



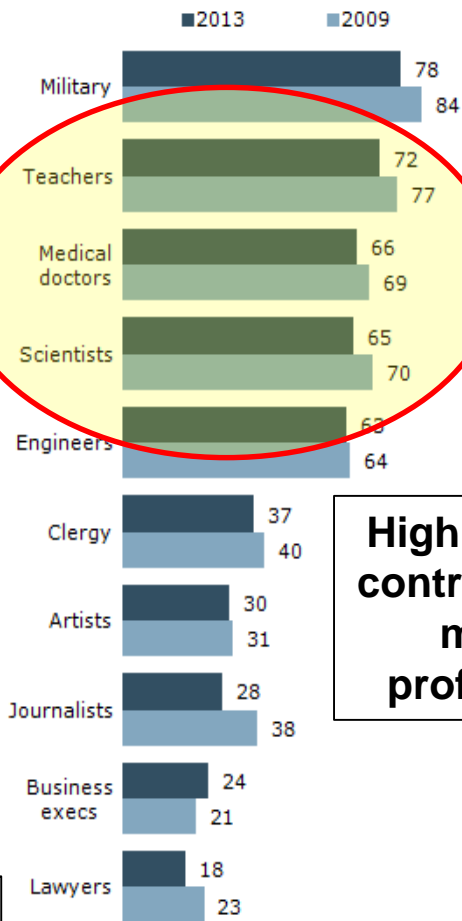
# **This is Baltimore.**

## ***The Impact of Historical Structural Racism on Health***

**Chuck Callahan, DO, FAAP  
UMMC Population Health**

## Trend in Perceived Contribution

% saying each group contributes "a lot" to society's well-being



2013

Source: Pew Research Center surveys March 21-April 8, 2013 and April 28-May 12, 2009. Q6a-j. Responses of those who said some, not very much, nothing at all and those who did not give an answer are not shown.

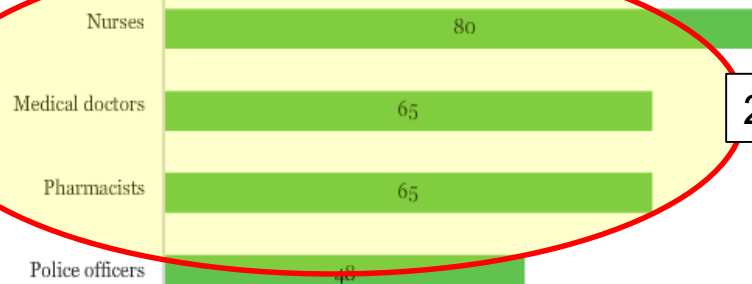
PEW RESEARCH CENTER

**High ethics and contributions of medical professionals**

Please tell me how you would rate the honesty and ethical standards of people in these different fields -- very high, high, average, low or very low?

Dec. 8-11, 2014

% Very high/High



2014

Nurses Keep Healthy Lead as Most Honest, Ethical Profession



Please tell me how you would rate the honesty and ethical standards of people in these different fields -- very high, high, average, low or very low?

% Very high/High % Average % Not high/Very low % No opinion



2018

Nurses Still Rate Highest for Honesty and Ethics

Please tell me how you would rate the honesty and ethical standards of people in these different fields -- very high, high, average, low or very low. (% Very high/High)

	2019	2018	2017	2016
Nurses	85	84	82	84
Engineers	66	—	—	65
Medical doctors	65	67	65	65
Pharmacists	64	66	62	67
Dentists	61	—	—	59
Police officers	55	61	60	60

2019

# Doctors for Medicare For All

BY ABIGAIL ABRAMS

**M**IRIAM CALLAHAN REMEMBERS THE PATIENT who clarified her decision to become a political activist. He was homeless, suffered from severe arthritis in his hip and was self-medicating with fistfuls of Advil. That gave him a bleeding gastric ulcer that landed him in the emergency room at a public hospital. Callahan, who is a medical student at Columbia University, and her colleagues patched him up and sent him back to the shelter, where he began self-medicating again. He was stuck in a horrific cycle. Arthritis isn't a disease that should kill people, Callahan says, but in this case, it was becoming a real possibility. "It's immoral," she says, "the way that we treat people in this country."

In the months since seeing that patient, Callahan has channeled her frustration into political organizing—and she's hardly alone among her fellow medical professionals. With roughly 27.5 million Americans uninsured and nearly 80 million struggling with medical bills, doctors, nurses, medical students and other patient-facing professionals are finding themselves on the front lines of a broken system. Like Callahan, many are looking for ways to fix it. The result is that the medical field, which was once one of the most conservative professions, is becoming an unlikely hotbed of progressive political activity. One of these advocates' top goals? Single-payer health care, now known most often by its politically charged nickname: Medicare for All.

"I don't think I can just be a patient advocate at the bedside," says Deb Quinto, a 38-year-old nurse in California who has canvassed in support of Medicare for All. "It's our job to protect our community and to protect any threat to their health."

Single-payer health care was once considered a fringe idea in the U.S. But so were the ideas that led to Medicare and Medicaid, through which the government pays for qualifying citizens' medically necessary services. And over the course of the past few years, proposals for a universal single-payer plan have entered the mainstream political lexicon, at least that of one major party. Large majorities of Democratic voters now say they support some version of Medicare for All, and Senators Elizabeth Warren and Bernie Sanders, two of the three top-polling Democratic presidential candidates, have made the policy central to their campaigns. There are two Medicare for All bills currently pending before Congress. Medical professionals are central to this growth in popularity. From 2008 to 2017, the share of physicians who favor single-payer health care increased from 42% to 56%, according to Merrin-Hawkins, a physician-recruitment firm.

While Medicare for All remains deeply controversial among many Americans—and a nonstarter among most Republicans—physician-activists insist the tide is beginning to turn. "There's

Nurses push Medicare for All at a Washington rally in April



been a sea change in the way we talk about health care reform," says Dr. Adam Gaffney, an instructor at Harvard Medical School and president of Physicians for a National Health Program, which supports single-payer health care. He notes that as a growing number of doctors advocate for Medicare for All, the policy stands a better chance than a few years ago of passing. "Whatever reforms we need, we need them," he says. "We need them—now."

FOR MOST OF the 20th century, doctors were a staunchly Republican group, one overwhelmingly white and male well into the 1970s, many ran their own practices and operated as small business owners. Their leading trade group, the American Medical Association, reflected its members' politics: it helped sink attempts by Presidents Franklin Roosevelt and Harry Truman to pass universal health care, and in the 1960s it waged a pitched, if losing, battle against Medicare on the grounds that the net for older Americans amounted to crony socialism.

But over the past generation, both the nature of the job and the people doing it have mentally changed. As the insurance industry expanded, physicians have moved from their own private practices to being employees



**TIME**  
October 24, 2019  
A New Generation of  
Activist Doctors





## Race- and Rank-Specific Infant Mortality in a US Military Population

James S. Rawlings, MD, Michael R. Weir, MD

• Mortality among black infants in the United States is approximately twice that among white infants. The disparity has been attributed in large part to the higher incidence of poverty and limited access to health care among black Americans. We investigated race- and rank-specific infant mortality rates among dependents of military officers and soldiers at Madigan Army Medical Center, Tacoma, Wash, between 1985 and 1990. The overall infant mortality rate was 9.3 deaths per 1000 live births compared with 10.1 deaths per 1000 live births in the United States in 1987. Mortality rates for infants born to families of junior enlisted soldiers were similar to those for infants born to families of noncommissioned and commissioned officers. The mortality rate among black infants was 11.1 deaths per 1000 live births compared with 17.9 deaths per 1000 live births among all black Americans in 1987. These lower rates of mortality among black infants may be due to guaranteed access to health care and higher levels of family education and income in the multiracial subpopulation served by our medical center compared with the nation as a whole. (AJDC. 1992;146:313-316)

The United States ranks 22nd in infant mortality among large industrialized nations. There were 10.1 deaths in the first year of life per 1000 live births in the United

poverty and limited access to health care affecting large segments of the black American population. These risk factors are not characteristic of the families of US military personnel on active duty, an easily identifiable subpopulation that is ethnically representative of the general public. Thus, mortality rates at a large US military health care center may reflect the potential effects of eliminating these factors in the nation as a whole.

### METHODS

Data were compiled for all live births and infant deaths among dependents of active-duty military personnel at Madigan Army Medical Center (MAMC), Tacoma, Wash, between 1985 and 1990. These data were collected through a comprehensive review of MAMC medical records. Locally recorded data were cross-checked for accuracy and completeness with data printouts provided by the Services and Biostatistics Activity, Patient Administration Division, Office of the Surgeon General, Department of the Army. Infants born at MAMC whose deaths were recorded at any other medical facility of the worldwide US Army Health Care Delivery System were identified by matching birth dates and parents' Social Security numbers.

Information available about each birth included birth weight, gestational age, length of neonatal hospital stay, race, gender, age at death (if applicable), dependency status, rank of active-duty parent, and all medical diagnoses. Racial designations were assigned according to parental preferences as annotated on birth certificates. Each infant was assigned the race of his or her mother. Tabulations of infant deaths were based on year of oc-

Table 2.—Prevalence of Factors Relating to Outcome of Pregnancy\*

Race	Preterm Delivery, No. of Weeks' Gestation			Low Birth Weight, kg			Length of Hospital Stay, d		
	<37	<30	<26	<2.5	<1.5	<1.0	>7	>14	>28
White	90.6	7.8	2.9	65.2	11.8	5.3	51.7	24.2	9.8
Black	121.7	17.6	6.5	113.3	26.0	13.0	88.4	39.0	18.4
Other	95.4	8.8	2.6	77.9	15.8	7.9	53.4	22.8	11.4
All	96.2	9.5	3.5	74.2	14.5	6.8	58.0	26.6	11.4

\*All values are number of cases per 1000 live births. All differences between white and black infants were highly significant ( $P < .01$ ); all differences between white infants and infants of other races were not significant.

