PITTSBURGH'S INEQUALITY ACROSS GENDER AND RACE

2019

CITY OF PITTSBURGH'S
GENDER EQUITY COMMISSION

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City of Pittsburgh

Gender Equity Commission

September 2019. As a representative of Mayor William Peduto's Office of Equity, I want to convey my deep thanks to the interdisciplinary research team that produced this groundbreaking report. It examines equity indicators in Pittsburgh and introduces an innovative tool that compares data across cities and helps identify which local interventions are likely to be most effective. The intersectional methodology and analyses of disaggregated data expose patterns that may otherwise be invisible.

This is the first component in a city-wide Gender Analysis which is being undertaken collaboratively by a research team from the University of Pittsburgh and members of Pittsburgh's Gender Equity Commission (GEC).

Created by local ordinance in late 2016, the GEC is part of a coalition of CEDAW (The Convention on the Elimination of all Forms of Discrimination Against Women) cities in the U.S. The GEC currently consists of the Executive Director and 13 volunteer Commissioners who live or work in the City of Pittsburgh. We are tasked with identifying and overcoming barriers to gender equity in local government.

> *The **mission** of the Gender Equity Commission is to achieve equity for women and girls in the City of Pittsburgh. Its **vision** is a future in which everyone in the City of Pittsburgh, regardless of gender identity or expression, is safe in all spaces, empowered to achieve their full potential, and no longer faces structural or institutional barriers to economic, social, and political equality.*

Based on the findings from the completed Gender Analysis, the GEC in 2020 will begin making recommendations for City policy and legislation to mitigate inequalities and promote gender inclusiveness. Our recommendations will incorporate input from diverse local communities and draw on the expertise of staff in City departments and authorities.

This report is notable for remedying research gaps that occur when gender and race lenses are not used to assess the equity challenges confronting our cities. Such gaps routinely lead to the proposal of allegedly universal or neutral solutions for social problems. In fact, people experience those problems differently, depending on their varied identities and the impact of systems of power, privilege, and resource allocation.

The report "Pittsburgh's Inequality Across Gender and Race" will be an exemplar in modeling how inequity needs to be measured in order to make real, sustainable change. Our city must be livable for all, and we need analyses like this one to empower us to enact changes for the greater good of people in Pittsburgh.

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Learn more about Pittsburgh's Gender Equity Commission: pittsburghpa.gov/gec
Learn about the Cities for CEDAW Campaign: citiesforcedaw.org

EXECUTIVE SUMMARY

The City of Pittsburgh has prioritized ensuring Pittsburgh is a livable city for all residents. As a part of this goal, the Gender Equity Commission commissioned this research to evaluate Pittsburgh's livability across gender and race. Specifically, this report examines health, income, employment, and education indicators for six sub-populations in Pittsburgh: White women, White men, Black women, Black men, AMLON (Asian, Multiracial, Latinx, Other, and Native American) women, and AMLON men.

Reflecting broader trends in the nation, our results show gender and racial inequality persist across health, income, employment and education in Pittsburgh. For example, Pittsburgh's White women make only 78 cents to every dollar Pittsburgh's White men make. Likewise, Pittsburgh's AMLON women make only 59 cents and Pittsburgh's Black women make only 54 cents to every dollar Pittsburgh's White men make. Moreover, Pittsburgh's Black women are five times more likely to live in poverty than Pittsburgh's White men. These inequalities are not limited to income; comparable patterns exist across the examined domains. However, we also find inequalities vary in their extent and direction.

These descriptive results help illuminate the current status of Pittsburgh's six sub-populations. However, to rank Pittsburgh's livability and identify possible policy interventions, we introduce a new tool, the Relative Strengths Indicator. Using this tool, we calculate Pittsburgh's Index of Ranked Livability (IRL). This measure illuminates both Pittsburgh's standing relative to other cities and to what extent each outcome is driven by city-level factors. In doing so, the IRLs highlight Pittsburgh's strengths as well as areas where targeted interventions could make notable improvements to Pittsburgh's livability.

Results suggest that for White residents, Pittsburgh ranks in the middle 50 percent of cities. That is, for the majority of indicators, Pittsburgh's White residents are comparable to their White counterparts in other U.S. cities. However, on some indicators, like poverty, the inequality between White men and White women is higher in Pittsburgh than in other cities. For AMLON residents, especially women, Pittsburgh ranks at or above average on the vast majority of indicators. However, for Black residents, Pittsburgh falls far below similar cities. Black women and men in other cities have better health, income, employment, and educational outcomes than Pittsburgh's Black residents.

Using our Relative Strengths Indicator, we identify eight areas of focus for policy interventions. These include Black women's maternal mortality, employment, poverty, and college readiness; Black men's occupational segregation, homicide rate, cancer, and cardiovascular disease; as well as low enrollment in college admissions exams and school police referrals across students. We conclude with suggestions for how the City of Pittsburgh might address the structural factors contributing to these areas of concern.

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INTRODUCTION

The City of Pittsburgh has been called one of the most “livable” cities in the United States.[1] However, this title is based on rankings that do not consider whether Pittsburgh is “livable” for all residents.[2] In alignment with the OnePGH initiative and its goal to ensure Pittsburgh is livable for everyone, this report examines the health, income, employment and education among Pittsburgh's city residents.[3]

Like previous initiatives we examine racial inequality in Pittsburgh;[4] however, unlike existing reports we use an intersectional approach examining gender and race simultaneously. Additionally, we introduce a new tool, the Relative Strengths Indicator, that calculates Pittsburgh's Index of Ranked Livability (IRL). The IRLs highlight Pittsburgh's strengths as well as areas for improvement. As a guide for reading this report, we begin by defining gender, intersectionality, and race. We then describe our new tool and how this approach measures Pittsburgh's livability.

DEFINING GENDER

We conceptualize ‘gender’ as a socially defined categorization practice based on appearance and attributes. Like previous research, we use demographic sex categories to show the disparities that are created by gendered social relations. The governmental records we use in our research employ binary categories: men and women.[5] These socially constructed categories are a dichotomous delineation of socially agreed upon physical characteristics. This binary excludes intersex persons and obscures the complexities of varied gendered identities (cis, trans, nonbinary), preventing us from examining the inequalities across these categories. However, it enables us to capture how gendered structures and processes contribute to observed inequities.

Photographer: Kelli Slogan

DEFINING INTERSECTIONALITY

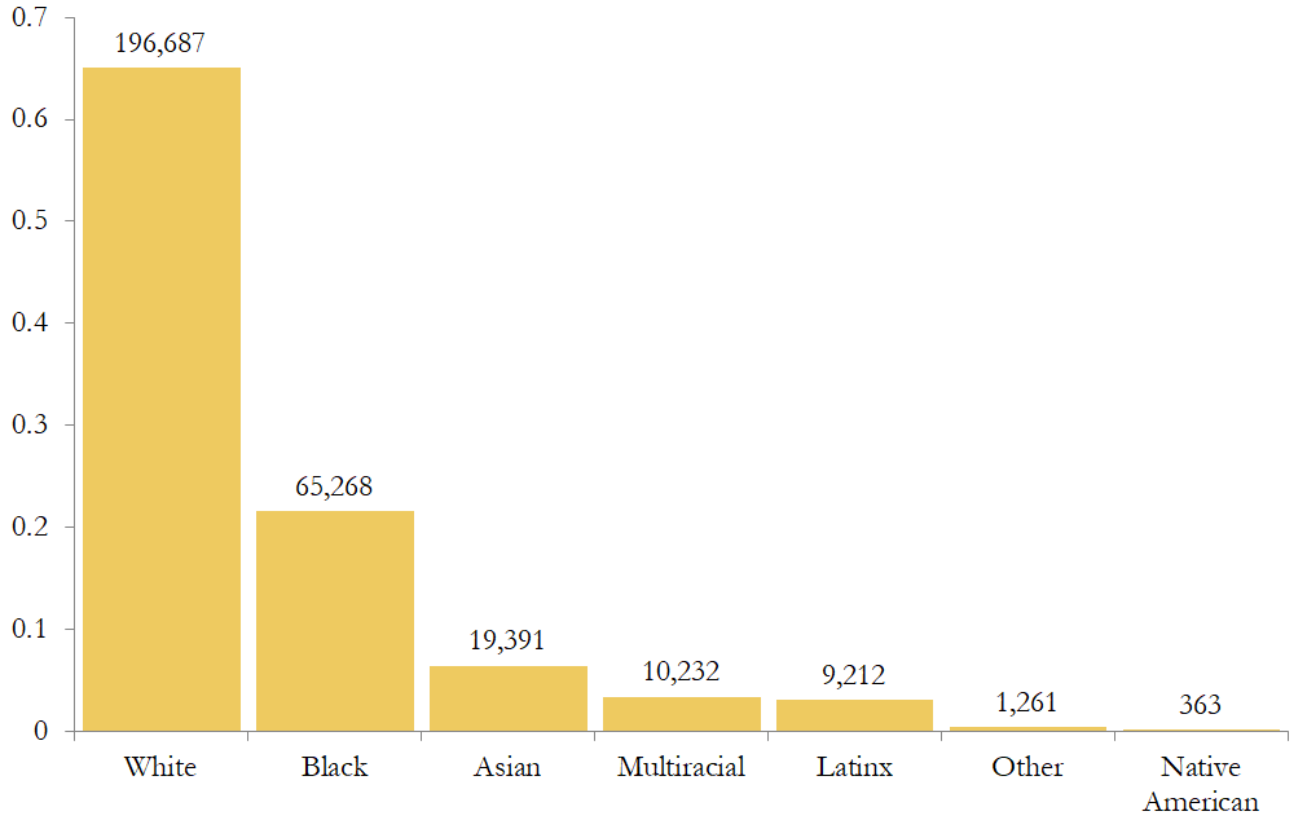
Introduced by Kimberlé Crenshaw,[6] intersectionality recognizes that power-based hierarchies are simultaneously based on multiple classification categories: gender, race, education, income, age, sexuality, religion, ability and nationality, etc... In other words, a person is not only Black, or a woman, but rather a Black woman. Her multilayered identity has particular implications that are different from Black men or White women. In this report, we use an intersectional approach to examine gender and race as well as a combination of other factors including: age and socioeconomic status.

DEFINING RACE

Like gender, race is not a biological phenomenon but a socially defined classification scheme based on socially agreed upon criteria which usually includes: ancestry and phenotype. To capture this symbolic categorization scheme, we use self-identified racial groups. In governmental records residents are asked to classify their race using seven categories: non-Hispanic White (hereafter White), non-Hispanic Black (hereafter Black), Hispanic (hereafter Latinx), non-Hispanic Asian, non-Hispanic Native American, some other non-Hispanic race, and individuals who identify as two or more non-Hispanic races.[7]

In Pittsburgh, White residents make up 65 percent of the population followed by Black residents (22 percent), Asian residents (6 percent), multiracial residents (3 percent), Latinx residents (3 percent), residents who identified as another race (less than 1 percent) and Native American residents (less than 1 percent).

Racial Categories in Pittsburgh



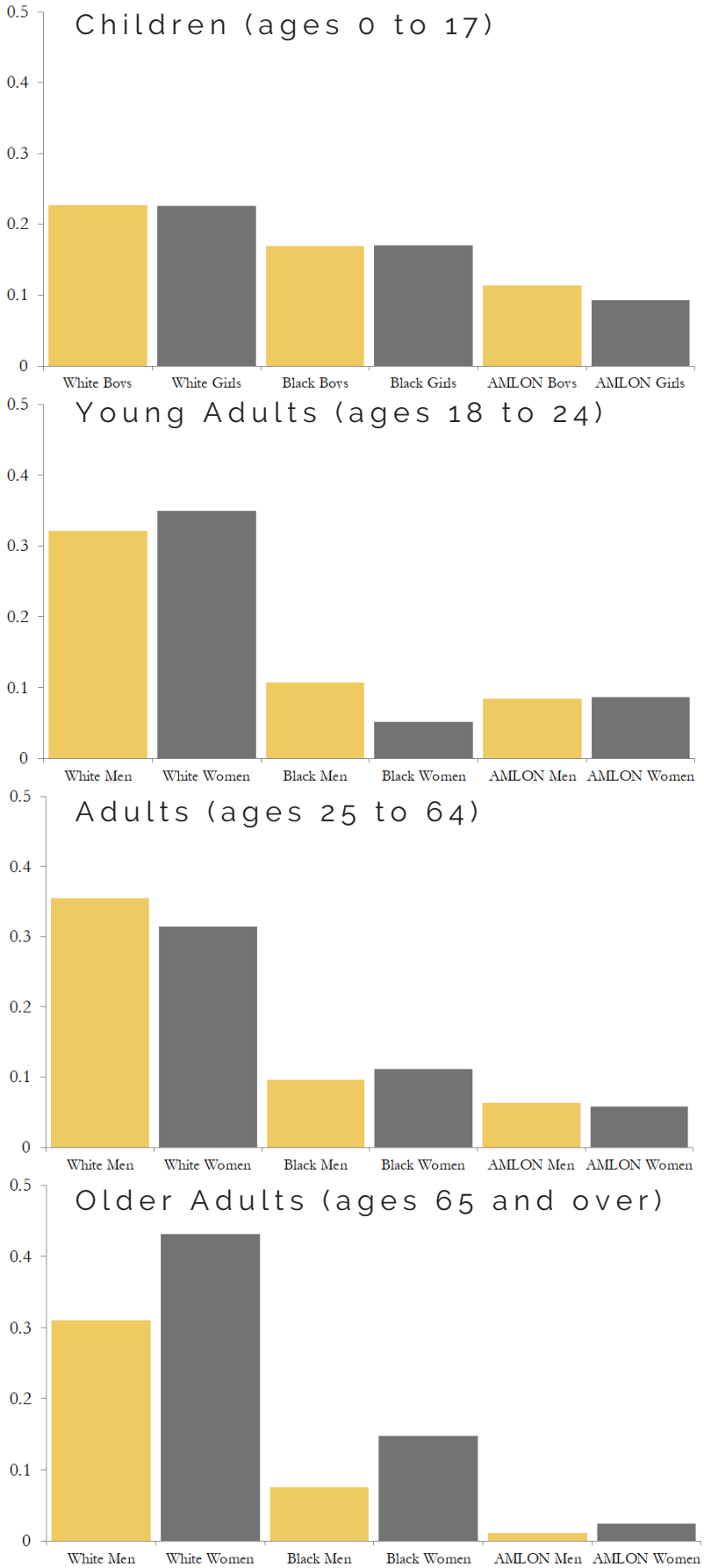
To protect individuals' privacy, data are not delineated when categories are too small. In Pittsburgh, this includes individuals who identified as Asian, Multiracial, Latinx, other racial groups or Native American (ordered by population size). Thus, for analytical purposes we combine these individuals into a single category and refer to them by an acronym, AMLON. Although not ideal, this approach provides an initial examination of Pittsburgh's livability.

Specifically, in this report, we examine six groups: White women, White men, Black women, Black men, AMLON women, and AMLON men. When indicators vary drastically across age, we also examine these categories by age cohorts.

One of the reasons that indicators vary by age is that the representation of racial and gender categories themselves differ across age cohorts in Pittsburgh. Gender categories are distributed more equally among children compared to older adults—where women are the majority.

Likewise, Pittsburgh's children are more racially diverse than its adults. Less than half (46 percent) of Pittsburgh's children are White, while three quarters (74 percent) of Pittsburgh's older adults are White. These differences reflect national trends of immigration and diversification as well as the fact that parents are more likely to classify their children as multiracial but these children often self identify as monoracial when they become adults.[8] In fact, ten percent of Pittsburgh's children are classified as multiracial compared to only two percent of the adult population.

Racial and Gender Categories



INDEX OF RANKED LIVABILITY (IRL)

In order to evaluate Pittsburgh's livability, we introduce a new tool: the Relative Strengths Indicator. We use this tool to calculate Indexes of Ranked Livability for Pittsburgh's health, income, employment and educational outcomes.

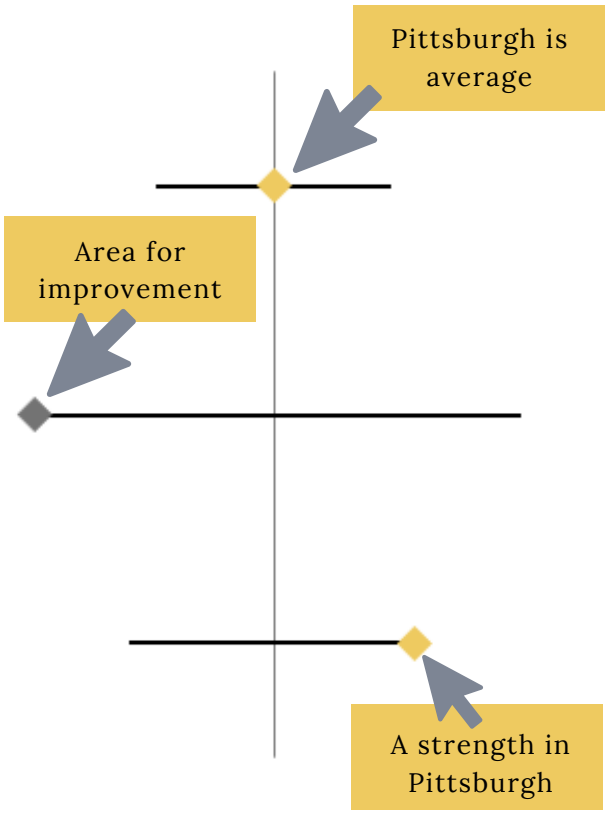
The Relative Strengths Indicator evaluates relative standing on a given outcome as well as the likelihood each outcome is affected by local policies. For every outcome of interest, we compare Pittsburgh to other similar cities by arranging all the cities from the most to the least "livable." For example, for infant mortality, the city with the lowest infant mortality is ranked as the most livable. Conversely, for college graduation rates, the city with the highest proportion of college graduates is ranked as most livable. We then calculate the percent of cities that are "worse" than Pittsburgh.

The Relative Strengths Indicator then weights Pittsburgh's relative ranking by the likelihood the outcome is influenced by local conditions. Building off the assumption that outcomes with more variation across cities are more influenced by local conditions than outcomes that are relatively similar across all cities, we calculate our weight using a standardized measure of variability.

The result of this weighted relative ranking is the Index of Ranked Livability (IRL). This number encompasses both Pittsburgh's livability and the degree to which this livability is likely driven by local factors. These rankings can be zero, positive, or negative. An IRL of zero indicates Pittsburgh is in the middle of the distribution. In other words, half the cities are more livable than Pittsburgh and half the cities are less livable. A positive IRL indicates a strength. The larger the ranking, the better Pittsburgh is doing relative to other cities and the more that particular indicator is driven by local factors. Negative rankings suggest an area where Pittsburgh can improve. Large negative numbers suggest areas where Pittsburgh falls below average and the indicator could likely be addressed by local interventions.

After we examine all the outcomes of interest, we use the IRLs to compare across outcomes and sub-populations. By comparing across the IRLs we are able to identify the areas of relative strength for Pittsburgh as well as the categories and sub-populations where Pittsburgh should consider targeted interventions.

Finally, since we included other cities in the analysis, we are able to identify which cities are strong in areas where Pittsburgh desires to improve. This provides an opportunity to investigate and learn from how these other cities address various outcomes and foster equity among their populations.

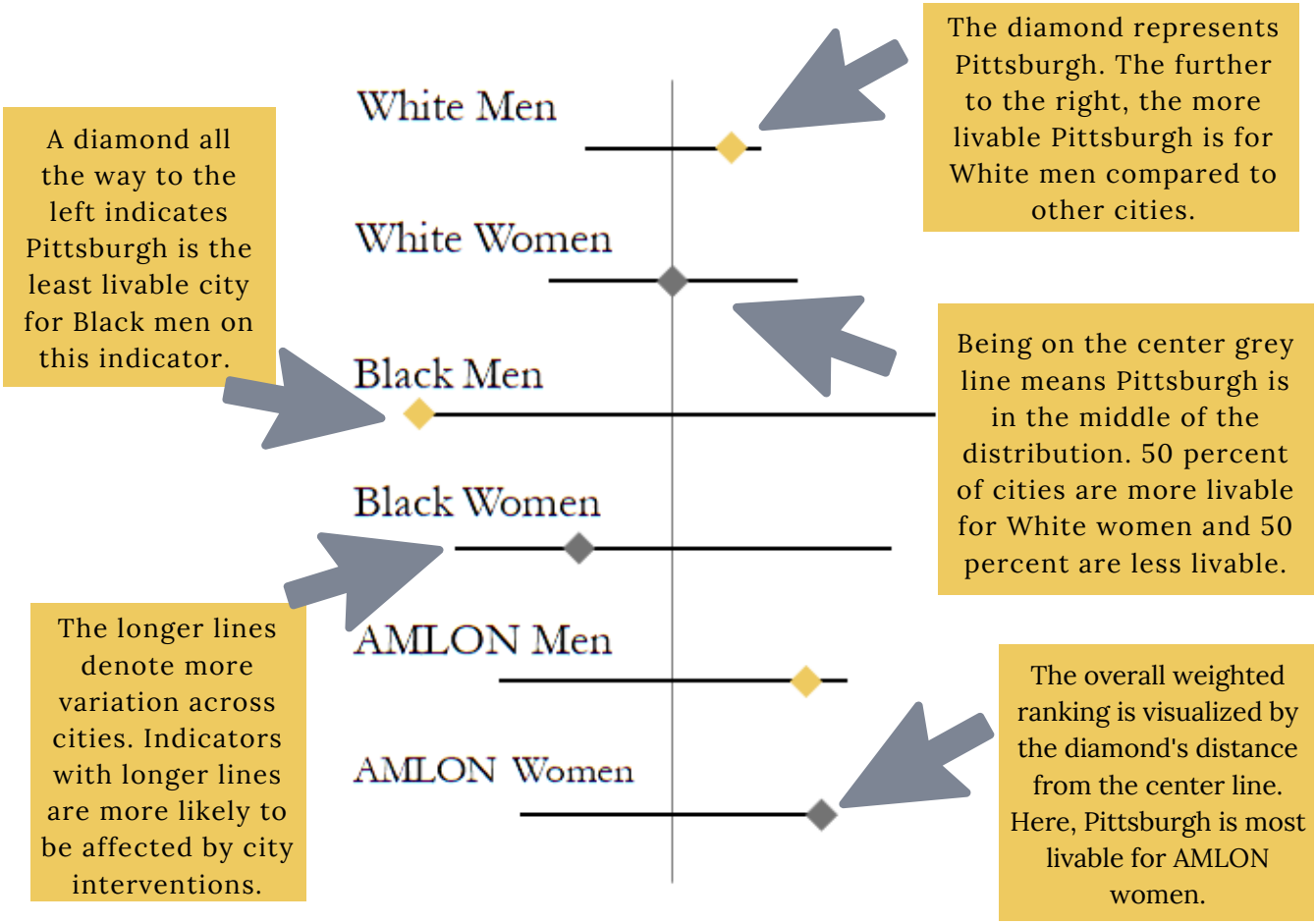


VISUALIZING THE INDEX OF RANKED LIVABILITY

To help the reader comprehend the rankings, we visualize these rankings throughout the report. These visualizations capture Pittsburgh's relative livability for each indicator. Pittsburgh is represented by the diamond. The vertical line represents a rank of zero denoting the "average" city. When the diamond is on the vertical line, Pittsburgh is at the 50th percentile. Diamonds to the right of the line represent Pittsburgh's strengths. Diamonds to the left of the line represent areas where Pittsburgh can improve.

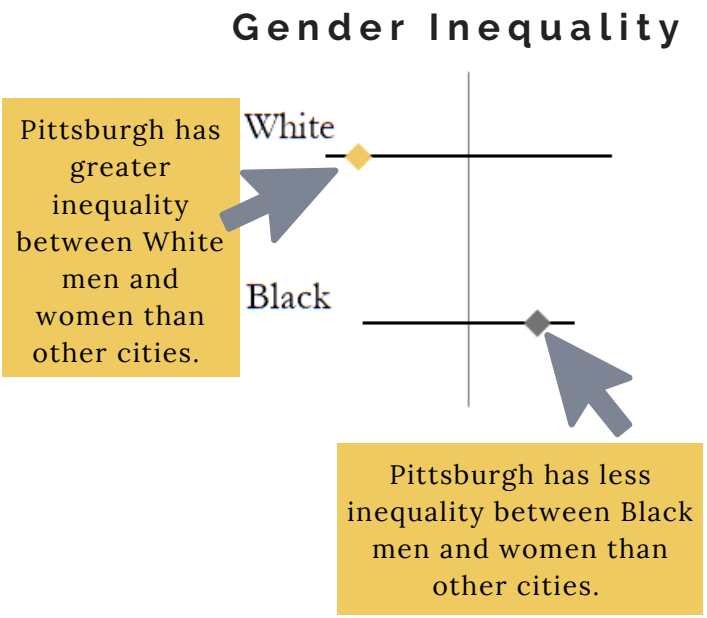
To compare Pittsburgh's livability across groups, we calculate a ranking for each of our six groups: White men, White women, Black men, Black women, AMLON men, and AMLON women. The horizontal line length varies between groups and indicators. The length of the lines represents how much the indicator varies from city to city. Longer lines represent indicators that have more variability and thus are more influenced by local interventions. Shorter lines represent indicators that are comparable across all cities. Absolute distance from the center line denotes the IRL or weighted relative ranking of Pittsburgh on that specific outcome for that sub-population.

The hypothetical example below serves as a guide for interpreting the visualizations. A more complete discussion of our methods can be found in Appendix A and Pittsburgh's numeric rankings are listed in Appendix E.



COMPARING INEQUALITY ACROSS CITIES

In addition to examining how each sub-population compares to their counterparts in other cities, we also compare Pittsburgh's inequality to inequality in other cities. Inequality, in and of itself, can elevate stress and reduce livability, even when outcomes are relatively good. Thus, we also measure how Pittsburgh's inequality compares to other cities.



To conceptualize what this entails, consider an example: residents' income. In our analysis, we first examine how Pittsburgh's White men's income compares to White men's income in similar cities. We then consider how Pittsburgh's White women's income compares to White women's income in similar cities, and so on for each of our six groups of interest. We then calculate the difference between White men and White women's income. Using our Relative Strengths Indicator, we then derive Pittsburgh's IRL for White gender income inequality. This IRL tells us how Pittsburgh's gender inequality compares to other cities.

Inequality IRLs with negative values denote areas where Pittsburgh's inequality between groups is larger than that same inequality in other cities. Conversely, positive rankings indicate areas were Pittsburgh's inequality is lower than other cities. Ranking both absolute outcomes and inequalities between groups helps us delineate the mechanisms contributing to Pittsburgh's livability.

COMPARISON CITIES

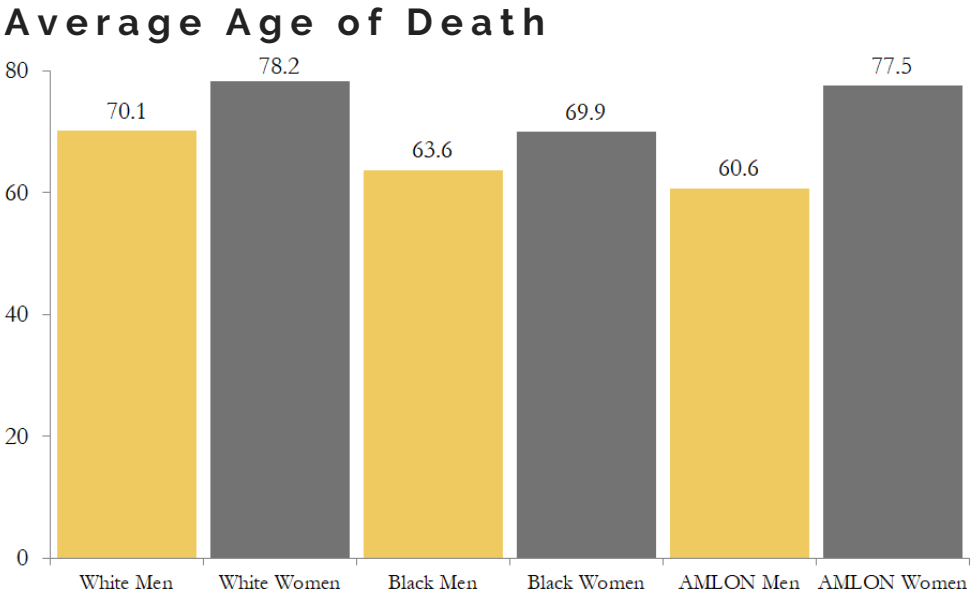
The Relative Strengths Indicator calculates Pittsburgh's livability by comparing Pittsburgh to other demographically similar cities. Since we are interested in Pittsburgh's livability for specific racial and gender categories, we define demographically similar cities as municipalities with enough Black and White residents for the Census Bureau to provide subgroup calculations. This includes cities that Pittsburgh is often compared to including: Baltimore, Buffalo, Charlotte, Cincinnati, Cleveland, Columbus, Detroit, Indianapolis, Louisville, Milwaukee, Philadelphia, and Richmond. Yet, it also includes a broader swath of cities from across the country that have substantial White and Black populations.

We define demographically similar cities empirically ensuring our sample is not biased by perceptions of comparable places but based on a full count of places with comparable demographics. However, as a supplemental test of our main findings, we also calculated IRLs using only the cities commonly compared to Pittsburgh. Results were comparable, providing additional support for our findings. For a full discussion of how cities were selected, see Appendix A. For the complete list of demographically similar cities included in the study and an explanation of the supplemental test, see Appendix B.

HEALTH

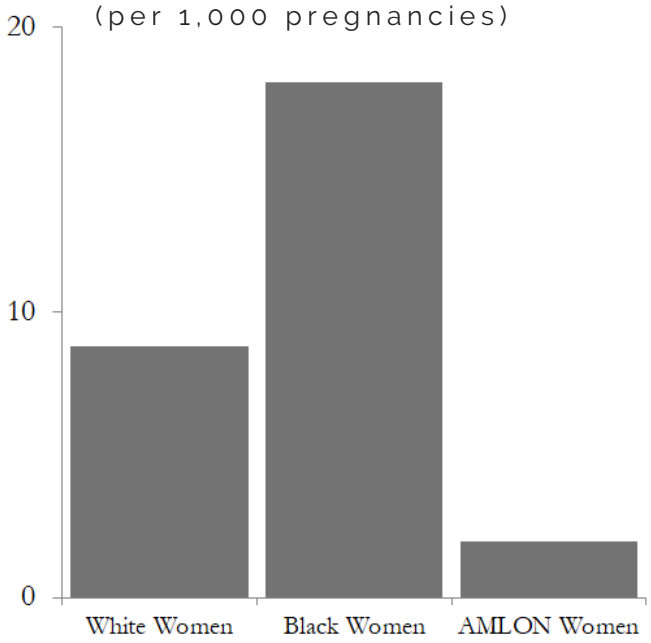
A key indicator of Pittsburgh's livability is the physical and mental well-being of its residents. Well-being can be measured in a plethora of ways including the absence of disease or infirmity, physical fitness, emotional stress, and access to healthcare. Each of these measures have their benefits and shortcomings. Yet, ultimately they all directly or indirectly affect the length of residents' lives. Thus, we first summarize Pittsburghers' health by examining mortality rates and causes.

We begin by comparing the average age of death for our six groups. As is true nationally, women in Pittsburgh live longer than men. Yet, the extent to which this is true differs across racial groups. On average, White women live 8 years longer than White men while Black women only live 6 years longer than Black males. Additionally, both White women and men live longer than Black women, Black men, and AMLON men. This summary indicator illuminates clear racial inequality in Pittsburgh. However, exploring the mechanisms contributing to these divergent lifespans across both race and gender will require looking into more specific subcategories. To do this, we examine mortality by age—starting with fetal and maternal health.



Fetal Mortality Rate

(per 1,000 pregnancies)



Fetal deaths are relatively common in Pittsburgh. Pennsylvania counts fetal deaths as all pregnancies, at least 16 weeks gestation, where the fetus shows no signs of life once born. Fetal deaths are influenced by the quality of maternal health. Thus, high fetal deaths serve as an indicator of women's overall health.

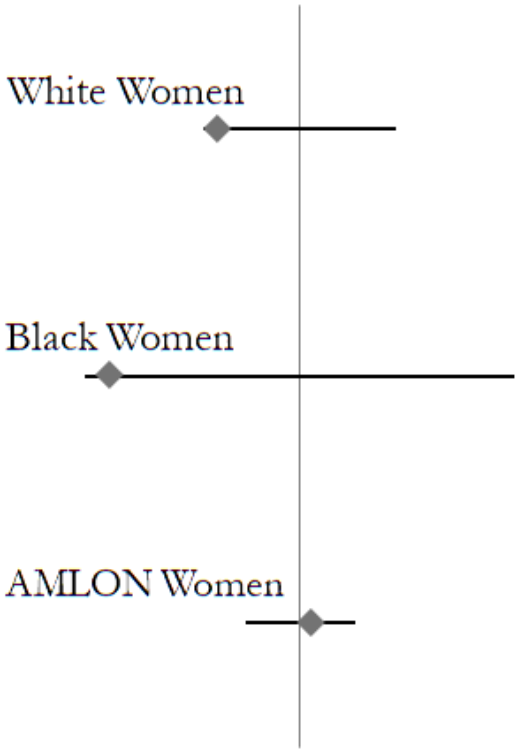
For Pittsburgh's Black women, 18 out of every 1,000 pregnancies end in a fetal death. This is compared to only 9 out of every 1,000 White pregnancies and 2 out of every AMLON pregnancies.

Fetal deaths are **2 times** more likely among Pittsburgh's Black women compared to White women.

By itself, this inequality is startling. Yet, even more striking is the fact that Pittsburgh's Black fetal mortality is higher than Black fetal mortality in 94 percent of similar cities. As visualized by the long line in the graph to the right, Black women's fetal mortality varies drastically across the country. That is, some cities have as few as 5 Black fetal deaths while others have as many as 72 per 1,000 pregnancies. The bad news is Pittsburgh is in the bottom 6 percent of these cities. The good news is fetal mortality could improve with city-level interventions.

Notably, Pittsburgh's White fetal mortality also ranks in the bottom 7 percent of similar cities. Conversely, AMLON fetal mortality is average. In short, although it is most pressing for Black women, Pittsburgh's maternal health has room for improvement across all groups.

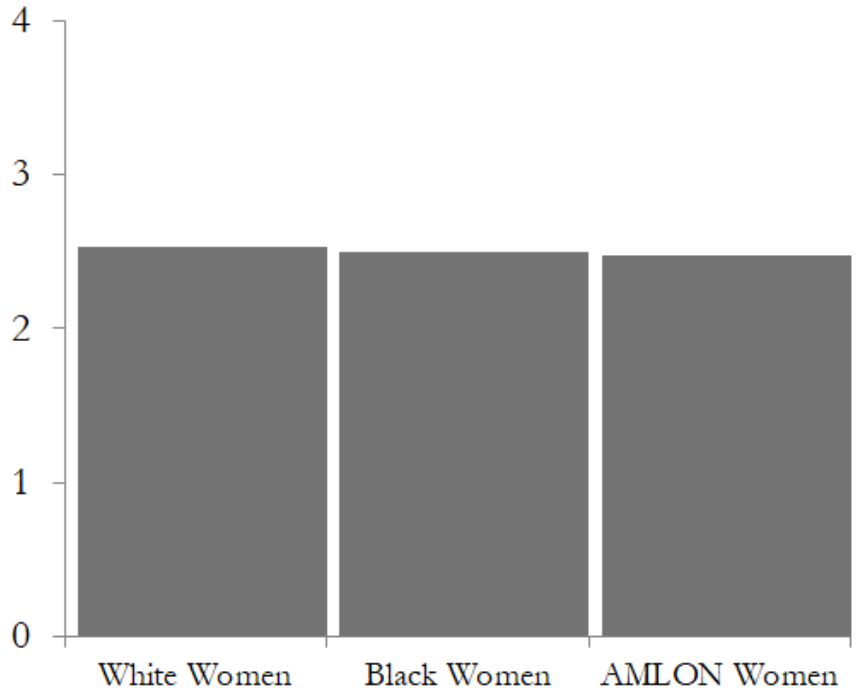
Fetal Mortality



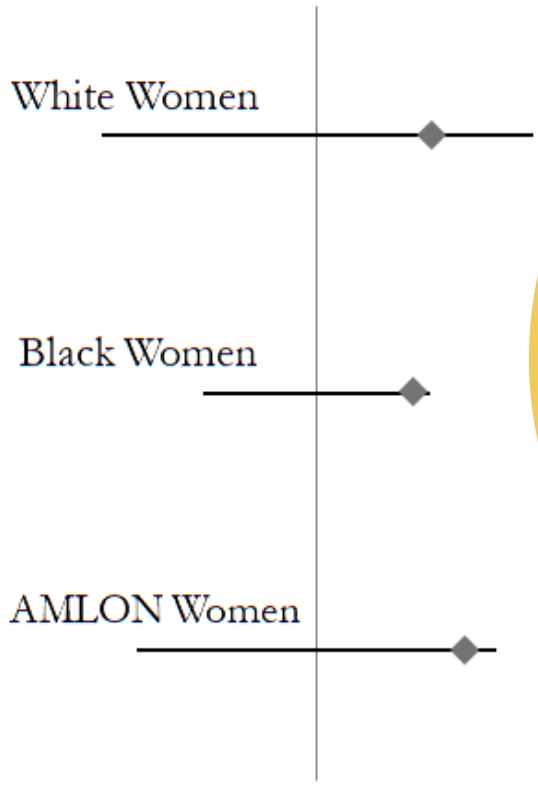
Fetal deaths have a myriad of causes. Yet, contrary to common assumptions, Pittsburgh's relatively high rates of fetal deaths are not due to lack of prenatal care. On average, Pittsburgh's women—across race—start prenatal care at 10 weeks.

