

# The Policing of the “Reserve Army”

## Economic Inequality and Police Killings

Matthew A. Carson

May 21, 2024

# Table of Contents

1 Research Question and Design

2 Literature Review

3 Findings: Race and Tract Income

4 Findings: Gentrification

5 Discussion

## Research Question

- How does class, economic inequality, and gentrification contribute to the incidence of police killings in the US?

# Research Question

- How does class, economic inequality, and gentrification contribute to the incidence of police killings in the US?
  - There are sharp racial disparities.
  - But what are the economic dimensions?

# Research Question

- How does class, economic inequality, and gentrification contribute to the incidence of police killings in the US?
  - There are sharp racial disparities.
  - But what are the economic dimensions?
    - I'm interested specifically in looking at place.

# Research Question

- How does class, economic inequality, and gentrification contribute to the incidence of police killings in the US?
  - There are sharp racial disparities.
  - But what are the economic dimensions?
    - I'm interested specifically in looking at place.
  - How do processes of gentrification contribute to rates of police killings?

## Research Design: Data Sources

- US Census American Community Survey
  - Median Family Income in tracts
  - Racial composition of tracts

# Research Design: Data Sources

- US Census American Community Survey
  - Median Family Income in tracts
  - Racial composition of tracts
- FatalEncounters.org
  - List of people killed by law enforcement in the US
  - Compiled by journalists – FBI data not reliable
  - Includes latitude and longitude
  - Years in this study 2015–2020, inclusive

# Research Design: Data Sources

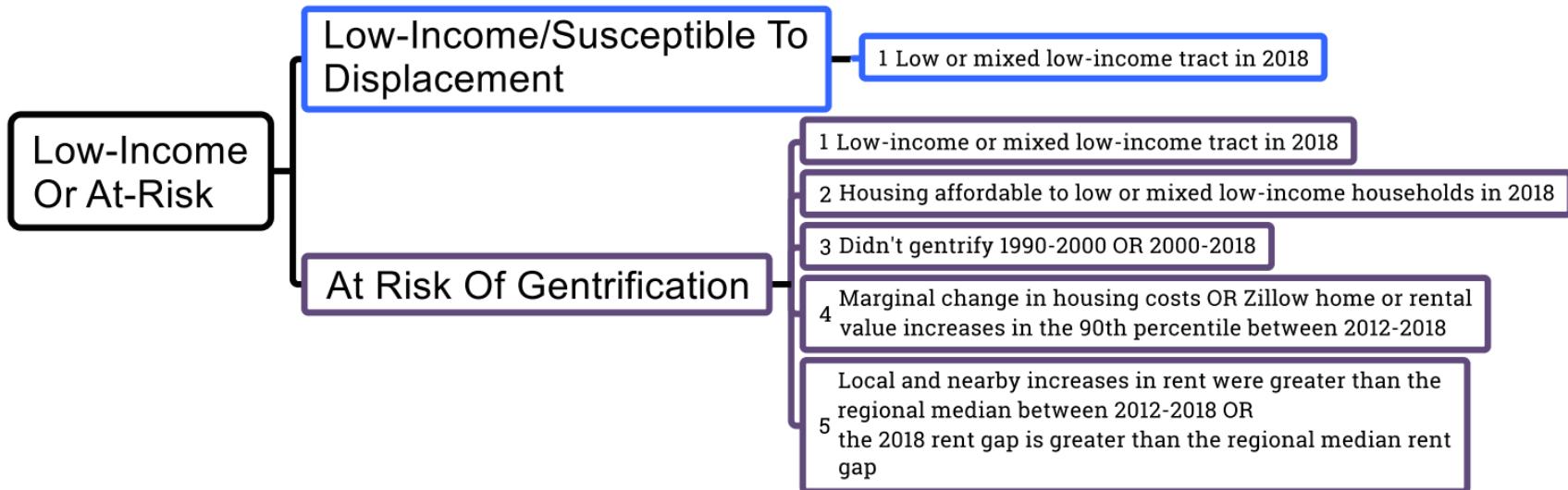
- US Census American Community Survey
  - Median Family Income in tracts
  - Racial composition of tracts
- FatalEncounters.org
  - List of people killed by law enforcement in the US
  - Compiled by journalists – FBI data not reliable
  - Includes latitude and longitude
  - Years in this study 2015–2020, inclusive
- Urban Displacement Project Typologies
  - Condensed into three typologies
    - Low-Income or At-Risk
    - Gentrifying
    - Stable