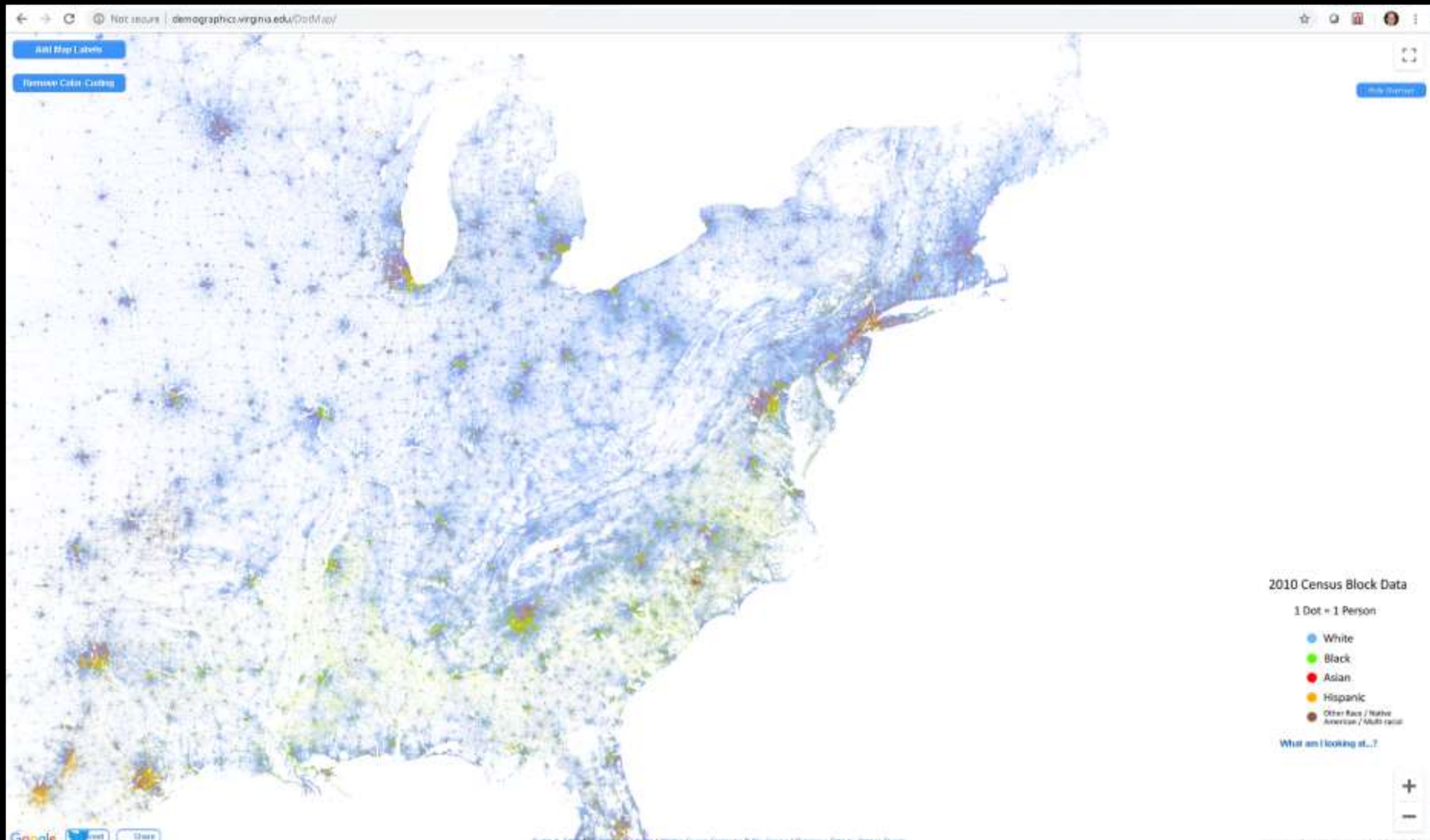
Table 1.—Race-Specific Neonatal, Postneonatal, and Infant Mortality

Race	No. of Live Births	No. of Deaths			
		Neonatal	Postneonatal	Infant	IMR*
White	11 740	81	25	106	9.03
Black	2613	21	8	29	11.10
Other	1142	6	3	9	7.88
Total	15 495	108	36	144	9.29

\*IMR indicates infant mortality rate. Values are number of deaths per 1000 live births.



Baltimore Uprising April 2015  
The Death of Freddie Gray

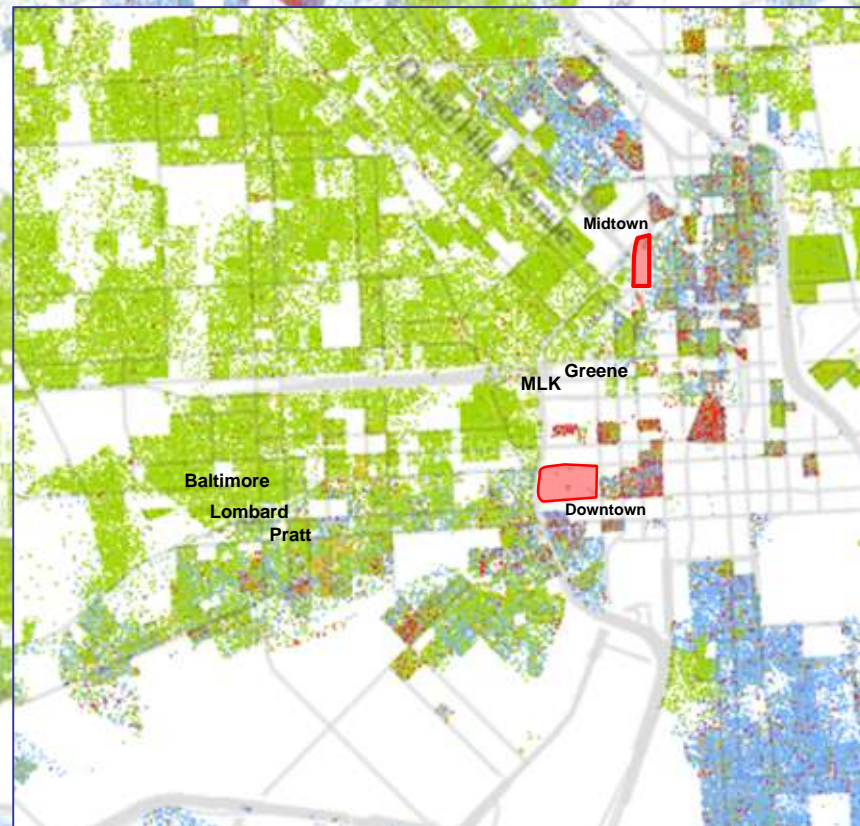


Dot Map

**Dot Map:** One dot by race for every person on 2010 census



# Baltimore



## 2010 Census Block Data

1 Dot = 1 Person

- White
- Black
- Asian
- Hispanic
- Other Race / Native American / Multi-racial

What am I looking at...?



Dot Map

**Dot Map:** One dot by race for every person on 2010 census

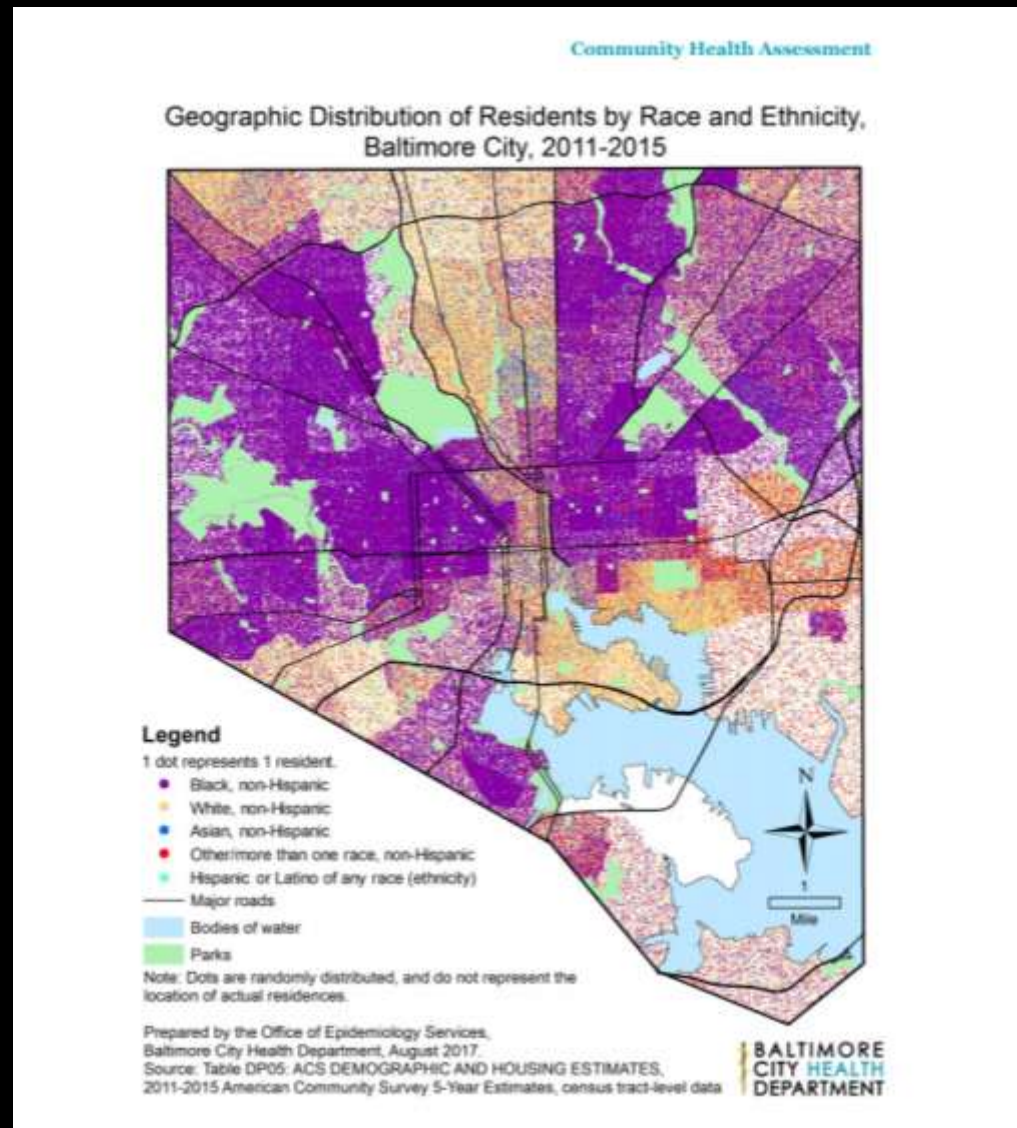
# White “L” & the Black Butterfly



Lawrence Brown, PhD  
Associate Professor  
School of Community Health & Policy  
Morgan State University



Lawrence Brown “Two Baltimore's”