This not only demonstrates racial equality in duration of prenatal care, but Pittsburgh's women begin prenatal care sooner than women in other cities. In particular, Pittsburgh's Black women begin care sooner than Black women in 92 percent of similar cities.

Month Prenatal Care Began

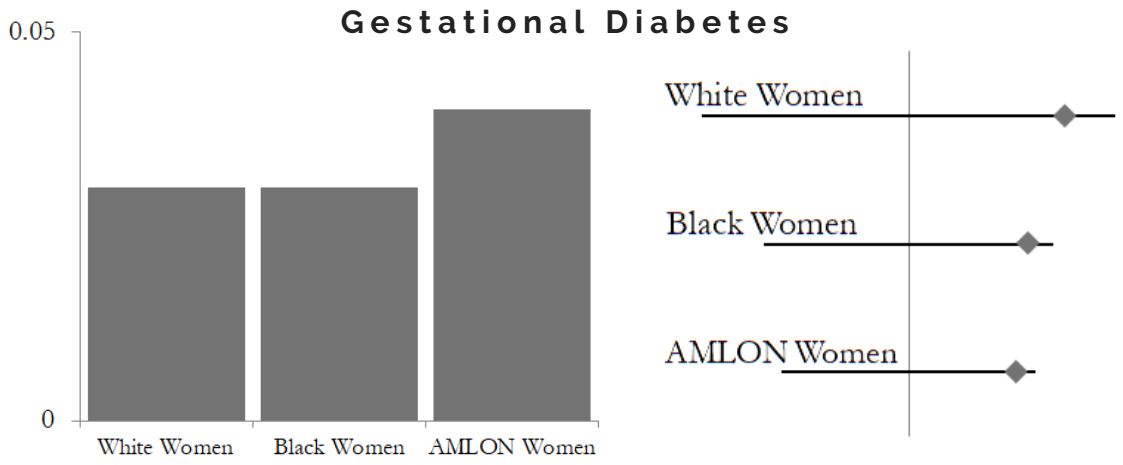


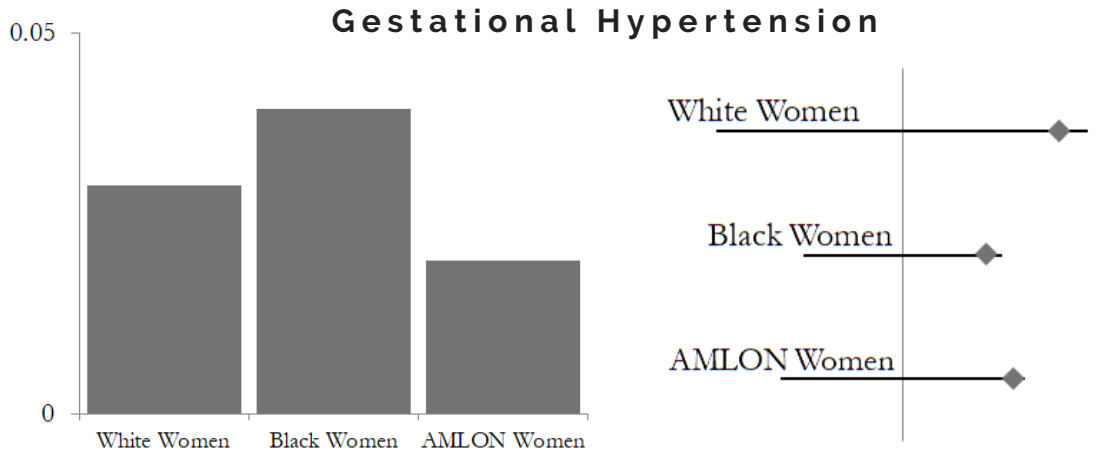
Prenatal Care Began

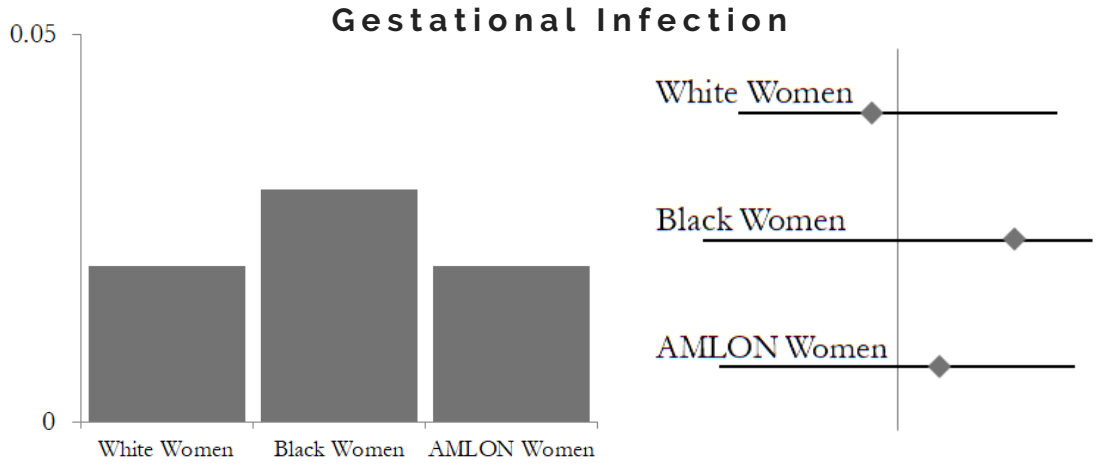


Pittsburgh's women start prenatal care ***earlier*** than women in the vast majority of similar cities.

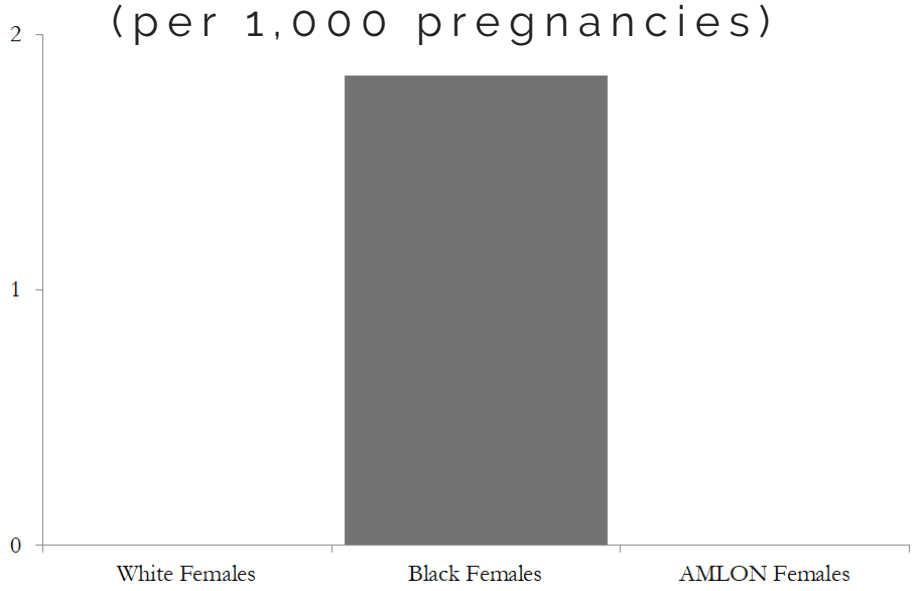
Likewise, cases of gestational diabetes, hypertension, and infections are relatively equal across racial groups. Black women do experience slightly higher rates of gestational hypertension and infection whereas AMLON women experience higher rates of gestational diabetes, but Pittsburgh's women overall have fewer cases of gestational diabetes and hypertension than women in 90 percent of similar cities. Taken together, these rates suggest that inequality in prenatal care or manageable health conditions is not contributing to racial inequality in fetal demise.

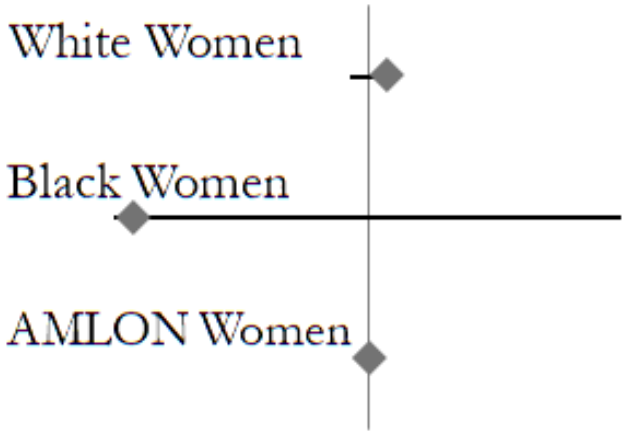






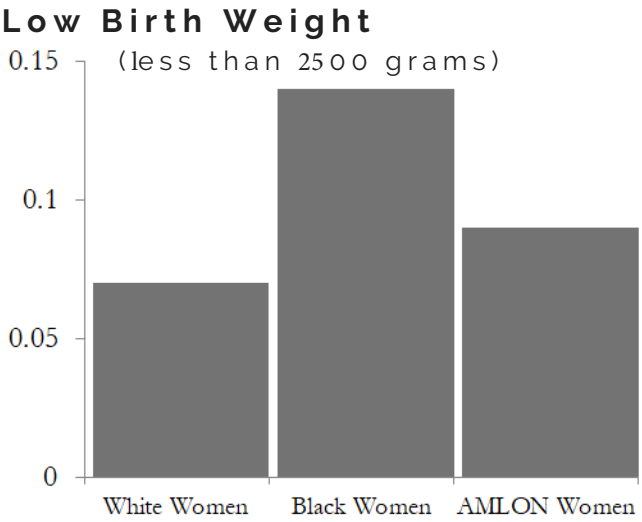
Maternal Mortality Rates
(per 1,000 pregnancies)

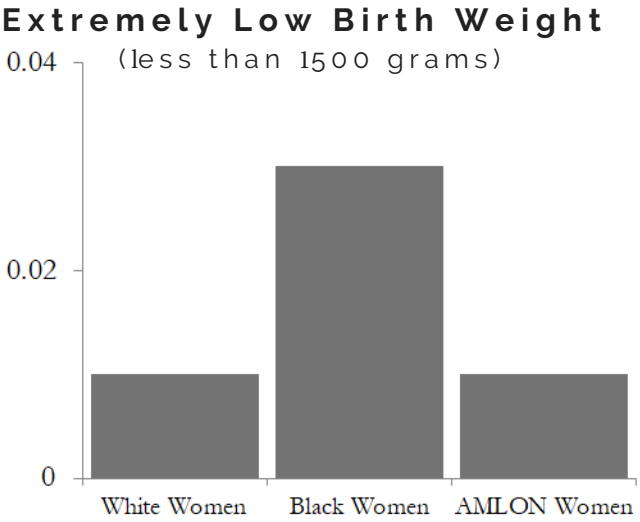




Pittsburgh's Black maternal mortality rate is higher than Black mortality rates in *97 percent* of similar cities.

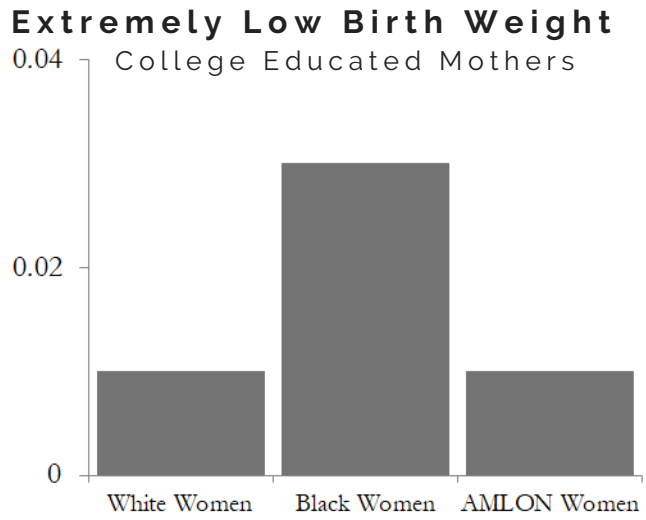
Additionally, despite starting prenatal care earlier than Black women in similar cities and having lower rates of gestational diabetes, hypertension and infection, Black women's maternal mortality is higher in Pittsburgh than 97 percent of similar cities. Moreover, the inequality between White and Black maternal mortality rates in Pittsburgh is greater than the inequality between White and Black maternal mortality rates in 84 percent of similar cities.

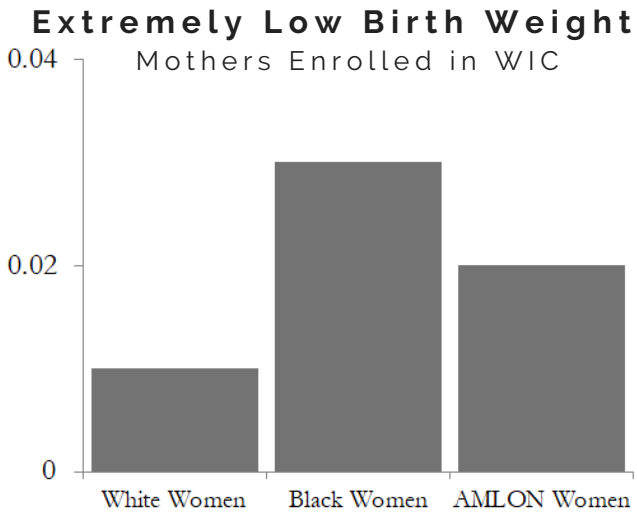




The observed racial inequality in maternal mortality is also present in infant health. Fourteen percent of babies born to Black mothers are born with low birth weight (less than 2500 grams or 5.5 lbs). This is twice the rate of babies born to White mothers and 1.5 times more than babies born to AMLON mothers. Moreover, Pittsburgh babies born to Black mothers are three times more likely to be under 1500 grams or 3.3 lbs than babies born to White and AMLON mothers. And this inequality is not due to educational or economic differences. In fact, when only considering college educated mothers or when only considering mothers on the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the inequities persist—suggesting racial inequality, not education or income, drives the observed inequities.

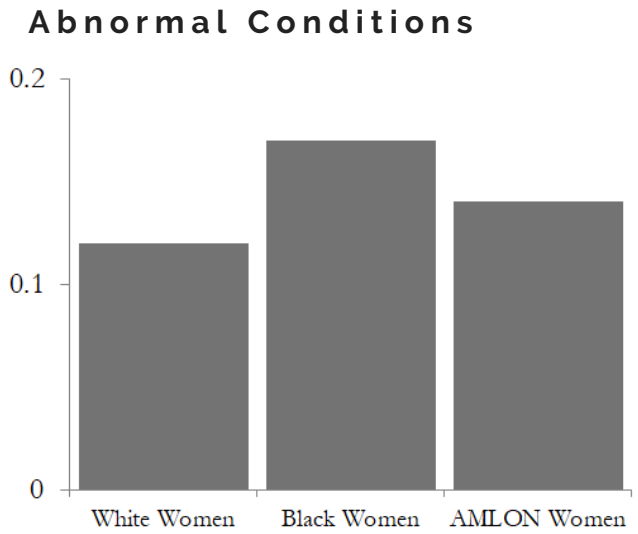
Compared to White mothers, Black mothers are ***3 times*** more likely to give birth to extremely low weight babies.

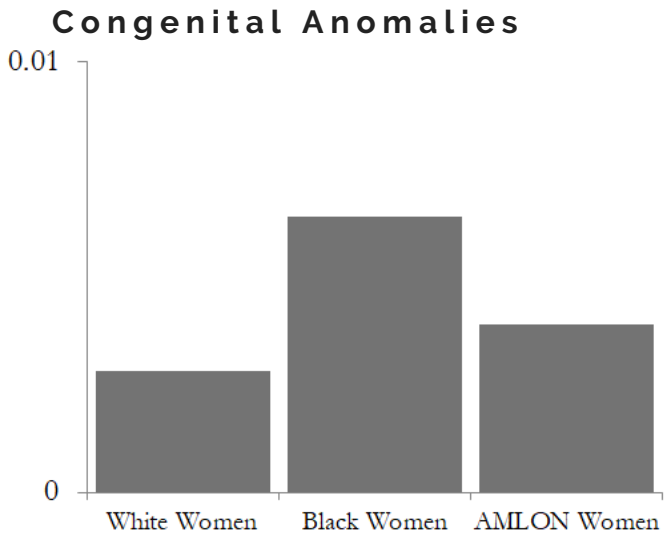




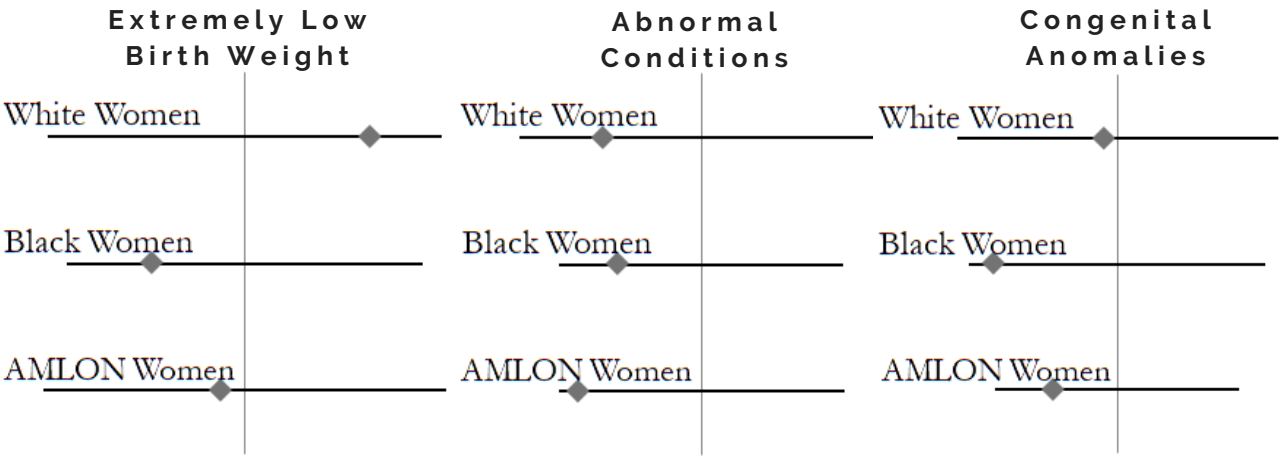
In addition to birth weight, infants born to Black mothers are also more likely to have abnormal conditions (e.g., seizures, infection, needing ventilation, admission to the NICU) and congenital anomalies (e.g., Down's Syndrome, cleft palate, chromosomal disorder, spina bifida, heart diesase). Seventeen percent of babies born to Black mothers have abnormal conditions. This is 5 and 3 percent higher than White and AMLON mothers, respectively. Congenital anomalies are more rare but the inequity is even starker. Out of every 10,000 babies born to Black mothers, only 64 have abnormal conditions. This is over twice the rate for babies born to White mothers (28 in every 10,000) and over 1.5 times the rate for babies born to AMLON mothers (39 in every 10,000).

These inequities are striking, particularly when we take into consideration that not all cities have such stark inequities in maternal health. For example, Pittsburgh's

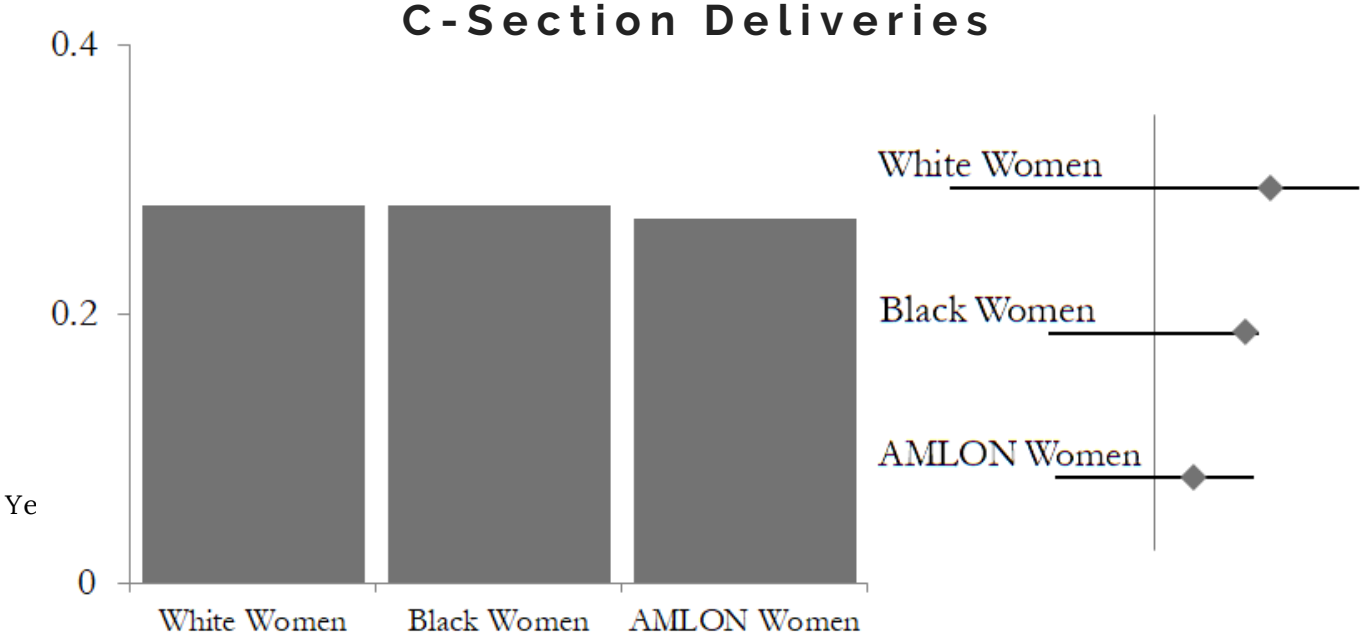




White women have fewer extremely under weight babies than 81 percent of cities but Pittsburgh ranks in the bottom 25 percent of cities for Black women's baby weight—making the inequality larger than 90 percent of cities. Less racial inequality exists in the rates of congenital anomalies and abnormal conditions. However, across all racial groups Pittsburgh has considerably higher rates of these conditions. In fact, for all racial groups, Pittsburgh has higher rates of abnormal conditions compared to 80 percent of cities.

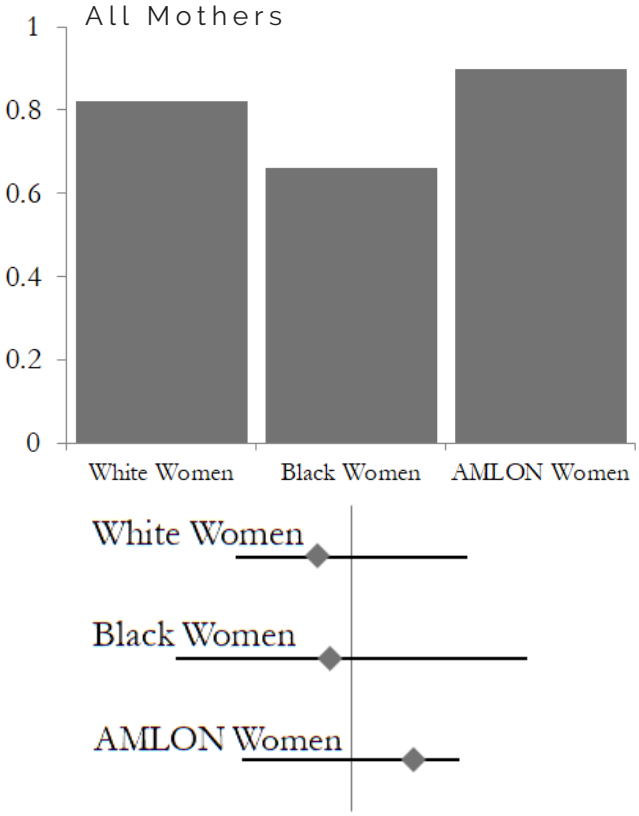


C-Section Deliveries

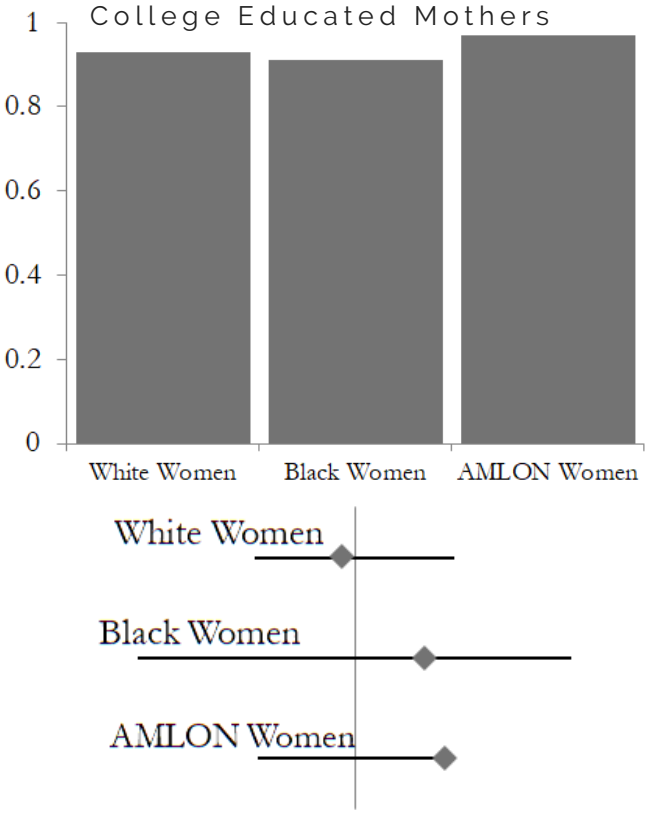


The racial inequality in infant conditions is not mirrored in delivery or breastfeeding rates. Across all three racial groups, 1 in every 3 Pittsburgh babies are delivered by C-section. This is higher than the World Health Organization's recommended rate, yet lower than 80 percent of similar cities. Conversely, the rate of breastfeeding mothers in Pittsburgh is slightly below the national average and is lower among Black and White mothers compared to their AMLON counterparts. Yet, this racial inequality dissipates for college educated women suggesting education and economic stability are key contributors to this inequality.

Breastfeeding

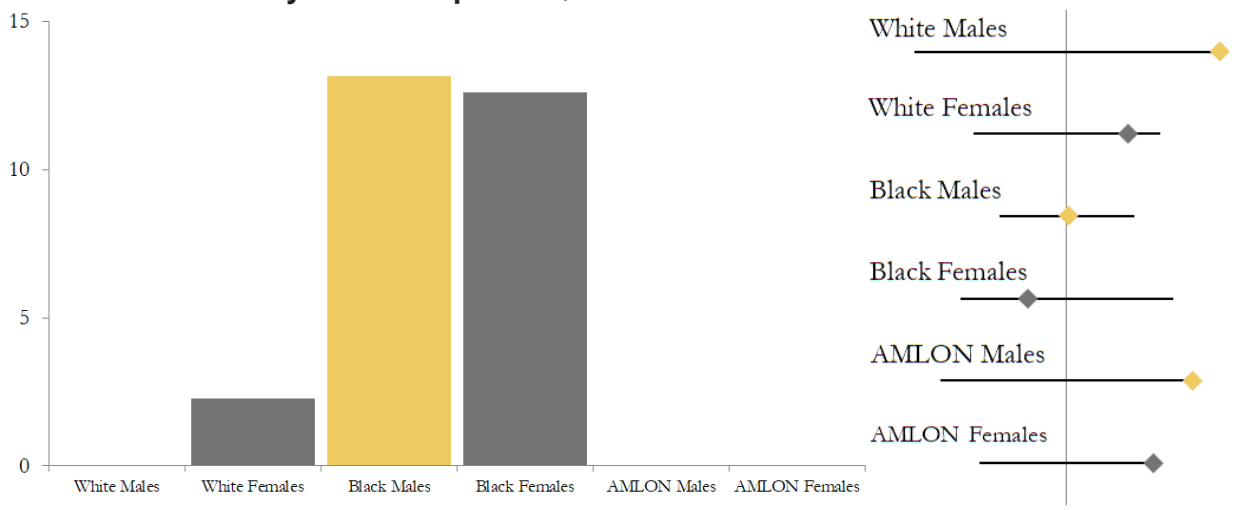


Breastfeeding



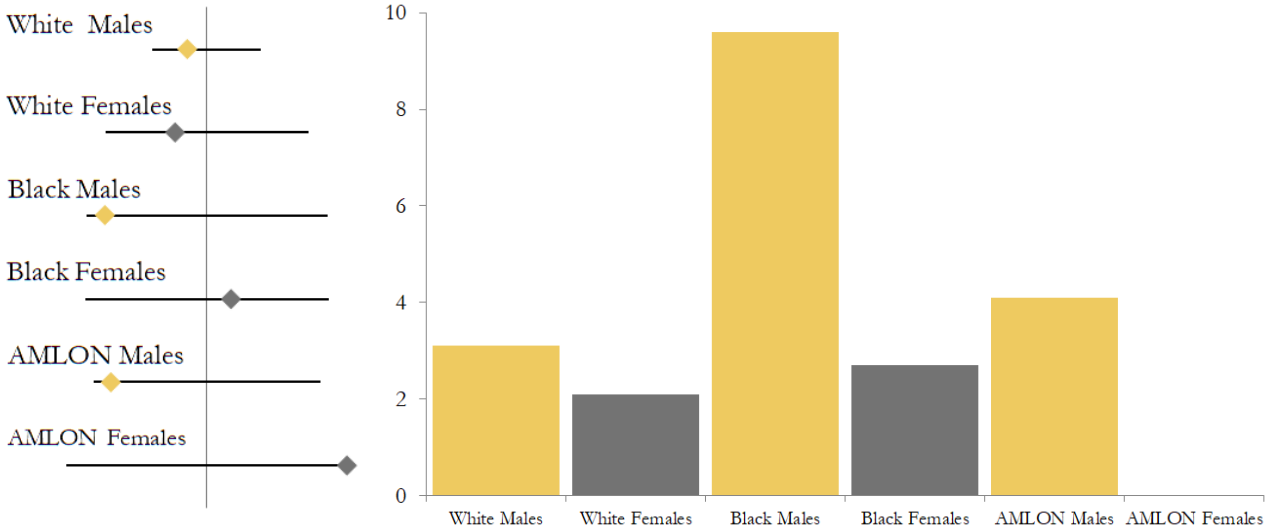
Post delivery, the racial inequality in infant health continues. Regardless of sex assigned at birth,[9] 13 of every 1,000 Black Pittsburgh babies die before they turn one. In comparison, 2 of every 1,000 White babies assigned female at birth, virtually no White babies assigned male at birth, and virtually no AMLON babies die before turning one. For these non-Black babies, Pittsburgh has fewer infant deaths than the vast majority of cities. Yet, for Black babies this is not true. Male Black infant mortality in Pittsburgh is average but female Black infant morality is higher than 70 percent of similar cities.

Infant Mortality Rate (per 1,000 live births)



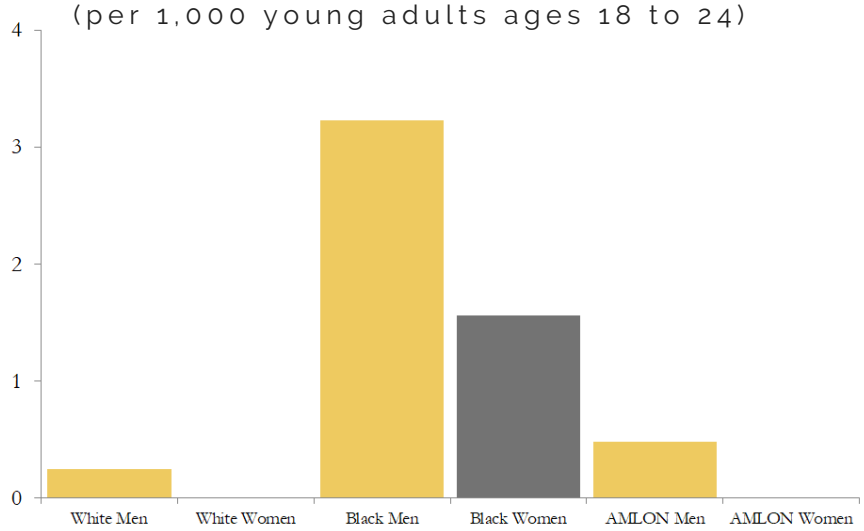
Once children turn one, mortality rates decrease. However, Pittsburgh generally fairs worse in child mortality compared to other cities, and racial inequalities persist. Using this definition, 10 in every 10,000 Black boys die. This is over three times the rate of White boys (3 in every 10,000) and double the rate of AMLON boys (4 in every 10,000). Pittsburgh's male child mortality is higher than other cities; specifically Black and AMLON boys' mortality rate which is higher than 93 percent of similar cities. Mirroring national trends, Pittsburgh female mortality is lower than male mortality. However, Black girls still have a higher mortality rate than Pittsburgh's White and AMLON girls.

Child Mortality Rate (per 10,000 children ages 1-17)



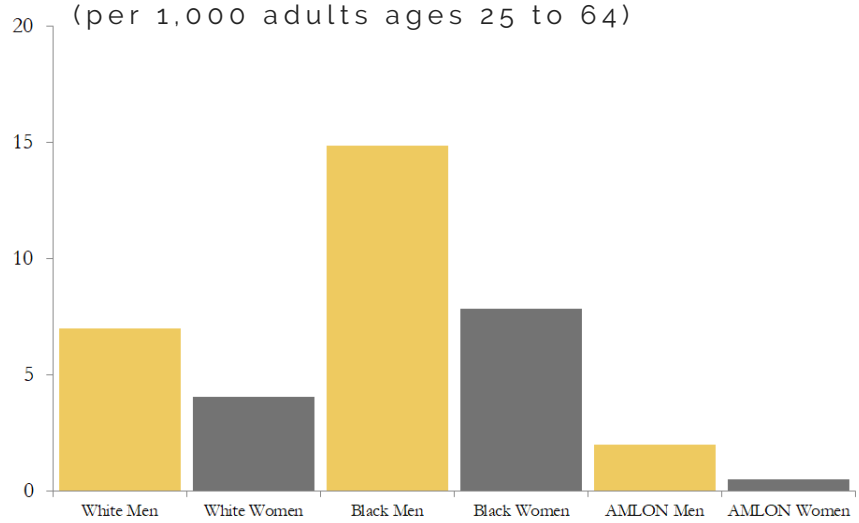
Young Adult Mortality Rate

(per 1,000 young adults ages 18 to 24)



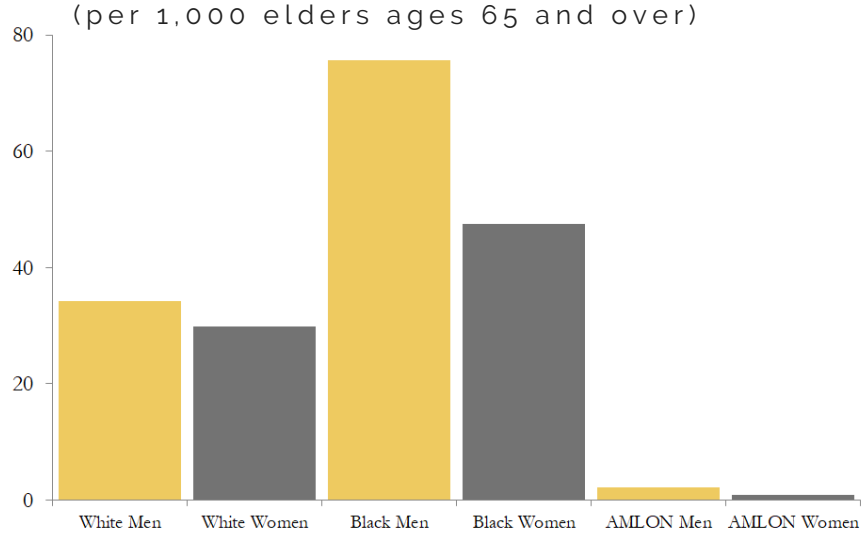
Adult Mortality Rate

(per 1,000 adults ages 25 to 64)



Older Adult Mortality Rate

(per 1,000 elders ages 65 and over)



The patterns observed among Pittsburgh's children continue throughout the life course. Men continue to be more likely to die than their female counterparts. However, racial inequities are more pronounced than gender inequality.

