community center (Flanner House) that has endured through 125 years [1]. Flanner House originated as a direct response to segregation with the purpose of promoting moral, social, and physical welfare to African Americans living in the community [74]. Early on, a sweat equity project was developed that gave residents the chance to build their own homes without needing a down payment. Flanner House has helped build 260 homes for residents throughout the Near Northwest. Homeownership has been shown to positively influence health by creating a sense of physical and emotional security, providing people with more control over their life and safety [75].

Flanner House still strives to improve the quality of life of Near Northwest residents by focusing on education, wellness, employment, peace and safety, food justice, and economic development [1]. The Center for Working Families is held inside of Flanner House and has the goal to empower residents by providing industry-based skills through education and training, offering support services such as transportation and childcare, and by sharing opportunities and services with the Near Northwest community [74].

There are more parks/greenways (26), places of worship (38), and libraries (1) in the Near Northwest when taking into account the population size compared to Marion County. Overall, the Near Northwest has 44.6 community assets per 10,000 people compared to 13.3 community assets per 10,000 people in Marion County (Table 14).

Table 14. Community Resources of the Near Northwest and Marion County

Community Resources	Near Northwest		Marion County	
	Number	Assets per 10,000 Persons	Number	Assets per 10,000 Persons
Libraries <sup>a</sup>	1	0.7	24	0.3
Community centers <sup>b</sup>	1	0.7	24	0.3
Places of worship <sup>c</sup>	38	25.7	948	10.0
Parks and greenways <sup>d</sup>	26	17.6	255	2.7
Total:	66	44.6	1,251	13.3

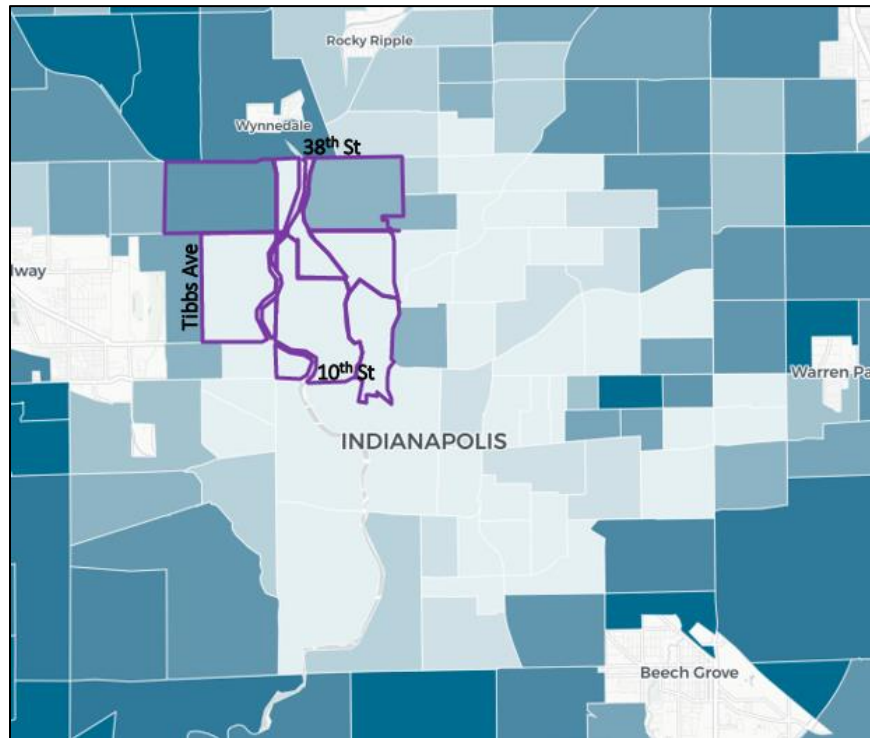
Data source: The Polis Center at IU Indianapolis, SAVI Community Information System (<https://www.savi.org/>), using data from: Indiana State Library<sup>a</sup>; Indiana 2-1-1<sup>b</sup>; Center for Congregations, Inc<sup>c</sup>; Indiana Department of Natural Resources<sup>d</sup>; Marion County Department of Public Health<sup>3</sup>, 2023.

Aside from the considerable health benefits community resources can bring through social ties, there are often additional health benefits. For example, parks/greenspaces provide space for physical activity, reduce stress, and mitigate air pollution and urban heat islands through a concentration of trees [76].

The Near Northwest community is home to several large parks/recreation areas. The largest of these parks is Riverside Park, with dedicated aquatic and recreation centers, a memorial, and a large playground/fitness area. Historically, Riverside Park has always been a hub for community. In addition to the parks in the Near Northwest, the White River serves not only as a connector between parks and golf courses as its own green space for pedestrians and bikers.

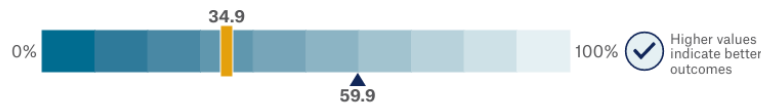
Generally, areas with higher levels of green space and walkability have a lower risk of developing diabetes [77]. Throughout the Near Northwest, there are 584 out of 3,840 acres (15%) dedicated to green space [74]. In 2018, 78% of the Near Northwest population by tract had park access compared to 35% of the population residing in Indianapolis [78]. Here, park access is defined as residents living within a 10 minute walk of a park [79]. Park access in the Near Northwest is also higher than the average across all City Health Dashboard cities (Figure 27), conveying a positive influence on health and well-being. Two tracts have a relatively low percentage of the population with park access (36.6% and 54.4%) compared to the Dashboard’s cities.