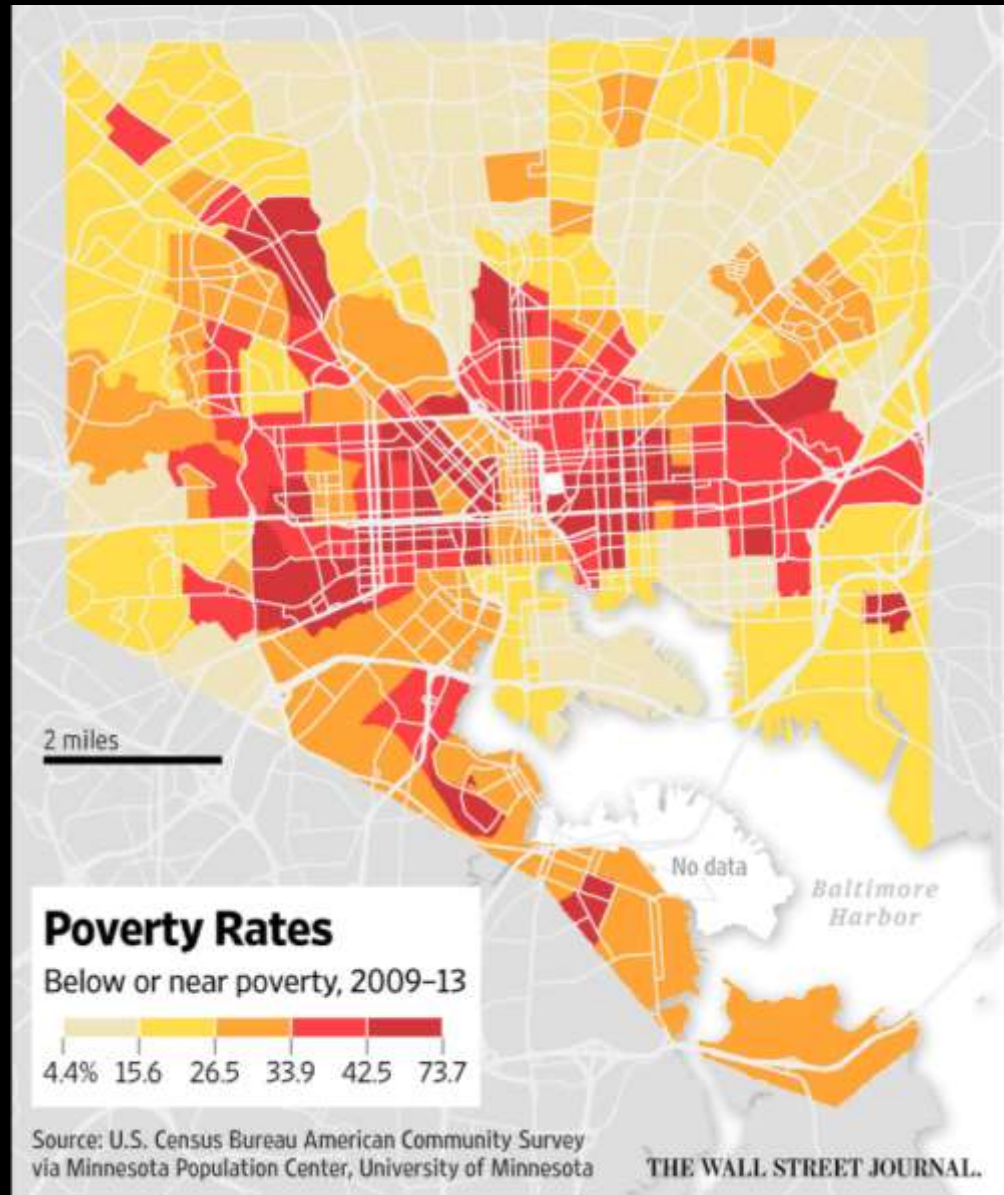
# **Structural Racism:**

**Normalization and legitimization  
of an array of dynamics**

**- historical, cultural, institutional and  
interpersonal -**

**that routinely advantage whites while  
producing cumulative and chronic adverse  
outcomes for people of color**

# Poverty and the Butterfly



No Progress Black America

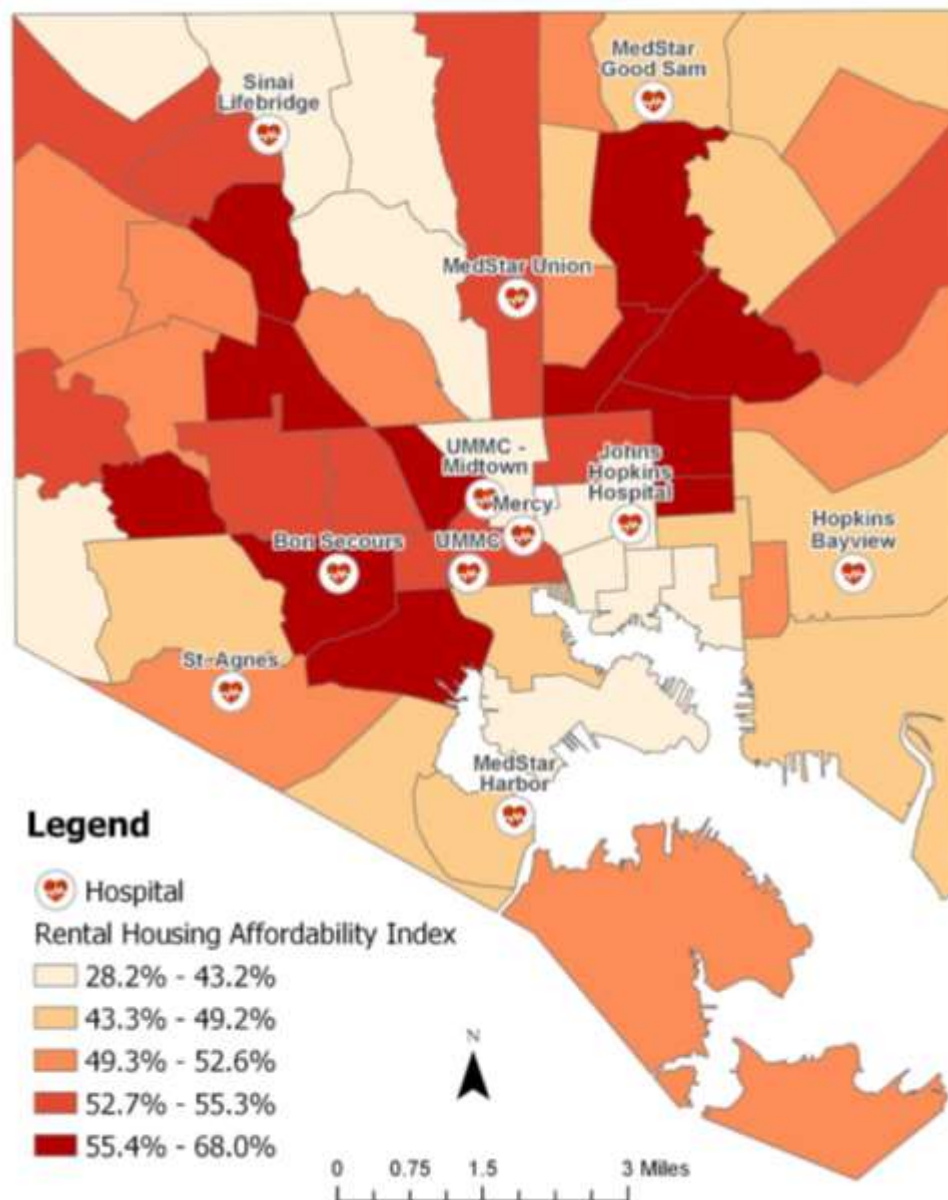
# Rental Housing Affordability Index by Community Statistical Area and Hospital Locations, Baltimore City, 2016

**Percent of households that pay more than 30% of their total household income on rent and related expenses out of all households in an area**



*Bernard C. "Jack" Young*  
Mayor, Baltimore City

*Dr. Letitia Dzirasa, M.D.*  
Commissioner of Health, Baltimore City

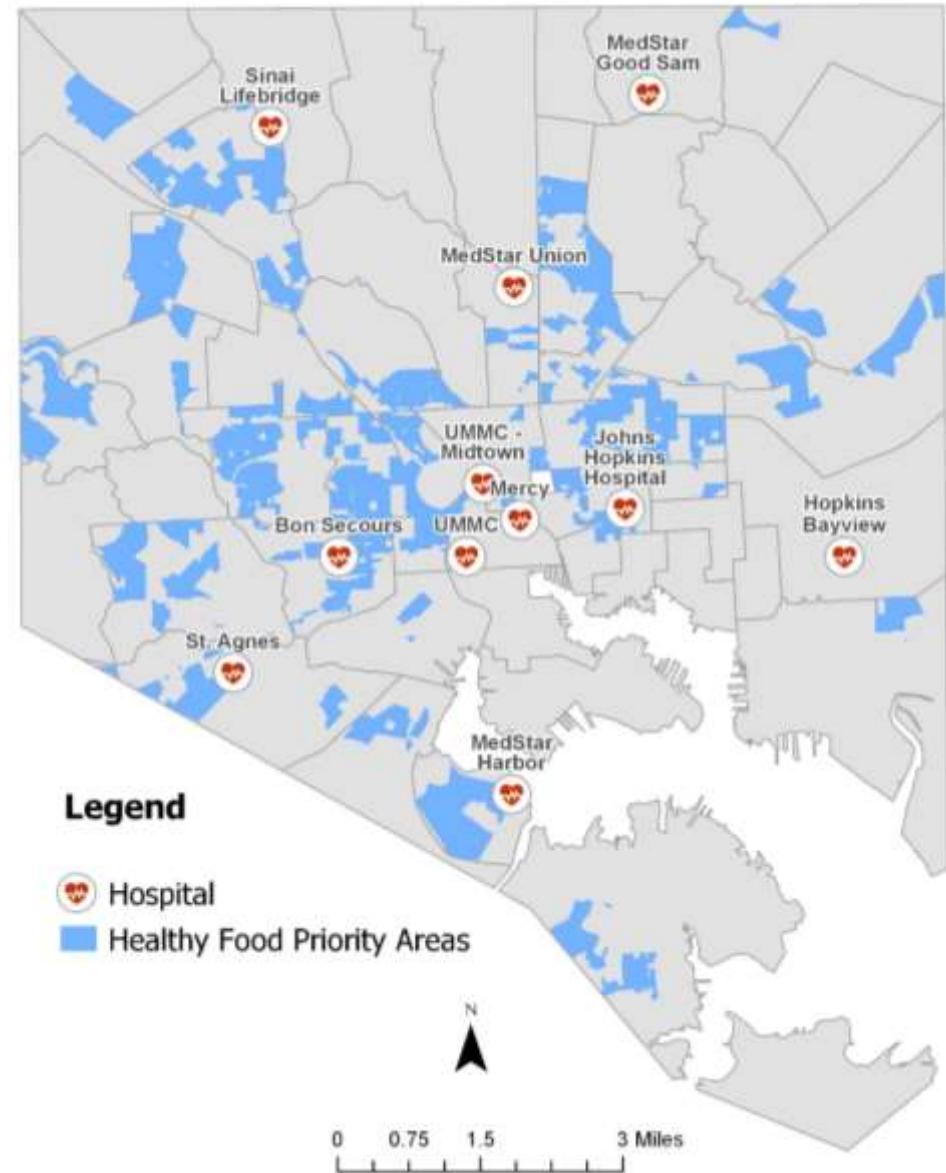


American Community Survey, 2016,  
5-year estimate

**BALTIMORE**  
**CITY HEALTH**  
**DEPARTMENT**



# Healthy Food Priority Areas by Community Statistical Area and Hospital Locations, Baltimore City, 2018



Healthy Food Priority Areas 2018  
shapefile downloaded from  
<https://hub.arcgis.com/>