Black young men (ages 18-24) are 13 times more likely to pass away than White young men and 7 times more likely than AMLON men. Black young women die at half the rate as their male counterparts but still die at higher rates than White and AMLON men.

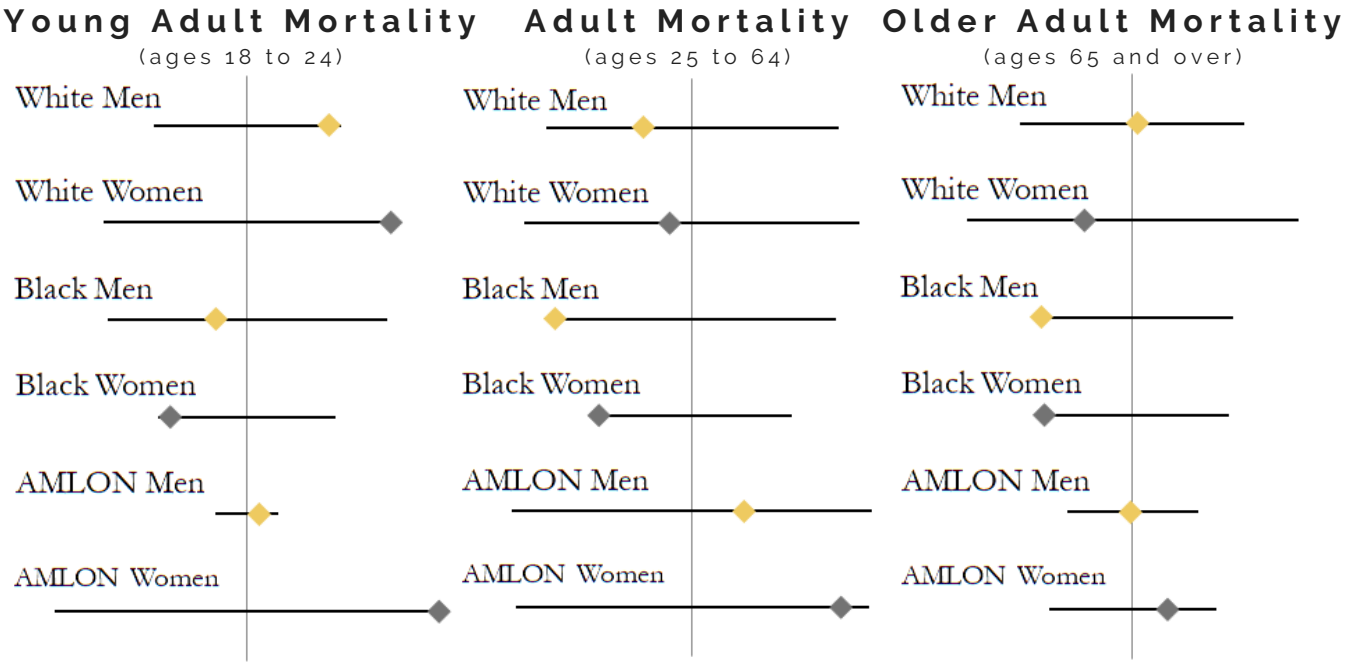
As expected, adults (ages 25-64) are more likely to die than young adults. Yet, the same race and gender patterns persist. Of course, older adults (ages 65 and older) are most likely to die. Yet, the rates still differ by race. Black men (76 out of every 1,000) are most likely to pass away followed by Black women (47 out of 1,000), White men (34 out of 1,000), White women (30 out of 1,000), AMLON men (2 out of 1,000), and AMLON women (1 out of 1,000). It is notable that for Whites and AMLON residents gender inequality is minimal, but Black men are 1.5 times more likely to die than Black women.

Not only is the mortality rate for Pittsburgh's Black men higher than the rest of Pittsburgh's population, but Black men are more likely to die in Pittsburgh than Black men in other cities. This is particularly true for adults. The mortality rate for Black men in Pittsburgh is higher than 98 percent of similar cities. In fact, this is also true for Black women. That is, Black adult women living in virtually all other cities are less likely to die than Pittsburgh's Black women. In fact, Pittsburgh consistently ranks among the worst for Black women's mortality across all age groups.

On the other hand, young White Pittsburghers have a lower mortality rate than over 90 percent of cities. However, Pittsburgh's White adult morality rate is slightly higher than the majority of similar cities. This is particularly true for White older adult women who have a higher mortality rate than 65 percent of similar cities.

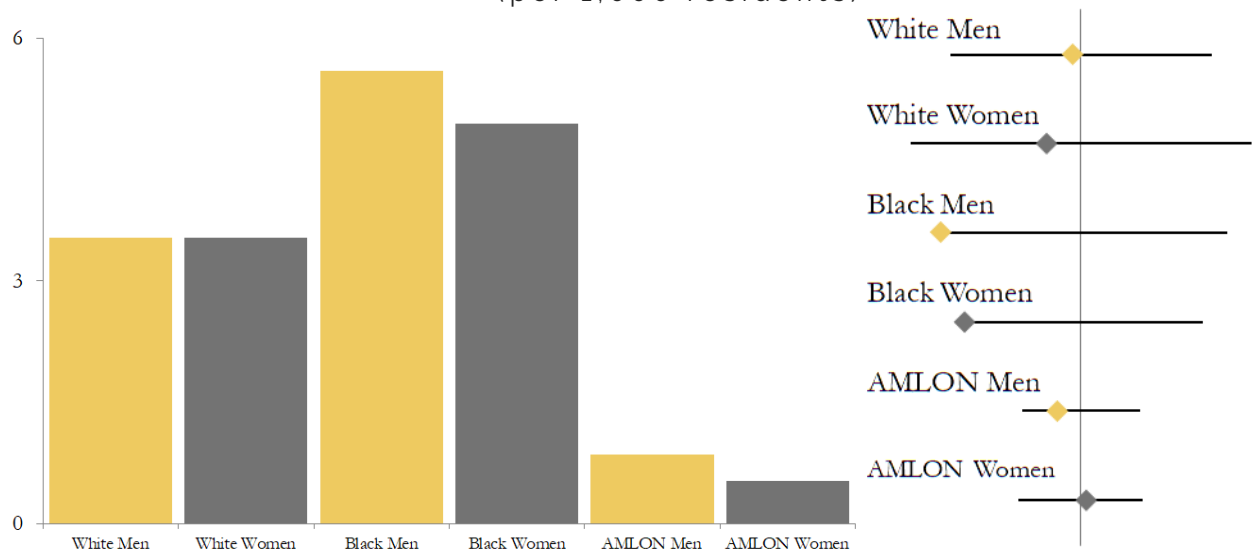
Black adult mortality rates are higher in Pittsburgh than in **98 percent** of similar cities.

AMLON men and women have average or above average mortality rates. In particular, AMLON women are less likely to die than AMLON women in the vast majority of other cities. The vastly different experiences of AMLON, White and Black Pittsburghers further illustrate the anomaly of Pittsburgh's Black mortality rates. To understand these inequities further, we now turn to examining the primary causes of death in Pittsburgh.



Cause of Death: Cardiovascular Disease

(per 1,000 residents)

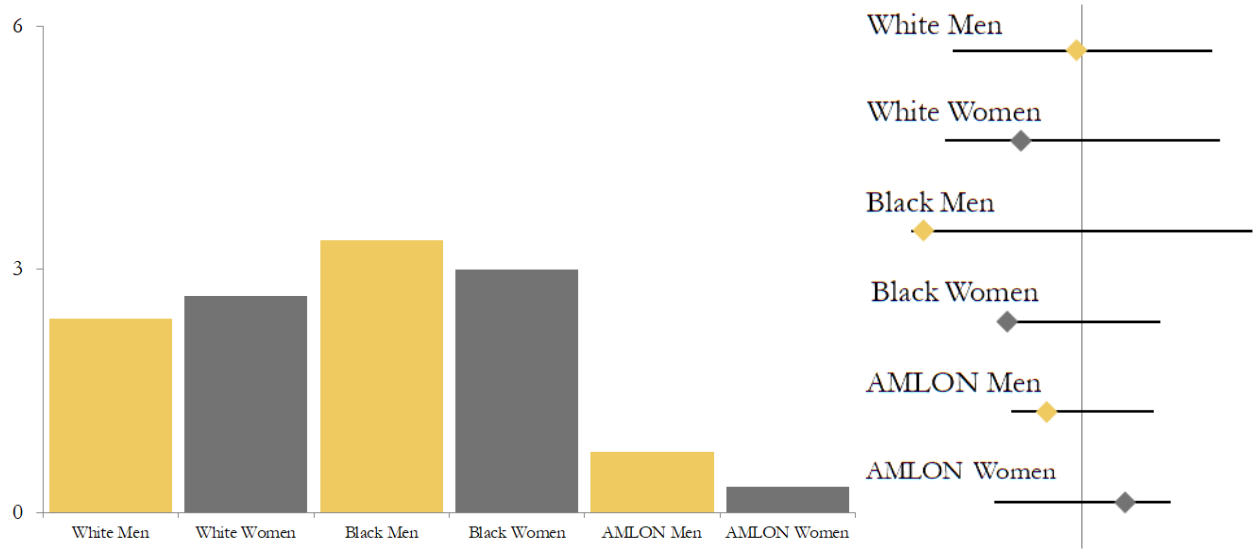


Reflecting the national trend, cardiovascular or heart disease is the most common cause of death in Pittsburgh. Nearly 6 of every 1,000 Black men in Pittsburgh die of cardiovascular disease each year. Similarly, each year, Pittsburgh loses 5 of every 1,000 Black women to cardiovascular disease. More Black residents die of cardiovascular disease in Pittsburgh than 98 percent of similar cities. Black residents are 1.5 times more likely than their White neighbors and 6.5 times more likely than their AMLON neighbors to die of heart disease.

Cancer is the next most common cause of death in Pittsburgh. Once again, we see Black residents are more likely to die of cancer than their White and AMLON neighbors, although the inequities are not as great. Pittsburgh's Black residents, White women, and AMLON men are more likely to die of cancer than their counterparts in the majority of similar cities.

Cause of Death: Cancer

(per 1,000 residents)

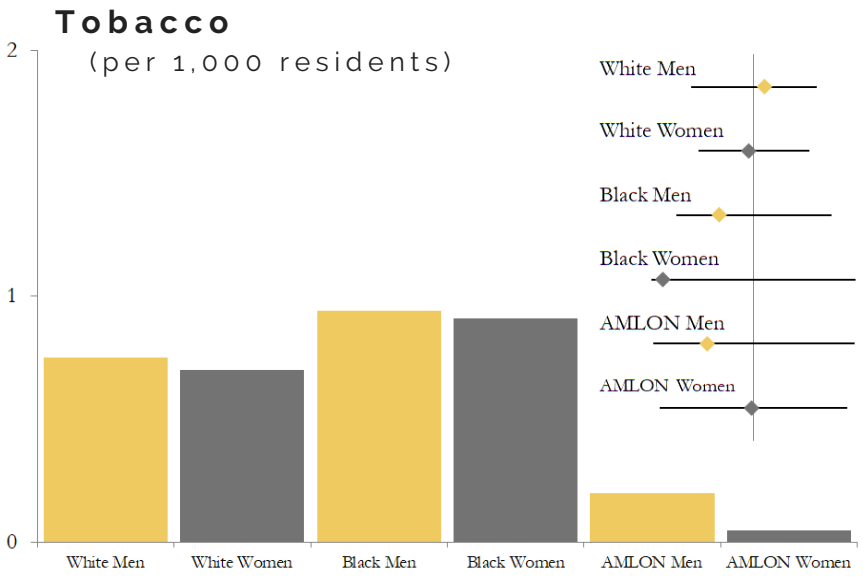


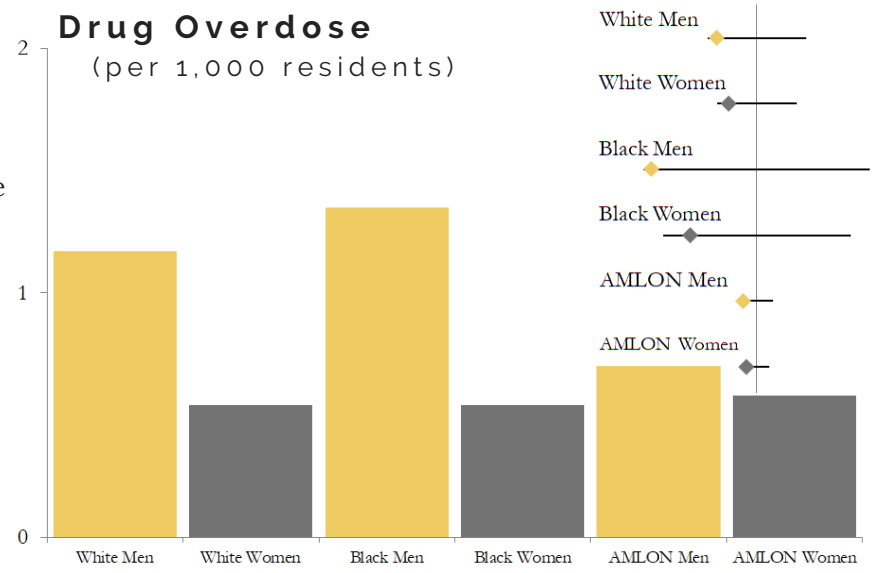
Other common causes of death include: Tobacco related deaths, Drug Overdoses, and Suicides. Men are more likely to die of these three causes than their female counterparts.

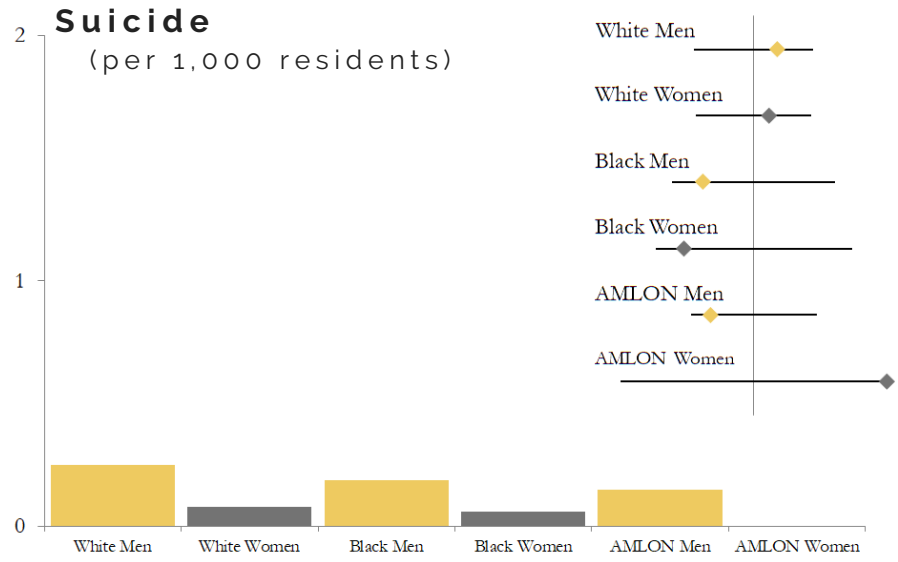
Overall, tobacco related deaths are more common in Pittsburgh than other similar cities. Yet, this is most true for Black women. Black men and women have comparable rates of tobacco related deaths with nearly 1 in every 1,000 residents dying of a tobacco related cause.

For all men, drug overdoses are more common than tobacco related deaths. In fact, across all three racial groups, male overdose rates in Pittsburgh are higher than 92 percent of other cities. Although not as high as Pittsburgh's men, women in Pittsburgh also have high drug overdose rates relative to other cities.

Finally, completed suicide also disproportionately affects men compared to women. Suicide is most common among White men. Yet, Pitsbrugh's White male suicide rate is lower than similar cities. In contrast, Pittsburgh has a relatively high rate of death by suicide among AMLON men, Black men and Black women.





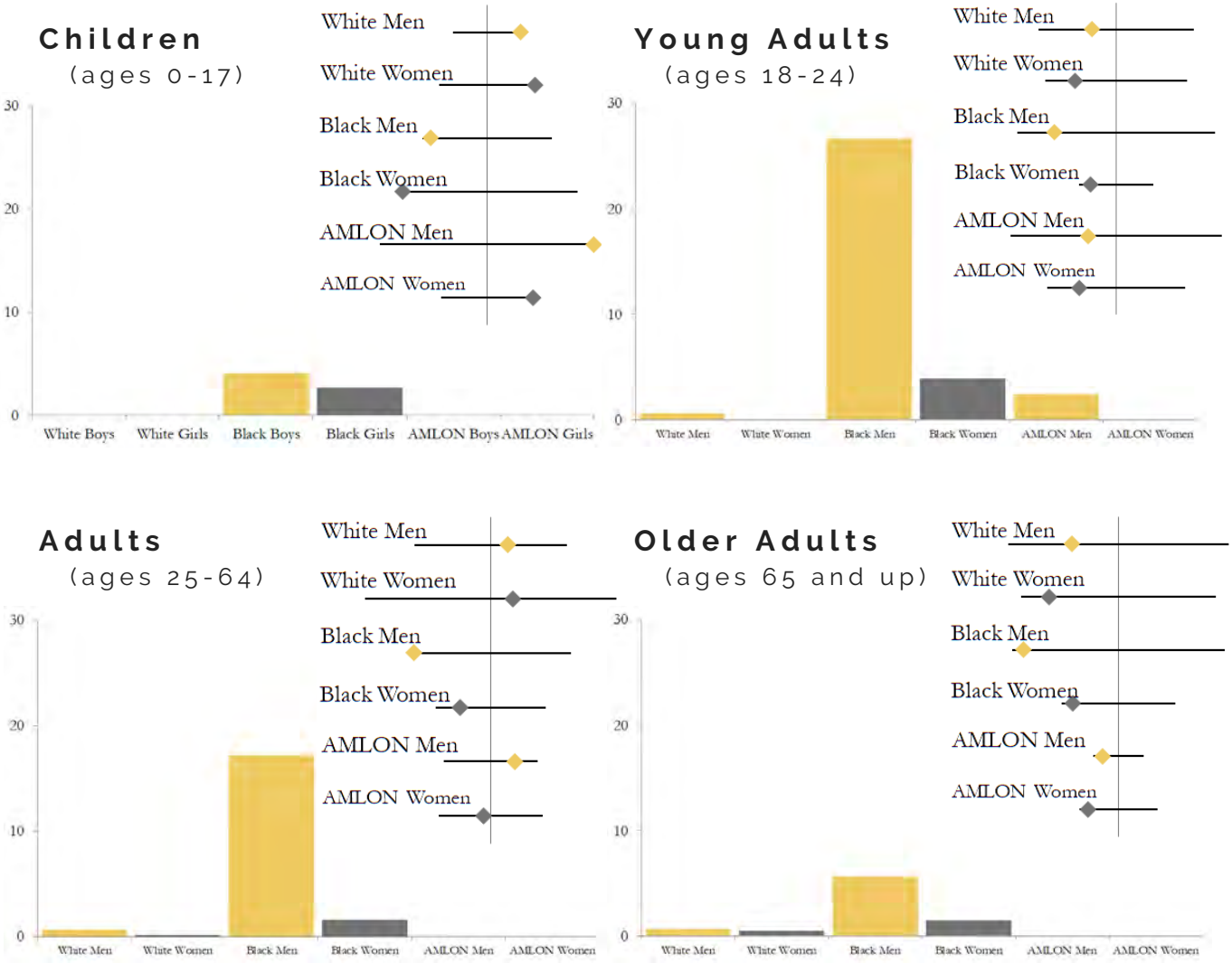


Finally, we turn to homicides. Homicides are rare occurrences. And they disproportionately affect Black men. Across all age groups, Black men are most likely to lose their life to homicide—including children and older adults. This is most true for young adults. Twenty-seven out of 10,000 young Black men die by homicide. Young Black men are 42 times more likely than young White men and 11 times more likely than AMLON men to die from homicide.

Although not as high as Black men, Black women also have high homicide rates across all the age groups. In fact, much like their male counterparts, Black women in Pittsburgh are more likely to die of homicide than Black women in 93 percent of similar cities. Moreover, Pittsburgh's young adults and older adults of all racial groups are more likely to die from homicide than the national average.

Homicides

(per 10,000 residents)



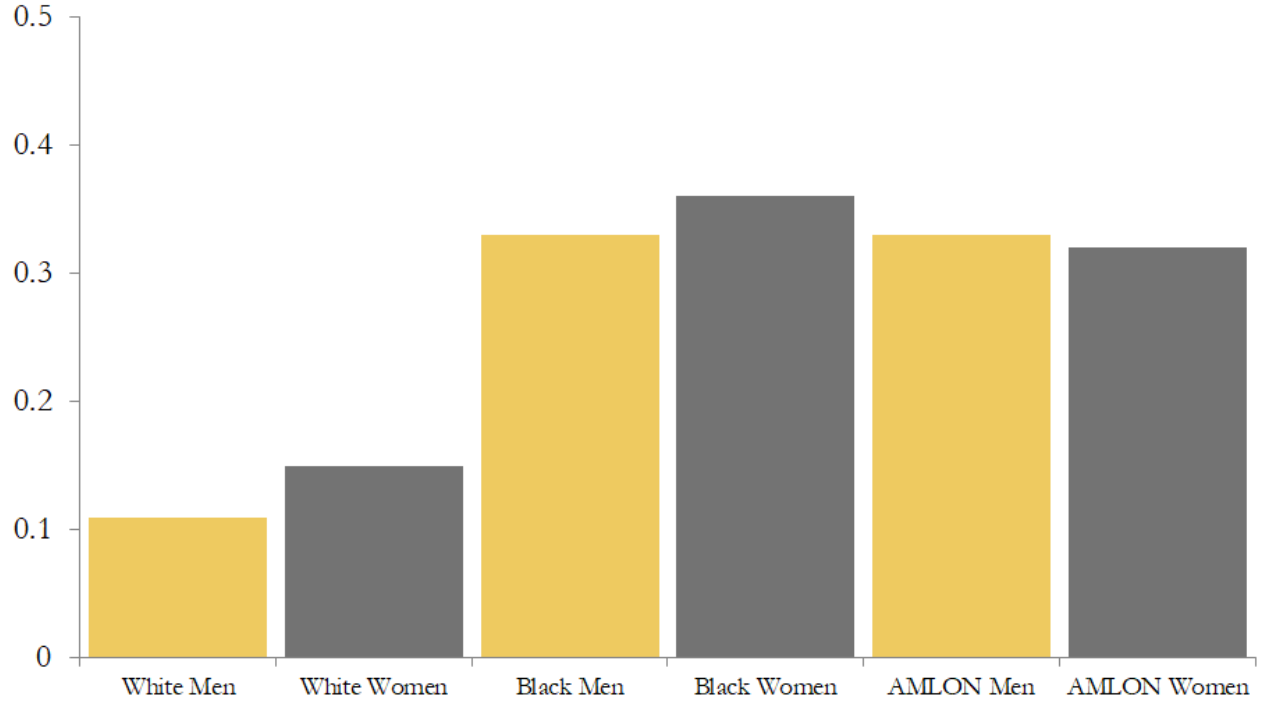
POVERTY AND INCOME

Multiple factors contribute to the observed heath inequalities. One of these key factors is poverty. Living in poverty limits access to quality health care and balanced diets, contributing to premature deaths. Poverty also increases stress, constrains children's educational opportunities, and much more.

To measure poverty, we use the 2017 federal poverty line which classifies households as poor based on total household income and household size. For a family of four, those making less than $25,750 a year are considered poor, while single individuals must make less than $12,490 to be considered poor.[10] Although not a perfect measure, the federal poverty line identifies families who do not have sufficient income to meet their basic needs. It does not, however, denote a livable wage. Some families who live above the poverty line are still not able to meet all their needs. In this way, the federal poverty line is a conservative measure of poverty, or more precisely, a measure of severe economic deprivation.

In Pittsburgh, White and Black women are more likely to live in poverty than their men counterparts. However, the racial differences are much larger than the gender distinctions. Pittsburgh's Black women are twice as likely as Pittsburgh's White women to live in poverty. Over one-third of Pittsburgh's Black women live below the federal poverty line. To further understand these racial and gender differences, it is helpful to examine how poverty rates differ across age cohorts.

Proportion of the Population Living in Poverty



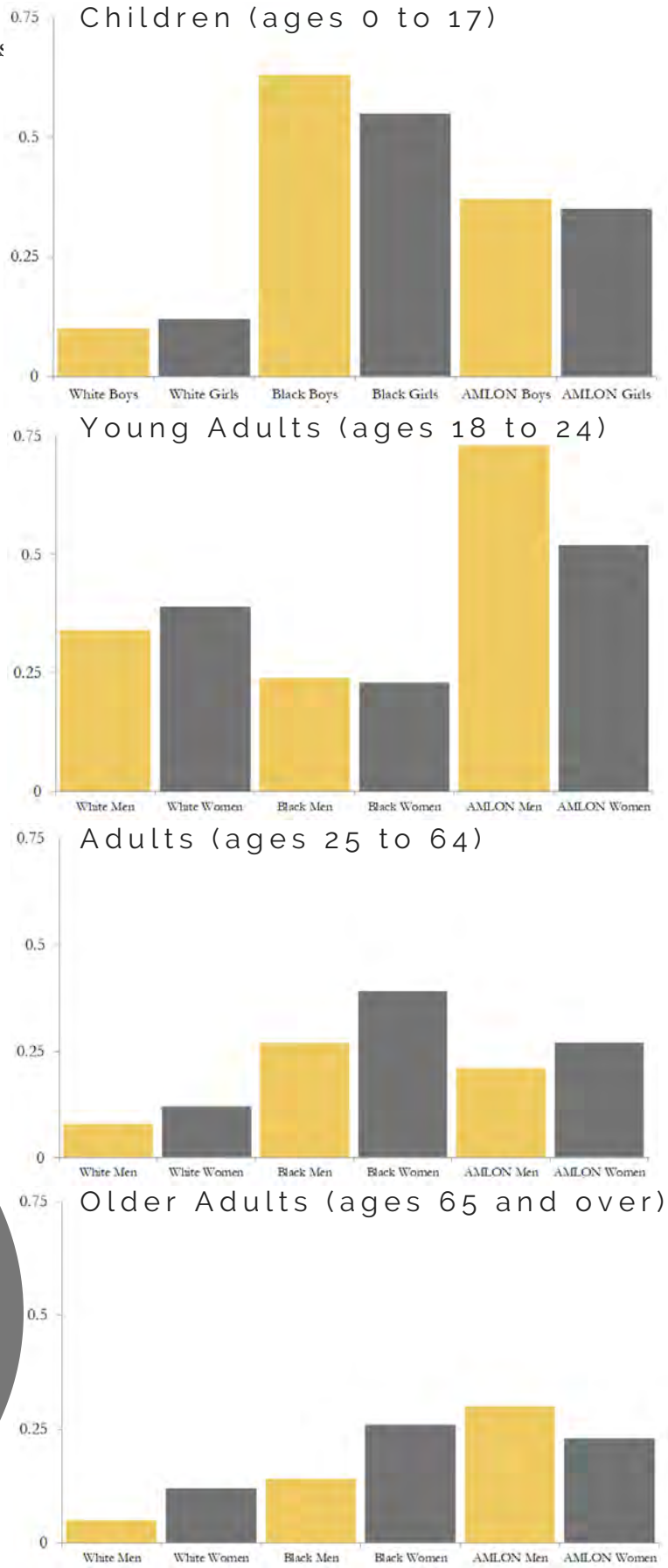
Gender differences are smaller than racial differences amongst children—partly because boys and girls are just as likely to be raised in poor households. Yet, Pittsburgh's Black boys are over 6 times more likely to live in poverty than White boys.

Gender differences are more pronounced among adults, but racial differences still persist. Nearly 40 percent of Pittsburgh's Black adult women live in poverty, compared to only 27 percent of Black men and 8 percent of White men.

In contrast, Black young adult women (ages 18 to 24) are least likely to live in poverty. The majority of impoverished individuals in this age category are college students who live on their own but have limited or no income. This explains the high number of AMLON young men living in poverty—many of whom are international students. In fact, this group is why AMLON men overall are slightly more likely to live in poverty than AMLON women.

Pittsburgh's Black adult women are 5 times more likely to live in poverty than White adult men

Population Living in Poverty

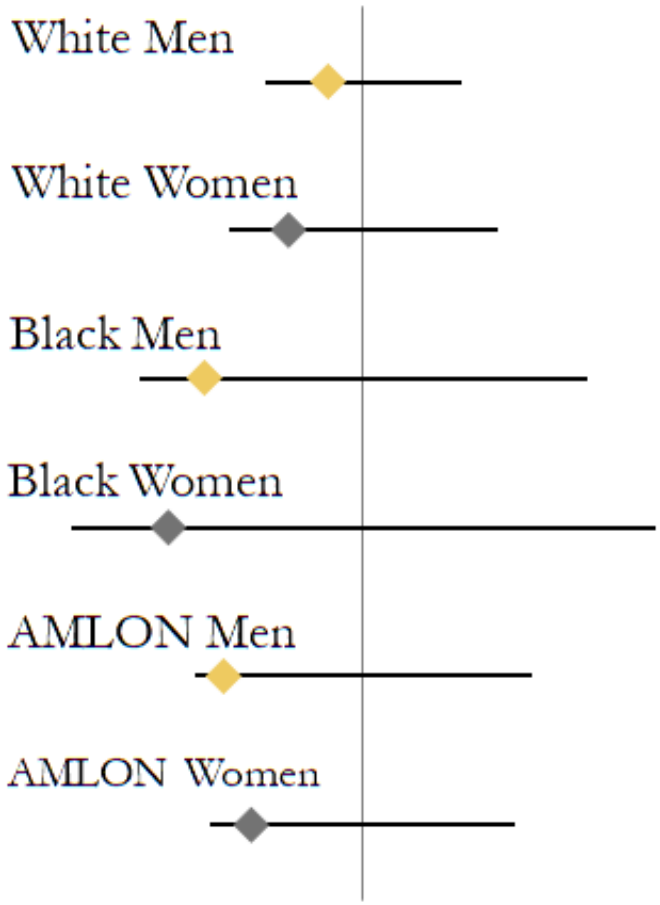


Putting Pittsburgh's poverty in the context of other U.S. cities, we see across all groups Pittsburgh has higher poverty rates than the average city. Even White men who are doing the best of our six groups, rank in the bottom third of U.S. cities.

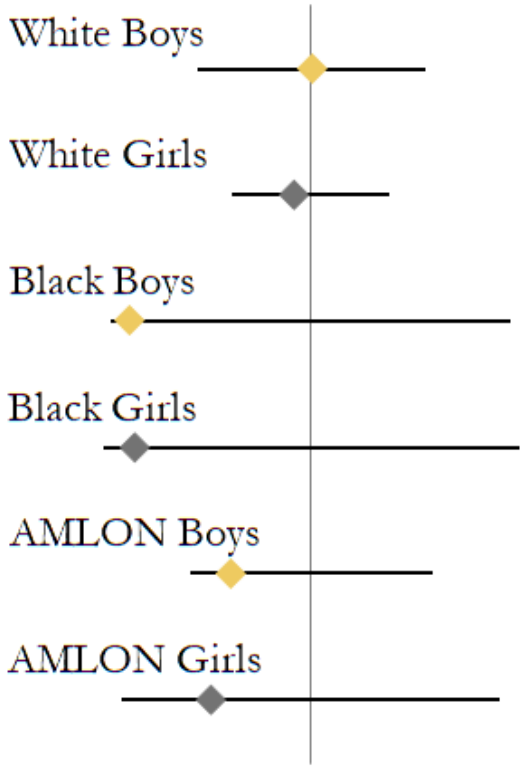
Pittsburgh's Black women not only have higher poverty than others in Pittsburgh, but their poverty rates are higher than Black women in most cities. In fact, Black women in 85 percent of U.S. cities are doing better than Black women in Pittsburgh. Although Black women have the lowest ranking, Black men and AMLON men are not far behind.

Black women's poverty is higher in Pittsburgh than 85 percent of cities.

Poverty (Total Population)



Childhood Poverty

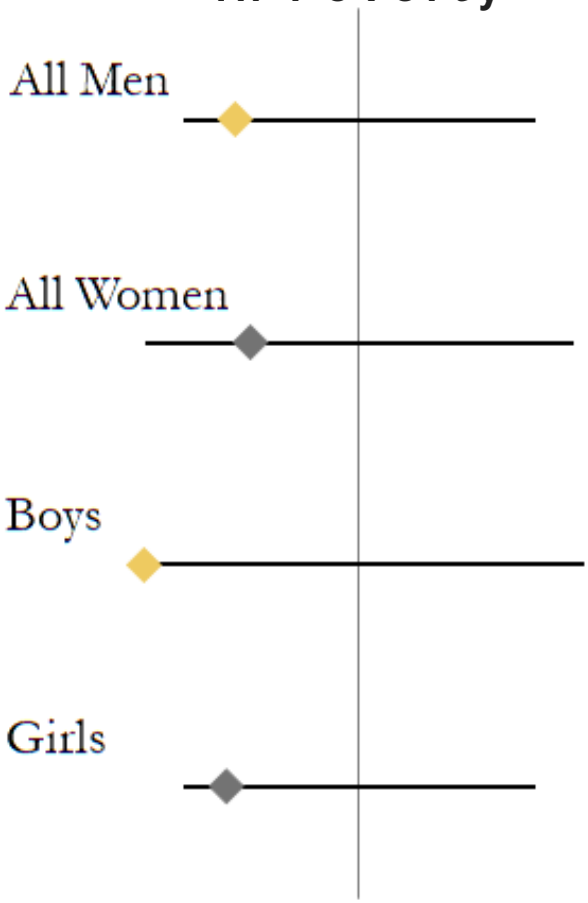


Similar to overall poverty rates, childhood poverty is also higher in Pittsburgh than in most cities. Pittsburgh's poverty rate for White boys is average compared to other cities, but poverty rates for all other groups fall below average.

Black boys and Black girls have particularly low rankings. Poverty rates among Black boys are higher in Pittsburgh than 96 percent of U.S. cities. In other words, Black children in virtually all U.S. cities are less likely to live in poverty than Pittsburgh's Black children.

More Black children in Pittsburgh grow up in poverty than 95 percent of similar cities.

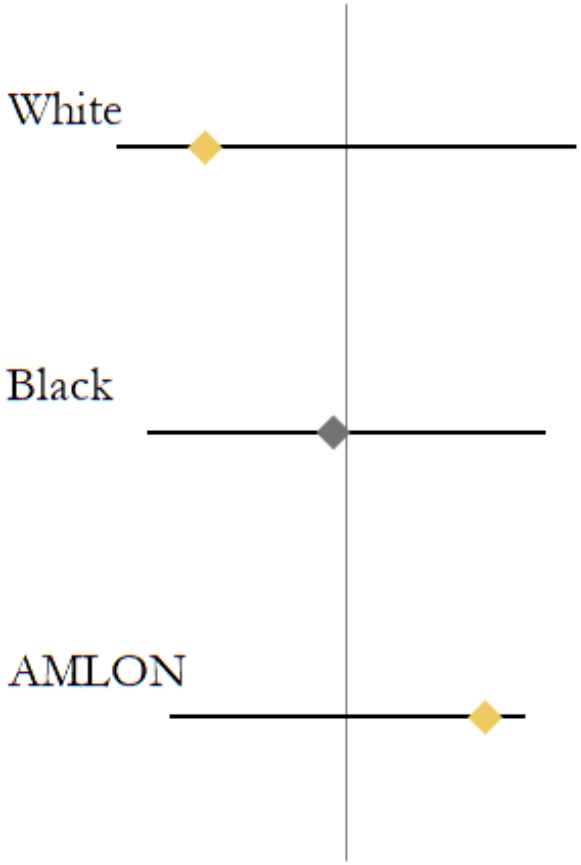
White-Black Inequality in Poverty



Pittsburgh's Black poverty rates are striking. However, it could be the case that White-Black inequality in Pittsburgh is similar to other cities and Pittsburgh's higher overall poverty creates the striking Black rankings. To differentiate whether the high Black poverty in Pittsburgh is mainly due to Pittsburgh's overall poverty or an unusually high inequality between Whites and Blacks, we compare White-Black inequality across U.S. cities.