Figure 27: Parks Access in the Near Northwest, 2018



### Park Access in Indianapolis, IN

Source: City Health Dashboard; Data from ParkServe®, 2018



34.9% of Indianapolis's residents had park access, compared to an average of 59.9% across the Dashboard's cities.

■ City or census tract value    
 ▲ Dashboard-City Average    
 ✓ Present when value is better than Dashboard-City Average    
 ✔ Better Outcomes

Data source: City Health Dashboard using ParkServe® and Census tract data

Note: Near Northwest tracts outlined in purple. Near Northwest streets labeled in black by M. Altman

## Key Takeaways: The Community Context for Health in 2018

The major influences on our health occur throughout our everyday living experiences. We refer to these as “social drivers of health” – defined as “the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks” [80]. In the tree analogy, these everyday conditions are akin to sunlight, water, soil, and the root system of the tree necessary to thrive.

In this report, we describe many different aspects of the Near Northwest community environment that influence the health of its members in order to identify what is supporting good

community health (strengths) and what is hindering it (opportunities). In this section, we summarize the key takeaways. Details, context, and discussion of the impact on health are provided in prior sections of the report.

### Community-Wide Social Context

- Overall, the Near Northwest is racially/ethnically diverse, conveying a positive influence on life expectancy, although there is still a significant amount of racial residential segregation.
- All seven census tracts in the Near Northwest experience moderate-high or high rates of social vulnerability, which raises the risks for poor health and lost years of potential life in times of both crisis and normalcy.
- All tracts within the Near Northwest area experience factors that contribute to reduced opportunities for children such as high unemployment and poverty.
- As of 2019, there appears to be little change in the neighborhood composition occurring across the Near Northwest area; however, there is evidence of gentrification within 2 of the 7 tracts nearest to the downtown center.

### Education

- There are two highly-ranked elementary/junior high schools in the Near Northwest, two schools holding lower and mixed ratings (B by state, C by federal) and three schools not meeting state or federal expectations.
- In the Near Northwest, a greater proportion of adults do not have a high school diploma or a college degree compared to Marion County as a whole.
- Located within the Near Northwest, Crispus Attucks High School serves the broader Indianapolis area and consistently has a higher graduation rate than the county, metro, or state. The opening of the Herron-Riverside High School expands the opportunity for a quality high school education in the Near Northwest.

### Employment

- In 2018, unemployment was higher overall in the Near Northwest than across Marion County. Near Northwest residents without a high school diploma are unemployed at 3.2 times the rate of those with a college degree.

### Income

- Compared to Marion County, residents of the Near Northwest have a lower median income and a higher rate of poverty which results in a lower tax base and impacts availability and access to health-promoting resources in the neighborhood.

### Housing

- Compared to Marion County, the Near Northwest has lower rates of home ownership, higher rates of housing-cost burden (cost >30% of income), and slightly higher rates of eviction – all of which are threats to health and wellbeing.

### Food access

- In 2015, a larger percentage of Near Northwest residents lived within 1 road mile of a grocery store compared to Marion County, indicating better food access.
- In 2018, there was one full service grocery store located in the Near Northwest. Two block groups within the Near Northwest, with at least 47% of their population living in poverty, are the farthest away from a full-service grocery store with only convenience stores nearby.
- In the Near Northwest, a higher percentage of the population are enrolled in the Supplemental Nutrition Assistance Program (SNAP), often referred to as SNAP benefits, compared to Marion County, indicating a higher level of food insecurity.

### Transportation

- There is a moderate to low level of walkability in the Near Northwest. The area is a car-dependent community although a higher percentage of Near Northwest workers travel to work without using a car compared to Marion County as a whole.
- Despite being very close in proximity to the center of the city, the Near Northwest has only a moderate level of transit access.

### Pollution

- One Near Northwest tract falls into the highest score of pollution burden (>80%), while the least pollution-burdened tract in the area is considered to be low to moderately polluted (>20-30%). Since most of the tracts have a moderate level of pollution burden, the data suggest that exposure to various environmental pollutants presents potential health risks to residents of the Near Northwest.

### Community Safety

- The Near Northwest has a lower rate of juvenile charges per 1,000 residents (2018) compared to the rest of the county.
- The Near Northwest has a higher rate of property and violent crime compared to Indianapolis, though the violent crime rate was trending down from 2013 to 2018.
- Three block groups of the Near Northwest are in the highest grouping for violent crime relative to all blockgroups of Indianapolis.

### Other Community Resources

- The area has one, long-standing community center (Flanner House), and a rich variety of parks/greenways (26) and places of worship (38). Overall, the Near Northwest has 44.6 community assets per 10,000 people compared to 13.3 community assets per 10,000 people in Marion County.

**The considerable strengths of the community can be leveraged, with a committed group of residents, to address challenges together and build healthier futures for Near Northwest residents of all ages.**

## Tending the Tree: Next Steps

This report shares what was learned at the start of the DIP-IN project (2018), when we analyzed health and its social context in Indianapolis' Near Northwest area. Through this process we have gained a better understanding of both the challenges and strengths to consider as we try to improve community health and reduce the burden of diabetes among residents. Our next steps will be to reassess the Near Northwest at the conclusion of the project to see how the context of health has changed over the course of the DIP-IN work.

**Improving a community's health and life expectancy can be done, though it takes time and diligence. The people of the Near Northwest deserve nothing less.**

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