*Bernard C. "Jack" Young*  
Mayor, Baltimore City

*Dr. Letitia Dzirasa, M.D.*  
Commissioner of Health, Baltimore City

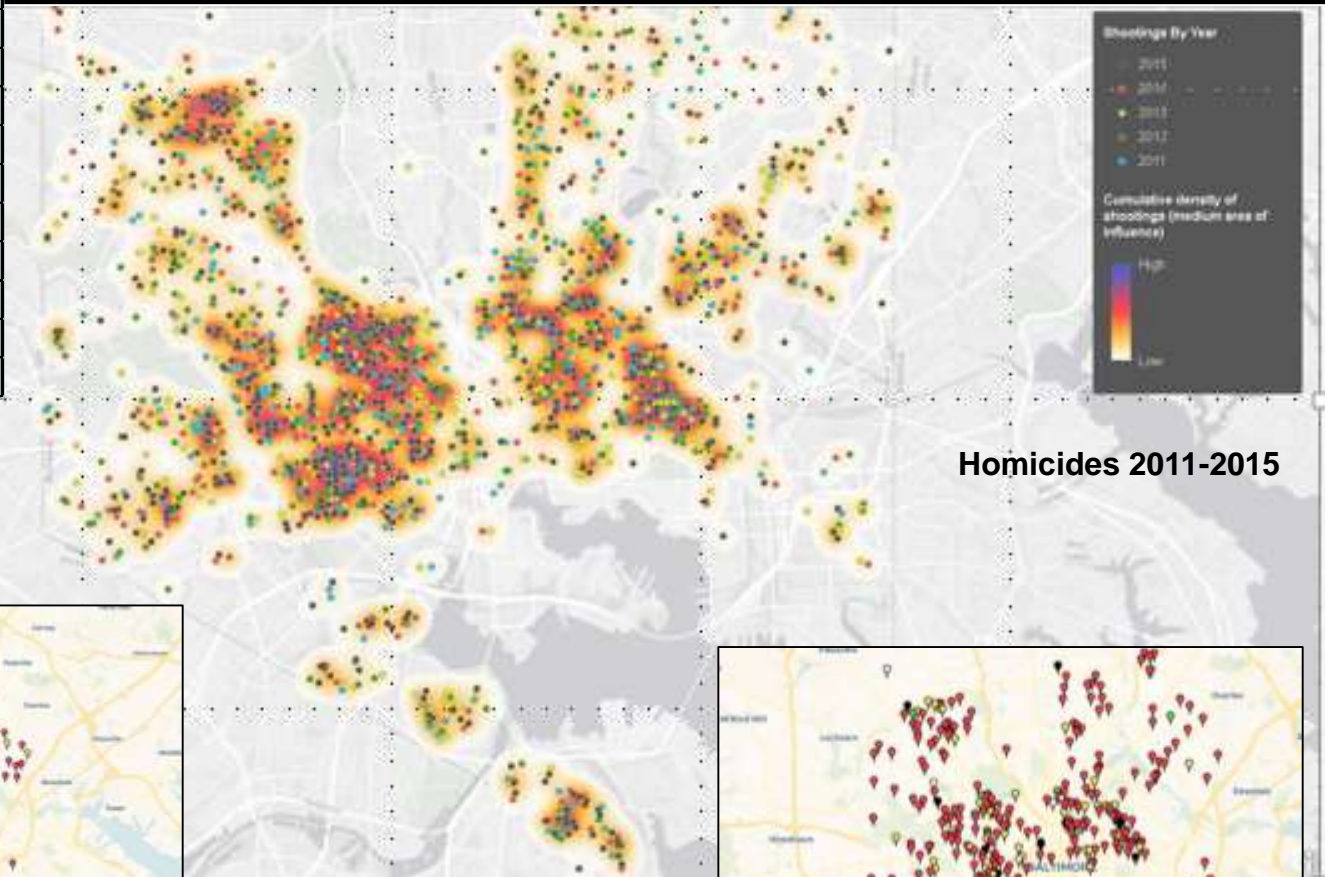
**BALTIMORE**  
**CITY HEALTH**  
**DEPARTMENT**

# Violent Crime and the Butterfly



Baltimore Homicides

Year	Number	Rate
2010	223	34.8
2011	196	31.1
2012	218	34.9
2013	233	37.5
2014	211	33.8
2015	344	55.4
2016	318	51.4
2017	343	57.8
2018	309	50.5
2019	348	57



Homicides 2011-2015



309 Homicides in 2018

2018: 51/100,000

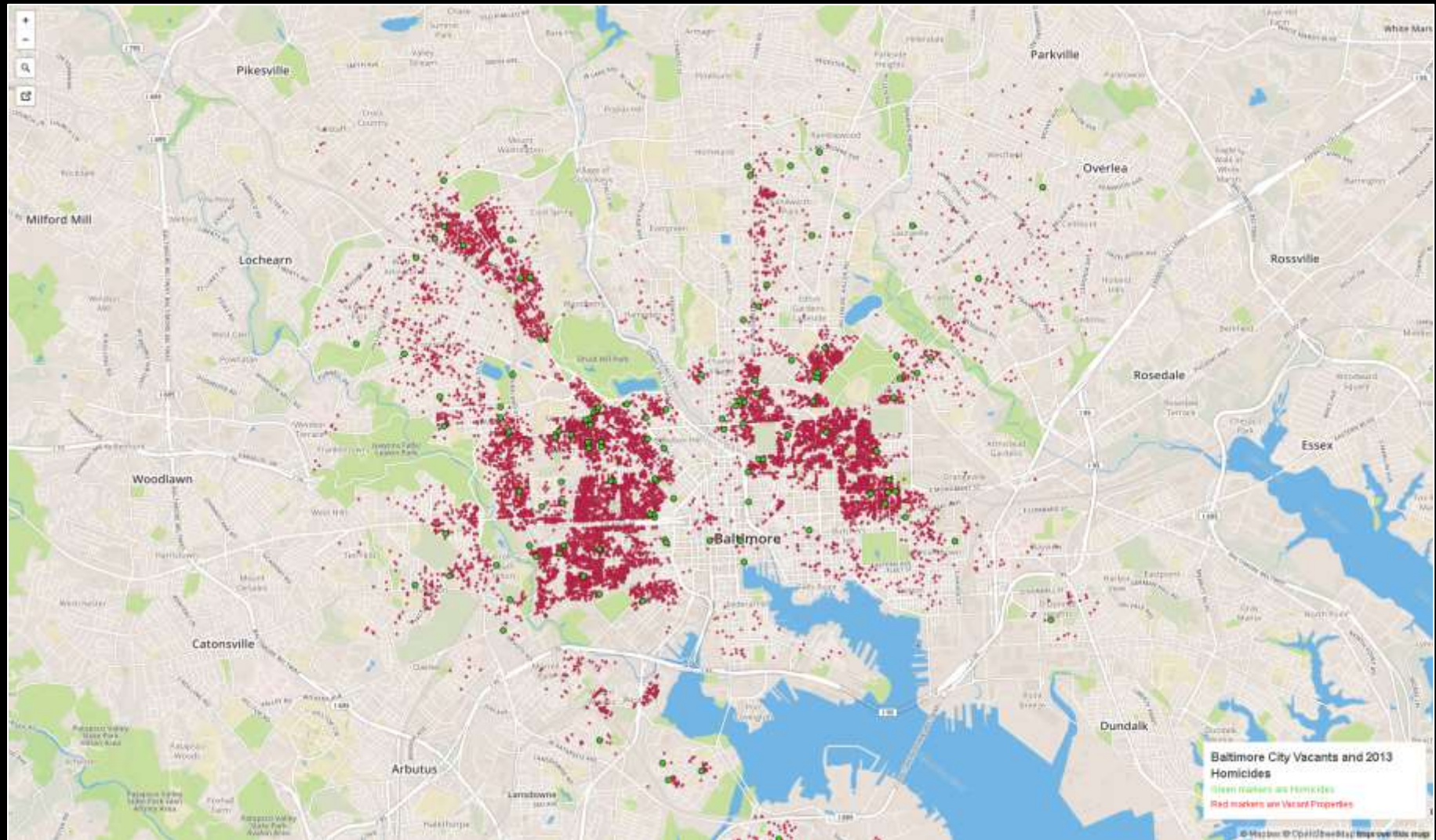


348 Homicides in 2019

2019: 57/100,000



# Overlap: Poverty, Violence and the Butterfly



Vacants vs. Homicides

Vacant Buildings vs. Homicides, 2013



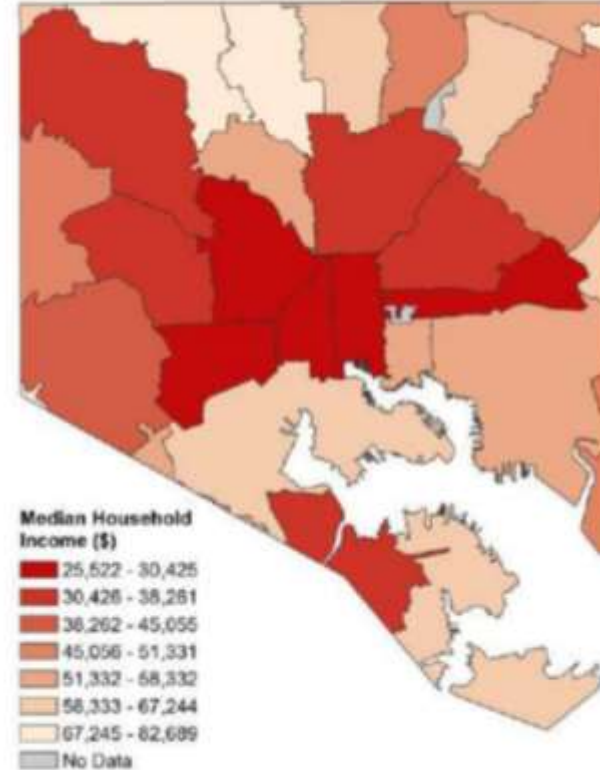
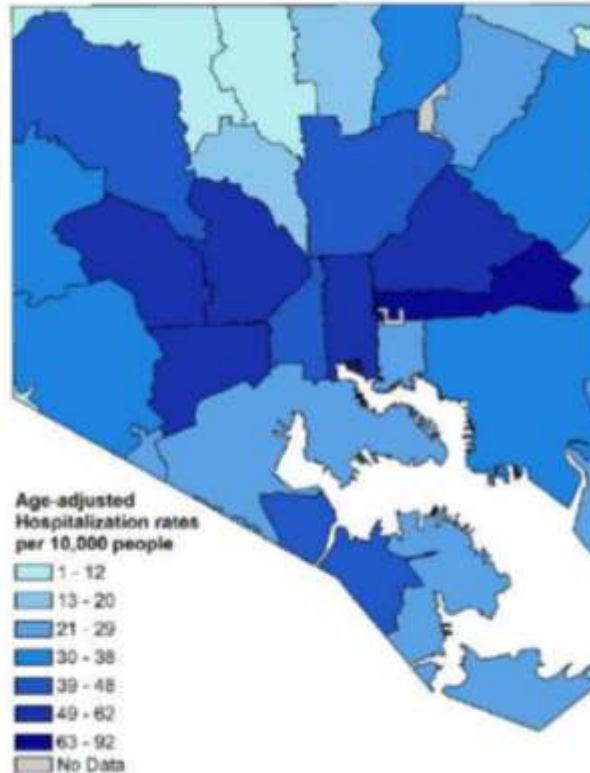
## 2013: Asthma Hospitalization Rate follows the “Butterfly”

Asthma and Air Pollution in  
Baltimore City



U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES  
CENTERS FOR DISEASE CONTROL AND PREVENTION  
NATIONAL CENTER FOR ENVIRONMENTAL HEALTH STUDIES