# Research Design: Definitions

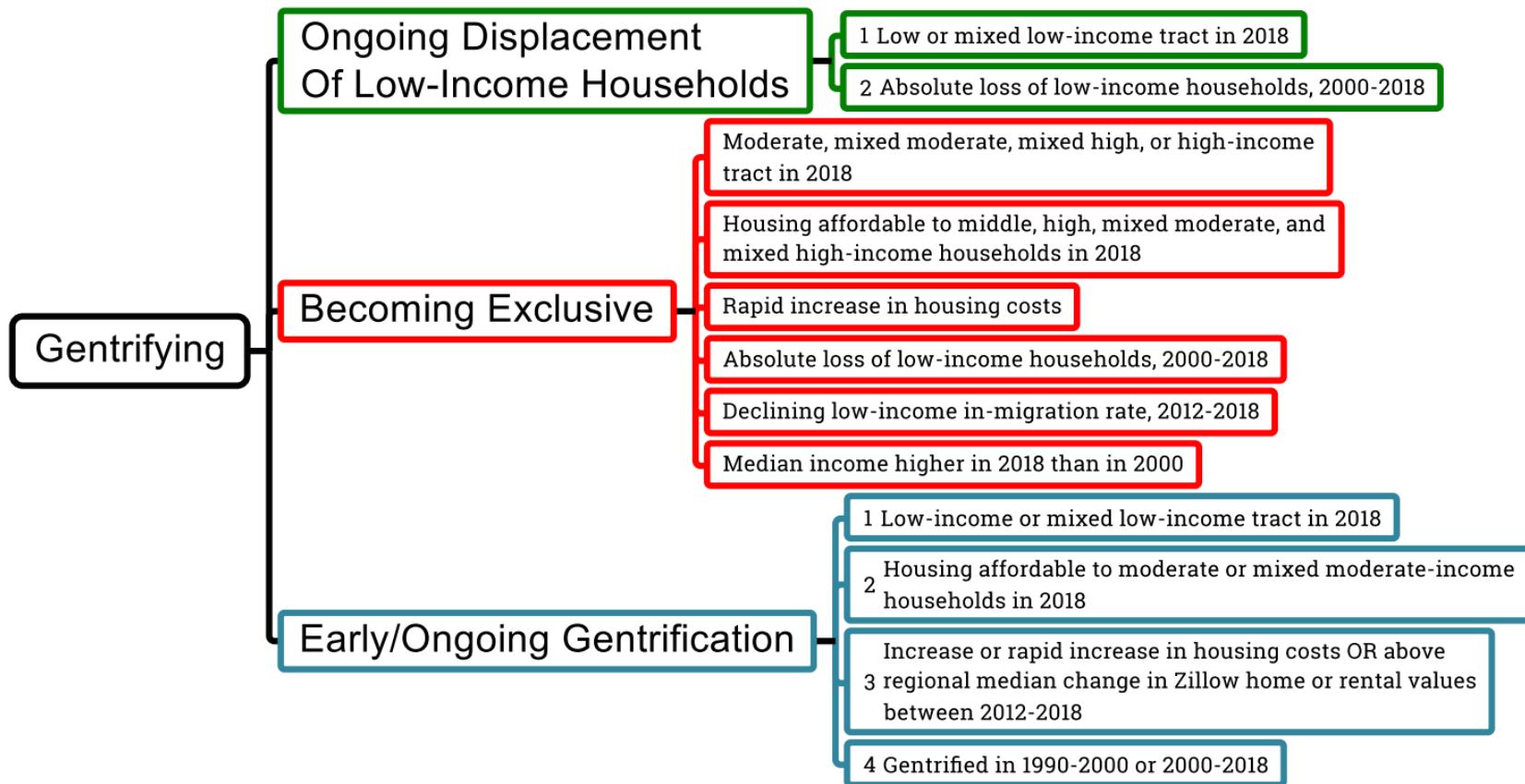
- Lethal Use of Force (LUOF)