Across gender and age categories, White-Black inequality in poverty rates is notably higher in Pittsburgh than most cities. This is particularly true for the inequality between Black and White boys. Ninety-eight percent of cities have more equality between White and Black boys than Pittsburgh.

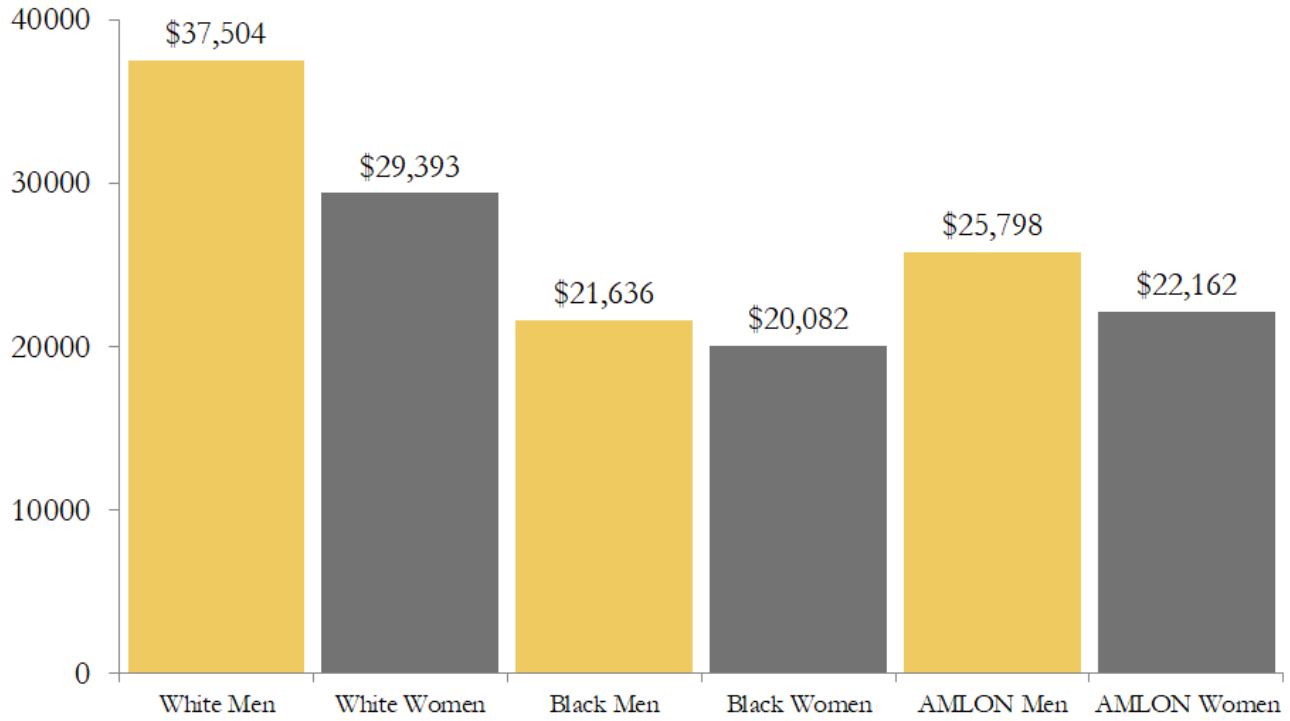
Gender Inequality in Poverty



Unlike racial inequality, gender inequality in Pittsburgh is varied. Pittsburgh's gender inequality within the Black population is average compared to other cities while Pittsburgh ranks in the top 10 percent for equality among AMLON men and women. Conversely, Pittsburgh ranks in the bottom 20 percent of cities when it comes to White gender equality.

Together, this demonstrates that both overall poverty rates and inequality between groups contribute to Pittsburgh's low rankings. Additionally, this highlights that compared to White men in other cities, Pittsburgh's White men are even more privileged than the remainder of Pittsburgh's population—including White women and people of color.

Median Annual Income for All Workers



As discussed above, the definition of poverty takes into account both income and family size which is important for understanding lived realities. Yet, to understand how inequality manifests specifically in income, we now examine income inequality explicitly.[11]

Pittsburgh's women make less than men in every racial group. However, both White men and White women make more than AMLON men and women who both make more than Black men and women. On average, White men make $8,000 more than White women, $12,000 more than AMLON men, $15,000 more than AMLON women, $16,000 more than Black men, and $17,000 more than Black women. Said another way, White men make nearly twice as much as Black women.

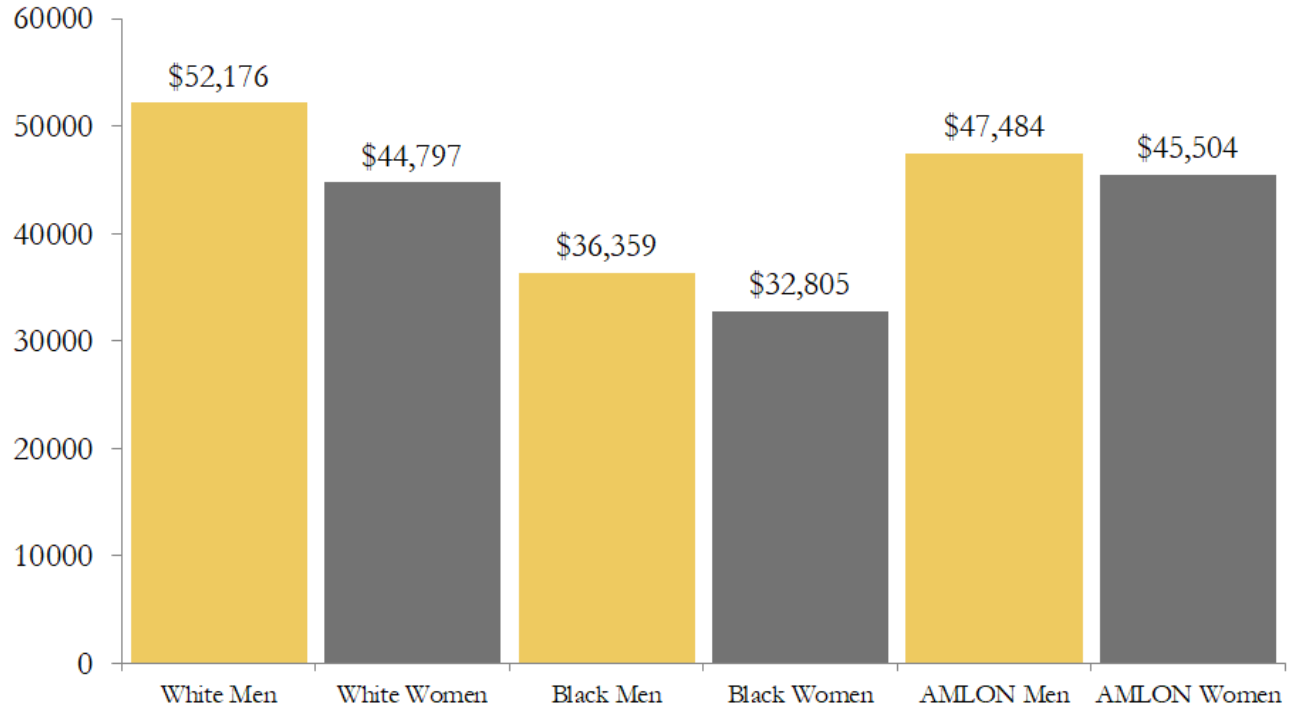
Activists commonly discuss wage gaps as the number of cents women make compared to every dollar made by men. Using this metric, Pittsburgh's White women make only 78 cents to every dollar Pittsburgh's White men make—which is similar to the national average. However, when we compare Black women to White men, we see they make only 54 cents to every dollar Pittsburgh's White men make and AMLON women make only 59 cents to every dollar Pittsburgh's White men make. This once again emphasizes the persistent gender and racial inequalities in Pittsburgh.

Pittsburgh's White women make 78 cents to every dollar made by Pittsburgh's White men; Black women make 54 cents.

The median annual income across all workers, presented previously, is a helpful overview. Yet, some of this inequality is due to the fact that women disproportionately conduct unpaid labor, like taking care of family members. As a result, women are more likely to work part time with lower annual incomes. To differentiate how much of the observed inequality is due to women spending fewer hours conducting paid labor, we now examine the median income of full time workers.

As expected, across all categories the income of full time workers is higher than their part time counterparts. The gender inequality across all racial groups persists. However, patterns across racial groups are slightly different.

Median Annual Income for Full Time Workers

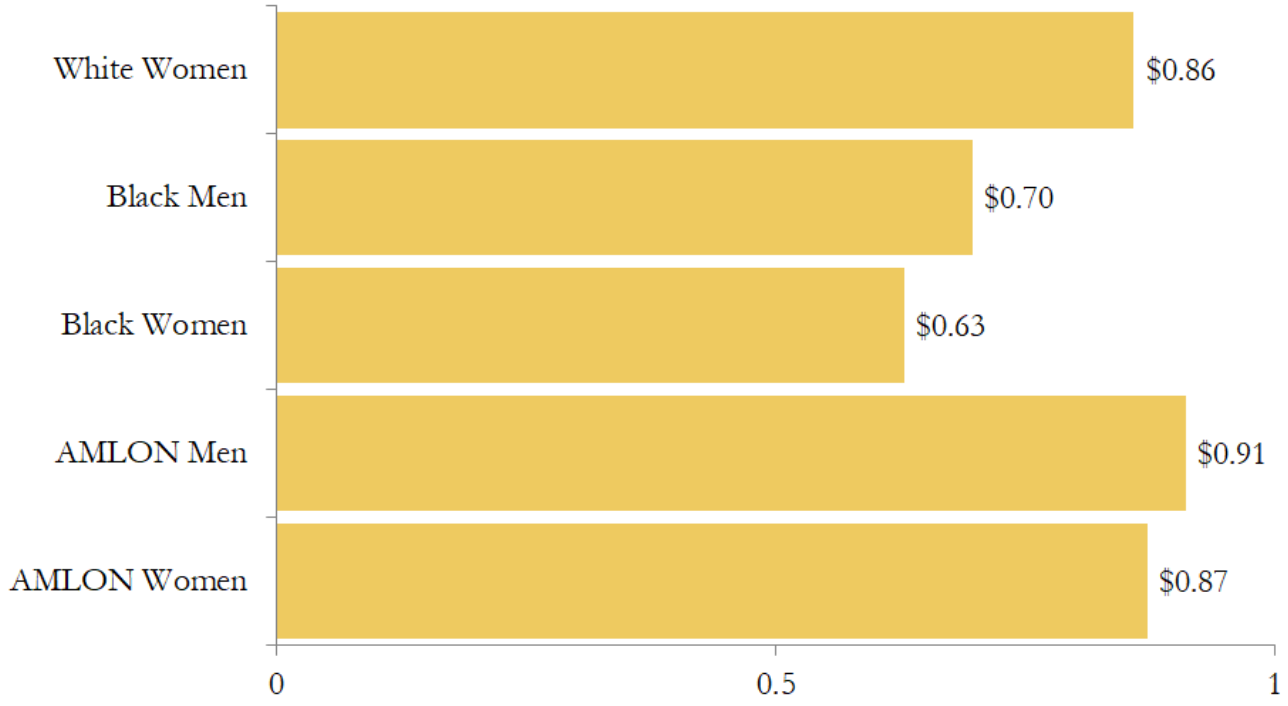


Full time AMLON men and women make more than White women. This suggests that much of the inequality between White women and AMLON individuals is due to lower wages among part time AMLON workers.

Additionally, the gender pay gap decreases among AMLON individuals when only the full time workers are considered. Yet, full time Black and White workers have larger gender gaps than their overall populations. Specifically, the gender pay gap for Black workers nearly doubles from $1,600 across all workers to $3,600 for full time workers. Suggesting gender inequality within the Black community has less to do with who is working full time and more to do with equitable pay for comparable hours worked. To unpack these differences further, we once again use the cent-to-dollar ratio.

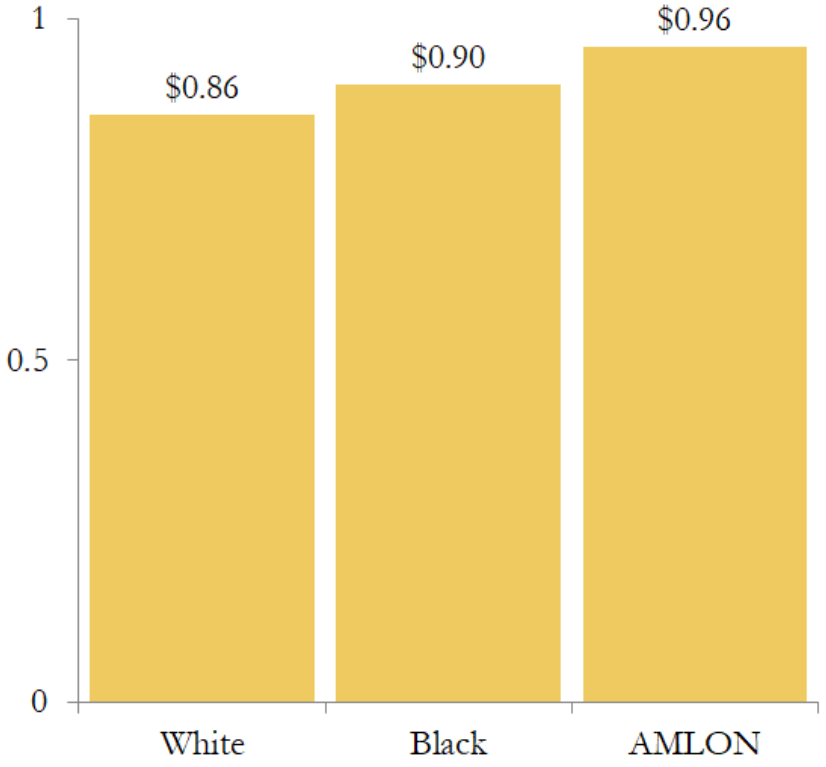
Income Compared to White Men's Dollar

for Full Time Workers



Full time White women make 86 cents to every dollar made by White men working full time. AMLON men make 91 cents to every dollar White men make and AMLON women make 87 cents to every dollar made by White men. Likewise, Black men working full time make only 70 cents and Black women only make 63 cents to every dollar made by White men.

Gender Inequalities Within Race

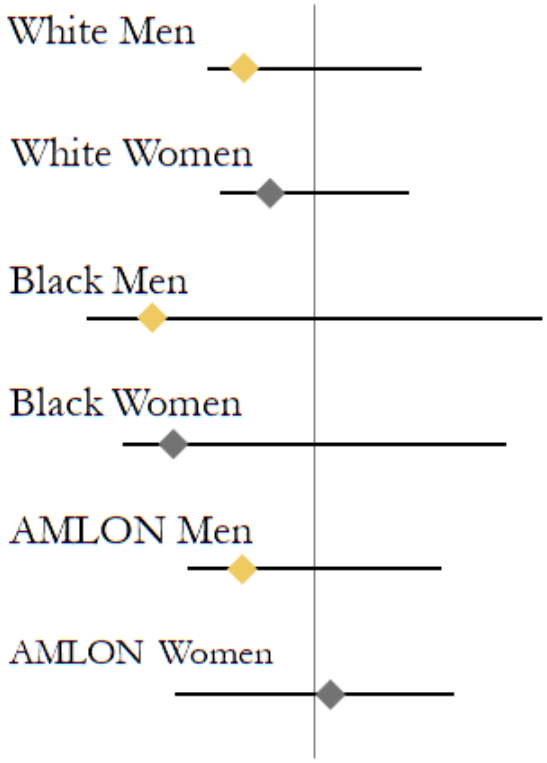


Clearly the racial differences continue to be most striking. But it is important to note that within each racial group gender inequality persists. Much like with poverty, this gender inequality is greatest within the White population. As just noted, White women make only 86 cents to every dollar made by White men. Gender parity is greater among the Black and AMLON, with Black women making 90 cents to every dollar made by Black men and AMLON women making 96 cents to every dollar made by AMLON men.

Like poverty, Pittsburgh's income ranks on the lower end of U.S. cities. This is partly due to low cost of living relative to other cities. Yet, Black Pittsburghers have lower relative income than their White counterparts. Black women in 90 percent of cities have higher median income than the Black women in Pittsburgh.

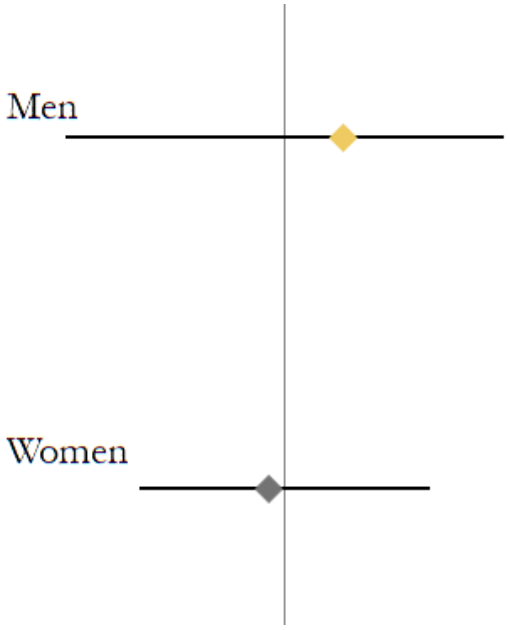
Black women in 90 percent of cities have higher median income than Black women in Pittsburgh.

Income (All Workers)



Despite the relatively low income for all of Pittsburghers, inequality between groups is on par or better than other cities. This is particular true for racial inequality between Black and White women and gender inequality between Black men and Black women. Racial inequality between Black and White men and gender inequality between White Pittsburghers and AMLON Pittsburghers is lower than two-thirds of U.S. cities.

White-Black Inequality in Income



Gender Inequality in Income

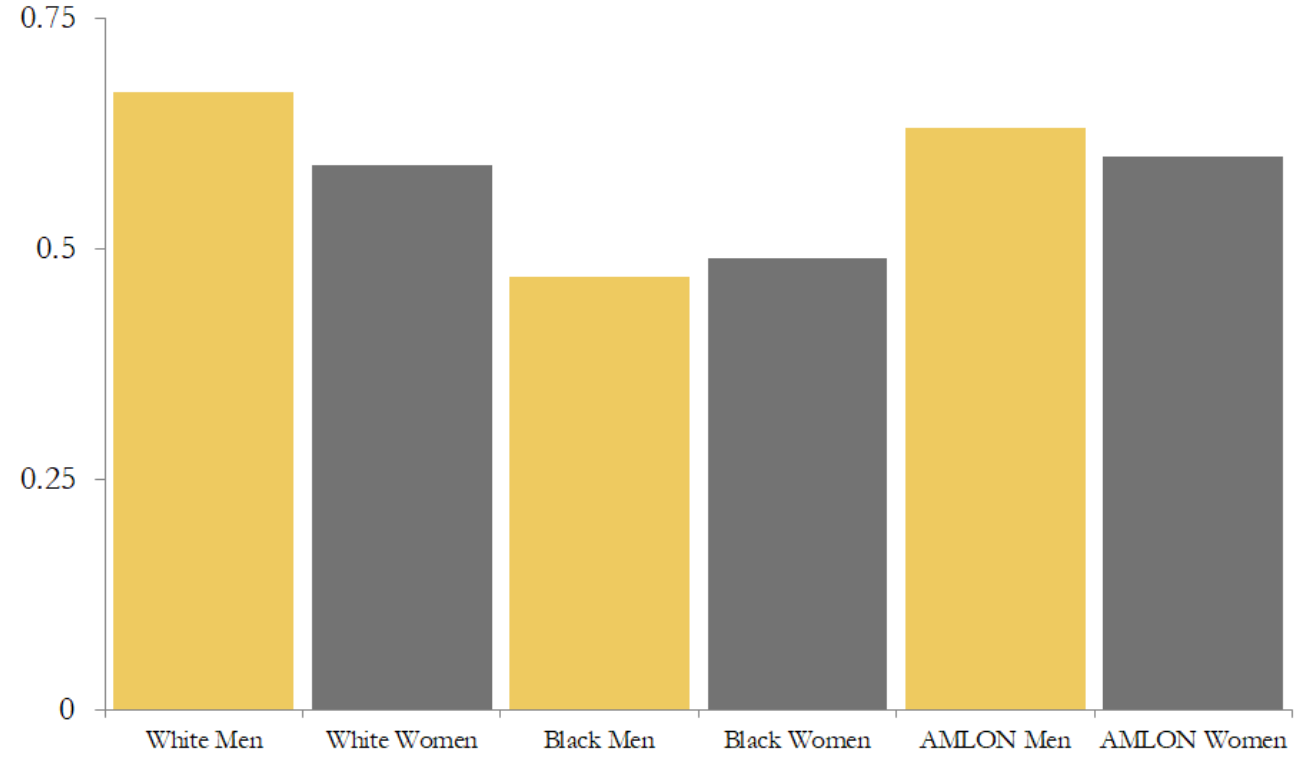
EMPLOYMENT

Income, poverty, and health are all influenced by and influence residents' employment. Thus, to further unpack the factors contributing to observed inequities we explore employment. Explicitly examining employment helps us illuminate to what extent the observed inequalities are the product of employers' inequitable hiring versus their compensation practices.

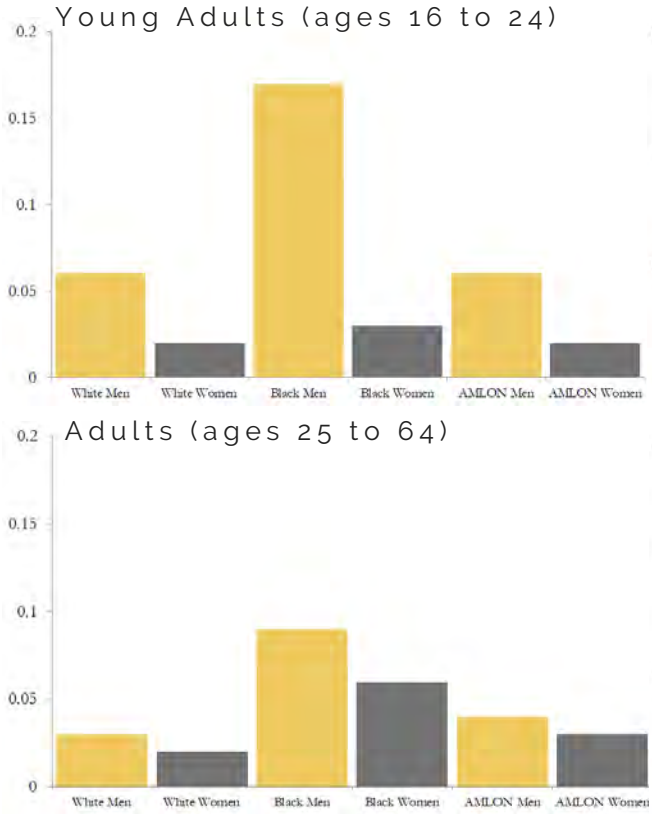
As seen in the graph below, 67 percent of Pittsburgh's White men are employed—the highest proportion across all six categories. At 63 percent, AMLON men are the next most likely to be employed. White and AMLON women are less likely to be employed than their male counterparts. In fact, as observed with median income, gender inequality is greatest among Whites.

Yet, for Blacks the story is reversed. Black women are slightly more likely to be employed than Black men with 49 compared to 47 percent of the population. However, the largest inequities are, once again, not between gender categories but by race and, more specifically, the difference between the Black population and everyone else. Understanding this inequality requires a more detailed assessment regarding who is not employed because of their decision to leave the work force versus who is actively seeking a job but is unable to obtain work.

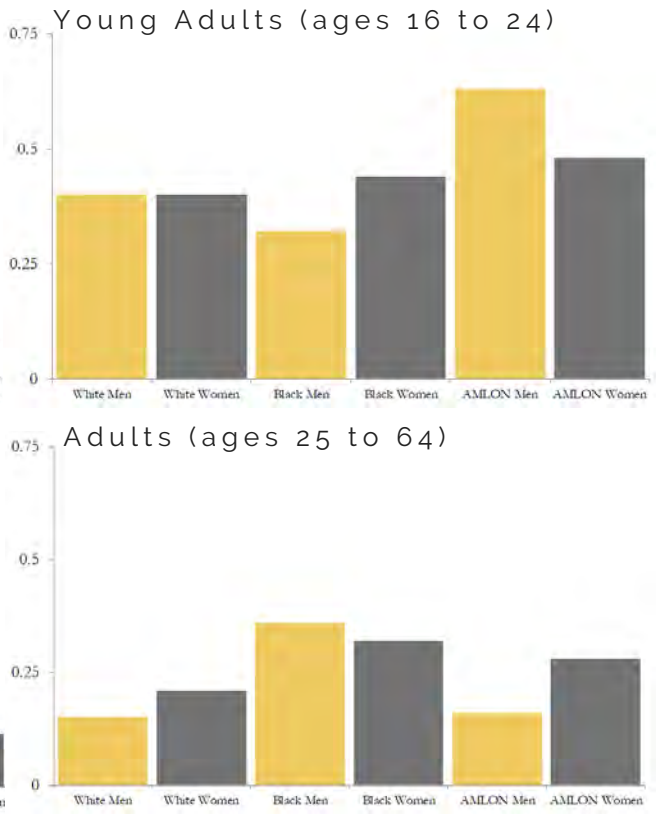
Proportion of the Population Employed



Looking for Work



Out of the Labor Force



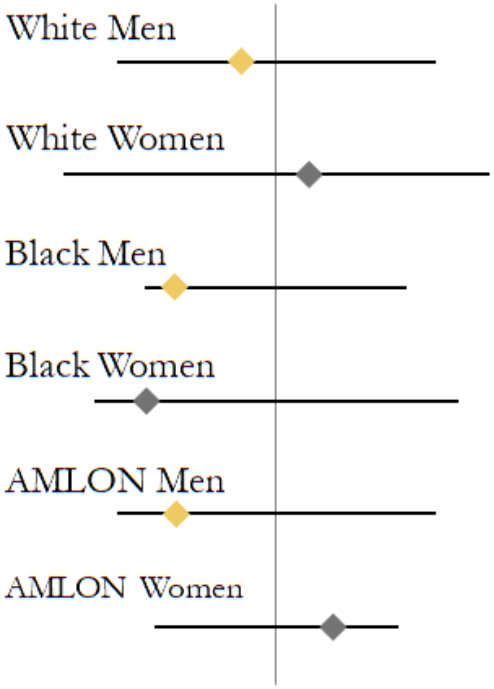
Across all the racial groups, men are more likely than women to be unemployed and actively searching for work. This is particularly true for the Black population. Black men are the least likely to be employed and most likely to be actively looking for work—meaning they have applied and interviewed for jobs in the last month. Young Black men (ages 16 to 24) are particularly likely to be actively searching for jobs (three times more likely than White men) and least likely to be out of the labor force. Yet, with persistently high unemployment, adult Black men (ages 25 to 64) are still the most likely to be actively looking for work but also the most likely to have left the labor force all together.

Black women, on the other hand, are much more likely to be out of the labor force in young adulthood—in part due to their enrollment in higher education. Yet, like their male counterparts, Black women ages 25 to 64 are more likely than any other group to be actively looking for work and to be out of the labor force, illustrating that some inequality in poverty and income is due to Black workers not being hired even when actively searching for work.

For Whites and AMLON, young women and men have comparable proportions of the population out of the labor force. Yet, White and AMLON women older than 25 are more likely to be out of the labor force and less likely to be looking for work. Together, this highlights employment is not simply gendered or racialized, but rather that it is the intersection of these factors with age that shapes who is employed.

Employment

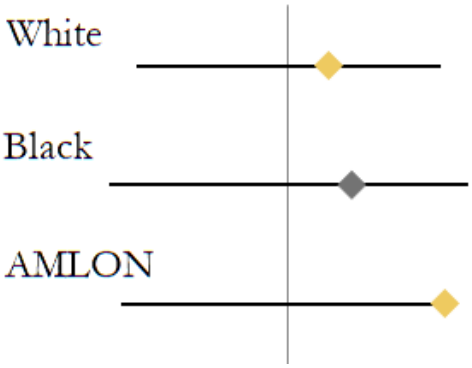
Comparing Pittsburgh's employment to other cities, we see that White and AMLON women have above average employment rates in Pittsburgh. Yet, Black women, Black men, and men of other races have lower employment rates in Pittsburgh than other similar cities. Pittsburgh is in the bottom 15 percent of cities for Black employment.



85 percent of cities have higher Black employment than Pittsburgh.

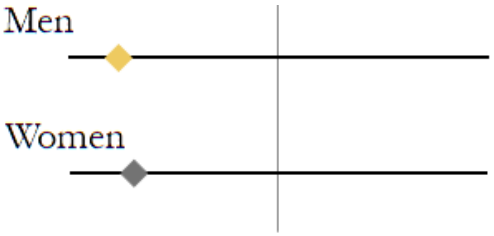
Gender equality in employment is relatively high in Pittsburgh, especially among AMLON residents. This is due to relatively high employment among AMLON women and low employment among AMLON men. Although still above the average city, White gender equity ranks lower in comparison to other cities than Black and AMLON gender equity.

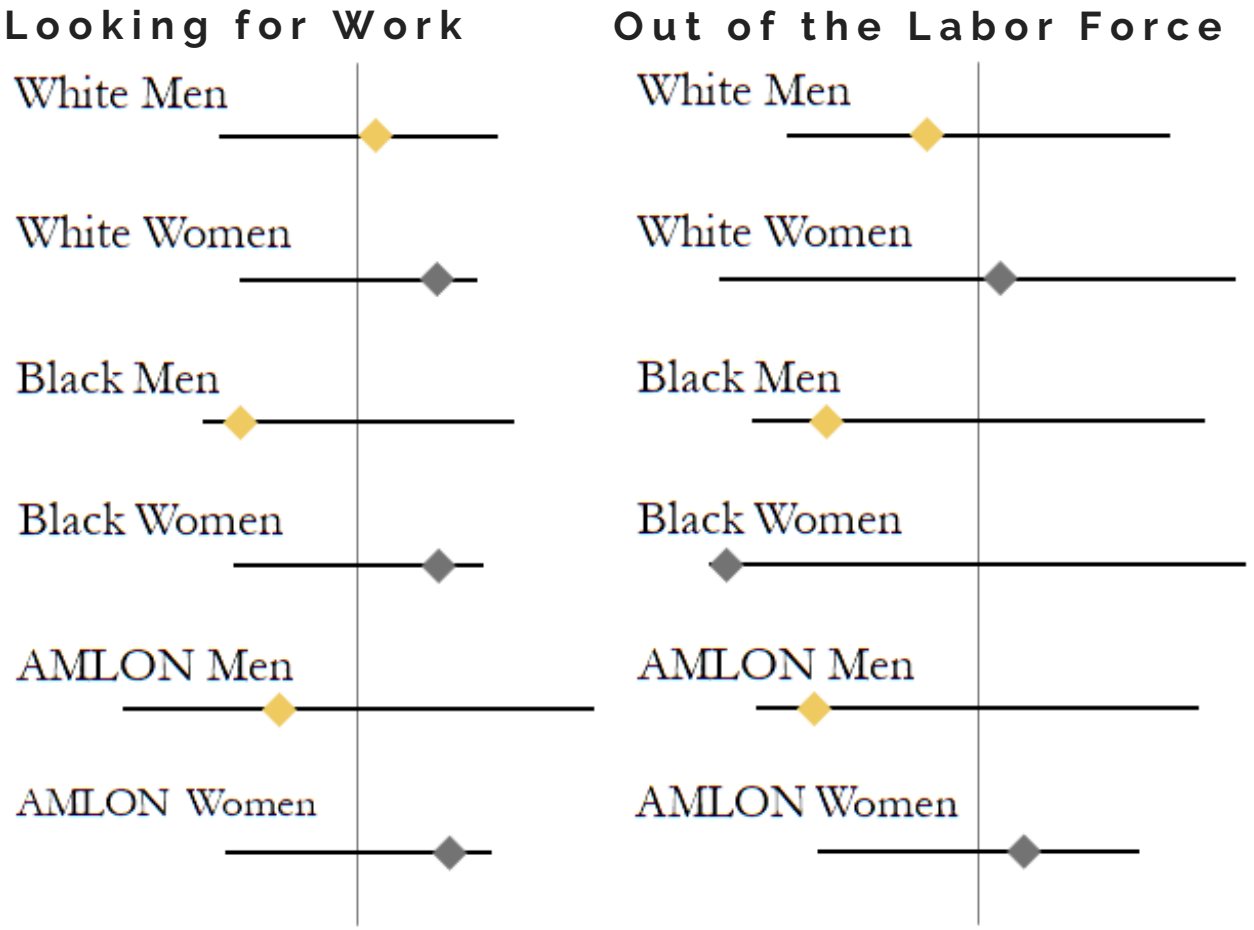
Gender Inequality



Racial equality in employment, on the other hand, is lower in Pittsburgh than other similar cities. For both men and women, the White-Black gap in employment is higher in Pittsburgh than 85 percent of similar cities. This reinforces that Pittsburgh's strikingly low Black employment is likely not due to the city's economy, but the failure of employers to hire Black workers who are seeking jobs.

White-Black Inequality





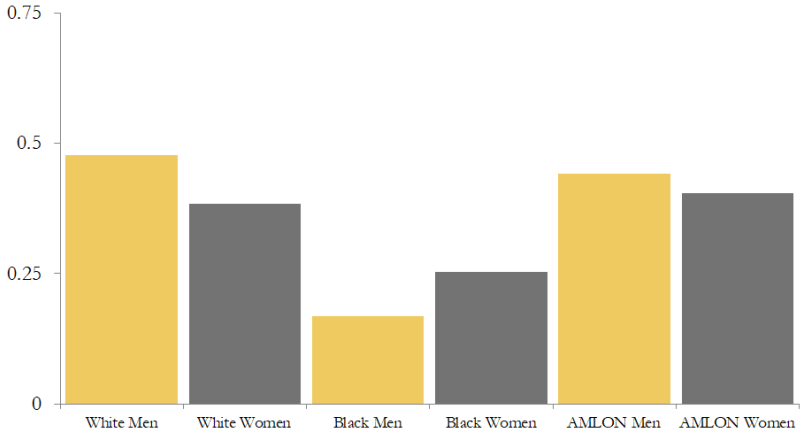
Pittsburgh's women are less likely to be actively looking for work (as indicated by diamonds to the right of the center indicating Pittsburgh is doing relatively well) than women in other cities. This pattern is extremely gendered. Women of all races are less likely to be actively looking for work in Pittsburgh than women in 80 percent of similar cities. Conversely, Black and AMLON men are more likely than their counterparts in other cities to be unemployed and actively looking for work.

Likewise, compared to other cities, Pittsburgh's men are also more likely to be out of the labor force all together. This includes individuals who have left the labor force to conduct unpaid labor like child-rearing or elder-care and those who have given up on finding employment. However, for Pittsburgh's women, it depends on the racial group. White and AMLON women are less likely than White and AMLON women in other cities to be out of the labor force while a higher proportion of Pittsburgh's Black women are out of the labor force than Black women in 97 percent of similar cities.

Pittsburgh has more Black women out of the labor force than **97 percent** of cities.