**Figure ES-5. 2013 Asthma Hospitalization Rates (left) and 2013 Median Household Income (right)**

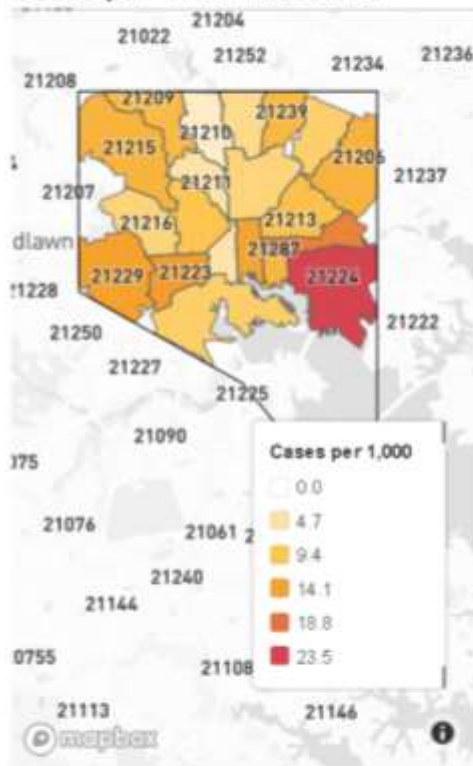


# Four Months of COVID Data: Following the Butterfly?

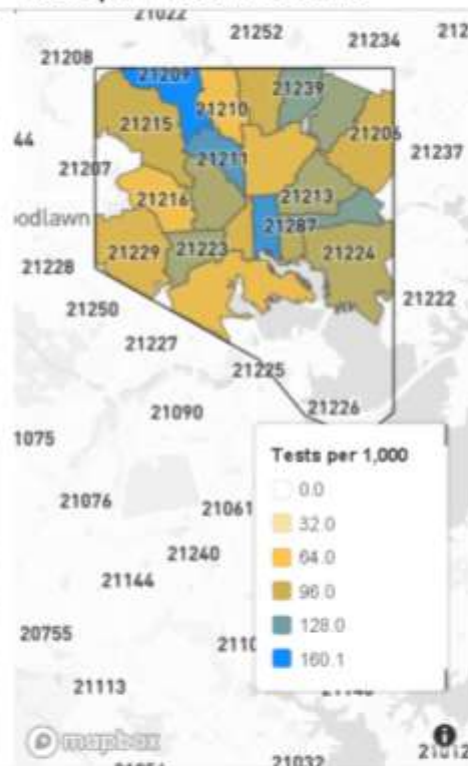
BALTIMORE  
CITY HEALTH  
DEPARTMENT

## Baltimore City COVID-19 Tracking Dashboard Cases and Test Results by ZIP Code

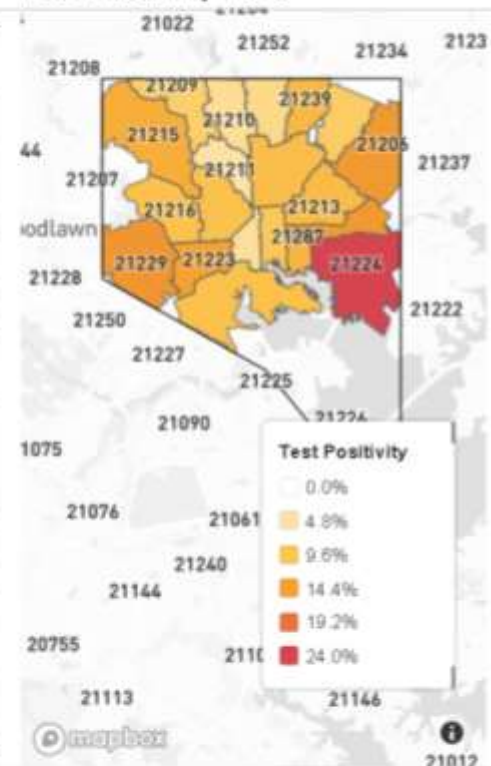
Cases per 1,000 Residents



Tests per 1,000 Residents



Test Positivity Rate



Use the bookmarks or the date slider to filter the visualizations according to the date range you wish to view.  
The most recent 7 days of data is incomplete due to the test reporting process.

- ☐ Past 7 days ☐ March ☐ June  
☐ Past 14 days ☐ April ☐ All time  
☐ Past 30 days ☐ May



ZIP Code USPS Area

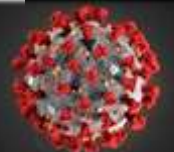
Baltimore

Inside Baltimore City Border

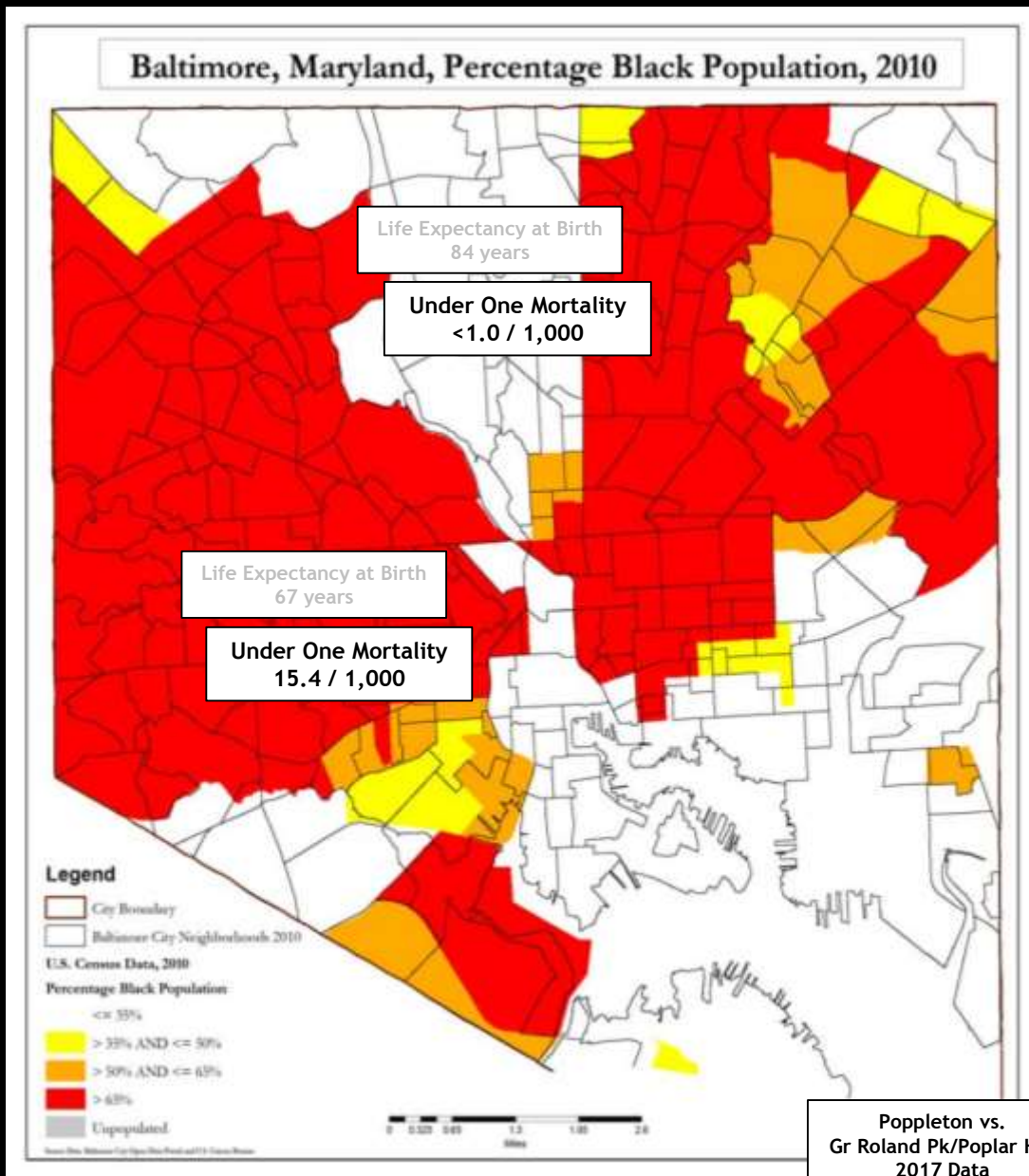
All

Population of ZIP Code

Population Greater Than 0



# Health Outcomes and the Butterfly

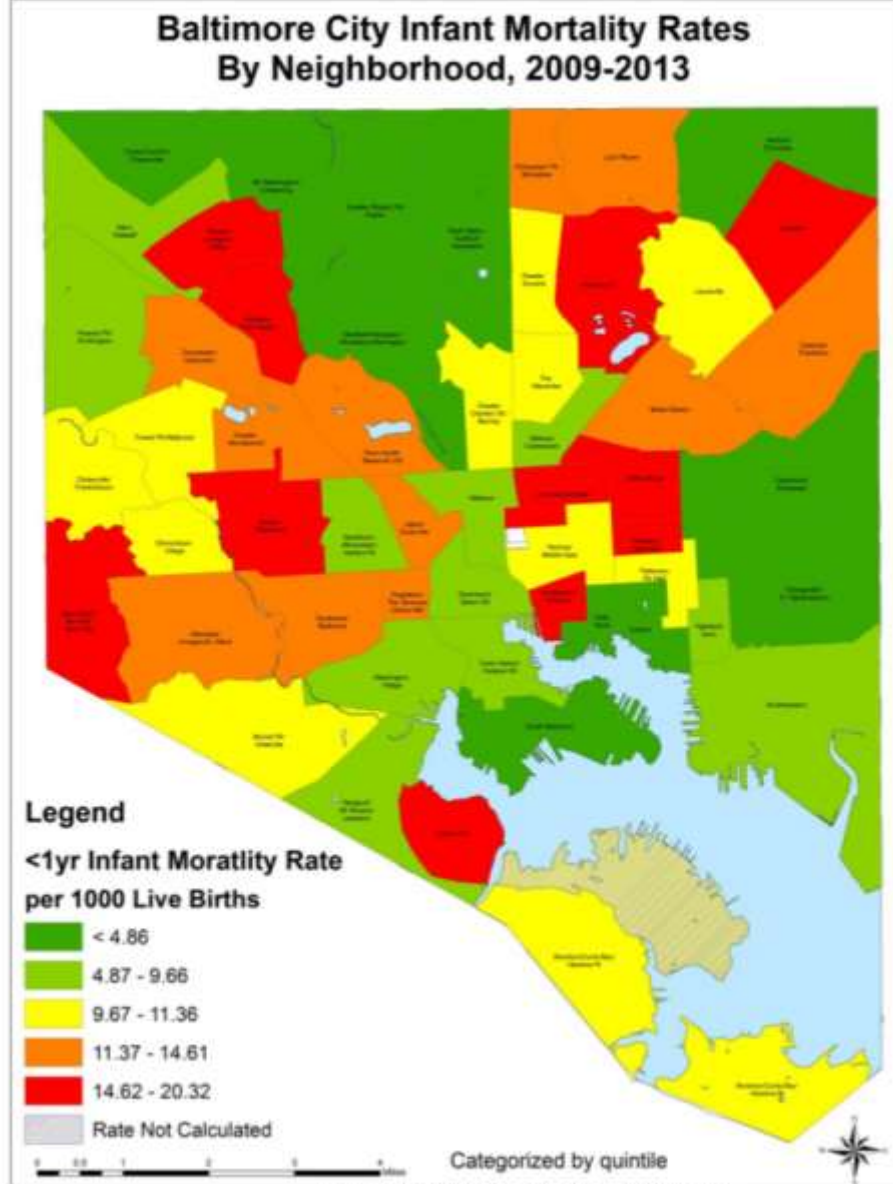


Poppleton vs.  
Gr Roland Pk/Poplar Hill  
2017 Data  
<http://bniajfi.org/>





# Infant Mortality and the Butterfly



Source: DHMH Vital Statistics Records 2009-2013  
Prepared by the Baltimore City Health Department  
Bureau of Maternal & Child Health