- Include: Level of Force Applied
  - tasered, gunshot, stabbed, asphyxiated/restrained, beaten/bludgeoned with an instrument, chemical agent/pepper spray, asphyxiation/restrained, or less than lethal force.
- Exclude: Cause
  - vehicle, fell from a height, drowned, medical emergency, other, burned/smoke inhalation, drug overdose, and undetermined.

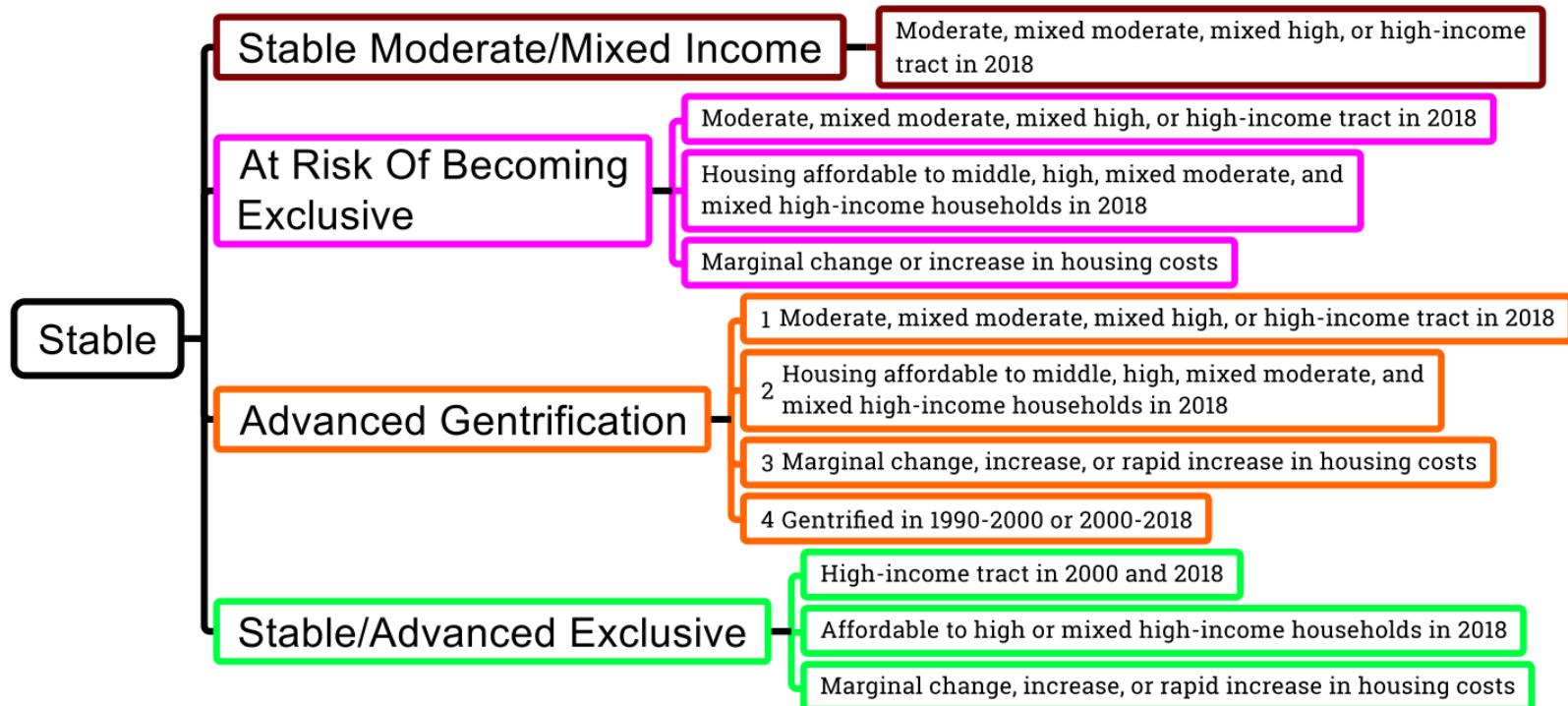
# Research Design: Gentrification



# Research Design: Gentrification



# Research Design: Gentrification



## Research Design: Hypotheses

**H<sub>1</sub>:** LUOF rates should vary more substantially by income quintiles within each racial group than by racial groups within each income quintile. The lowest income quintiles should have the highest LUOF rates.