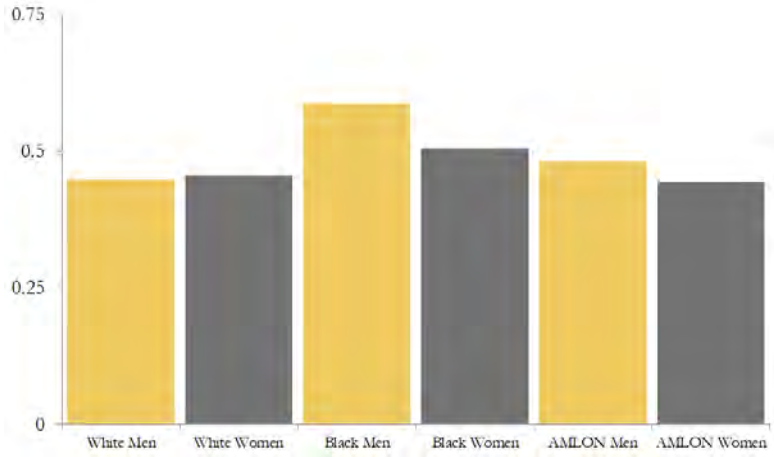
Occupations with Median Income above $50,000

- Lawyers
- Computer Programmers
- Mathematicians
- Architects
- Engineers
- Scientists
- Police
- Business and Finance
- Doctors and Nurses
- Athletes and Artists



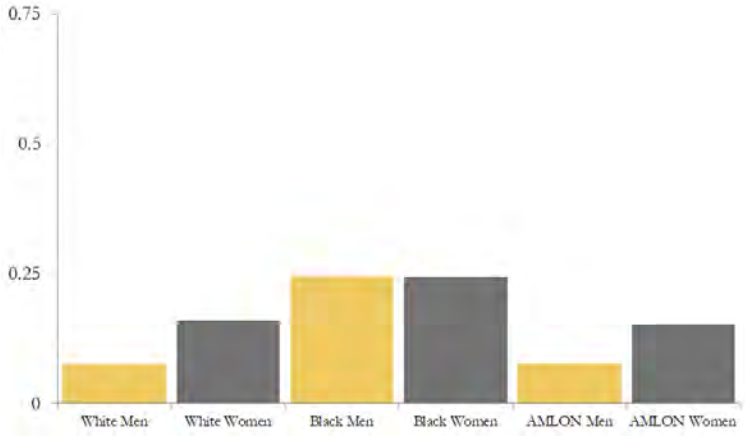
Occupations with Median Income between $30,000 and $50,000

- Construction Workers
- Contractors
- Farmers and Fishers
- Teachers
- Social Service Workers
- Sales
- Office Administrators
- Maintenance
- Fire Fighters
- Transit Workers
- Factory Workers



Occupations with Median Income less than $30,000

- Heath care support
- Personal care workers
- Cooks
- Servers
- Caterers
- Custodians



Having the opportunity to work is critical for staying out of poverty and maintaining healthy lifestyles. Yet, not all jobs are created equal. To further unpack the distribution across job types, we categorize occupations by their median income. Jobs like lawyers and engineers which pay on average above $50,000 a year are disproportionately filled by Pittsburgh's White men. Conversely, jobs that pay less than $30,000 a year (e.g. health care support workers, servers, and custodians) are disproportionately filled by Pittsburgh's Black population. White and AMLON women are also more likely than their male counterparts to be employed in low versus high paying occupations.

Occupations with Highest Concentrations

White Men

1. Farmers/Fishers
2. Construction/Contractors
3. Police
4. Lawyers
5. Computer Programmers

White Women

1. Office Administrators
2. Social Service Workers
3. Health Care Support
4. Doctors and Nurses
5. Teachers

Black Men

1. Maintenance
2. Fire Fighters
3. Factory Workers
4. Food Service
5. Construction/Contractors

Black Women

1. Health Care Support
2. Personal Care
3. Office Administrators
4. Maintenance
5. Factory Workers

AMLON Men

1. Police
2. Computer Programmers
3. Teachers
4. Fire Fighters
5. Sales

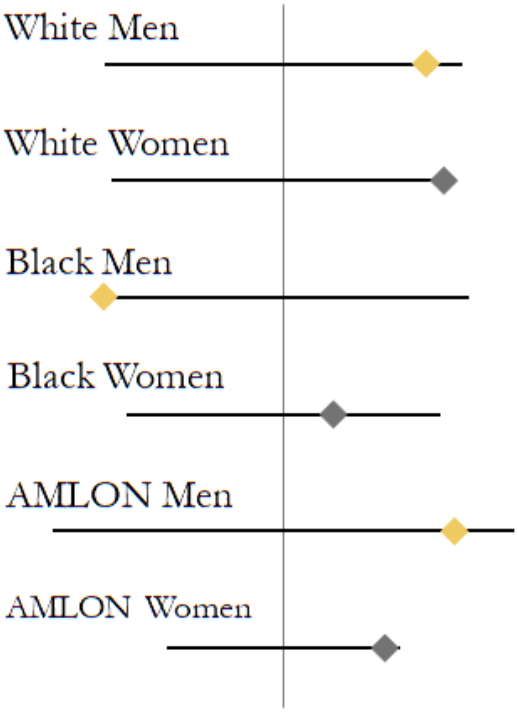
AMLON Women

1. Fire Fighters
2. Doctors and Nurses
3. Entertainment
4. Teachers
5. Sales

Taking a more granular approach, we examine where workers of each group are clustered. Occupational segregation occurs across gender and race categories. Some occupations like construction, for men, and office administrators, for women, are gendered, while others like maintenance and factory workers are clustered more by race.

Using an occupational segregation index, we see segregation is fairly high for all six groups. Yet, this is true across the nation. In fact, when we compare Pittsburgh's occupational segregation to other cities, we see Pittsburgh's White work force is more equally distributed across occupational categories than 90 percent of other cities. Yet, our Black workforce, in particular Black men, is more concentrated than the Black male workforce in 99 percent of other cities.

Work Segregation

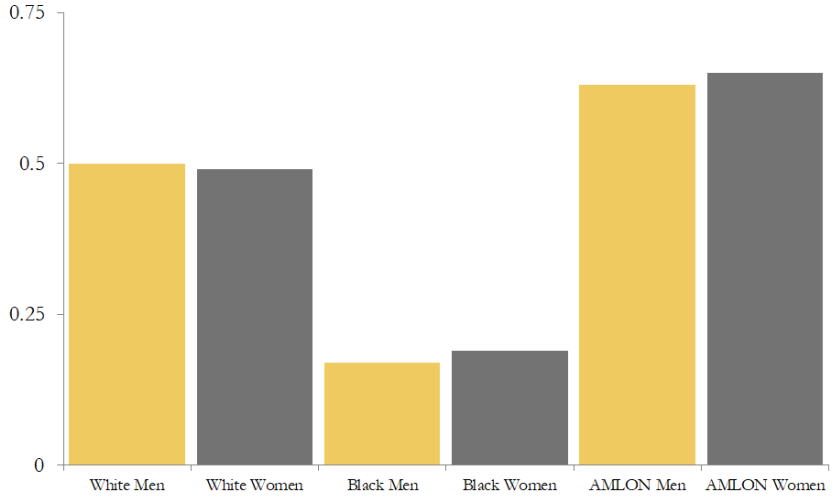


EDUCATION

Employment and occupational inequality are due to many factors, including differential access to the networks that have information and connections to jobs as well as employers' biases in the application process. Yet, they are also due to differences in educational attainment. To be a lawyer, accountant, or doctor, individuals need to obtain the requisite degrees. Thus, inequality in Pittsburgh's education contributes to inequality in employment, leading to inequality in poverty and health outcomes. Further, holding income and occupation constant, education is also related to mental and emotional health.

Recognizing the important role of education, in this section we examine educational inequality in Pittsburgh. We begin by looking at the adult population's (those 25 years old or older) educational attainment. In this way, we isolate those who are in the workforce from young adults who are more likely to still be pursuing their education. We then turn to our public school children and what opportunities Pittsburgh is providing the next generation.

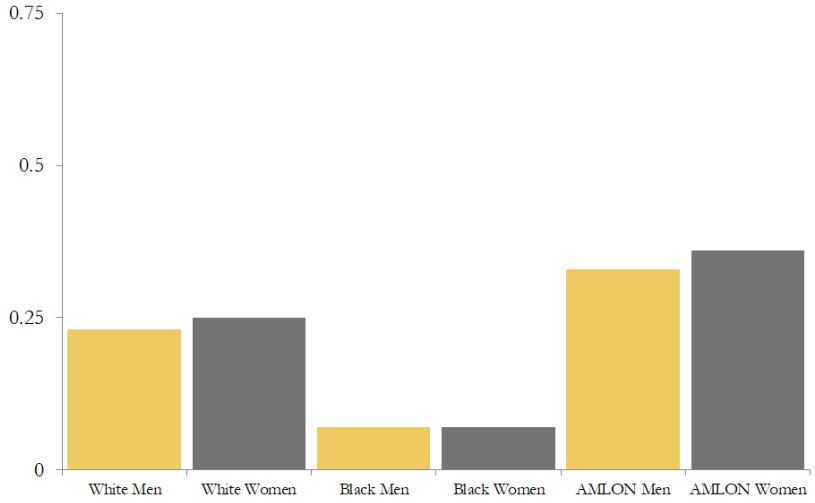
Proportion with a Bachelor's Degree



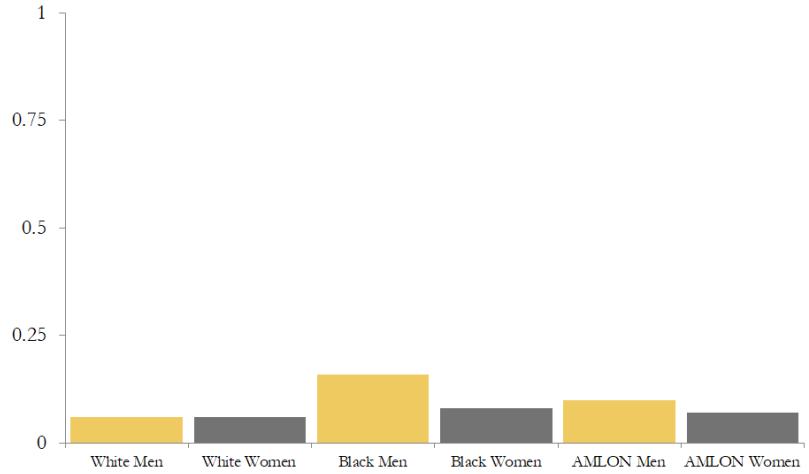
Gender equality in bachelor's and graduate degrees is extremely high in Pittsburgh. Few differences exist across men and women. Yet, the racial inequality is striking. White residents are nearly 3 times more likely, and AMLON are 3.5 times more likely, than Black residents to have a bachelor's degree. Similarly, White residents are 3.5 times more likely and AMLON are 5 times more likely than Black residents to obtain a graduate degree.

White residents are 3 times more likely to have a college degree than Black residents

Proportion with a Graduate Degree



Those Who Did Not Finish High School

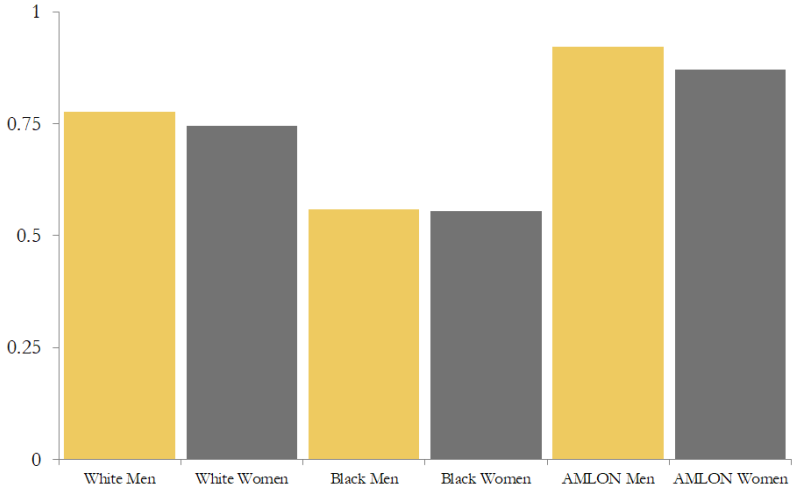


Racial inequality is also present among those with less education. The majority of all Pittsburghers finish high school, but Black men are twice as likely as Black women to drop out of high school and 2.5 times more likely than White students. Sixteen percent of Black men in Pittsburgh do not have a high school diploma or GED.

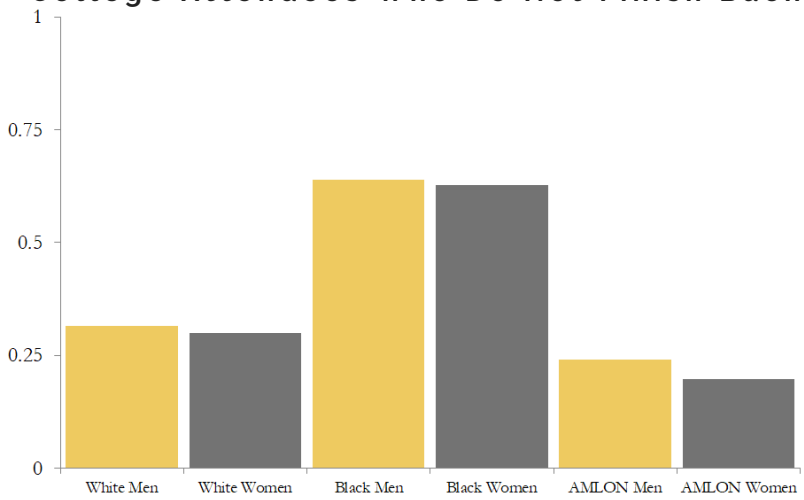
Across all groups, boys are more likely to drop out of school than girls. Yet, of the students who finish high school, men are more likely to attend college. AMLON men and women are most likely to attend college (92 and 87 percent respectively) followed by White students. Although Black students are less likely than their classmates to continue, the majority of Black students who finish high school attend college.

Men are less likely to finish their degrees but when they do they are more likely to pursue further education.

High School Graduates Who Attend College

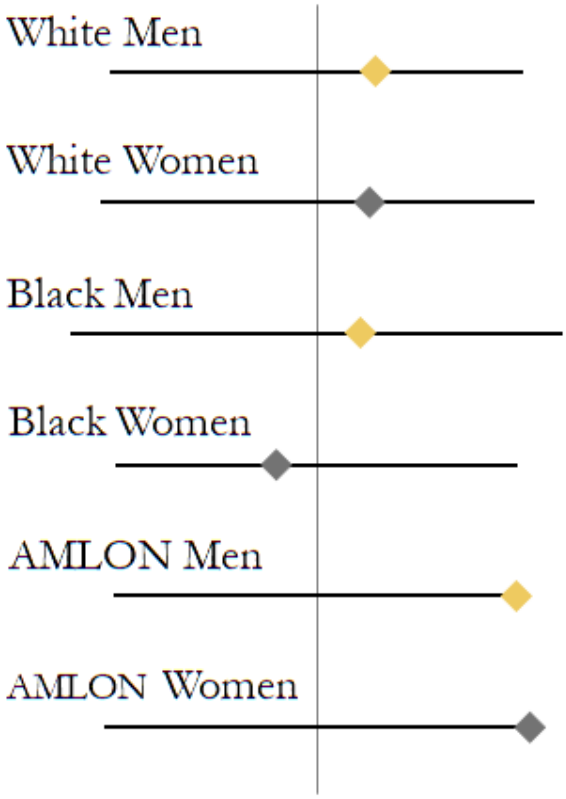


College Attendees Who Do Not Finish Bachelor's

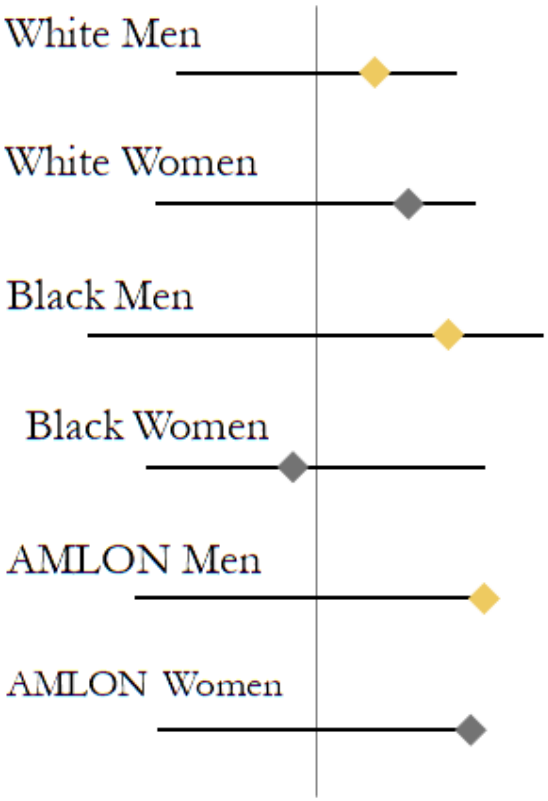


Like with high school, men are more likely than women to not finish their bachelor's. Yet, the larger inequities exist across racial categories. Over 60 percent of Black students drop out, which is over double the rate for White and AMLON students. In short, the majority of Black students who finish high school start college but only 40 percent finish.

Bachelor's Degree



Graduate Degree



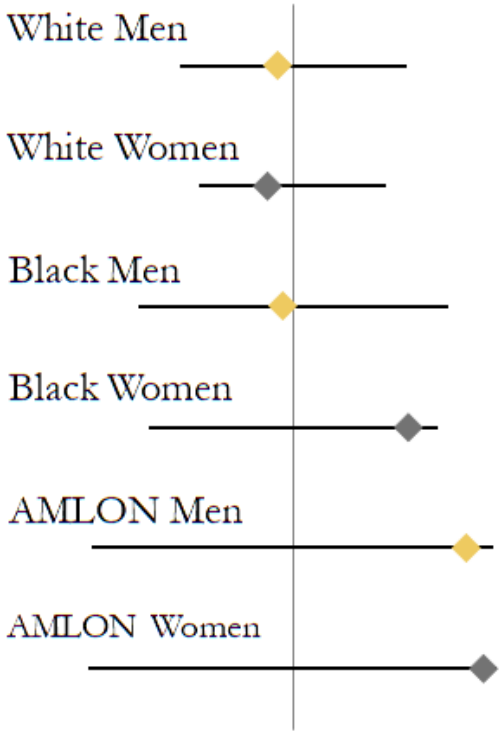
The proportion of Pittsburgh's residents with bachelor's degrees is higher than most cities. Specifically, Pittsburgh's White population is more likely to have a bachelor's degree than White populations in other similar cities. Additionally, Pittsburgh ranks first for the proportion of AMLON populations with bachelor's degrees. Even Pittsburgh's Black men are more educated than Black men in 60 percent of similar cities. Yet, when it comes to Black women the story is reversed. 60 percent of cities have higher college completion rates for Black women than Pittsburgh.

The story is fairly comparable for graduate degrees. Relative to other cities, Pittsburgh ranks even higher for Black men with graduate degrees but still falls below average for Black women. Predictably, the inequality rankings demonstrate Pittsburgh's relative advantage between White and Black men but relative disadvantage between White and Black women.

Yet, what is perhaps even more noteworthy is Pittsburgh's higher rankings for education than employment or income. Pittsburgh has a relatively educated population but this is not translating into equality in the workplace.

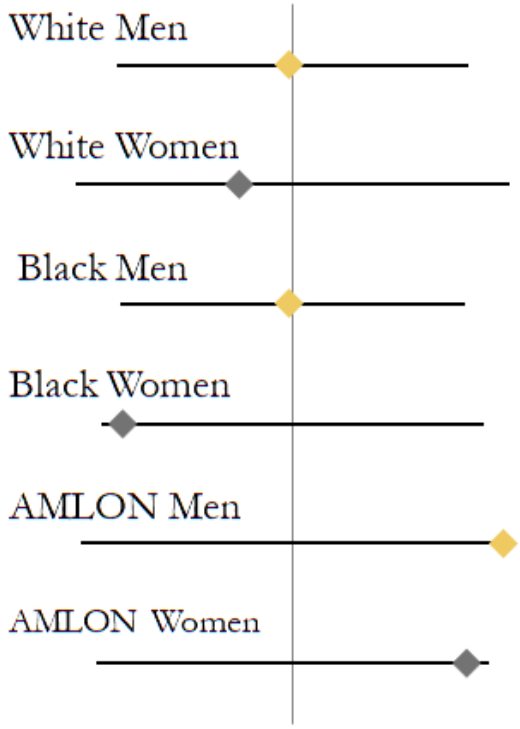
Pittsburghers are more educated than most, except for Pittsburgh's Black women who have less education than Black women elsewhere.

Didn't Finish High School

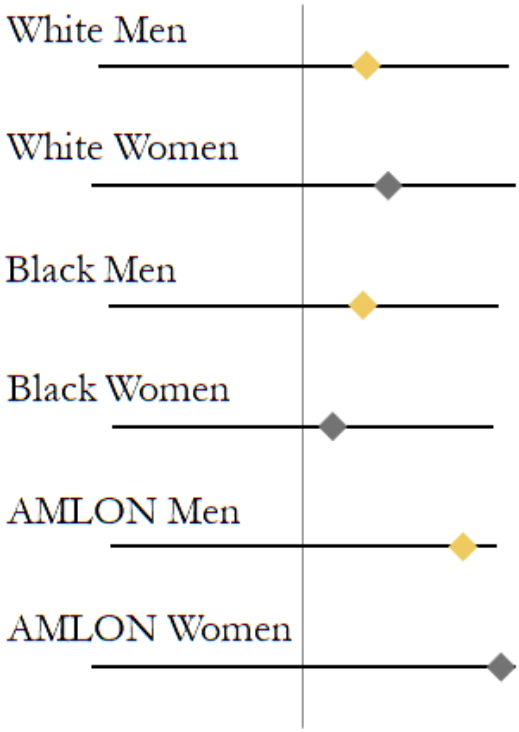


Although Pittsburgh's White men, White women, and Black men have above average proportions of residents with bachelor's degrees, high school drop out rates among these groups in Pittsburgh are also slightly higher than average. Yet, Pittsburgh's Black and AMLON women have relatively low drop out rates. This suggests that Pittsburgh's Black women's low higher educational attainment is not due to their failure to finish high school.

Attend College

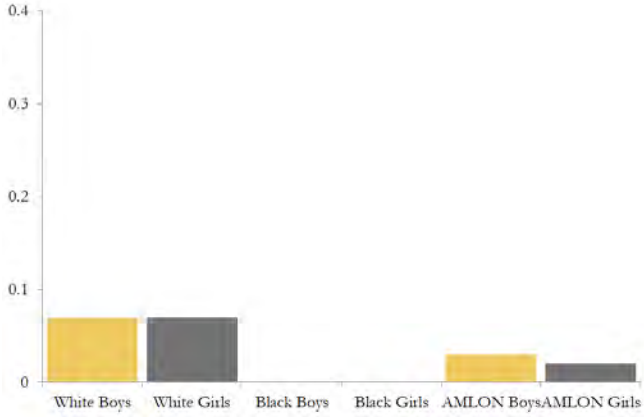


Didn't Finish Bachelor's

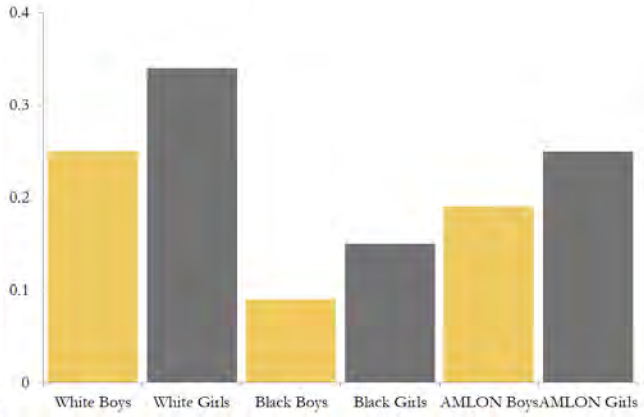


Instead, what we see is that, compared to Black women in other cities, Pittsburgh's Black women who finish high school are less likely to go to college. Although not nearly as dramatic, we see the same pattern among Pittsburgh's White women who, compared to their male counterparts, are less likely to go to college. Once Pittsburgh's women go to college, their completion rates are similar to those found across the country.

Passed At Least One AP Test



Took AP or IB Course

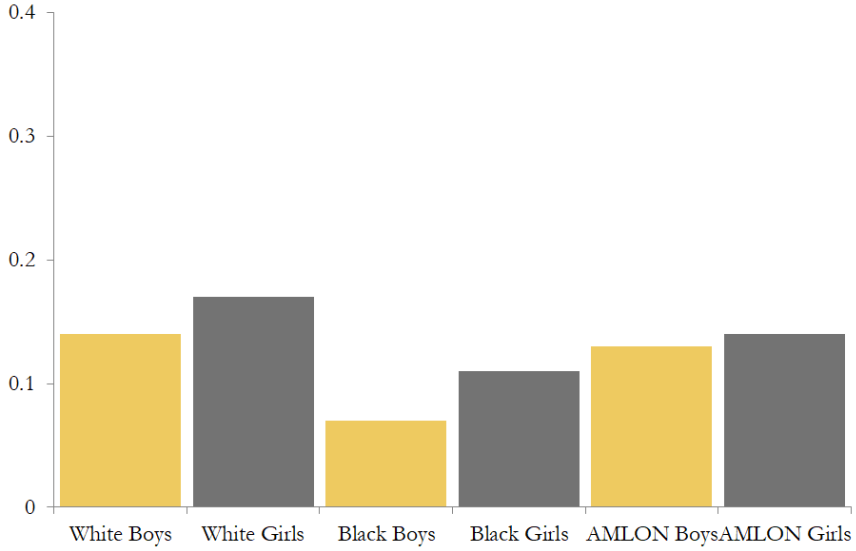


Having examined adult educational attainment in Pittsburgh, we now turn to exploring our public school students in order to illuminate possible origins of the observed inequities. One way researchers measure student achievement in high school is Advanced Placement (AP) tests. AP tests are standardized college preparatory tests that cover a wide range of topics. In Pittsburgh's public high schools, 7 percent of White students received a passing score on at least one AP exam. This is over twice the passing rate of AMLON students and over 7 times the zero percent of Black students who passed these exams.

High school girls are considerably more likely to take college prep courses and tests but this does not translate into advantages post-high school.

Part of this inequality is due to students not getting equal access to college preparatory courses—both AP and International Baccalaureate (IB) classes. White students are most likely to be enrolled in these courses as well as signed up to take ACT and SAT tests. Yet, for both accelerated courses and ACT/SAT tests, there are notable gender differences, with girls being more likely to take these classes and tests than their male counterparts.

Proportion of High Schoolers Who Took SAT or ACT Test

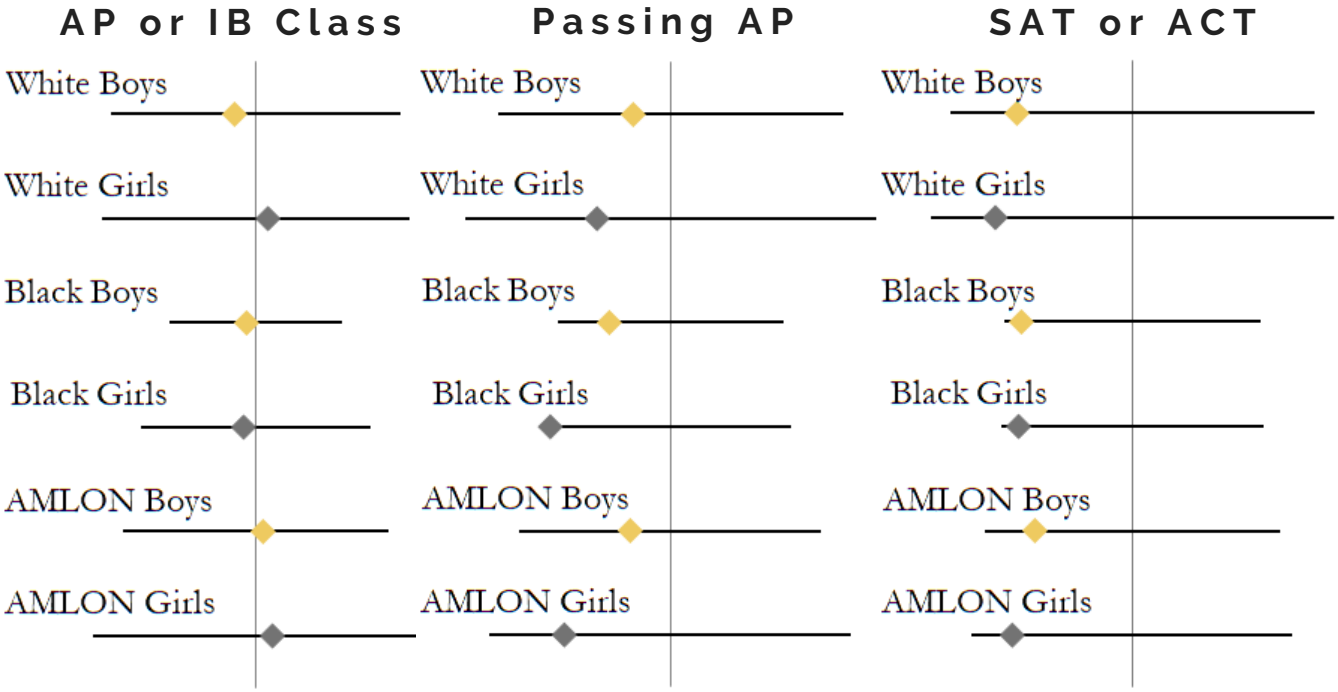


Pittsburgh's enrollments in college preparatory courses and the corresponding inequities are comparable to similar cities. Across all six groups, enrollment in these courses is at or near the 50 percent mark—suggesting half the cities have more and half the cities have fewer students enrolled in these courses.

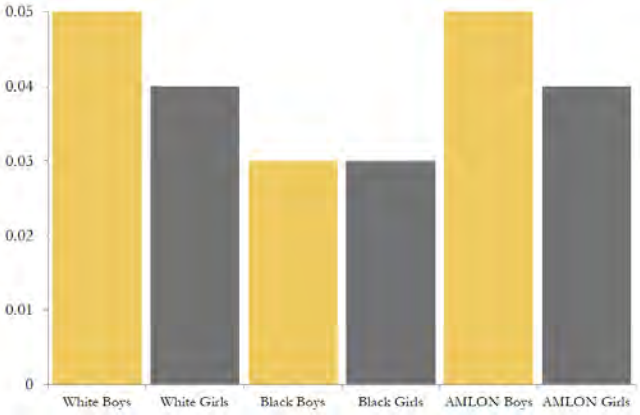
However, when it comes to passing AP tests, Pittsburgh's students are below average. Black girls in Pittsburgh are less likely to pass AP courses than Black girls in 98 percent of cities. This highlights that while students are enrolled in these courses, they are not being equipped with the tools to pass the associated tests.

Finally, Pittsburgh's students across groups are not as likely to take these college admissions tests as their counterparts in other similar cities. This is particularly true for Pittsburgh's girls, who are even less likely than girls in other cities to take these tests.

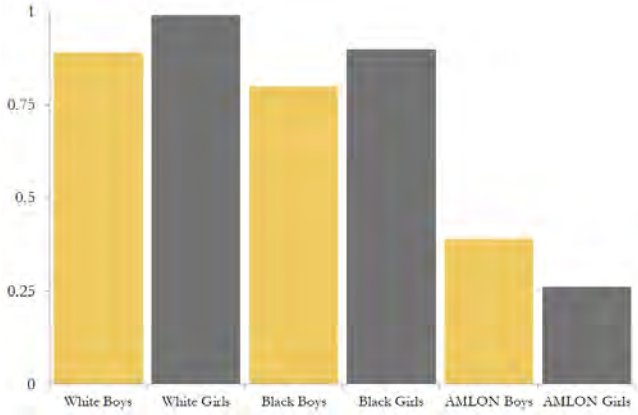
Pittsburgh's high schools rank in the bottom 20% for students taking ACT/SATs.



Enrolled in 8th Grade Alegbra



Passed 8th Grade Algebra



Even before students get to high school, early tracking into advanced classes influences their high school performance and eventual college preparedness. The most common early tracking of students occurs with middle school algebra. Although students might be placed in other advanced classes, algebra is the most consistent course across the country.

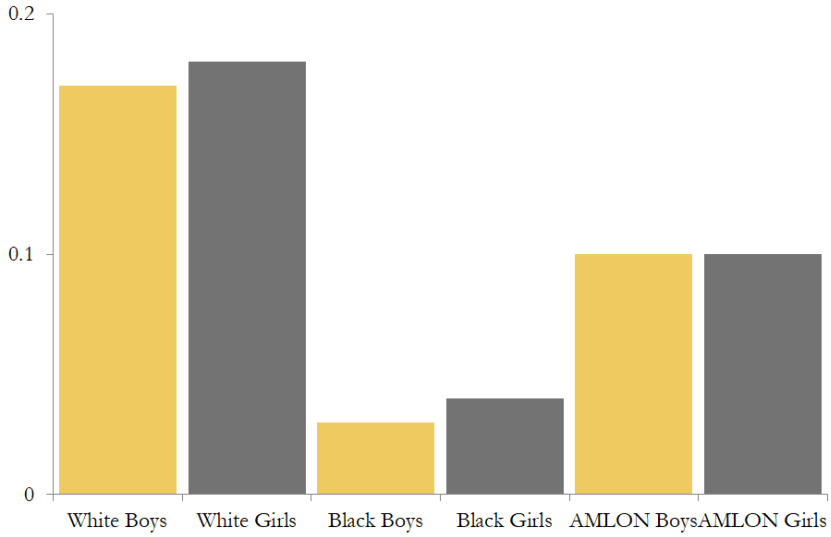
In Pittsburgh, middle school boys are more likely to be placed in algebra than their girl counterparts. Five percent of White and AMLON boys are enrolled in middle school algebra. This is compared to only 3 percent of Black students and 4 percent of White and AMLON girls. Despite these inequalities in enrollment, Black students enrolled in middle school algebra are almost as likely as their White classmates to pass. Moreover, girl students are more likely to pass the course, even though their enrollment is lower. In fact, Black girls are more likely to pass than middle school White boys.

Girls are less likely to be enrolled in middle school algebra despite being more likely to pass,

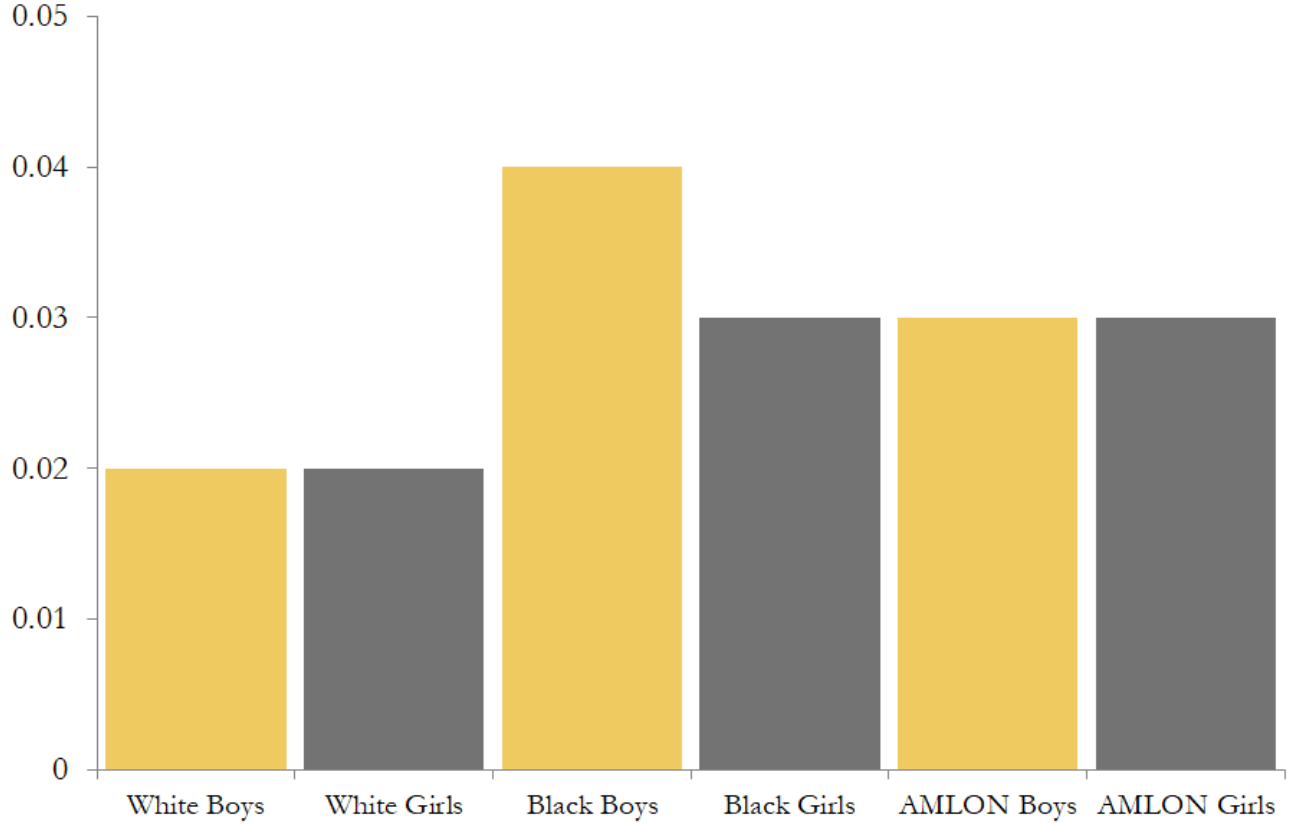
Before middle school, students often receive advanced instruction if they are enrolled in Gifted and Talented programs. These programs are designed to challenge students showing aptitude in particular subjects. How students are selected for the programs varies across schools, but research demonstrates racial and gender biases influence these decisions. Pittsburgh reflects these national patterns, with White students almost 5 times more likely to be selected for such programs than their Black classmates and 3 times more likely than their AMLON classmates. Although girls are slightly more likely than boys to be enrolled in these programs, the more noticeable differences are across race.