FETAL-INFANT  
MORTALITY REVIEW IN  
BALTIMORE CITY

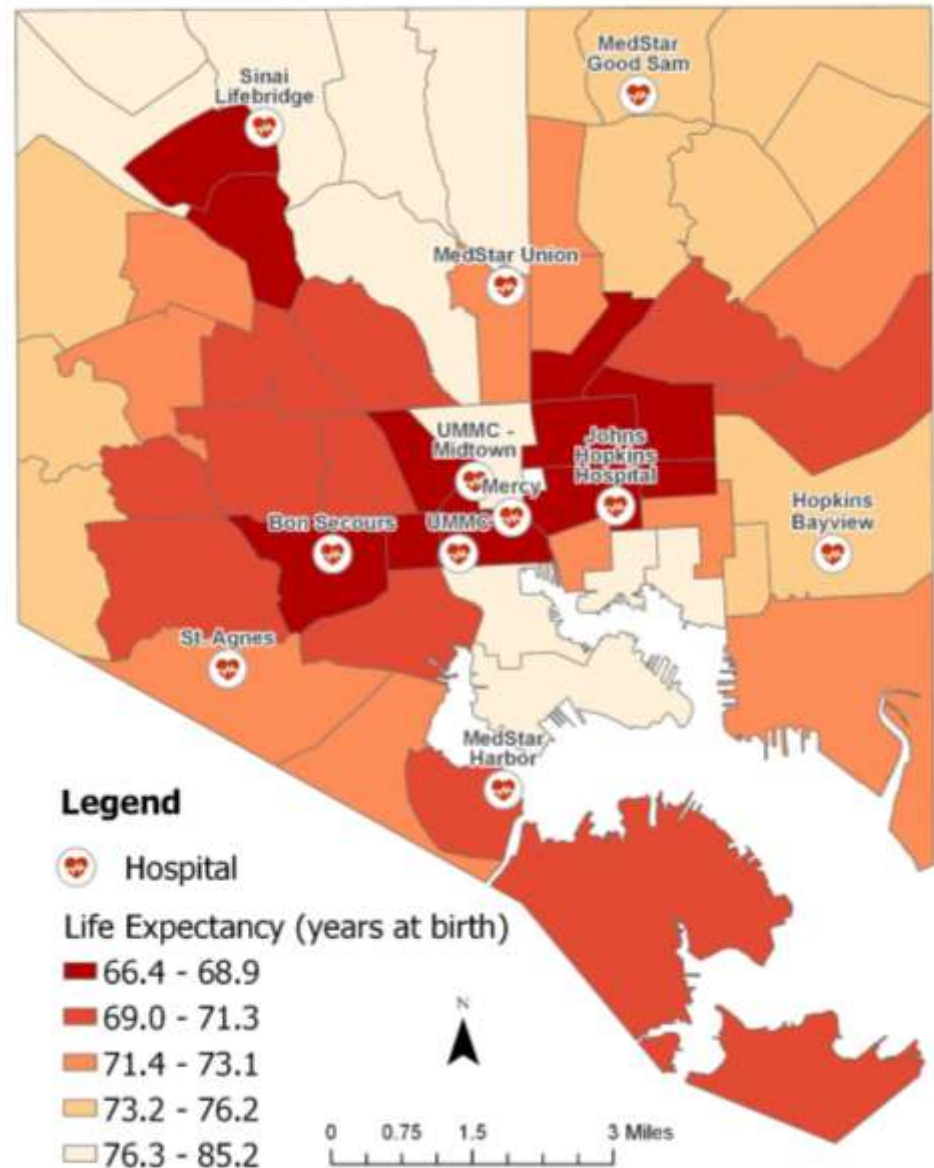
# Life Expectancy by Community Statistical Area and Hospital Locations, Baltimore City, 2012-2016

BCHD analysis of data provided by the Maryland Department of Health Vital Statistics Administration



*Bernard C. "Jack" Young*  
Mayor, Baltimore City

*Dr. Letitia Dzirasa, M.D.*  
Commissioner of Health, Baltimore City





*One Year of Life Lost  
for Every Minute Traveling South*

Poppleton vs.  
Gr Roland Pk/Poplar Hill  
2017 Data  
<http://bniajfi.org/>









Reconstruction



# Slums of Baltimore 1890

<https://collections.digitalmaryland.org/digital/collection/tcgc/id/23>

- **Germans & Irish**  
-Mid-19<sup>th</sup> century
- **Polish**  
-Fells Point
- **Russian Jews & Italians**  
-East Bank Jones Falls
- **African-Americans**  
-Hughes St. west of Fed Hill  
-Pigtown west of Camden Stn  
-Biddle Alley south of Druid St

Power G. Deconstructing the Slums of Baltimore.  
Maryland Historical Society 2002.