## Research Design: Hypotheses

- H<sub>1</sub>:** LUOF rates should vary more substantially by income quintiles within each racial group than by racial groups within each income quintile. The lowest income quintiles should have the highest LUOF rates.
  
- H<sub>2</sub>:** Tracts experiencing gentrification or vulnerable to becoming gentrified should experience higher rates of LUOF than tracts that are not experiencing gentrification, regardless of the racial composition of the tract.

# Table of Contents

1 Research Question and Design

2 Literature Review

3 Findings: Race and Tract Income

4 Findings: Gentrification

5 Discussion

## Literature Review

- Cedric Johnson (2016; 2019; 2023)
- Wacquant (2010)
- J. Feldman (2020) and J. M. Feldman et al. (2019)

# Table of Contents

1 Research Question and Design

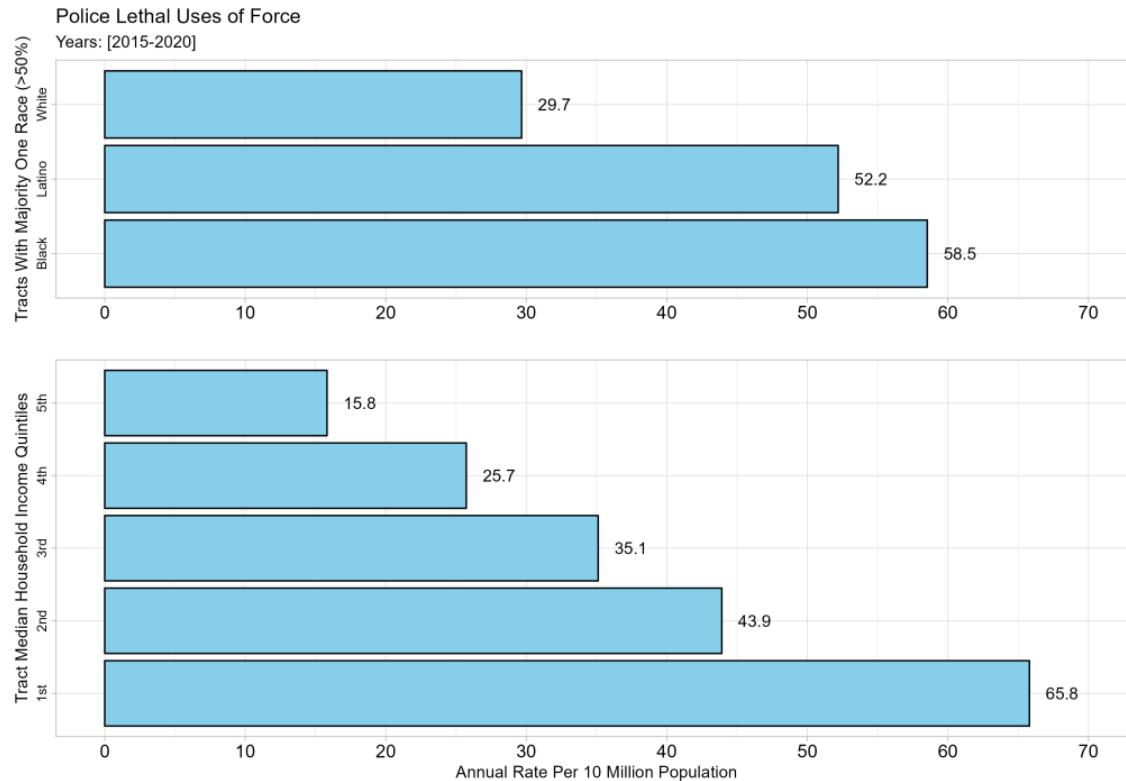
2 Literature Review

3 Findings: Race and Tract Income

4 Findings: Gentrification

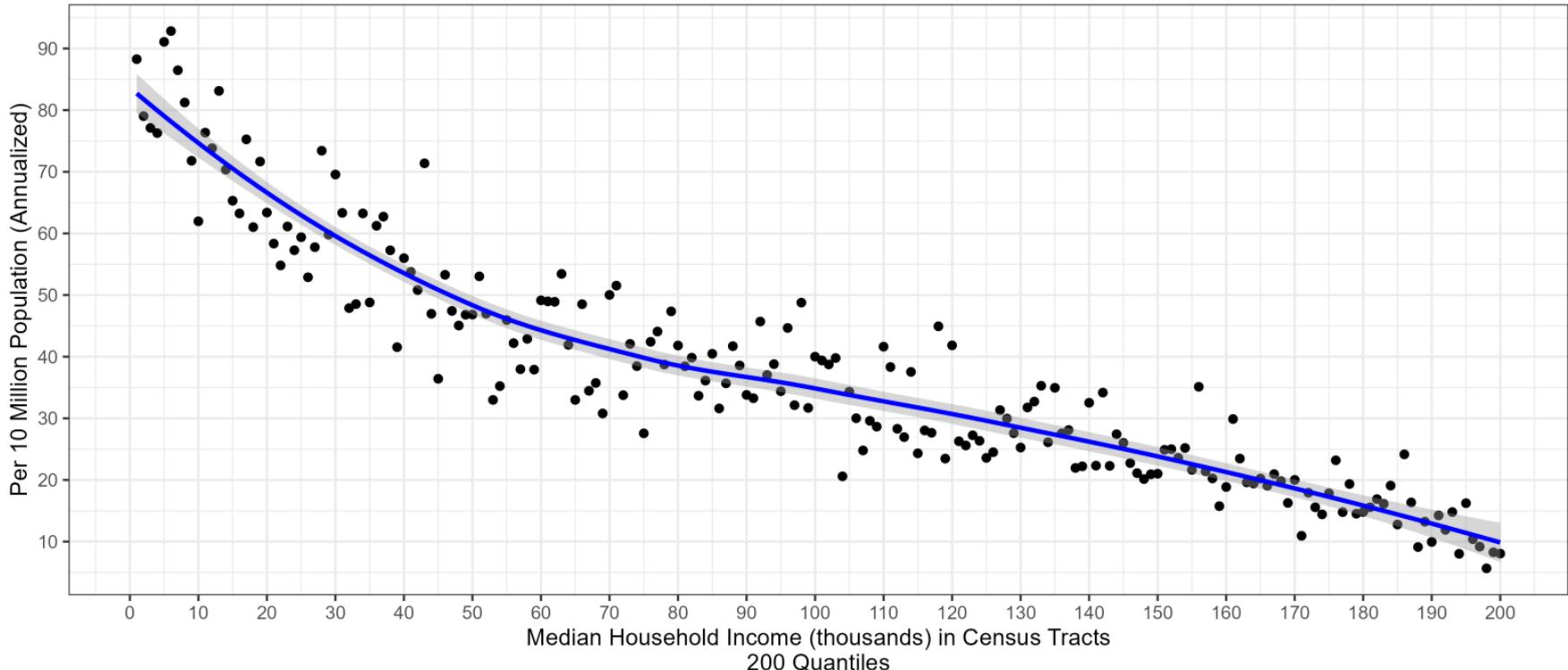
5 Discussion

## Findings: Rates by Race/Ethnicity



# Findings: Median Household Income

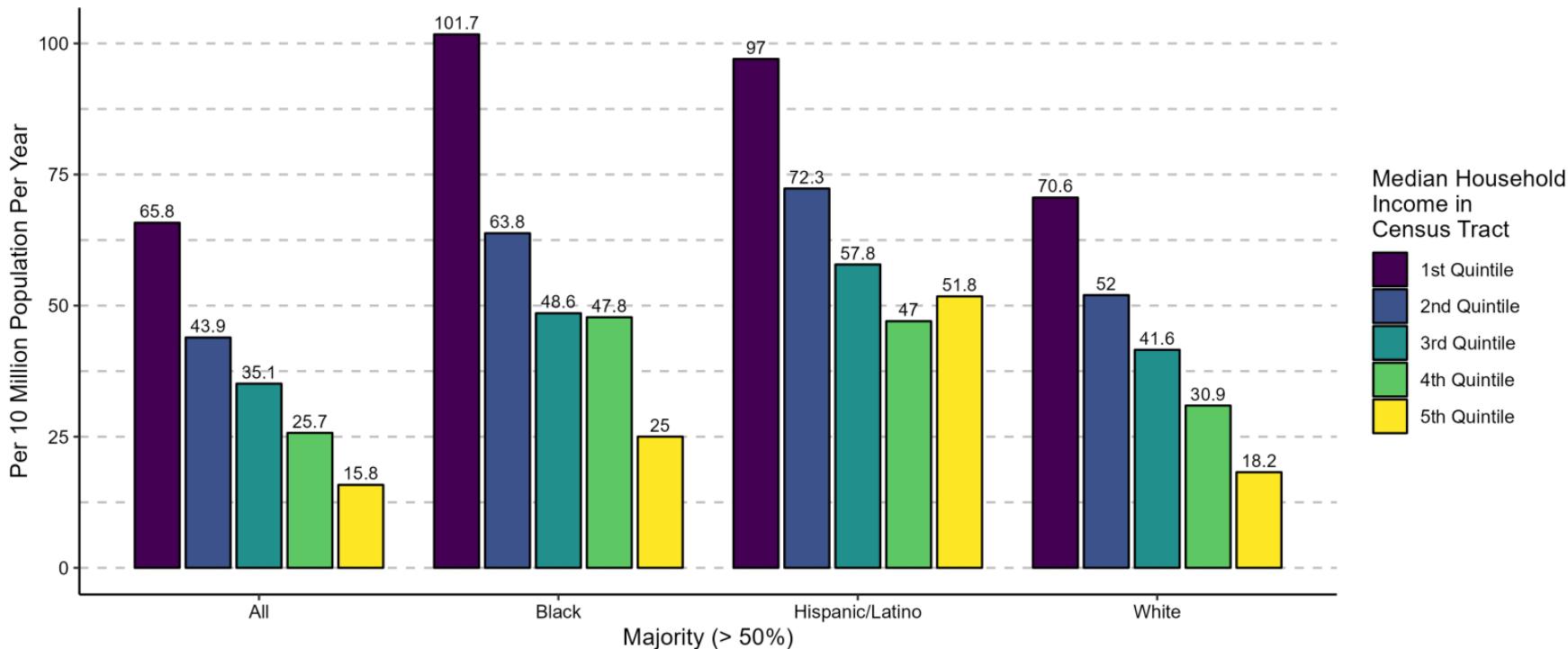
Lethal Uses of Force by Census Tract Income Quantiles