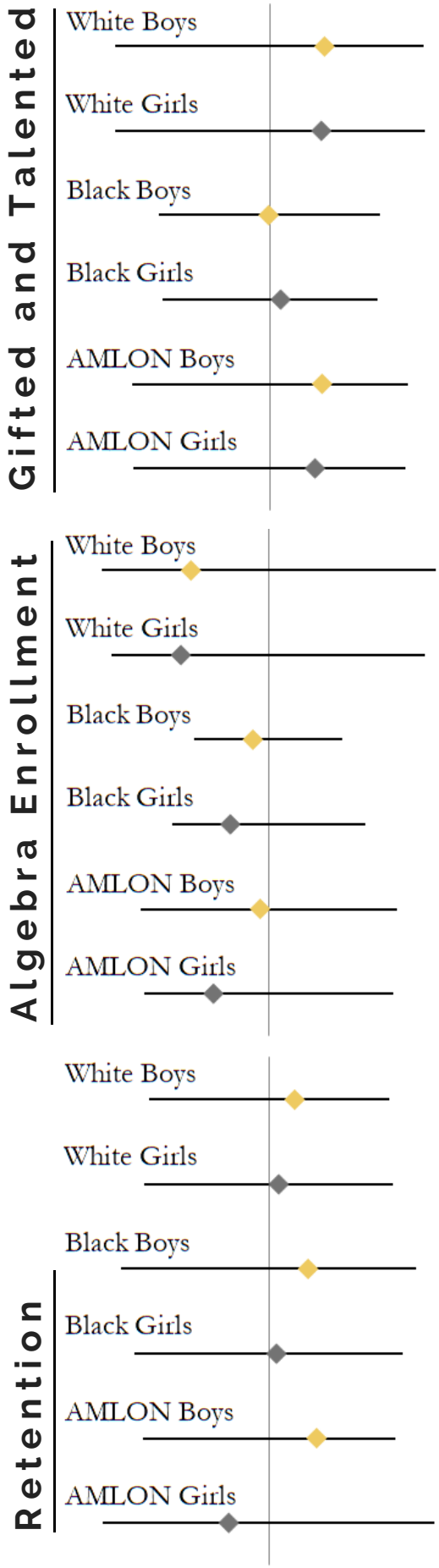
Likewise, across all grades, students of color are much more likely to be held back in school than their White classmates. Black boys, in particular, are twice as likely to be held back as their White peers.

Enrollment in Gifted and Talented Programs



Grade Retention Rates





As mentioned previously, the inequality we observe in Pittsburgh's classrooms is a common pattern across the country. However, Pittsburgh's inequality is higher than in similar cities.

In Pittsburgh, an above average proportion of White students and AMLON students are enrolled in Gifted and Talented programs. Pittsburgh's Black students are enrolled in these programs at similar rates to other cities. Yet, this gap makes the racial inequality in Gifted and Talented programs greater in Pittsburgh than in over 70 percent of similar cities.

Conversely, compared to other cities, Pittsburgh's middle schoolers are less likely to be enrolled in algebra across all the racial and gender categories. This is particularly true for White girls.

Pittsburgh's grade retention rates are at or below average, with fewer students being held back than the majority of cities. Yet, Pittsburgh's rankings are consistently lower for girls than their male classmates.

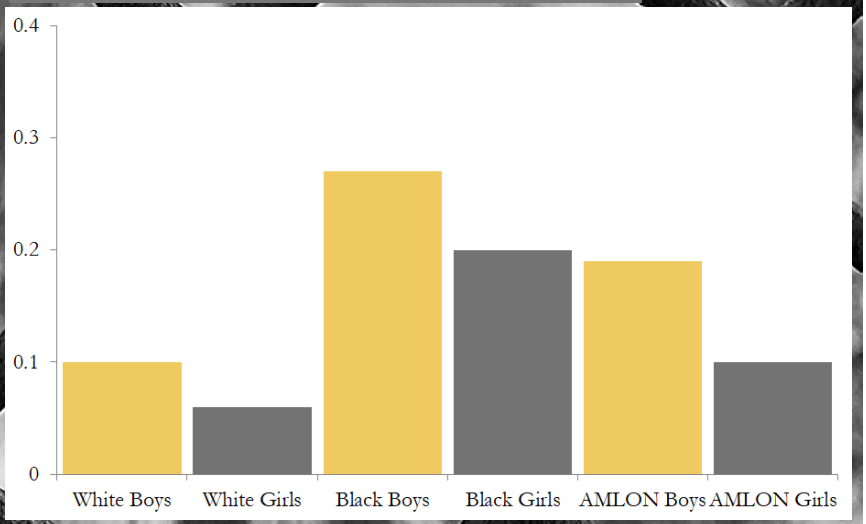
Across all groups, Pittsburgh's students are less likely to be enrolled in middle school algebra than students in other cities—especially Pittsburgh's girls.

DISCIPLINE

Finally, to understand educational opportunities for our students we need to consider school discipline. Although discipline is used to address inappropriate or dangerous behavior, researchers have repeatedly demonstrated that students of color are more likely to be disciplined than White students who commit the same transgressions. Discipline that takes students out of the classroom interferes with students' educational success.

Pittsburgh's boys are more likely to be suspended than their same race girl classmates. Yet, girls of color are more likely to be suspended than White girls. In fact, Black girls are more likely to be suspended than AMLON or White boys. One in five Black girls and one in three Black boys enrolled in Pittsburgh's public schools are suspended at least once during the school year. Black boys are 4.5 times more likely to get suspended than White girls.

At Least One Suspension



Photographer: Megan Palmiter

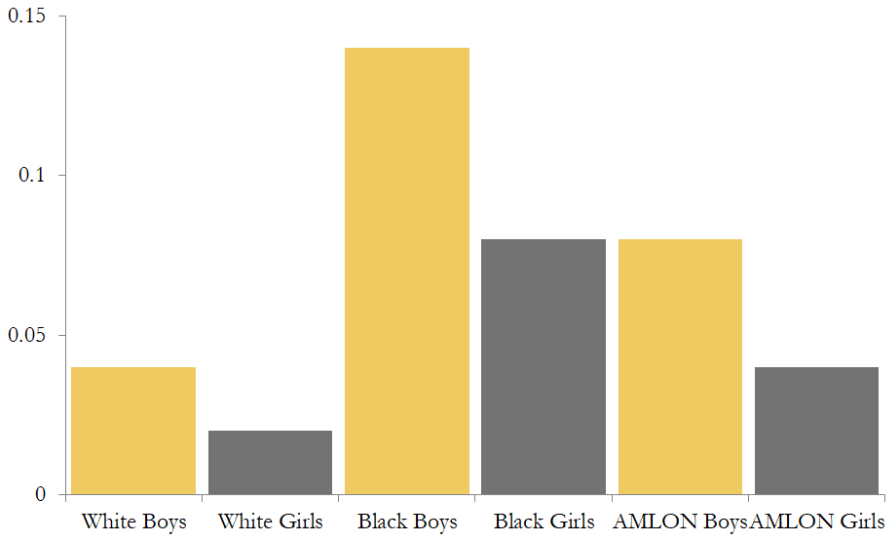
Similar patterns play out for the more extensive punishments. Yet, as punishments go from multiple suspensions, to police referrals, to arrest, the gender inequality decreases and the racial inequality increases.

Black boys are seven times more likely than White girls to be suspended multiple times in one school year. Black boys and girls experience the same number of police referrals and arrests, at rates 3 to 5 times their White classmates.

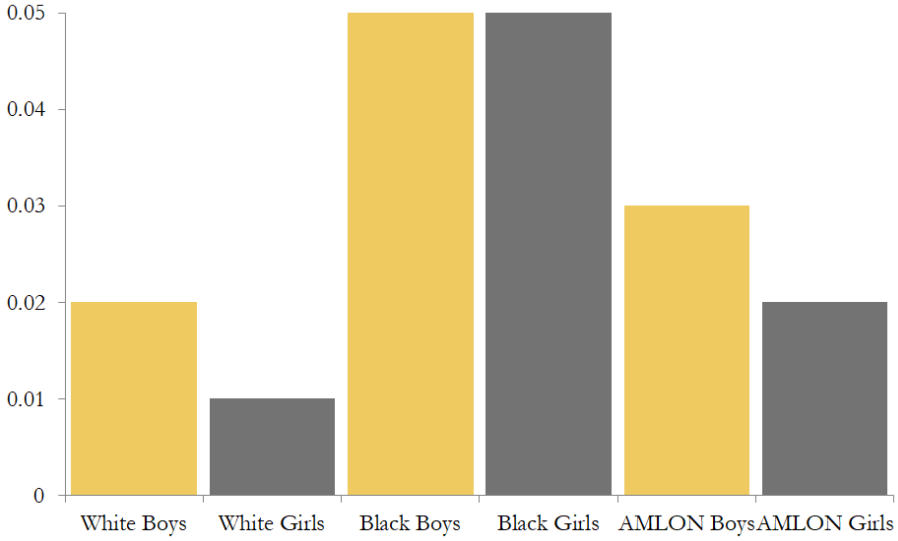
Thus, while overall girls are less likely than boys to be disciplined, Black girls experience the harshest punishments at the same rate as Black boys.

It is also noteworthy that other students of color experience higher multiple suspensions, referrals to police, and arrests than their White classmates.

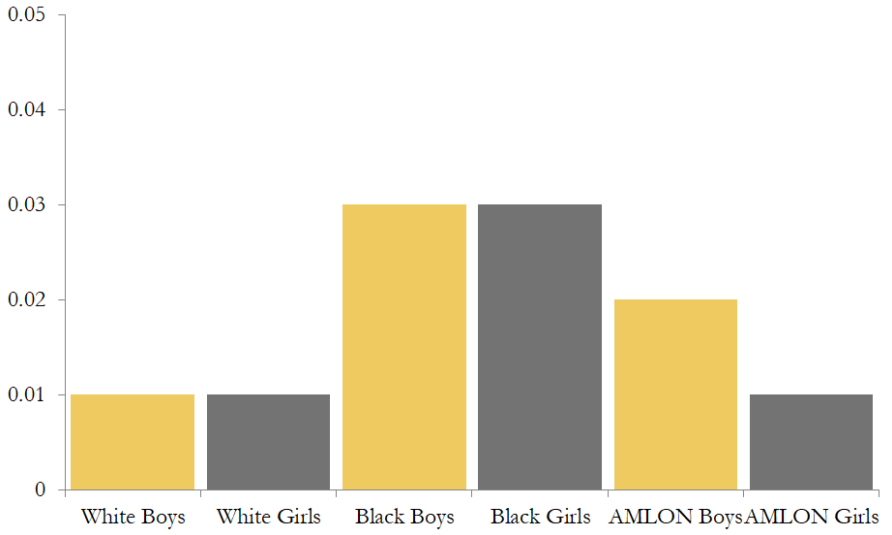
More than One Suspension



Police Referrals



School Related Arrest

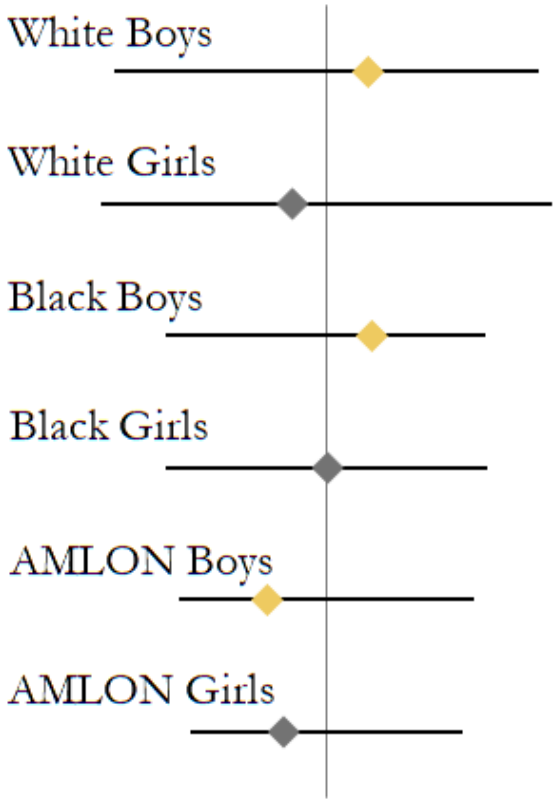


Pittsburgh's public schools refer more students to police than 95 percent of school districts in similar cities.

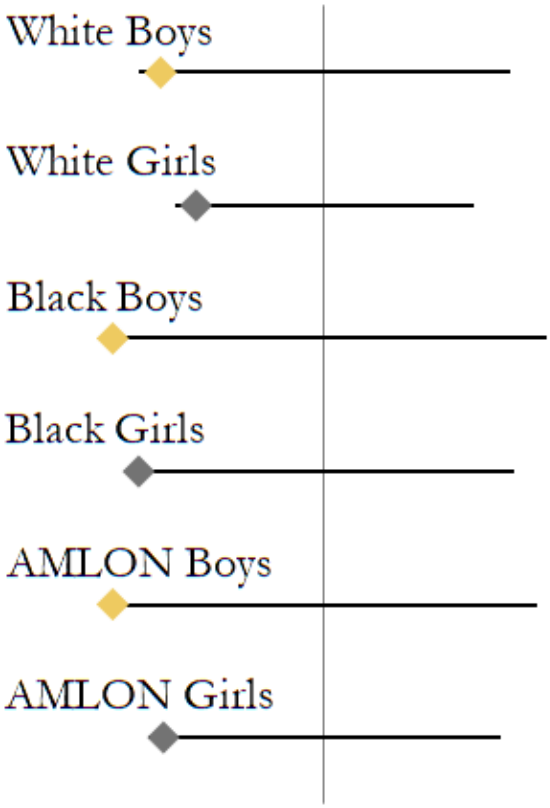
Generally speaking, Pittsburgh has average suspension rates across all groups. This means the inequalities observed above reflect national patterns. This is reflected in the inequality rankings that demonstrate Black-White inequality in Pittsburgh is lower than 70 percent of cities. Yet, it is noteworthy that the ranking of Pittsburgh's suspension rates for girls is worse than Pittsburgh's ranking for boys.

Unlike suspension rates, Pittsburgh's schools stand out for their high referrals to police. Across all groups Pittsburgh's schools are referring students to police more often than 95 percent of other school districts. For Black girls, Pittsburgh refers more Black girls to the police than 99 percent of similar cities.

Suspensions



Police Referrals

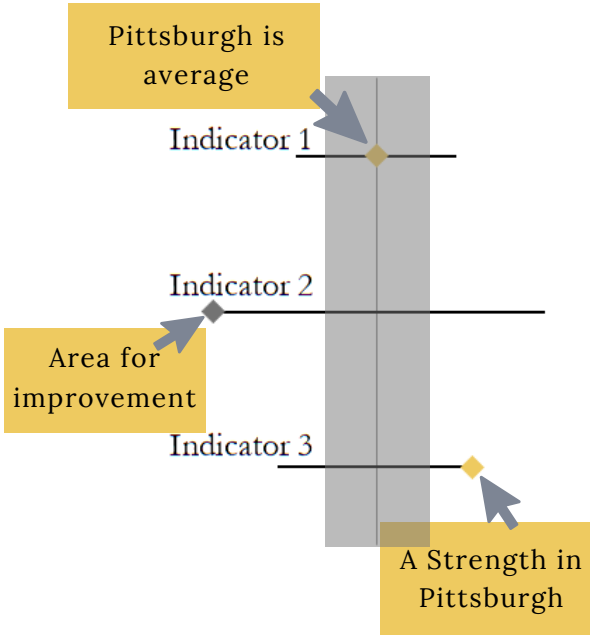


SUMMARY

In recent years, the City of Pittsburgh has seen an increase in prosperity, amenities, and quality of life. In fact, as noted in the introduction, it has been ranked one of the most "livable" cities in the United States. However, prosperity, amenities, and quality of life are not equally shared across all of Pittsburgh residents. To explore whether Pittsburgh's livability varies across subgroups, this report examined the health, income, employment, and education of Pittsburgh's White men, White women, Black men, Black women, AMLON (Asian, Multiracial, Latinx, Other, and Native American) men, and AMLON women. Overall, Pittsburgh's White men experience more economic privileges than White women and residents of color. White women, on the other hand, have more favorable health outcomes than White men and residents of color. And the group with the most favorable educational outcomes depends on the specific indicator being considered.

These descriptive overviews are helpful to illuminate persistent disparities within Pittsburgh. However, these inequities are the result of both national and local policies and practices. Thus, to help illuminate Pittsburgh's specific strengths and weaknesses, we ranked Pittsburgh's livability on each indicator for each group. As discussed in the introduction, to derive this ranking, we first compare Pittsburgh to 89 similar cities and calculate the proportion of cities that perform more favorably than Pittsburgh. We then weight the proportion by the indicator's range. This weight helps us identify which indicators vary based on local (compared to national) factors. Together, our weighted proportion—or ranking—helps identify the areas where Pittsburgh is more or less livable than similar cities.

Although we have presented these rankings throughout the report, this final section focuses on them more explicitly. To do this, we rearrange the rankings and examine the various indicators for each subgroup. Additionally, we add a grey bar to the visualization. This grey bar represents the average city. All indicators to the right of this bar symbolize Pittsburgh's strengths. Indicators to the left of the bar suggest areas where Pittsburgh should strive to improve.



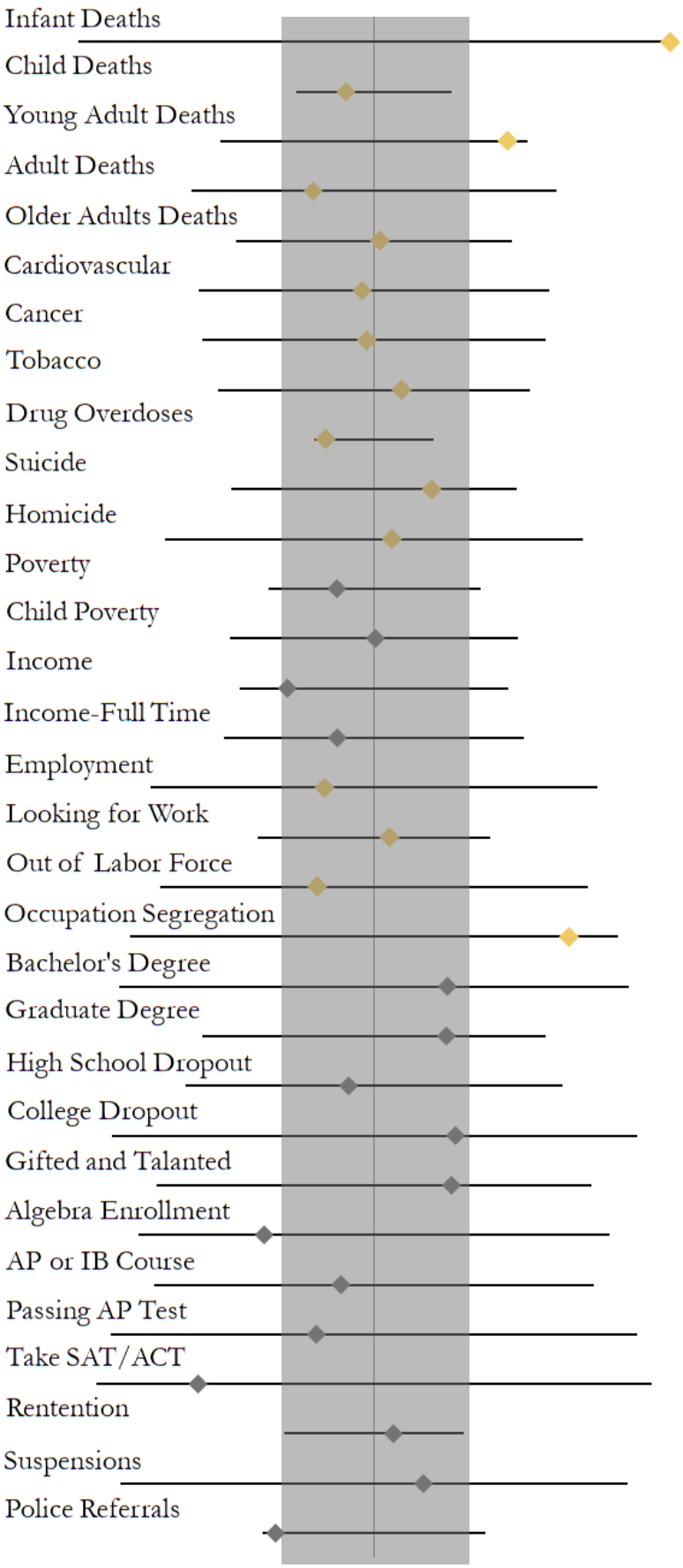
White Men

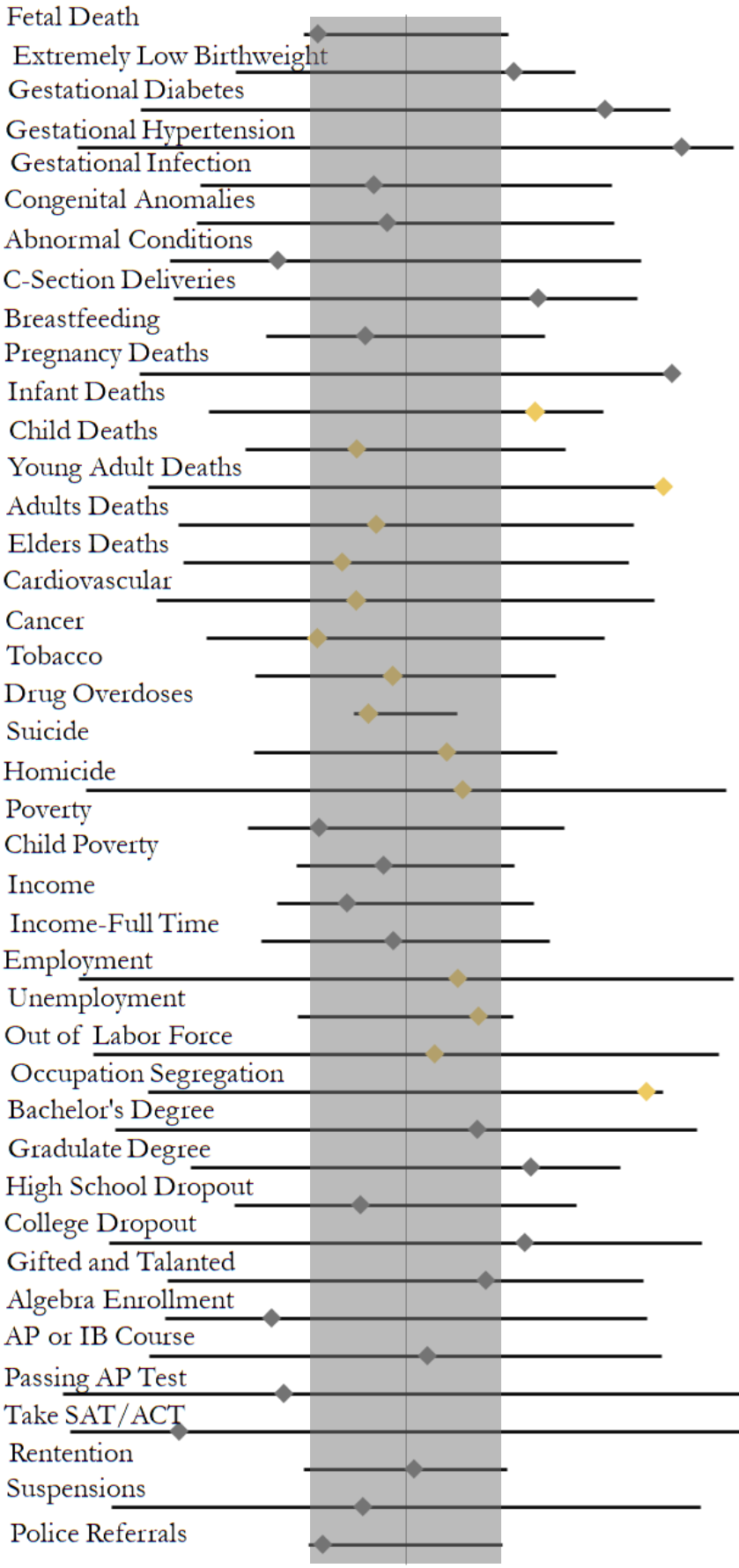
First, we consider Pittsburgh's livability for White men. For the vast majority of our key indicators, Pittsburgh has an average ranking. In other words, Pittsburgh's livability for White men is comparable to the majority of other cities. However, there are three notable strengths and three areas for improvement.

For White men, Pittsburgh has higher than average livability rankings on infant deaths, young adult deaths, and occupational segregation. That is, compared to White men in other cities, Pittsburgh White male infants are less likely to die, as are Pittsburgh's White young adult men. Additionally, Pittsburgh's working White men are spread relatively equitably across different industries.

Conversely, White men in Pittsburgh have relatively low enrollment in middle school algebra and college admissions tests. They also experience high police referrals.

In short, Pittsburgh is a livable city for White men, scoring on or above average for most indicators. Pittsburgh could improve its livability for White men with a few educational interventions.





White Women

Much like Pittsburgh's rankings for White men, Pittsburgh has average livability rankings for White women. However, Pittsburgh does have ten notable strengths and four areas of needed improvement.

Pittsburgh's White women have lower rates of gestational diabetes, gestational hypertension, C-section deliveries, babies with extremely low birth weight, deaths related to pregnancy, infant deaths, and young adults deaths. Likewise, Pittsburgh's White women are employed across occupational industries, have high rates of graduate degrees and low rates of college drop out. These strengths should be praised and built upon.

Conversely, Pittsburgh should aim to improve the rate of congenital anomalies (e.g., folic acid supplementation) in babies born to White women, the proportion of White girls enrolling in middle school algebra, college admissions exams, and passing advanced placement courses.

In summary, Pittsburgh's livability for White women is similar to other cities with a particular strength in maternal health and higher education—reflecting Pittsburgh's strength in the "Eds and Meds" sectors.

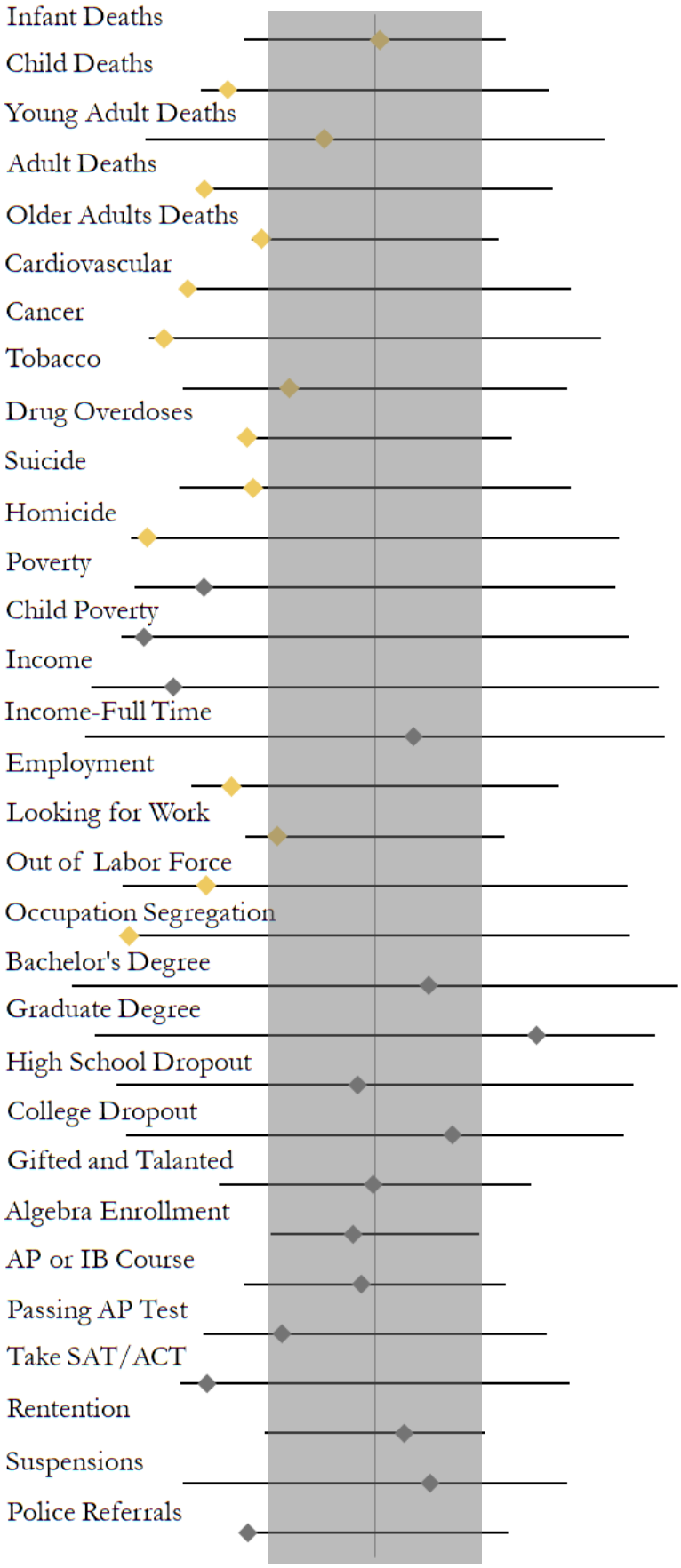
Black Men

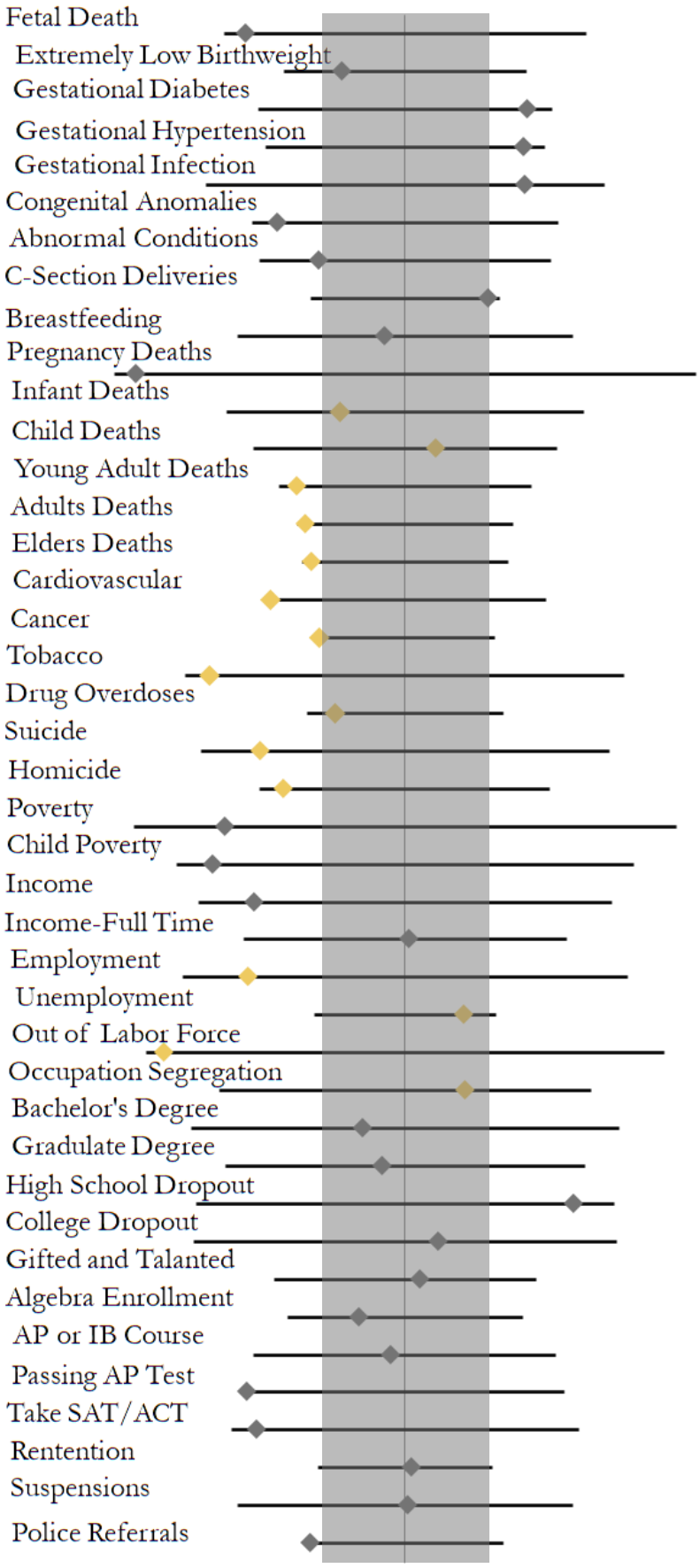
Unlike Pittsburgh's average livability rankings for White residents, Pittsburgh ranks below average for Black men on the majority of indicators. Pittsburgh has only one notable strength when it comes to livability of Black men and 15 areas for improvement.

Pittsburgh has a higher proportion of Black men with graduate degrees than most cities, which is likely a reflection of the higher education, technology and medical industries that recruit highly educated Black employees.

Conversely, for Black men Pittsburgh ranks relative low on childhood, adult and older adult mortality, cardiovascular disease, cancer, drug overdoses, suicide, homicide, poverty, median income, employment rate, those still looking for work, occupational segregation, proportion taking college admissions tests, and referrals to the police by school officials.

In short, Pittsburgh is considerably less livable for Black men than other similar cities. This is particularly true when it comes to health and employment outcomes.





Black Women

For Black women, the story is similar. Pittsburgh's Black women have less favorable outcomes than Black women in the vast majority of US cities. Despite these 22 areas for improvement, Pittsburgh does still have four notable strengths.

Black women in Pittsburgh have lower than average rates of gestational diabetes, gestational hypertension, gestational infection, and high school dropouts.

However, for the vast majority of outcomes, Pittsburgh's Black women have lower livability rankings than the majority of cities. These outcomes include: fetal death rates, abnormal conditions, congenital anomalies, maternal mortality, death rates among young adults, adults and older adults, cardiovascular diseases, cancer, tobacco related deaths, suicide, homicide, poverty, child poverty, income, employment rates, proportion out of labor force, proportion passing advanced placement tests, taking college admissions tests, and referrals to the police by school officials.

Pittsburgh is arguably the most unlivable for Black women. Interventions should strive to improve life in the city by targeting these indicators.