Slums of Baltimore



Baltimore Map

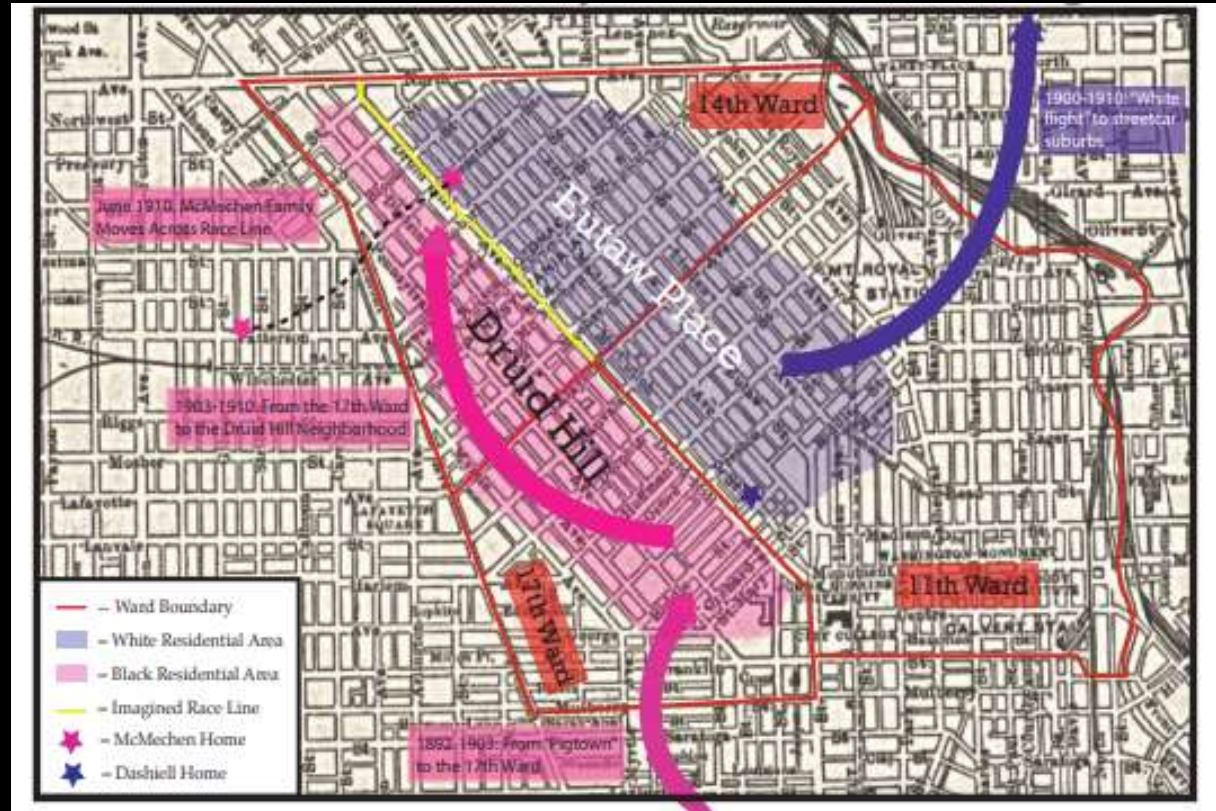




Biddle Alley



# Racially Designated Blocks 1910 to 1917



Betsy Nix, PhD



Racializing Space



1910: Baltimore Apartheid



# Restrictive Covenants 1918 to 1948



GROUP OF HOUSES SURROUNDING A PRIVATE PARK



CHERRYWOOD GARDENS IN SUMMER



ROLAND PARK PHARMACY



ROLAND PARK PRESBYTERIAN CHURCH - APPROXIMATELY 1917

- Roland Park
- Guilford
- Homeland
- Northwood

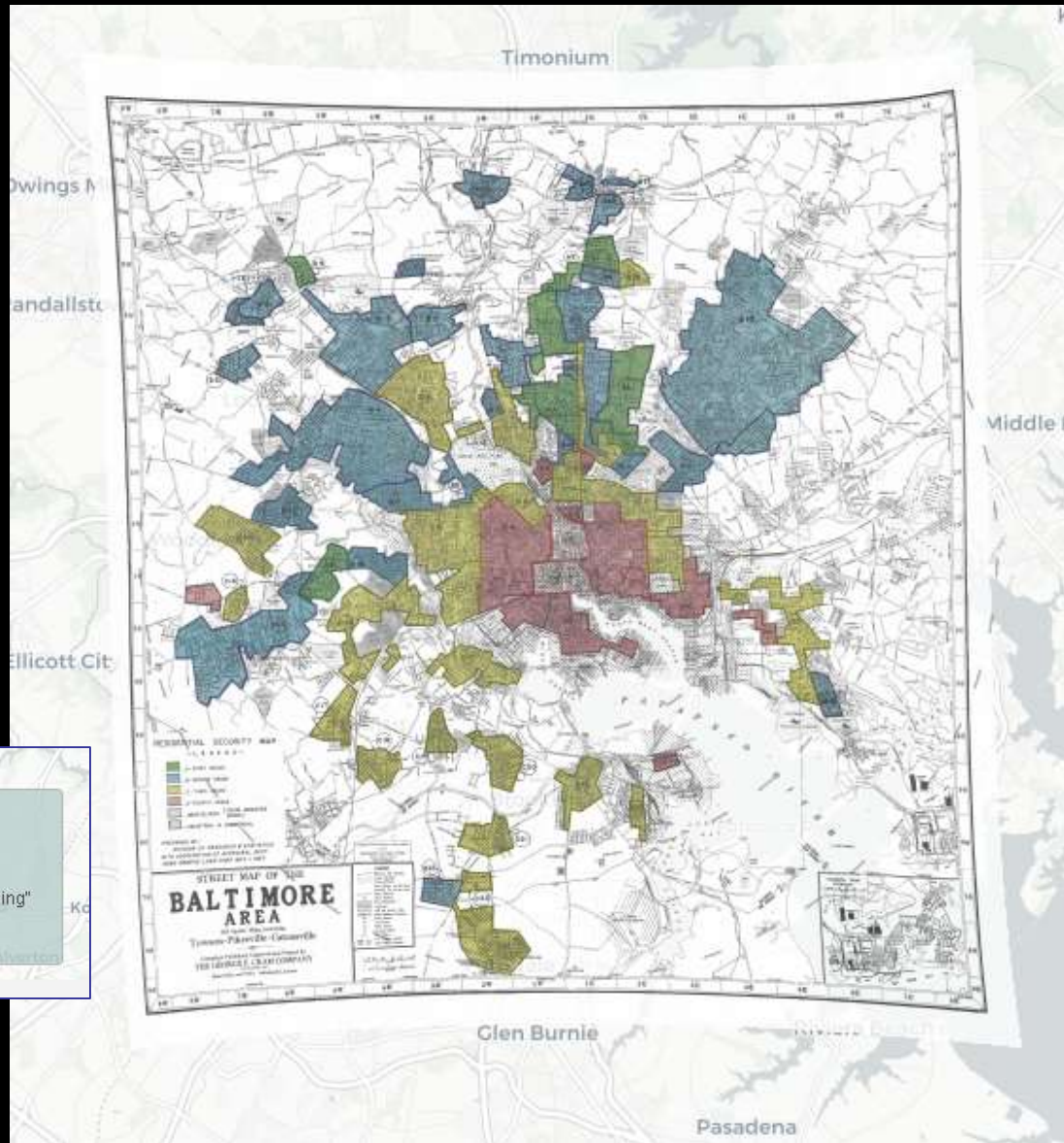


The Roland Park Company

Betsy Nix, PhD



# “Red-Lining” 1937 and after

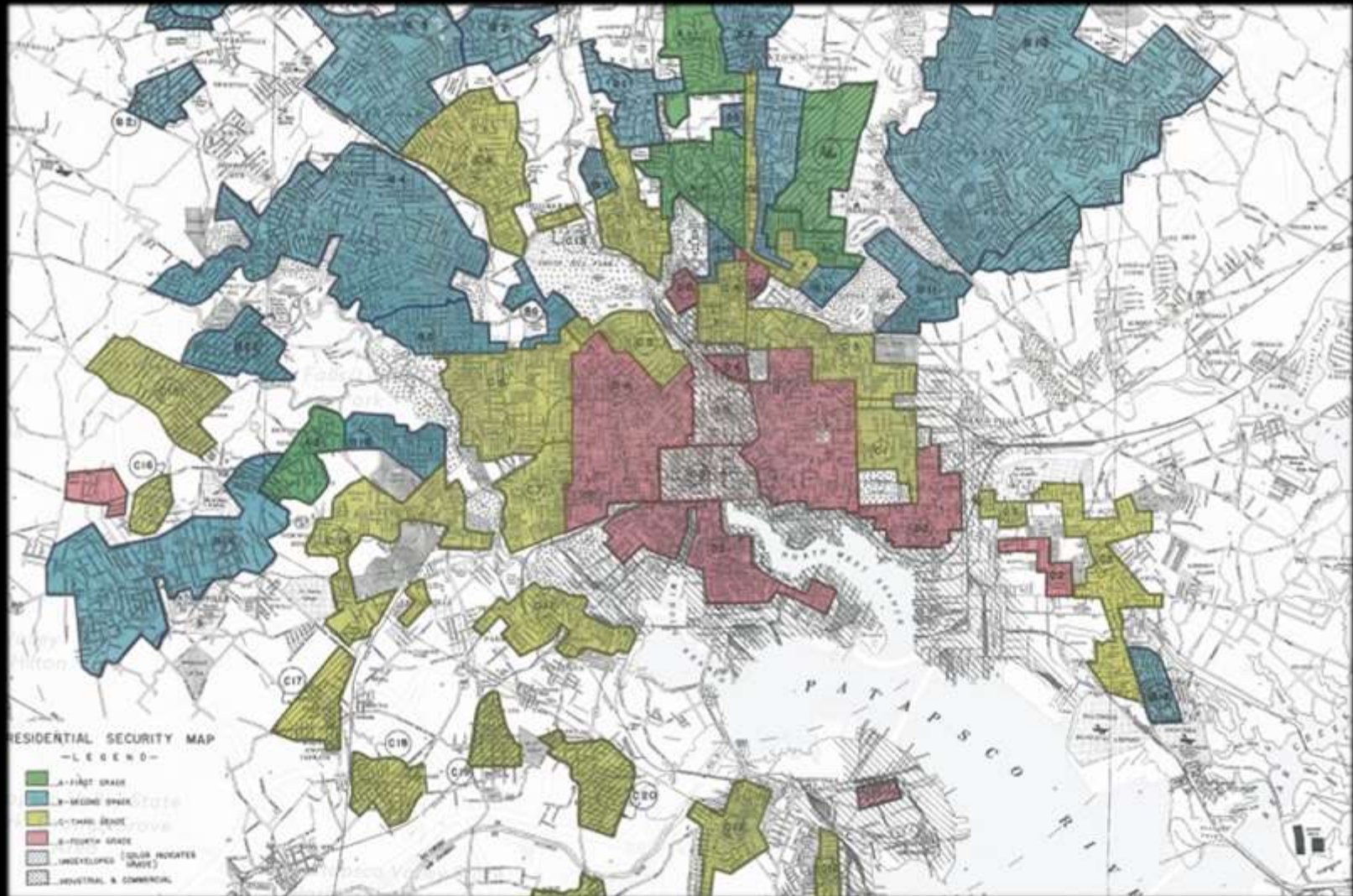


- A "Best"
- B "Still Desirable"
- C "Definitely Declining"
- D "Hazardous"



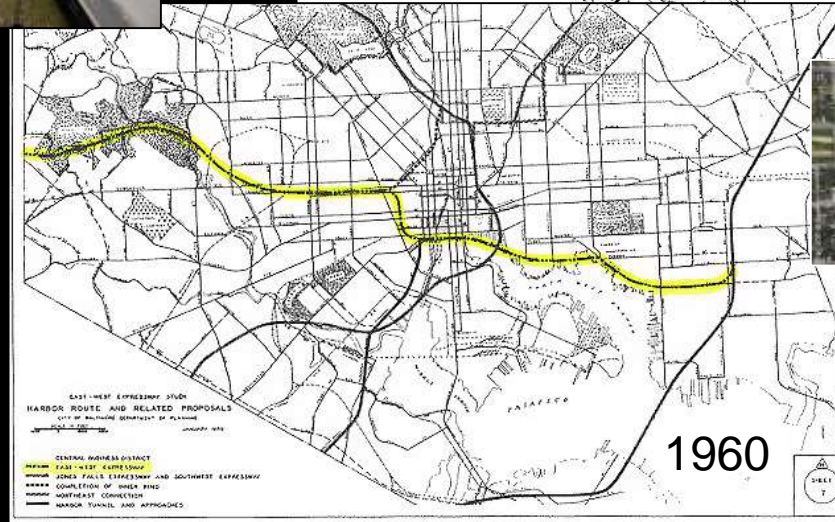
Redlining

# “Red-Lining” 1937 and After





# Roads 1957 “East/West” Highway



Betsy Nix, PhD



The Baltimore East/West Highway



Thesis: Highway to Nowhere



# Real Estate Practices: “Blockbusting”



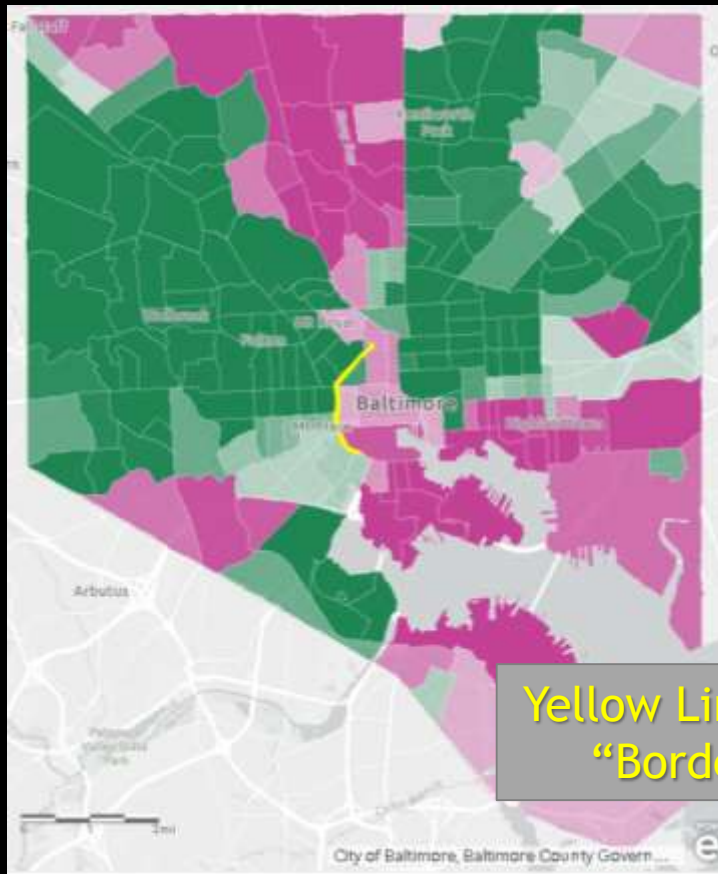
Saturday Evening Post  
July 14-21, 1962

# Revitalization: 1958, 1976, 2017



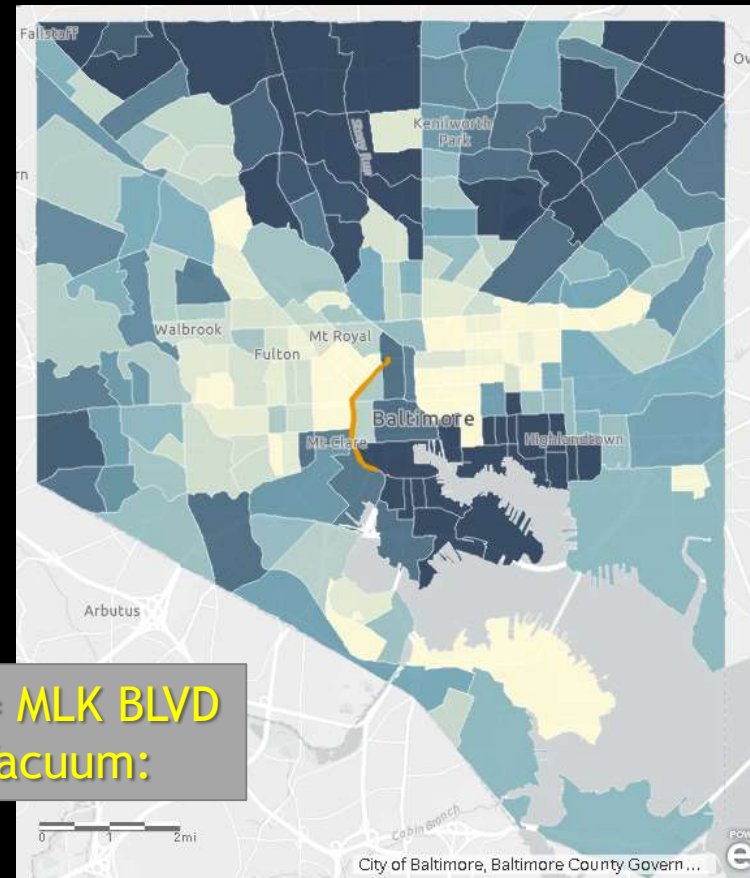
Inner Harbor Revitalization

# Significance of Martin Luther King Boulevard



Yellow Line = MLK BLVD  
“Border Vacuum:

Racial Difference:  
Green African American  
Pink Euro-American  
(Darker the shade the greater the %)