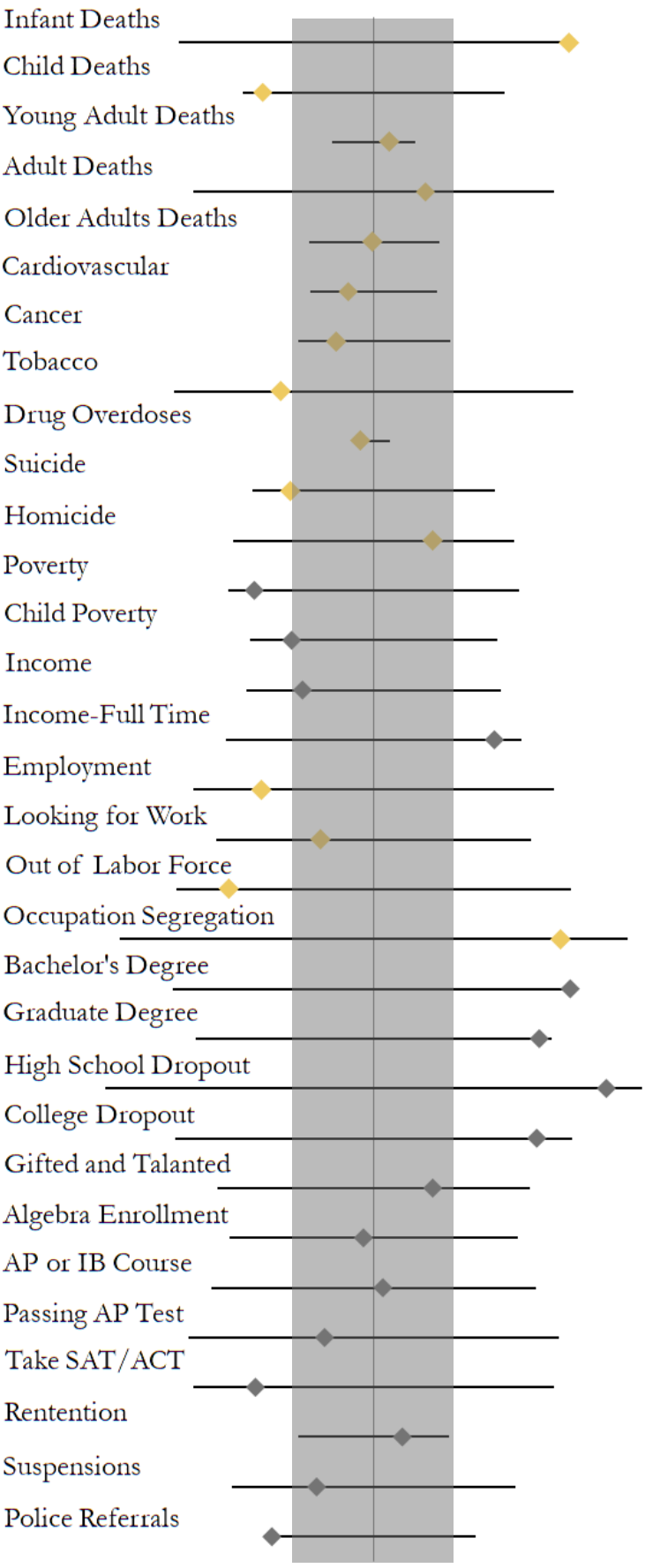
AMLON Men

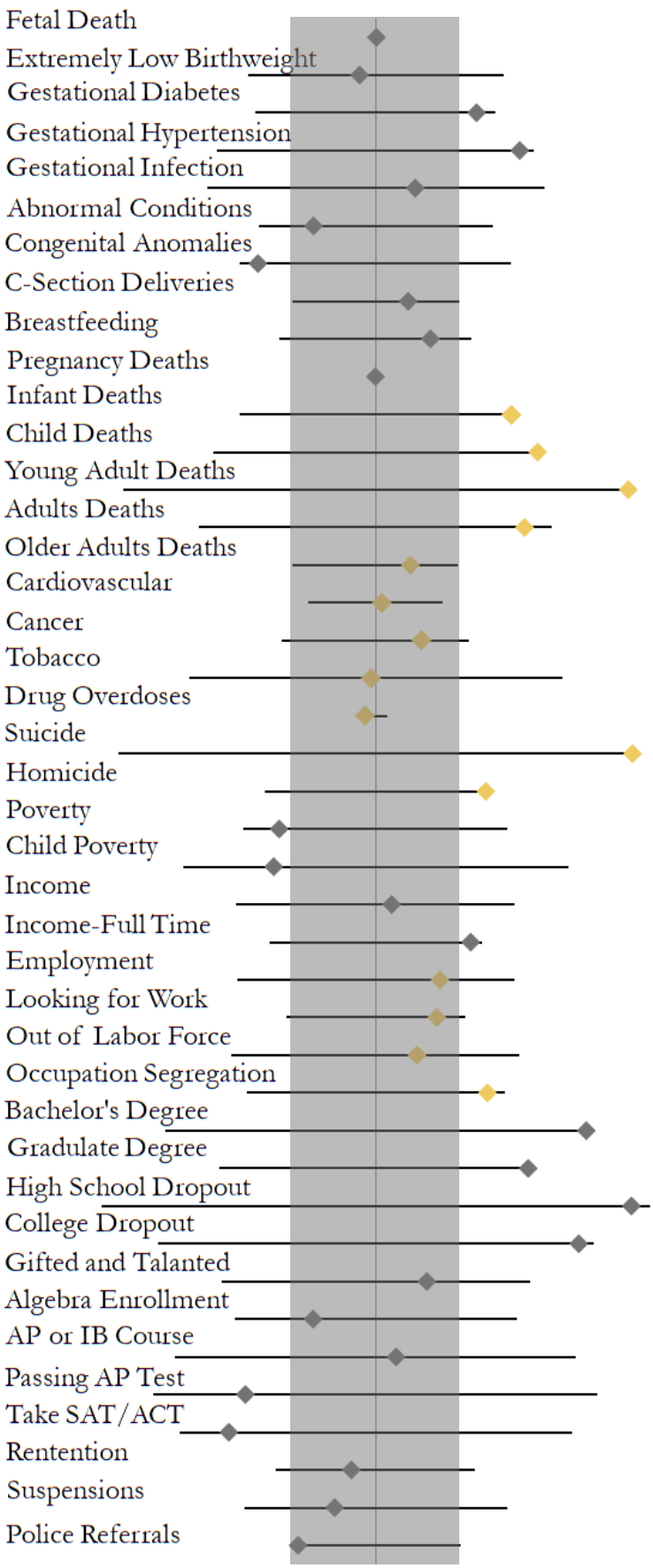
The livability of Pittsburgh for AMLON men varies depending on the indicator. Pittsburgh has seven notable strengths and seven areas for improvement.

Pittsburgh's strengths include: low infant death rates, high income for full time workers, low occupational segregation, high proportions of bachelor's and graduate degrees, and low high school and college dropout rates.

Yet, Pittsburgh also has room for improvement. Compared to other cities, AMLON men in Pittsburgh have high rates of mortality in childhood, tobacco related deaths, suicide, poverty, child poverty, unemployment, out of the labor force, referrals to police by school officials and low rates of taking college admissions tests.

The relatively high educational attainment and occupational integration of Pittsburgh's AMLON men, along with the relatively high poverty, unemployment, and suicide, suggest a bifurcation of experiences for AMLON men in Pittsburgh. This might be due to diversity within the AMLON classification that needs to be further examined to identify what factors can improve livability for this group of Pittsburghers.





AMLON Women

On our livability indicators for AMLON women, Pittsburgh has 14 strengths and five areas for improvement.

Pittsburgh's strengths include: the low rates of gestational diabetes, gestational hypertension, infant, child, young adult, and adult deaths, suicide, homicide, occupational segregation, college and high school dropouts; high rates of bachelor's and graduate degrees; and high average income for full time workers.

Pittsburgh can strive to improve on the rates of AMLON women having babies born with congenital anomalies, living in poverty and child poverty, passing advanced placement courses and taking college admissions exams.

Once again, much like AMLON men, the divergent outcomes of AMLON women suggest more needs to be unpacked to understand the diversity of lived experiences among AMLON women in Pittsburgh. In particular, future research should differentiate the experiences of AMLON residents growing up in Pittsburgh compared to those who moved to Pittsburgh as adults with advanced degrees.

Pittsburgh's Strengths

Our results confirm that Pittsburgh stands out as an exceptional place to live on some indicators. Below are the outcomes with the highest IRL rankings:

#1
Low Suicide Rates
for AMLON Women

#2
Low High School Dropout
for AMLON students & Black women

#3
Low Young Adult Mortality
for AMLON & White women

#4
Low Infant Mortality
for AMLON & White men

#5
Bachelor's Degrees
for AMLON residents

#6
Low Rates of Gestational Hypertension
for White & AMLON women

#7
Low Maternal Mortality
for White women

#8
Low Occupational Segregation
for White & AMLON workers

#9
Graduate Degrees
for AMLON adults & Black men

#10
Low Childhood Mortality
for AMLON girls

Indicators with Room for Improvement

Likewise, our data demonstrates several areas where Pittsburgh should improve its livability.

#1 Maternal Mortality *for Black Women*

#2 Low Rates in the Labor Force *for Black Women*

#3 Occupational Segregation *for Black Men*

#4 Poverty *for Black Children and Black Women*

#5 Homicide *for Black Men*

#6 Tobacco Related Deaths *for Black Women*

#7 Cancer *for Black Men*

#8 Low College Admissions Tests *for all students*

#9 Low Average Income *for Black Men*

#10 Cardiovascular Disease *for Black Men*

CULTIVATING LIVABILITY

To achieve Pittsburgh's goal to be a city that is livable for all residents, the City will need to address several of these areas for improvement. Recognizing that previous research has shown how several of these indicators are interconnected, we summarize where the city might focus attention to begin to address Pittsburgh's ongoing gender and racial inequality.

1 Black Women's Maternal Mortality

Despite state of the art health care, Pittsburgh's Black maternal mortality is higher than the vast majority of cities. High maternal mortality is caused by several factors, including health care providers' stereotypes of Black women that influence diagnoses and care.[12] Additionally, stress—particularly the stress related to racially charged assumptions, comments, and discriminatory behavior—has negative effects on health.[13] Pittsburgh should consider targeted interventions that address the racially discriminatory biases in the health care system, increase the number of Black health care providers, and reduce broader socioeconomic inequities faced by Pittsburgh's Black women.

2 Black Women's Employment and Poverty

Although Pittsburgh's Black women are similarly educated to Black women in other cities, they are much more likely to be under or unemployed. Despite applying for jobs, Pittsburgh's Black women are not securing employment. This contributes to their high poverty and the high poverty rates of their children. Poverty, under and unemployment, and corresponding stressers also contribute to high tobacco use and eventual death.[14] The City should consider interventions that incentivize and/or regulate employment practices to ensure Black women are receiving well-paying employment opportunities. For possible policy interventions, the City should examine practices in Raleigh, North Carolina and Virginia Beach, Virginia, which both have low poverty and high employment rates among Black women.

3 Black Men's Occupational Segregation

Pittsburgh's Black men are highly segregated into a few occupational sectors. These sectors are also disproportionately those with lower incomes—contributing to the lower than average income for Pittsburgh's Black men. Ensuring Black men are not only employed but employed across occupational sectors will reduce socioeconomic inequality. As Pittsburgh considers ways to foster occupational integration, the City might consider how Los Angeles, Houston, and San Antonio have maintained low occupational segregation for Black men.

4 Black Men's Homicide

Pittsburgh has one of the highest Black male homicide rates in the country. In fact, only Miami, Florida, Fort Wayne, Indiana, and St. Louis, Missouri have higher rates. As with the other indicators discussed here, factors contributing to homicide are multilayered. Addressing the broader occupational and socioeconomic inequality faced by Pittsburgh's Black men will certainly help reduce rates of homicide. However, the City should also consider targeted interventions to address these reoccurring tragedies. Cities with low Black male homicide rates such as New York, Tallahassee, Florida and Virginia Beach, Virginia might provide insights into how Pittsburgh can reduced homicide rates among Black men.

5 Black Men's Cancer and Heart Disease

The stress of economic insecurity and environmental hazards more common in certain occupations are likely contributing to Black men's higher rates of cancer and cardiovascular disease.[15] However, future research should investigate the primary causes of these conditions in Pittsburgh. Based on this future research, interventions should strive to adjust environmental and socioeconomic factors contributing to the abnormally high rates of cancer and cardiovascular disease in Pittsburgh's Black men.

6 College Admissions Exams

Across all six groups, Pittsburgh ranks lower than most cities in the percent of students who take the ACT or SAT. However, the data we are using for this report are from the 2015-2016 school year. These are the most recent data available (see Appendix C). Last academic year (2018-2019), Pittsburgh Public Schools transformed their process for administering the ACT and SAT tests. These interventions have increased the percentage of students taking the exams. This is exactly the kind of intervention that can address the observed inequities in this report. Future research will illuminate whether the new approach has reduced differences between Pittsburgh and other cities or whether additional interventions are needed.

7 College Bound Black Girls

Pittsburgh's Black girls are less likely than Black girls in other cities to drop out of high school or college once they begin. However, fewer of Pittsburgh's Black girls go on to college after finishing high school. Additionally, Pittsburgh has one of the lowest rates of Black girls passing Advanced Placement tests in high school. Pittsburgh should consider new interventions that target Pittsburgh's Black high school girls to encourage, equip, and support them to enter college after graduating high school.

8 Police Referrals in Schools

Pittsburgh students, no matter their race or gender, are more likely to be referred to the police than students in other cities. Although discipline in schools is important, police referrals are disproportionately affecting Pittsburgh's Black children and have a lasting impact on their educational attainment and economic well-being.[16] Thus, Pittsburgh's schools should consider new policies that reduce police referrals and severe discipline across the board as well as targeted efforts to address racial and gender biases in the schools' disciplinary practices.

Based on the results of this report, these eight areas are the most pressing concerns that need to be addressed to increase Pittsburgh's livability. However, it is critical to note effective interventions will require a recognition of the structural factors contributing to the observed disparities.

For example, often when issues like Black maternal mortality, unemployment, and poverty are discussed, policymakers and organizations default into individualistic social capital models that encourage Black women to seek earlier prenatal care, provide job readiness training, or resource assistance programs for impoverished women. Under certain conditions, these approaches can have some beneficial effects on residents' well-being.

However, as we demonstrate in this report, Pittsburgh's high rates of Black maternal mortality are not the result of Black women's lack of access to prenatal health care. Likewise, Black women's unemployment and poverty are not explained by their educational levels. Instead, Pittsburgh's Black women have poor health and economic outcomes because of the individual and structural racism and sexism they face. Thus, effective interventions will aim to transform the institutions that perpetuate these inequities, not the individuals who experience the exclusion and marginalization.

Addressing systematic exclusion and marginalization will require multifaceted approaches aimed at increasing residential integration, awareness, resources, and new systems of regulation. A creative intervention could include providing tax incentives for companies and organizations who hire and pay employees equitably across gender and race categories. This includes paying employees with the same job titles equitably. It also includes hiring and pay practices that result in equal proportions of women and men, White, Black, and AMLON workers filling positions at all levels and pay scales. Well constructed policies that ensure the City government itself as well as our local institutions are hiring and paying residents equally will go a long way in fostering livability for all residents.

Comprehensive policies like these that push for institutional transformation are often seen as impossible and unattainable. Yet, Pittsburgh's own history proves this wrong. In the early 20th century, Pittsburgh's unions and labor movement led the way in fighting for livable wages and working conditions. Once again, Pittsburgh can lead the way. Pittsburgh is a city of much promise and possibility with state of the art universities, medical institutions, and technology companies. These strengths can be harnessed to fight for a city that is livable for all residents across gender and racial categories.

NOTES

[1] As it has been covered in multiple news outlets, Pittsburgh has been ranked one of the most livable U.S. cities by the Economist Intelligence Unit's Global Livability Index. For example see, Eberson, Sharon. 2018. "Pittsburgh Is The No. 2 Most Livable City in America." *Pittsbrugh Post-Gazette*. https://www.post-gazette.com/local/neighborhood/2018/08/20/Pittsburgh-No-2-most-livable-city-America-32-global-liveability-index-Economist/stories/201808200090

[2] The primary livability ranking referenced in the news is the Economist Intelligence Unit's Global Livability Index (http://www.eiu.com/topic/liveability). This index examines 140 cities to help companies estimate whether they should give employees additional incentives when requiring them to relocate to less "livable" cities. The index selects "representative" cities in each country. For the United States, they use 15 cities including: Pittsburgh, Pennsylvania; Honolulu, Hawaii; Washington D.C.; Minneapolis, Minnesota; Boston, Massachusetts; Chicago, Illinois; Miami, Florida; Seattle, Washington; San Francisco, California; Atlanta, Georgia; Los Angeles, California; New York, New York; Houston, Texas; Detroit, Michigan; and Lexington, Kentucky.

Compared to cities in Canada, Europe and Australia, U.S. cities do relatively poorly, ranking between the 30th and 70th in the world. Since the indicator is designed to be a global comparison, using this index to discuss differences between U.S. cities has limited validity. At the very least, we must recognize being ranked one of the most livable cities in the United States on this index means the "most livable" compared to the other 14 cities selected.

Moreover, this index is calculated by an Economist Intelligence Unit in-house expert who ranks 30 different indicators as "acceptable, tolerable, uncomfortable, undesirable or intolerable." These indicators span five categories and include: Stability (petty crime, violent crime, threat of terrorism, threat of military conflict, threat of civil unrest); Healthcare (availability of private and public health care, quality of private and public healthcare, availability of over-the-counter drugs); Culture & Environment (humidity and temperature, tourist perception of climate, corruption, social or religious restrictions, censorship, availability of sports, culture, food, drink and consumer goods); Education (availability and quality of private education, children enrolled in school, expenditure per pupil, literacy); and Infrastructure (quality of road network, public transport, international flights, availability of quality housing, quality of available electricity, water and telecommunications).

Although all of these indicators are important, they focus primarily on the availability of services and not the access various populations within the city have to such services. Thus, for our purposes we are focusing on indicators more communally associated with livability: health, poverty and income, employment, and education.

[3] OnePGH is Mayor Bill Peduto's strategy to enhance Pittsburgh's resilience through ensuring the city is livable for all residents. To read more about the initiative visit: http://pittsburghpa.gov/onepgh/index.html

[4] Recent reports that also considered Pittsburgh's racial inequality include: P*ittsburgh's Racial Demographics 2015: Differences and Disparities* created by the University of Pittsburgh's Center on Race and Social Problems and *Pittsburgh's Equity Indicators* (2017; 2018) created as a collaboration between OnePGH and the RAND corporation. The primarily focus of all three reports is racial inequality. We add to their findings by simultaneously examining both race and gender inequalities.

Additionally, these reports evaluate Pittsburgh's inequality by either comparing Pittsburgh to Allegheny County, Pennsylvania, and the nation or comparing different indicators to one another. Although both of these approaches make important contributions, neither illuminate which inequalities are likely due to local conditions and thus what could possibly be improved upon with local policy interventions. By comparing Pittsburgh to other cities using our Relative Strengths Indicator we are able to provide more concrete suggestions for policy interventions.

[5] For some of our data (e.g. birth and death certificates), sex category is assigned by the medical professional. Other data (e.g. Census surveys) are self identified categories. Finally, for some of the data (e.g. public school records) it depends on the institution whether sex categories are determined by parents, students or school officials.

[6] Crenshaw, Kimberlé. 1989. "Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics." *University of Chicago Legal Forum* 1989(8).

[7] Throughout this report, we use White and Black to denote non-Hispanic White and non-Hispanic Black individuals. We use Black and White instead of African American or Caucasian as they are more inclusive terms. For example, African American often denotes descendants of the transatlantic slave trade. However, our classification includes residents who trace their heritage to Africa but migrated to the United States after the transatlantic slave trade. Thus, we elect to use the more inclusive and colloquially preferred term, Black. Moreover, we follow the lead of W.E.B. Du Bois and recent Critical Race Scholars who intentionally capitalize 'Black' and 'White' to denote they are not merely adjectives describing skin color but proper nouns signifying socially constructed racial groups.

We also use the word 'Latinx' to denote all individuals who identify as Hispanic. Latinx is the gender neutral or nonbinary alternative to Latino and Latina. Latinx denotes all individuals of Latin American descent.

Finally, those who identify as "some other race" are individuals who do not identify as Latinx and selected the category, "other," when filling out the Census or their governmental records (e.g. birth certificates). Since we have no further information about their heritage it is hard to know exactly the ancestry of these respondents. However, in recent years, the majority of individuals in the United States who select "other" identify as "Middle Eastern." Starting in the 1990's, global conflicts and immigration patterns have increasingly created a notion of "Middle Eastern" as a distinct group not encapsulated in the listed racial categories. Thus many, although not all, individuals from "Middle Eastern" countries select "other" when asked to racially identify.

[8] Bratter, Jenifer. 2007. “Will ‘Multiracial’ Survive to the Next Generation? The Racial Classification of Children of Multiracial Parents.” *Social Forces* 86(2): 821–849.

[9] Newborns are categorized by medical professionals as male or female based on their external genital. Since they have yet to have agency in self classifying their gender, we use the terms “assigned female at birth” or “assigned male at birth.”

[10] The amounts are averages across family type. For a more complete list of thresholds and more details regarding the federal poverty line see: https://www.thebalance.com/federal-poverty-level-definition-guidelines-chart-3305843

[11] In this section, we define income as earned wages or salary from work. However, we do note that the federal poverty line includes all sources of income (e.g. interest, child support, etc...) when determining total household income.

[12] Dusenbery, Maya. 2017. Doing Harm: The Truth about How Bad Medicine and Lazy Science Leave Women Dismissed, Misdiagnosed, and Sick. San Francisco, CA: HarperOne.

[13] Collins Jr, James W., Gayle Soskolne and Kristin M. Rankin. 2017. "African-American: White Disparity in Infant Mortality due to Congenital Heart Disease." *Journal of Pediatrics*. 181: 131–136.

[14] Kendzor, Darla E., Lorraine R. Reitzel, Carlos A. Mazas, Ludmila M. Cofta-Woerpel, Yumei Cao, Lingyun Ji, Tracy J. Costello, Jennifer Irvin Vidrine, Michael S. Businelle, Yisheng Li, Yessenia Castro, Jasjit S. Ahluwalia, Paul M. Cinciripini, and David W. Wetter. 2012. "Individual-and Area-Level Unemployment Influence Smoking Cessation among African Americans Participating in A Randomized Clinical Trial." *Social Science & Medicine* 74(9): 1394-1401.

Poghosyan, Hermine, Erika L. Moen, Daniel Kim, Justin Manjourides and Mary E. Cooley. 2019. "Social and Structural Determinants of Smoking Status and Quit Attempts Among Adults Living in 12 US States, 2015." *American Journal of Health Promotion* 33(4): 498-506.

[15] See the following for resources on the connection between one's environment and health outcomes.

Havranek, Edward P., Mahasin S. Mujahid, Donald A. Barr, Irene V. Blair, Meryl S. Cohen, Salvador Cruz-Flores, George Davey-Smith, Cheryl R. Dennison-Himmelfarb, Michael S. Lauer, Debra W. Lockwood, Milagros Rosal, and Clyde W. Yancy. 2015. "Social Determinants of Risk and Outcomes for Cardiovascular Disease: A Scientific Statement from the American Heart Association." *Circulation* 132(9): 873-898.

Rushton, Lesley, Sally J. Hutchings, Lea Fortunato, Charlotte Young, Gareth S. Evans, Terry Brown, Ruth Bevan, Rebecca Slack, Phillip Holmes, Sanjeev Bagga, John W Cherrie and Martie Van Tongeren. 2012. "Occupational Cancer Burden in Great Britain." *British Journal of Cancer* 107: S3-S7

Krieger, Nancy. 2005. "Defining and Investigating Social Disparities in Cancer: Critical Issues." Cancer Causes & Control 16(1): 5-14.

Ramsey, S. D., Bansal, A., Fedorenko, C. R., Blough, D. K., Overstreet, K. A., Shankaran, V., & Newcomb, P. (2016). Financial insolvency as a risk factor for early mortality among patients with cancer. Journal of Clinical Oncology, 34(9), 980.

[16] See the following references for more information on the connections between school punishment and well-being in adulthood.

Rios, Victor M. 2011. *Punished: Policing the Lives of Black and Latino Boys*. New York, NY: University Press.

Morris, Edward W., and Brea L. Perry. 2016. "The Punishment Gap: School suspension and Racial Disparities in Achievement." *Social Problems* 63(1): 68-86.3.

Huguley, James P., Ming-Te Wang, Kathryn Monahan, Gina Keane and Abel J. Koury. 2018. *Just Discipline in Greater Pittsburgh: Local Challenges and Promising Solutions.* Pittsburgh, PA: Center on Race and Social Problems. http://www.heinz.org/UserFiles/Library/Just_Discipline_and_the_School_to_Prison_Pipeline_in_Pittsburgh.pdf

APPENDIX A

Comparison Methodology

Numbers by themselves communicate very little information. Just like isolated words, numbers must be combined with other numbers to communicate meaning. Even without realizing it, any time we interpret a number we are comparing it to other numbers. We could compare it to what we expect the number to be, what an ideal number would be, what similar numbers in the past have been, or to similar numbers across other groups.

To contextualize the numbers in this report, we compare our outcomes across our six groups (White men, White women, Black men, Black women, AMLON men and AMLON women). These comparisons help demonstrate how different Pittsburghers experience the livability of the city. However, since the outcomes have unique ranges and are affected by national and local factors, it is impossible to use these intergroup comparisons to illuminate which inequalities are particular to Pittsburgh and thus which might be addressed with city-level interventions.

To further contextualize our outcomes and identify Pittsburgh's relative strengths and weaknesses, we model off previous livability indexes and compare Pittsburgh to demographically similar cities. For the purposes of this intersectional analysis, we conceptualize similar cities as places with substantial Black and White populations. Specifically, we include all census defined places in the United States whose Black ***and*** White populations are large enough to disclose their intersectional data publicly. This is partially a methodological decision as these are the cities for which we can access all the required data. Yet, it is also a theoretical decision as cities with extremely small White or Black populations will likely have very different dynamics than Pittsburgh and thus limit the utility of the comparison. For the full list of these cities and their basic demographic characteristics, see Appendix B.

For each outcome, we use the full list of demographically similar cities to help us contextualize Pittsburgh's proportions and medians. We then apply our new tool, the Relative Strengths Indicator. This tool starts by comparing how each of our six groups compare to their counterparts in similar cities. For example, how does the proportion of White men living in poverty in Pittsburgh compare to the proportion of White men living in poverty in all the other similar cities? We quantify this comparison by using a percentile (centile). In other words, what percentage of the similar cities have less poverty among their White men than Pittsburgh?

For consistency, we reconfigured all outcomes such that higher centiles would represent Pittsburgh doing "better" than the majority of cities and lower centiles would indicate Pittsburgh's relatively low ranking. For outcomes like median income, proportion with a bachelor's degree, or employment, no adjustments were necessary as higher numbers on these outcomes are generally conceptualized as "better." Yet, for outcomes like poverty, the proportion of students with multiple suspensions, or infant deaths, the centiles were inversed. This reversal ensures the higher numbers correspond to what is seen as more "preferable" such as lower poverty, suspensions and deaths.

These centiles give us a helpful way to compare across groups and outcomes to illuminate Pittsburgh's strengths and weaknesses. Yet, they are unable to take into account that some outcomes vary dramatically across cities while others are relatively constant. For example, let us consider grade retention and poverty. Across school districts, grade retention is fairly constant. Even the schools that have the grade lowest retention rates are only a few percentage points less than the districts with the highest rates. Adult educational attainment, on the other hand, ranges dramatically from city to city.

When outcomes, like grade retention rates, are similar across cities they are likely driven more by national policies and factors. Thus, Pittsburgh's ability to address these outcomes might be more limited. Conversely, outcomes with large ranges suggest similar cities to Pittsburgh are more livable; implying Pittsburgh might be able to adopt interventions to increase our livability.

To capture the variability in outcome ranges, we weighted the centiles by their corresponding variability. Specifically, we started by calculating the mean absolute deviation of each outcome across all the cities. Like standard deviation, mean absolute deviation is a measure of the average variation from the mean. Yet, unlike standard deviation, mean absolute deviation is more appropriate for non-random samples as it does not presume normality by imposing a quadratic transformation. Mean absolute deviation is calculated as follows:

$$\frac{\sum |x - \bar{x}|}{n}$$

The mean absolute deviation helps us estimate the variation between cities. However, mean absolute deviations are not comparable across units. For example, income, which is measured in dollars, is going to have a larger mean absolute deviation than poverty which is measured as a proportion. To standardize units, we divide the mean absolute deviation by the range (maximum value minus the minimum value). In other words, we are estimating to what extent an outcome varies across cities given its possible range.

We use this measure of variability to weight Pittsburgh's centile ranking. Additionally, we center the ranking such that 50 percent is at zero. We operationalize this using the following equation:

$$mad - 2 \times mad \times centile$$

As mentioned above, we calculate this relative ranking, which we call an Index of Relative Livability (IRL), for all outcomes across all six race and gender groups. This enables us to examine how Pittsburgh's groups compare to those same groups in other similar cities, for example, how Pittsburgh's Black men compare to Black men in other demographically similar cities. Yet, it does not examine whether the inequality between these groups is similar across cities. To this end, we also calculate inequality measures and their corresponding rankings.

For every outcome, we calculate the inequality between 15 pairings: White men and White women, White men and AMLON men, White men and AMLON women, White men and Black men, White men and Black women, White women and AMLON men, White women and AMLON women, White women and Black men, White women and Black women, AMLON men and AMLON women, AMLON men and Black men, AMLON men and Black women, AMLON women and Black men, AMLON women and Black women, Black men and Black women.

To calculate inequality, we first subtracted the value of the first group from the value of the second group. To enable comparisons across inequalities, we then divide the difference by the average value across the entire population. We then used this normalized difference to calculate Pittsburgh's centile and the mean absolute deviation across cities. Much like the outcomes themselves, we invert differences. when needed, so that lower centiles represent more inequality and higher centiles outcomes more equality. In the end we have 21 weighted rankings for each outcome.

APPENDIX B

List of Similar Cities

City	Total Population	White Proportion	Black Proportion
Dothan, Alabama	67,526	0.63	0.31
Huntsville, Alabama	195,369	0.60	0.30
Mobile, Alabama	190,273	0.43	0.50
Montgomery, Alabama	199,525	0.34	0.59
Phoenix, Arizona	1,626,085	0.46	0.07
Little Rock, Arkansas	198,594	0.49	0.40
Fresno, California	527,422	0.30	0.08
Long Beach, California	469,459	0.31	0.13
Los Angeles, California	3,999,742	0.30	0.09
Oakland, California	425,204	0.29	0.24
Sacramento, California	501,890	0.35	0.14
San Diego, California	1,419,488	0.45	0.06
San Francisco, California	884,363	0.41	0.05
Aurora, Colorado	367,250	0.49	0.16
Denver, Colorado	704,621	0.58	0.09
New Haven, Connecticut	131,005	0.33	0.35
Washington, D.C.	693,972	0.39	0.45
Jacksonville, Florida	892,064	0.54	0.30
Miami, Florida	463,354	0.11	0.17
Orlando, Florida	280,258	0.38	0.26
Tallahassee, Florida	191,039	0.54	0.32
Tampa, Florida	385,423	0.47	0.23
Atlanta, Georgia	486,299	0.39	0.51
Augusta, Georgia	195,678	0.36	0.55
Columbus, Georgia	194,058	0.42	0.46
Macon, Georgia	152,646	0.41	0.52
Savannah, Georgia	146,449	0.37	0.54
Chicago, Illinois	2,716,462	0.35	0.29
Rockford, Illinois	148,287	0.59	0.20
Fort Wayne, Indiana	254,796	0.70	0.14
Indianapolis, Indiana	857,386	0.58	0.27

City	Total Population	White Proportion	Black Proportion
Kansas City, Kansas	155,031	0.43	0.23
Lexington, Kentucky	321,959	0.74	0.14
Louisville, Kentucky	621,337	0.68	0.22
Baton Rouge, Louisiana	225,370	0.40	0.52
New Orleans, Louisiana	393,292	0.33	0.58
Shreveport, Louisiana	191,715	0.37	0.57
Baltimore, Maryland	611,648	0.30	0.61
Boston, Massachusetts	683,015	0.47	0.24
Detroit, Michigan	673,103	0.11	0.79
Flint, Michigan	96,439	0.39	0.51
Grand Rapids, Michigan	198,811	0.62	0.19
Minneapolis, Minnesota	422,326	0.65	0.15
St. Paul, Minnesota	306,604	0.55	0.15
Kansas City, Missouri	488,825	0.59	0.27
St. Louis, Missouri	308,626	0.47	0.44
Omaha, Nebraska	466,903	0.71	0.12
Las Vegas, Nevada	641,708	0.47	0.11
North Las Vegas, Nevada	242,949	0.26	0.22
Buffalo, New York	258,592	0.47	0.35
New York, New York	8,622,698	0.33	0.24
Rochester, New York	208,049	0.42	0.37
Syracuse, New York	143,398	0.52	0.28
Charlotte, North Carolina	859,052	0.45	0.34
Durham, North Carolina	267,932	0.43	0.38
Fayetteville, North Carolina	209,913	0.39	0.42
Greensboro, North Carolina	290,201	0.46	0.42
High Point, North Carolina	111,213	0.48	0.36
Raleigh, North Carolina	464,972	0.55	0.29
Winston-Salem, North Carolina	244,592	0.50	0.34
Akron, Ohio	197,849	0.61	0.29
Cincinnati, Ohio	301,305	0.52	0.40
Cleveland, Ohio	385,552	0.37	0.47
Columbus, Ohio	881,901	0.60	0.26
Dayton, Ohio	140,379	0.54	0.40
Toledo, Ohio	276,494	0.63	0.26
Oklahoma City, Oklahoma	643,574	0.57	0.15
Tulsa, Oklahoma	402,227	0.58	0.14
Philadelphia, Pennsylvania	1,580,863	0.37	0.41
Pittsburgh, Pennsylvania	302,414	0.68	0.20

City	Total Population	White Proportion	Black Proportion
Columbia, South Carolina	133,578	0.49	0.41
Chattanooga, Tennessee	179,130	0.59	0.32
Memphis, Tennessee	652,231	0.29	0.62
Nashville, Tennessee	665,967	0.59	0.27
Arlington, Texas	396,407	0.41	0.23
Austin, Texas	950,714	0.51	0.08
Beaumont, Texas	119,126	0.34	0.46
Dallas, Texas	1,341,103	0.31	0.25
Fort Worth, Texas	876,060	0.43	0.18
Houston, Texas	2,313,230	0.27	0.24
Killeen, Texas	145,484	0.29	0.37
San Antonio, Texas	1,511,913	0.27	0.07
Chesapeake, Virginia	240,397	0.59	0.30
Hampton, Virginia	134,669	0.40	0.49
Newport News, Virginia	179,388	0.46	0.39
Norfolk, Virginia	244,703	0.46	0.40
Portsmouth, Virginia	94,572	0.39	0.52
Richmond, Virginia	227,032	0.44	0.45
Virginia Beach, Virginia	450,435	0.64	0.19
Milwaukee, Wisconsin	595,365	0.40	0.37

As mentioned in the methodological appendix, demographically similar cities were selected based on their racial and size demographics. This enables us to have an empirically consistent definition. However, we recognize Pittsburgh is often colloquially compared to Baltimore, Buffalo, Charlotte, Cincinnati, Cleveland, Columbus, Detroit, Indianapolis, Louisville, Milwaukee, Philadelphia and Richmond. All of these cities are included in our comparison and have been highlighted to draw attention to their inclusion. Moreover, Pittsburgh's ranking within these 12 other cities often mirrors Pittsburgh's ranking amidst the full 89 similar cities. For example, Pittsburgh is exactly average for White women's poverty when only comparing these cities (in order from least to most White women's poverty-Charlotte, Louisville, Baltimore, Indianapolis, Columbus, Richmond, Pittsburgh, Milwaukee, Cincinnati, Cleveland, Buffalo, Philadelphia, and Detroit). Yet, Pittsburgh has the second highest rate of Black girls' poverty (in order from least to most Black girls' poverty-Charlotte, Milwaukee, Philadelphia, Louisville, Baltimore, Columbus, Indianapolis, Detroit, Richmond, Cincinnati, Buffalo, Pittsburgh, and Cleveland). Thus, we can be confident our findings are comparable to what we would find if we only used these 12 cities and our more robust list enables us to have a broader point of reference when considering other cities with possible policy interventions that Pittsburgh might emulate.

APPENDIX C

Data and Definitions

The data for this report comes from three government data sets: the National Center of Health Statistics' National Vital Statistics System restricted-use Micro Data, the Census Bureau's American Community Survey, and the Department of Education's Civil Rights Data Collection. Below we discuss each data set in more detail including how we operationalized all the indicators discussed in the report.

National Vital Statistics System

The National Center for Health Statistics collects all birth and death certificates of all individuals who are born or die in the United States and its territories. Key information from these certificates are made available to researchers interested in conducting studies to improve the health and well-being of American residents. Using the most recent year available, 2016, we aggregated the number of deaths and births for individuals whose residence at time of birth/death was within the City of Pittsburgh.

We use the National Vital Statistics System (NVSS) data for the following indicators: average age of death, fetal mortality, prenatal care, gestational diabetes, gestational hypertension, gestational infection, low birth weight, extremely low birth weight, abnormal conditions, congenital anomalies, cesarean deliveries, breastfeeding, infant mortality, child mortality, young adult mortality, adult mortality, older adult mortality, cardiovascular disease, cancer, tobacco related death, drug overdoses, suicides, and homicides. How we measured each indicator is discussed in detail below.

Average Age of Death

Using the reported age on all death certificates, we calculated the mean age for each sub-population. For infant deaths, we used the number of days alive to calculate the proportion of the year they lived.

Fetal Mortality

Fetal death includes any spontaneous intrauterine death of a fetus at any time during pregnancy. In Pennsylvania, all pregnancies at least 16 weeks past gestation that end in a fetal death are recorded. This includes "stillbirths" or fetuses born 20 weeks after gestation who demonstrate no signs of life at birth. We calculated fetal mortality as the number of fetal deaths divided by the number of pregnancies within the year. We calculated pregnancies within the year as the total number of babies born plus the number of fetal deaths. In other words, pregnancies that end before 16 weeks after gestation are not included.

Prenatal Care

On each birth certificate, the month that prenatal care began is recorded. We calculated the mean month mothers sought prenatal care. This information is available by the babies' sex assigned at birth. However, no substantive differences were observed across the sex of the baby. Thus, we focus on the racial identity of the mother.

Gestational Diabetes

Birth certificates report whether mothers had gestational diabetes during pregnancy. To calculate the proportion of mothers with gestational diabetes, we divided the number with gestational diabetes by the total number of live births.