Household Income  
Darker the blue > household income

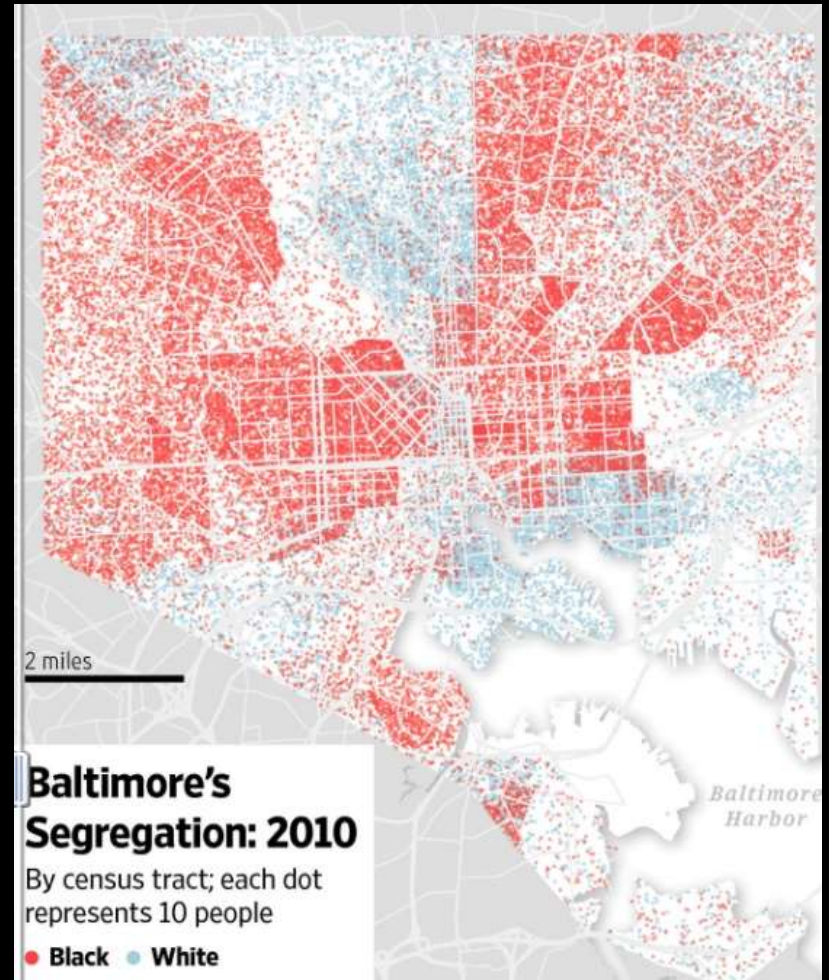
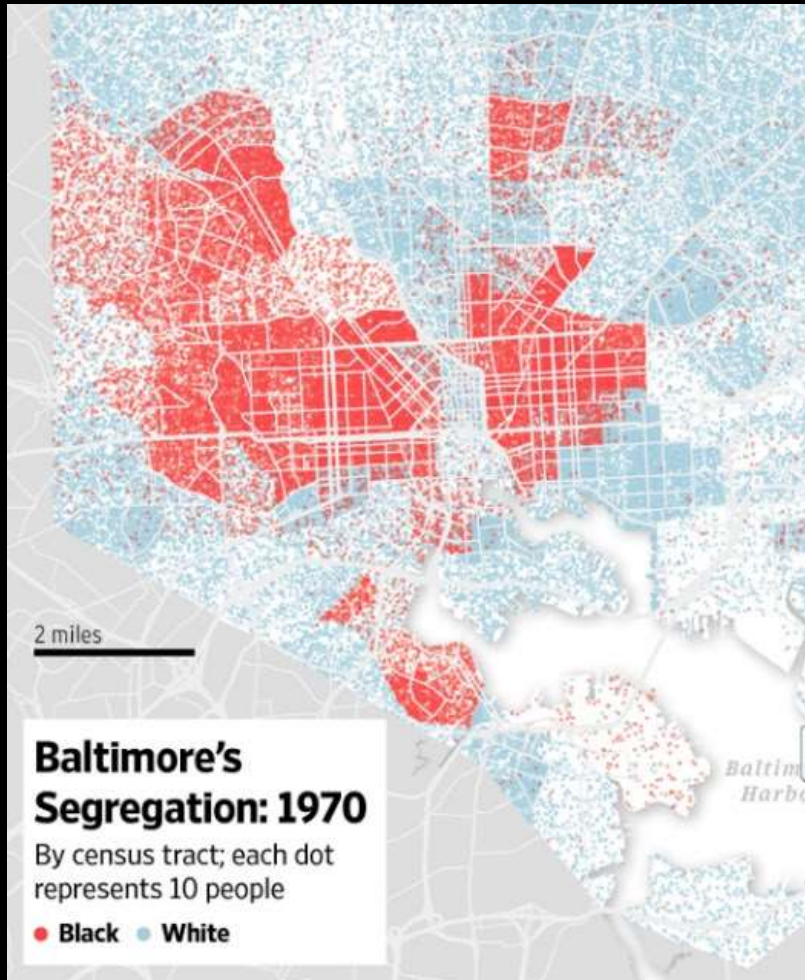


MLK Blvd as a “border vacuum”





# Progress?



# Implicit bias.

Arise from unconscious beliefs.

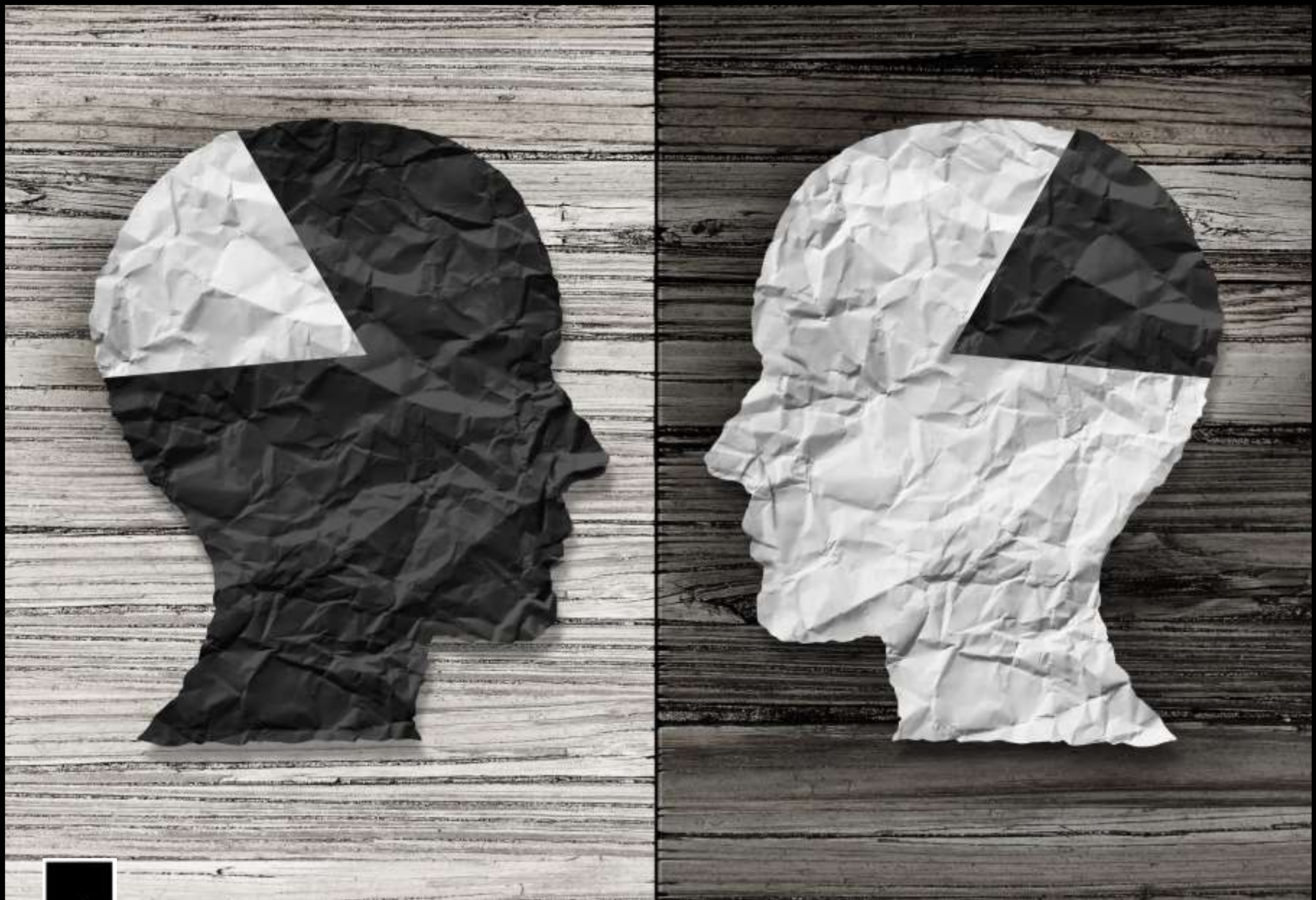
- Skin-tone ('Light Skin - Dark Skin' IAT)
- Native American IAT
- Presidents IAT
- Race IAT
- Weapons IAT
- Age IAT
- Religion IAT
- Arab-Muslim IAT
- Gender-Science IAT
- Gender-Career IAT
- Asian IAT
- Sexuality IAT
- Weight IAT
- Disability IAT



Implicit Association Test



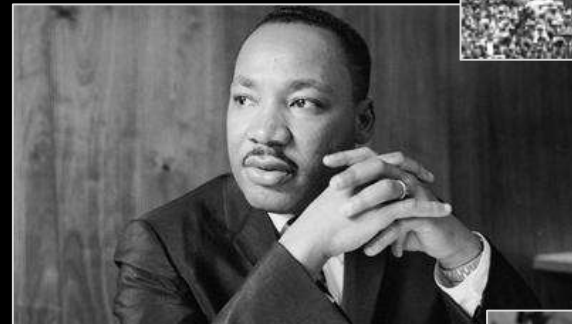






*“People fail to get along  
because they fear each other;  
they fear each other  
because they don’t know each other;  
they don’t know each other  
because they have not  
communicated with each other.”*

— Martin Luther King, Jr





# Listen & Learn.





# Stand.



# Speak.



# Invest & Enlist.







# thread

THE NEW SOCIAL FABRIC



Thread

## SPECIAL ARTICLES

### Science and Empiricism in Pediatrics

Richard B. Goldbloom, MD, FRCP

From the Department of Pediatrics, Dalhousie University, Halifax, Nova Scotia, Canada

Whatever the duration of your experience in looking after children, it doesn't take many years before you can look back with some amusement on abandoned practices in child care. The further you retrospect, the more ludicrous some of the antique routines seem—proving the fundamental equation that comedy equals tragedy plus time.

As we read or listen to scientific presentations laden with chi-squares and *P* values—measures of a significance that is sometimes more mathematical than real—we might easily be lulled into believing

One of our peculiar inconsistencies is that the rigor with which we apply the rules of scientific proof is highly situational. Before we allow a new vaccine or antibiotic to be released for use among the general public, we and our governments insist on the critical review and publication of carefully-controlled trials, first in laboratory animals and finally in groups of consenting humans. We do this to ensure efficacy, effectiveness, and efficiency. But let someone describe a new surgical procedure for

correcting an old wart on one's forehead and for a

**“Each of us bears a personal responsibility to leave the state of pediatric care better than we found it.”**

Goldbloom R. *Pediatr* 1984;73:693-698





***“Each of us bears a personal responsibility to leave  
Baltimore and the people of Baltimore  
better than we found them.”***



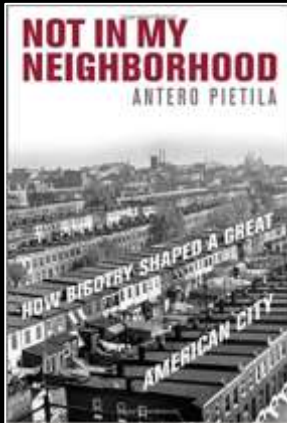




# To Learn More...

# This is Baltimore.

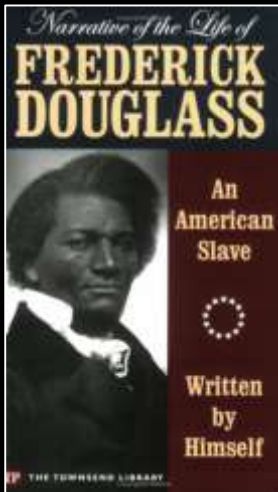
Chuck Callahan, DO, FAAP  
UMMC Population Health  
charlescallahan@umm.edu



How racism drove economics and real estate development in Baltimore.



The book that inspired “*The Wire*.”  
A year in the life of the drug culture and those it affected.



Autobiography of one of America’s most famous former-slaves, who grew up and labored in Baltimore.

True story of a man who reinvented his life while serving a life sentence.  
Now a Baltimore community leader