Gestational Hypertension

Likewise, birth certificates include a binary variable reporting whether mothers had gestational hypertension while pregnant. We calculated the proportion of mothers with gestational hypertension by dividing the number with gestational hypertension by the total number of live births.

Gestational Infection

We used the absence of any infection during pregnancy to derive the number of mothers who had infections. We then divided this number by the total number of live births to create a gestation infection rate. Gestation infections include: Gonorrhea, Syphilis, Chlamydia, Hepatitis B, and Hepatitis C.

Maternal Mortality

Maternal mortality is the rate of pregnant persons whose cause of death is related to childbearing or delivery per 1,000 pregnancies (including those who had a live birth and those whose fetus died).

Low Birth Weight

Low birth weight is defined as babies less than 2500 grams (or 5.5 lbs) at birth. We calculate the proportion of babies with a low birth weight by dividing the number born weighing less than 2500 grams by the total number of live births. Since being born underweight is shaped by the mother's experience during and before pregnancies, but not the sex of the baby, we examine these proportions by the mother's race, not the infant's race or sex.

Extremely Low Birth Weight

Extremely low birth weight is defined as babies less than 1500 grams (or 3.3 lbs) at birth. Like the proportion for low birth weight, we calculate the proportion of babies with an extremely low birth weight by dividing the number born weighing less than 1500 grams by the total number of live births.

Abnormal Conditions

A baby is defined as having an abnormal condition at birth if at least one of the following is true: needed immediate assisted ventilation, needed assisted ventilation six hours after birth, was admitted to the neonatal intensive care unit (NICU), diagnosed with surfactant or infant respirator distress syndrome, needed antibiotics, or had seizures. Our abnormal condition rate is the proportion of live births that had at least one abnormal condition.

Congenital Anomalies

Congenital anomalies include: Anencephaly, Meningomyelocele or Spina Bifida, Cyanotic Congenital Heart Disease, Congenital Diaphragmatic Hernia, Omphalocele, Gastroschisis, Limb Reduction Defect, Cleft Palate, Cleft Lip, Down Syndrome, Suspected Chromosomal Disorder, and Hypospadias. We count all babies with any congenital anomalies as part of our congenital anomalies rate. We divide this count by the total number of live births.

Cesarean Deliveries

Birth certificates note the method of delivery including: spontaneous, forceps, vacuum, and cesarean. We calculate the proportion of live births that were delivered via cesarean.

Breastfeeding

If the infant is breastfeeding at discharge from the birthing facility, they are recorded as breastfed. We calculated the proportion of breastfed babies by the total number of live births. As we did for the other maternal indicators, we calculated these proportions for White, Black, and AMLON mothers. Given that some of the observed disparities are due to education and economic stability, we also calculated the proportions for women who are college educated and currently receiving Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).

Infant Mortality

We define the infant mortality rate as the number of babies under the age of one that pass away in a given year divided by the number of live births in that year.

Child Mortality

We define the child mortality rate as the number of children from ages 1 to 17 who die in one year divided by the number of children (ages 1 to 17) at the start of that year. In other words, an incidence not prevalence. The number of deaths in the given year comes from the NVSS' death certificate records. However, the total number of children in the city at the start of the year comes from the U.S. Census Bureau's American Community Survey (ACS) data discussed at more length below.

Young Adult Mortality

Similar to child mortality, young adult mortality is defined as the number of individuals ages 18 to 24 who died in 2016 divided by the total number of individuals between the ages of 18 and 24 at the start of the year. Once again, the data regarding the number of deaths comes from the NVSS while the count of the total population is derived from the ACS.

Adult Mortality

Adult mortality is the number of individuals who passed away in 2016 and age at time of death was between 25 and 64 years old divided by the number of individuals reported by the ACS to be between the ages of 25 and 64 years old at the beginning of the year.

Older Adult Mortality

Much like the other mortality rates, the older adult mortality is derived by dividing the number of people who passed away in 2016 who were 65 or older at the time of death by the total number of people living in the city who were 65 or over at the beginning of the year, according to the ACS.

Cardiovascular Disease

Death certificates report the cause of death as evaluated by the medical inspector including injury diagnoses and external causes. Using the International Statistical Classification of Diseases codes, we define cardiovascular disease as all deaths classified as "diseases of the circulatory system." This includes: acute rheumatic fever and chronic rheumatic heart disease, hypertensive diseases, ischemic heart diseases, pulmonary heart disease and diseases of pulmonary circulation, other non-pulmonary forms of heart disease, cerebrovascular diseases, diseases of arteries, arterioles and capillaries, and other disorders of circulatory system. We divided the number of deaths associated with cardiovascular disease by the total population (all ages) estimated to be in the population at the start of the year according to the to ACS estimates.

Cancer

Using the International Statistical Classification of Diseases codes, we define cancer as the cause of death if the death certificate reports the cause of death as "neoplasms" (codes 68 through 146). This includes malignant neoplasms of the lip, tongue, pharynx, digestive organs, respiratory and intrathoracic organs, bone and articular cartilage, skin, acute rheumatic fever and chronic rheumatic heart disease, hypertensive diseases, ischemic heart diseases, breast, female or male genital organs, bladder, eye, adnexa, brain, central nervous system, lymphoid, and leukemia. We divided the number of deaths associated with malignant neoplasms by the total population (all ages) estimated to be in the population at the start of the year according to the ACS estimates.

Tobacco Related Death

Tobacco related deaths are deaths where the cause of death was related to the consumption of tobacco. This is not a mutually exclusive category with the other cause of death indicators. We divided the number of deaths related to tobacco by the total population (all ages) estimated to be in the population at the start of the year according to the ACS estimates.

Drug Overdoses

We define drug overdoses as death caused by accidental or intentional self-poisoning exposure to drugs and other biological substances. We divided the number of drug overdoses by the total population.

Suicide

When the mode of death is determined to be intentional self-harm, we regard it as suicide. To determine the suicide rate, we divided the number of deaths by suicide by the total population.

Homicides

Likewise, when the mode of death was determined as an assault (homicide), we counted this as a homicide and divided the number of homicides by the total population according to the ACS.

American Community Survey

Starting in 2005, the U.S. Census Bureau replaced the long form of the decennial census with the American Community Survey (ACS). The ACS is an annual survey sent to a representative sample of U.S. households. The survey asks residents about their ancestry, educational attainment, income, language proficiency, migration, disability, employment, family composition, and housing characteristics. Although the individual level data is restricted, the Census Bureau makes the data available at various geographic units. In this report, we use the data aggregated to census defined places. For Pittsburgh, this includes all residents who live within the City of Pittsburgh. We use the 2017 1-year summary as it is the most recent data that is publicly available.

We use the ACS for the following indicators: poverty, income, employment status, occupation, and adult educational attainment. Below we outline how each of these indicators is operationalized.

Poverty Status

Poverty status is defined as individuals whose household income is below the federal poverty threshold. The federal poverty threshold is based off the 1960's methodology. This method calculates the cost of a minimal food diet for the number of residents in the household and multiplies this number by three. The ACS uses respondent's household size and combined household income to calculate whom is living below the federal poverty threshold. They provide counts by race, age, and gender categories.

Income

The ACS asks each individual within the household over the age of 15 to report their income over the past 12 months. The ACS then calculates median incomes for gender, race and age groups within designated geographic areas. Median income for all workers includes anyone who worked for pay in the last 12 months. This includes full time workers, part time workers, contract workers, seasonal workers, individuals who were employed for part of the year and then lost their work, etc... Median income for full time workers includes all residents 16 years old and older who worked at least 35 hours a week for at least 50 weeks in the previous 12 months.

Employment Status

Employment status is calculated for all residents 16 years or older. The Census Bureau defines ***employment*** as individuals currently working any amount of hours for pay. We define ***unemployment*** as anyone not currently working who is 16 years old or older. We operationalize ***looking for work*** as residents who have applied for new jobs, interviewed, or called contacts in the last month. Those still searching for jobs but not completing applications within the last month are not counted as actively looking for work. Finally, ***out of the labor force*** includes residents over 16 years of age who are looking for work but not actively applying for jobs, those who have given up and stopped looking for work, those conducting unpaid labor (such as those raising children, caring for ill or aging relatives, or conducting volunteer work), disabled residents who are unable to work, retired residents, and all other individuals not working or actively looking for work.

Occupations

All employed workers are asked to describe the 'kind of work they are doing' as well as their 'most important activities or duties.' Census Bureau staff then code all of these responses into 539 occupational categories. These 539 categories are then arranged into 23 major occupational groups. Categories include: ***Management occupations*** (e.g. chief executives, general and operations managers, legislators, advertising and promotions managers, marketing and sales managers, human resources managers, industrial production managers, education administrators, architectural and engineering managers, food service managers, funeral service managers, social and community service managers, emergency management directors); ***Business and financial operations occupations*** (e.g. wholesale and retail buyers, cost estimators, human resources workers, training and development specialists, logisticians, fundraisers, market research analysts and marketing specialists, financial analysts, tax examiners and collectors); ***Computer and mathematical occupations*** (e.g. computer and information research scientists, computer programmers, software developers, mathematicians, statisticians); ***Architecture and engineering occupations***; ***Life, physical, and social science occupations*** (e.g. agricultural scientists, biological scientists, medical scientists, physicists, space scientists, chemists, economists, survey researchers, psychologists, sociologists, urban and regional planners); ***Community and social service occupations*** (e.g. counselors, social workers, probation officers, health educators, clergy); ***Legal occupations*** (e.g. lawyers, judicial law clerks, judges); ***Education, training, and library occupations*** (e.g. teachers, museum technicians, librarians); ***Arts, design, entertainment, sports, and media occupations*** (e.g. artists, designers, actors, producers, directors, athletes, coaches, umpires, dancers, writers, editors, photographers, television); ***Healthcare practitioners and technical occupations*** (e.g. dentists, physicians, chiropractors, nutritionists, optometrists, pharmacists, surgeons, physician assistants, occupational therapists, radiation therapists, speech-language pathologists, veterinarians, registered nurses, midwives, nurse practitioners, dental hygienists); ***Healthcare support occupations*** (e.g. nursing aides, physical therapist assistants, massage therapists, dental assistants, medical assistants); ***Protective service occupations*** (e.g. police, fire fighters, correctional officers, detectives); ***Food preparation and serving related occupation*** (e.g. chefs, food preparation, bartenders, waiters, dishwashers, hosts); ***Building and grounds cleaning and maintenance occupations*** (e.g. , janitorial workers, landscaping, pest control); ***Personal care and service occupations*** (e.g. animal trainers, motion picture projectionists, funeral attendants, hairdressers, bellhops, guides, childcare workers, fitness workers); ***Sales and related occupations*** (e.g. retail sales workers, cashiers, insurance sales agents, wholesale and manufacturing, telemarketers, door-to-door sales workers, news and street vendors); ***Office and administrative support occupations*** (e.g. office and administrative support workers, switchboard operators, bill and account collectors, human resources assistants, cargo and freight agents, recordkeeping, data entry keyers, word processors and typists, mail clerks); ***Farming, fishing, and forestry occupations***; ***Construction and extraction occupations***; ***Installation, maintenance, and repair occupations*** (e.g. radio and telecommunications equipment installers and repairers, industrial and utility, electronic equipment installers and repairers, home appliance repairers, locksmiths); ***Production occupations*** (e.g. factory workers, aircraft structure, rigging, bakers, butchers, woodworking, power plant operators); ***Transportation and material moving occupations*** (e.g. pilots, flight attendants, ambulance drivers, bus drivers, truck drivers, taxi drivers, railroad conductors, subway workers, sailors and marine oilers).

Adult Educational Attainment

Adult educational attainment is calculated for all residents 25 years old or older. Proportions are derived using the number of residents who have completed a given level of education divided by the total population who are at least 25 years old. Less than high school includes all adults who did not receive a high school diploma or GED. High school includes those who received their high school diploma or GED. Bachelor's degree includes everyone who has completed at least a bachelor's. Graduate degree includes everyone who has completed any degree beyond a bachelor's (e.g. master's degree or doctorate).

We calculated the proportion of high school graduates who attended college as the number of residents who reported finishing a graduate degree, bachelor's degree, or associate degree, as well as those who attended some college courses divided by the number of residents who received their high school diploma or GED.

We calculated the proportion college attendees who did not finish their bachelor's degrees as the number of residents who completed their associate degrees but no more school and those who took some college courses but did not receive a degree divided by all those listed above as attending some college.

Civil Rights Data Collection

Our final data source, the Civil Rights Data Collection (CRDC), is a biennial survey of all public, charter, alternative, and disability specialty schools as well as long-term juvenile justice facilities. The completion of the survey has been required by the Department of Education since 1968. The CRDC collects information on which students are enrolled in which classes and programs as well as discipline and reported incidents. Data is reported by gender and race categories. Some general information about the school and district is also reported.

For this report, we use the 2015-2016 school year data as it is the most recent publicly available data. We calculate all proportions across all educational facilities within the Pittsburgh public school district. For comparisons across other cities, we use all the educational facilities within the main district within the city. Most districts correlate closely with the boundaries of the city. Yet, some are unified districts that include all schools within the county or select smaller municipalities outside the bounds of the center city. However, all denominators and numerators are derived from within the CRDC data thus these small inconsistencies do not influence our ranked scores.

We use the CRDC data to calculate the following indicators: AP passing rates, AP and IB enrollment, SAT or ACT participation, middle school algebra enrollment, middle school algebra passing rates, gifted and talented participation, grade retention rates, suspensions (at least one), multiple suspensions, police referrals, and school related arrests.

AP Passing Rates

College Board's Advanced Placement (AP) tests are standardized exams in a wide variety of subjects. High schools often offer year-long courses that prepare students for the exams. However, students are not required to have taken the associated courses to take the exam. Nor do all students who take the associated course elect to take the standardized test. Tests are graded by the College Board. Most universities will grant course credit or advanced placement to students who receive a passing score.

Schools report to the CRDC how many students received a qualifying score (3, 4 or 5) on at least one AP exam. The number of students who passed an AP exam is reported by race and gender. Since students who do not take the associated courses are able to take the exams, we elect to derive the passing rate by dividing the number of students who passed at least one exam by the total number of students enrolled in high schools within the district.

AP and IB Enrollment Proportion

As mentioned above, Advanced Placement courses are offered to high school students as college level courses. Likewise, International Baccalaureate (IB) Diploma Programme are college level courses sponsored by the International Baccalaureate Organization. Much like AP courses, IB courses include a wide range of subjects and are intended to challenge students enrolled in 11th and 12th grade. Although some schools might offer both AP and IB courses, most schools offer one or the other. Thus, for this indicator we include everyone enrolled in either of these nationally recognized college preparatory programs. We divide the number of students enrolled by the total number of students enrolled in high schools within the district. We include all high school students as some advanced 9th and 10th graders take one or more of these courses.

SAT or ACT Participation Rates

The College Board's Scholastic Aptitude Test (SAT) and the American College Testing Incorporated's ACT test are both nationally recognized standardized exams that evaluate college readiness. Completing at least one of these tests is required for college admissions at the majority of U.S. universities. CRDC asks all schools to report the number of students who completed either the SAT or ACT. Although most students take these exams in the 11th grade, some students take them in 10th grade while others wait till their senior year. Thus, like the previous two indicators, we derive our participation rate as the proportion of high school students in the district who participated in either the SAT or ACT.

Middle School Algebra Enrollment Proportion

Across the United States, advanced 8th graders are placed into algebra. Students who pass algebra in middle school do not have to take it in high school putting them ahead of their peers in mathematics. Although middle school students might be placed into other advanced courses, algebra is the only consistent advanced placement course across the country. Thus, it serves as an early measure of advanced placement. We calculate enrollment proportions by dividing the number enrolled in 8th grade algebra by the total number of students in schools that have 8th graders. Ideally, we would divide by the number of 8th graders but this is not available in the data.

Middle School Algebra Passing Rates

The CRDC not only collects who was enrolled in middle school algebra but also who passed the courses. We use these counts to derive the passing rates. Passing rates are the number of students who passed 8th grade algebra divided by the number enrolled in 8th grade algebra.

Gifted and Talented Participation Rates

The Gifted and Talented program is the only national program that operates during regular school hours to provide accelerated and enriched curriculum for students who are determined to have a high mental ability or unusual talent. Curriculum and selection into the program varies across the country but research has demonstrated persistent racial and gender biases in who is selected into programs. Thus, examining participation rates illuminates the extent to which such inequality is occurring in Pittsburgh's schools. We include all students of any grade who are enrolled in a Gifted and Talented program divided by the total number of students enrolled in the district.

Grade Retention Rates

Grade retention rates refer to the proportion of all students in the district who did not successfully pass to the next grade. Students can be retained because they fail to pass their courses or by not accumulating enough credit hours to be classified as the next grade level. Students are not considered retained if they successful complete a summer school program that enables them to proceed to the next grade.

Suspensions (at least one)

Suspensions are when students are removed from their regular school for at least half a day for disciplinary purposes. Some suspended students are sent home while others are sent to behavioral centers. We calculate the total number of students with at least one suspension during the 2015-2016 school year divided by the total number of students in the district.

Multiple Suspensions

Given the negative consequences of multiple suspensions, we also calculate the proportion of all students who have had at least two suspensions during the 2015-2016 school year.

Police Referrals

CRDC collects the number of students who are referred to law enforcement for an incident that occurs on school grounds during school-related events (including school transportation and sporting events). We calculate the proportion of all students referred to law enforcement across all grades.

School Related Arrests

School related arrest includes any arrest of a student for any activity conducted on school grounds, during off-campus school activities (including school transportation), or due to a referral by any school official. All school-related arrests are considered police referrals but not all referrals result in an arrest. We calculate the proportion of all students arrested across all grades.

APPENDIX D

Pittsburgh's Livability Outcomes

	White Men	White Women	Black Men	Black Women	AMLON Men	AMLON Women
Health						
Birth, Infant Health and Maternity						
Fetal (per 1,000)		8.81		18.07		1.96
Prenatal Care (average month)		2.53		2.50		2.47
Gestational Diabetes		0.03		0.03		0.04
Gestational Hypertension		0.03		0.04		0.02
Gestational Infection		0.02		0.03		0.02
Low Birthweight		0.07		0.14		0.09
Extremely Low Birthweight		0.01		0.03		0.01
Abnormal Conditions		0.0028		0.0064		0.0039
Congenital Anomalies		0.12		0.17		0.14
C-Section Delivery		0.28		0.28		0.27
Breastfeeding		0.82		0.66		0.90
Maternal Morality (per 1,000)		0.00		1.84		0.00
Age of Death (per 1,000)						
Average Age	70.1	78.2	63.6	69.9	60.6	77.5
Infant (less than 1)	0.00	2.29	13.16	12.61	0.00	0.00
Children (1-17 yrs)	0.31	0.21	0.96	0.27	0.41	0.00
Young Adults (18-24 yrs)	0.25	0.00	3.23	1.56	0.48	0.00
Adults (25-64 yrs)	7.00	4.06	14.85	7.83	2.02	0.52
Older Adults (65-74 yrs)	34.21	29.84	75.69	47.45	2.25	0.86
Causes of Death (per 1,000)						
Cardiovascular Disease	3.53	3.53	5.60	4.94	0.85	0.53
Cancer	2.39	2.67	3.36	3.00	0.75	0.32
Suicide	0.25	0.08	0.19	0.06	0.15	0.00
Tobacco	0.75	0.70	0.94	0.91	0.20	0.05
Drug Overdose	1.17	0.54	1.35	0.54	0.70	0.58
Accidents	1.42	0.78	1.57	0.46	0.45	0.11
Homicide (per 10,000)						
Total Population	0.61	0.20	14.47	2.00	0.50	0.00
Children (0-17 yrs)	0.00	0.00	4.10	2.72	0.00	0.00
Young Adults (18-24 yrs)	0.63	0.00	26.62	3.90	2.42	0.00
Adults (25-64 yrs)	0.69	0.19	17.21	1.64	0.00	0.00
Older Adults (65 plus yrs)	0.69	0.50	5.67	1.46	0.00	0.00

	White Men	White Women	Black Men	Black Women	AMLON Men	AMLON Women
Income						
Poverty						
Total Population	0.11	0.15	0.33	0.36	0.33	0.32
Children (0-17 yrs)	0.10	0.12	0.63	0.55	0.37	0.35
Young Adults (18-24 yrs)	0.34	0.39	0.24	0.23	0.73	0.52
Adults (25-64 yrs)	0.08	0.12	0.27	0.39	0.21	0.27
Older Adults (65 plus yrs)	0.05	0.12	0.14	0.26	0.3	0.23
Income						
All Workers	37,504	29,393	21,636	20,082	25,798	22,162
Full Time Workers	52,176	44,797	36,359	32,805	47,484	45,504
Part Time Workers	11,591	7,379	7,106	10,949	7,034	4,835
Employment						
Employment Status						
Employed	0.67	0.59	0.47	0.49	0.63	0.60
Out of the Labor Force	0.30	0.39	0.43	0.47	0.32	0.38
Looking for Work	0.03	0.02	0.10	0.04	0.05	0.02
Looking for Work by Age						
Young Adults (16-24 yrs)	0.06	0.02	0.17	0.03	0.06	0.02
Adults (25-64 yrs)	0.03	0.02	0.09	0.06	0.04	0.03
Older Adults (65 plus yrs)	0.01	0.01	0.02	0.00	0.00	0.00
Occupation						
All Occupations	0.38	0.34	0.08	0.09	0.06	0.06
Management	0.52	0.29	0.03	0.06	0.05	0.06
Office Administrative	0.20	0.52	0.05	0.15	0.04	0.04
Healthcare	0.30	0.44	0.04	0.08	0.06	0.09
Computer Engineering	0.54	0.24	0.02	0.02	0.13	0.05
Sales	0.40	0.34	0.03	0.07	0.09	0.08
Education and Library	0.26	0.43	0.04	0.09	0.10	0.08
Food Service	0.29	0.38	0.17	0.07	0.02	0.07
Production and Transportation	0.53	0.11	0.18	0.11	0.03	0.05
Business and Financial	0.39	0.41	0.05	0.06	0.05	0.04
Personal Care and Service	0.15	0.38	0.12	0.20	0.07	0.07
Construction	0.70	0.07	0.15	0.00	0.08	0.01
Social service	0.25	0.50	0.10	0.09	0.01	0.05
Entertainment and Sports	0.43	0.38	0.04	0.02	0.04	0.09
Maintenance	0.39	0.16	0.23	0.11	0.07	0.04
Healthcare Support	0.09	0.46	0.07	0.32	0.01	0.05
Fire	0.36	0.14	0.23	0.07	0.10	0.10
Legal	0.59	0.23	0.00	0.11	0.04	0.03
Police	0.63	0.05	0.06	0.10	0.16	0.00
Farming, Fishing, Forestry	1.00	0.00	0.00	0.00	0.00	0.00

	White Men	White Women	Black Men	Black Women	AMLON Men	AMLON Women
Education						
Adult Educational Attainment						
Less than High School	0.06	0.06	0.16	0.08	0.10	0.07
High School	0.21	0.24	0.37	0.41	0.07	0.12
Some College	0.23	0.21	0.30	0.32	0.20	0.16
Bachelor's	0.27	0.24	0.10	0.12	0.30	0.29
Graduate	0.23	0.25	0.07	0.07	0.33	0.36
Public School Achievement						
Passed AP Test	0.07	0.07	0.00	0.00	0.03	0.02
Passed Middle school Algebra	0.89	0.99	0.80	0.90	0.39	0.26
Student Retention	0.02	0.02	0.04	0.03	0.03	0.03
Academic Opportunities						
Took AP or IB Class	0.25	0.34	0.09	0.15	0.19	0.25
Took SAT or ACT Test	0.14	0.17	0.07	0.11	0.13	0.14
Took Middle school Algebra	0.05	0.04	0.03	0.03	0.05	0.04
Gifted and Talented Enrollment	0.17	0.18	0.03	0.04	0.10	0.10
School Discipline						
At Least One Suspension	0.10	0.06	0.27	0.20	0.19	0.10
More than one Suspension	0.04	0.02	0.14	0.08	0.08	0.04
Police Referral	0.02	0.01	0.05	0.05	0.03	0.02
Arrest	0.01	0.01	0.03	0.03	0.02	0.01

APPENDIX E

Pittsburgh's Index of Ranked Livability

	White Men			White Women		
	Rank	Centile	Variability	Rank	Centile	Variability
Health						
Birth, Infant Health and Maternity						
Fetal				-0.05	0.07	0.05
Prenatal Care				0.08	0.76	0.15
Gestational Diabetes				0.10	0.88	0.14
Gestational Hypertension				0.14	0.92	0.17
Gestational Infection				-0.02	0.42	0.11
Low Birthweight				-0.02	0.44	0.14
Extremely Low Birthweight				0.06	0.82	0.09
Abnormal Conditions				-0.01	0.45	0.11
Congenital Anomalies				-0.07	0.23	0.12
C-Section Delivery				0.07	0.78	0.12
Breastfeeding				-0.02	0.35	0.07
Maternal Morality				0.01	1.00	0.01
Age of Death						
Average Age	-0.01	0.43	0.08	0.02	0.59	0.12
Infant	0.17	1.00	0.17	0.07	0.83	0.10
Children	-0.02	0.32	0.04	-0.03	0.34	0.08
Young Adults	0.07	0.93	0.09	0.13	1.00	0.13
Adults	-0.03	0.33	0.10	-0.02	0.43	0.12
Older Adults	0.00	0.52	0.08	-0.03	0.36	0.11
Causes of Death						
Cardiovascular Disease	-0.01	0.47	0.10	-0.03	0.40	0.13
Cancer	0.00	0.48	0.10	-0.05	0.28	0.10
Suicide	0.03	0.70	0.08	0.02	0.63	0.08
Tobacco	0.02	0.59	0.09	-0.01	0.46	0.08
Drug Overdose	-0.03	0.09	0.03	-0.02	0.14	0.03
Accidents	-0.05	0.19	0.08	-0.06	0.20	0.10
Homicide						
Total Population	0.01	0.54	0.12	0.03	0.59	0.16
Children	0.04	1.00	0.04	0.06	1.00	0.06
Young Adults	-0.03	0.34	0.10	-0.05	0.21	0.09
Adults	0.03	0.61	0.12	0.03	0.59	0.20
Older Adults	-0.06	0.29	0.14	-0.09	0.14	0.12

	White Men			White Women		
	Rank	Centile	Variability	Rank	Centile	Variability
Income						
Poverty						
Total Population*	-0.02	0.33	0.06	-0.04	0.22	0.08
Children (0-17 yrs)*	0.00	0.51	0.08	-0.01	0.39	0.06
Income						
All Workers	-0.05	0.18	0.08	-0.03	0.27	0.07
Full Time Workers	-0.02	0.38	0.08	-0.01	0.46	0.07
Employment						
Employment Status						
Employed	-0.03	0.39	0.13	0.03	0.58	0.17
Looking for Work*	0.01	0.57	0.07	0.04	0.83	0.06
Out of the Labor Force*	-0.03	0.37	0.12	0.01	0.54	0.16
Education						
Adult Educational Attainment	-0.01	0.43	0.11	-0.02	0.37	0.09
High School Dropout*	0.00	0.49	0.13	-0.04	0.38	0.16
Attend College	0.05	0.66	0.15	0.06	0.70	0.15
College Dropout	0.04	0.64	0.14	0.04	0.62	0.15
Bachelor's	0.04	0.71	0.10	0.06	0.79	0.11
Graduate						
Public School Achievement	-0.03	0.39	0.15	-0.06	0.32	0.18
Passed AP Test	0.01	0.61	0.05	0.00	0.54	0.05
Student Retention*						
Academic Opportunities	-0.02	0.43	0.12	0.01	0.54	0.13
Took AP or IB Class	-0.10	0.18	0.16	-0.12	0.16	0.17
Took SAT or ACT Test	-0.06	0.27	0.13	-0.07	0.22	0.12
Took Middle school Algebra	0.04	0.68	0.12	0.04	0.67	0.12
Gifted and Talented Enrollment						
School Discipline	0.03	0.60	0.14	-0.02	0.43	0.15
At Least One Suspension*	-0.06	0.06	0.06	-0.04	0.07	0.05
Police Referral*	-0.01	0.43	0.11	-0.02	0.37	0.09

Key

Indicators

* Indicators that were inverted before centiles were calculated.

Rank

Strength

Middle 50 percent

Area for improvement

Variability

High Variability-differences due to local factors

Low Variability-national factors drive indicator

	Black Men			Black Women		
	Rank	Centile	Variability	Rank	Centile	Variability
Health						
Birth, Infant Health and Maternity						
Fetal				-0.10	0.06	0.12
Prenatal Care				0.07	0.92	0.08
Gestational Diabetes				0.08	0.91	0.10
Gestational Hypertension				0.08	0.92	0.09
Gestational Infection				0.08	0.80	0.13
Low Birthweight				0.00	0.47	0.06
Extremely Low Birthweight				-0.04	0.24	0.08
Abnormal Conditions				-0.08	0.08	0.10
Congenital Anomalies				-0.06	0.20	0.09
C-Section Delivery				0.05	0.93	0.06
Breastfeeding				-0.01	0.44	0.11
Maternal Morality				-0.18	0.03	0.19
Age of Death						
Average Age	0.08	0.86	0.11	0.03	0.70	0.08
Infant	0.00	0.52	0.07	-0.04	0.32	0.12
Children	-0.08	0.08	0.10	0.02	0.60	0.10
Young Adults	-0.03	0.39	0.13	-0.07	0.07	0.08
Adults	-0.10	0.02	0.10	-0.07	0.03	0.07
Older Adults	-0.06	0.04	0.07	-0.06	0.04	0.07
Causes of Death						
Cardiovascular Disease	-0.11	0.02	0.11	-0.09	0.02	0.09
Cancer	-0.12	0.03	0.13	-0.06	0.02	0.06
Suicide	-0.07	0.19	0.11	-0.09	0.14	0.13
Tobacco	-0.05	0.28	0.11	-0.13	0.06	0.14
Drug Overdose	-0.07	0.03	0.08	-0.05	0.14	0.06
Accidents	-0.09	0.06	0.10	-0.06	0.17	0.09
Homicide						
Total Population	-0.13	0.03	0.14	-0.08	0.08	0.09
Children	-0.07	0.07	0.08	-0.11	0.03	0.12
Young Adults	-0.08	0.19	0.13	-0.03	0.16	0.05
Adults	-0.12	0.02	0.13	-0.05	0.22	0.09
Older Adults	-0.12	0.06	0.14	-0.06	0.10	0.07
Income						
Poverty						
Total Population*	-0.10	0.14	0.13	-0.12	0.17	0.18
Children (0-17 yrs)*	-0.13	0.04	0.14	-0.13	0.08	0.15
Income						
All Workers	-0.11	0.14	0.16	-0.10	0.13	0.13
Full Time Workers	0.02	0.57	0.16	0.00	0.51	0.10

	Black Men			Black Women		
	Rank	Centile	Variability	Rank	Centile	Variability
Employment						
Employment Status						
Employed	-0.08	0.11	0.10	-0.10	0.14	0.14
Looking for Work*	-0.06	0.12	0.07	0.04	0.82	0.06
Out of the Labor Force*	-0.09	0.17	0.14	-0.16	0.03	0.17
Education						
Adult Educational Attainment						
High School Dropout*	-0.01	0.47	0.15	0.11	0.90	0.14
Attend College	0.00	0.49	0.13	-0.13	0.06	0.14
College Dropout	0.04	0.66	0.14	0.02	0.58	0.14
Bachelor's	0.03	0.59	0.17	-0.03	0.40	0.14
Graduate	0.09	0.79	0.16	-0.02	0.43	0.12
Public School Achievement						
Passed AP Test	-0.05	0.23	0.10	-0.10	0.00	0.10
Student Retention*	0.02	0.63	0.06	0.00	0.53	0.06
Academic Opportunities						
Took AP or IB Class	-0.01	0.45	0.07	-0.01	0.45	0.10
Took SAT or ACT Test	-0.09	0.07	0.11	-0.10	0.07	0.11
Took Middle school Algebra	-0.01	0.40	0.06	-0.03	0.30	0.08
Gifted and Talented Enrollment	0.00	0.49	0.09	0.01	0.55	0.08
School Discipline						
At Least One Suspension*	0.03	0.64	0.11	0.00	0.51	0.11
Police Referral*	-0.07	0.02	0.07	-0.06	0.01	0.06

Key

Indicators

* Indicators that were inverted before centiles were calculated.

Rank

Strength

Middle 50 percent

Area for improvement

Variability

High Variability-differences due to local factors

Low Variability-national factors drive indicator

	AMLON Men			AMLON Women		
	Rank	Centile	Variability	Rank	Centile	Variability
Health						
Birth, Infant Health and Maternity						
Fetal				0.01	0.58	0.03
Prenatal Care				0.10	0.91	0.13
Gestational Diabetes				0.07	0.92	0.08
Gestational Hypertension				0.10	0.96	0.11
Gestational Infection				0.03	0.62	0.12
Low Birthweight				-0.03	0.24	0.06
Extremely Low Birthweight				-0.01	0.44	0.09
Abnormal Conditions				-0.04	0.24	0.08
Congenital Anomalies				-0.08	0.07	0.09
C-Section Delivery				0.02	0.70	0.06
Breastfeeding				0.04	0.79	0.07
Maternal Morality				0.00	1.00	0.00
Age of Death						
Average Age	0.04	0.66	0.12	0.12	0.98	0.12
Infant	0.14	1.00	0.14	0.09	1.00	0.09
Children	-0.08	0.08	0.09	0.11	1.00	0.11
Young Adults	0.01	0.69	0.03	0.18	1.00	0.18
Adults	0.04	0.64	0.13	0.10	0.92	0.12
Older Adults	0.00	0.49	0.05	0.02	0.71	0.06
Causes of Death						
Cardiovascular Disease	-0.02	0.30	0.04	0.00	0.54	0.05
Cancer	-0.03	0.26	0.05	0.03	0.74	0.07
Suicide	-0.06	0.16	0.09	0.18	1.00	0.18
Tobacco	-0.07	0.27	0.14	0.00	0.49	0.13
Drug Overdose	-0.01	0.08	0.01	-0.01	0.08	0.01
Accidents	-0.03	0.29	0.06	0.02	0.57	0.13
Homicide						
Total Population	0.04	0.71	0.10	0.08	1.00	0.08
Children	0.14	1.00	0.14	0.06	1.00	0.06
Young Adults	-0.04	0.37	0.14	-0.05	0.23	0.09
Adults	0.04	0.76	0.07	-0.01	0.43	0.08
Older Adults	-0.02	0.19	0.03	-0.04	0.11	0.05
Income						
Poverty						
Total Population*	-0.08	0.09	0.10	-0.07	0.13	0.09
Children (0-17 yrs)*	-0.06	0.17	0.09	-0.07	0.24	0.13
Income						
All Workers	-0.05	0.22	0.09	0.01	0.56	0.10
Full Time Workers	0.08	0.91	0.10	0.07	0.95	0.07

	AMLON Men			AMLON Women		
	Rank	Centile	Variability	Rank	Centile	Variability
Employment						
Employment Status						
Employed	-0.08	0.19	0.13	0.05	0.73	0.10
Looking for Work*	-0.04	0.33	0.11	0.04	0.84	0.06
Out of the Labor Force*	-0.10	0.13	0.14	0.03	0.64	0.10
Education						
Adult Educational Attainment						
High School Dropout*	0.16	0.93	0.19	0.18	0.97	0.19
Attend College	0.16	1.00	0.16	0.13	0.94	0.15
College Dropout	0.11	0.91	0.14	0.14	0.97	0.15
Bachelor's	0.14	0.99	0.14	0.15	1.00	0.15
Graduate	0.12	0.97	0.12	0.11	0.99	0.11
Public School Achievement						
Passed AP Test	-0.03	0.37	0.13	-0.09	0.21	0.16
Student Retention*	0.02	0.69	0.05	-0.02	0.38	0.07
Academic Opportunities						
Took AP or IB Class	0.01	0.53	0.11	0.01	0.55	0.14
Took SAT or ACT Test	-0.08	0.17	0.13	-0.10	0.13	0.14
Took Middle school Algebra	-0.01	0.47	0.10	-0.04	0.28	0.10
Gifted and Talented Enrollment	0.04	0.69	0.11	0.04	0.67	0.11
School Discipline						
At Least One Suspension*	-0.04	0.30	0.10	-0.03	0.34	0.09
Police Referral*	-0.07	0.00	0.07	-0.05	0.05	0.06

Key

Indicators

* Indicators that were inverted before centiles were calculated.

Rank

Strength

Middle 50 percent

Area for improvement

Variability

High Variability-differences due to local factors

Low Variability-national factors drive indicator

City of Pittsburgh

Gender Equity Commission

Office of Mayor William Peduto
City of Pittsburgh
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