# Findings: Majority Race and Income

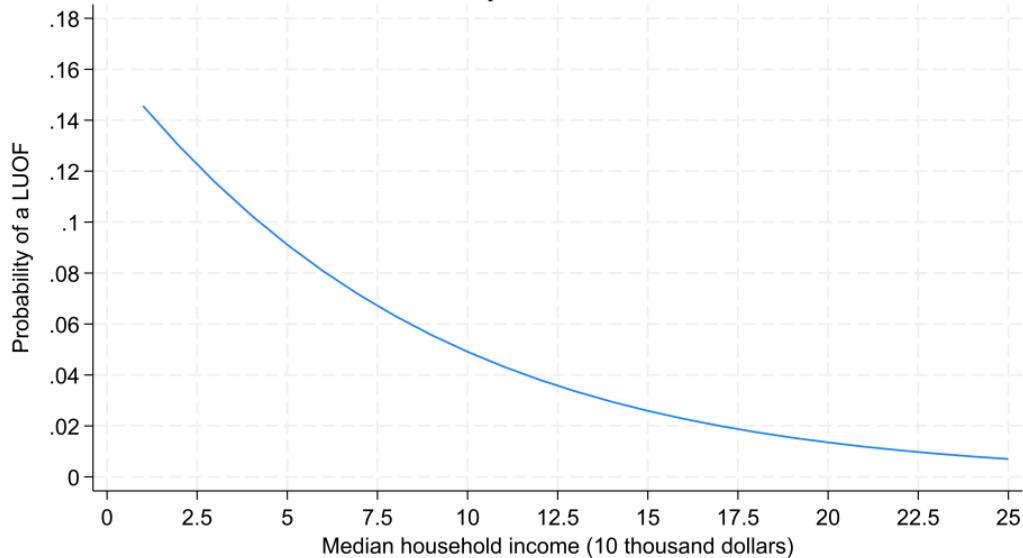
## Rate of Police Lethal Uses of Force

Years: [2015-2020]



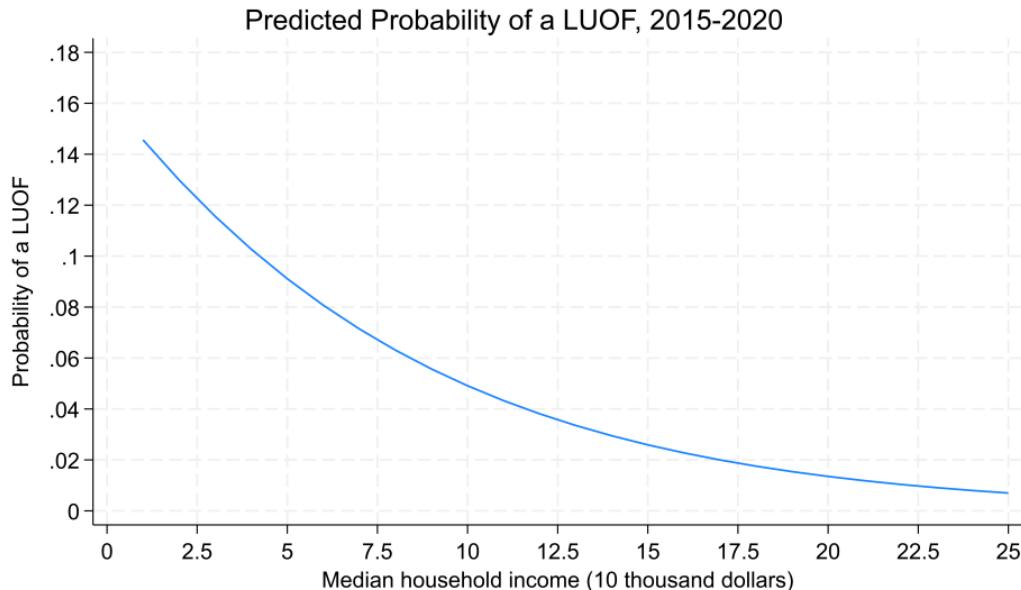
# Logistic Regression: Income Only

Predicted Probability of a LUOF, 2015-2020



Log likelihood: -21947.515		Dependent Var: LUOF $\geq 1$			
Number of obs: 82,907		LR chi2(1): 875.58			
Prob > chi2: 0.0000		Pseudo R2: 0.0196			
Term	Coefficient	Std. err.	z	P> z	[95% conf. interval]
Income (10k)	-0.1326502	0.0048988	-27.08	0.000	-0.1422516 -0.1230488
Intercept	-1.636736	0.0319747	-51.19	0.000	-1.699406 -1.574067

# Logistic Regression: Income Only



Log likelihood: -21947.515		Dependent Var: LUOF $\geq 1$			
Term	Coefficient	Std. err.	z	P> z	[95% conf. interval]
Income (10k)	-0.1326502	0.0048988	-27.08	0.000	-0.1422516 -0.1230488
Intercept	-1.636736	0.0319747	-51.19	0.000	-1.699406 -1.574067

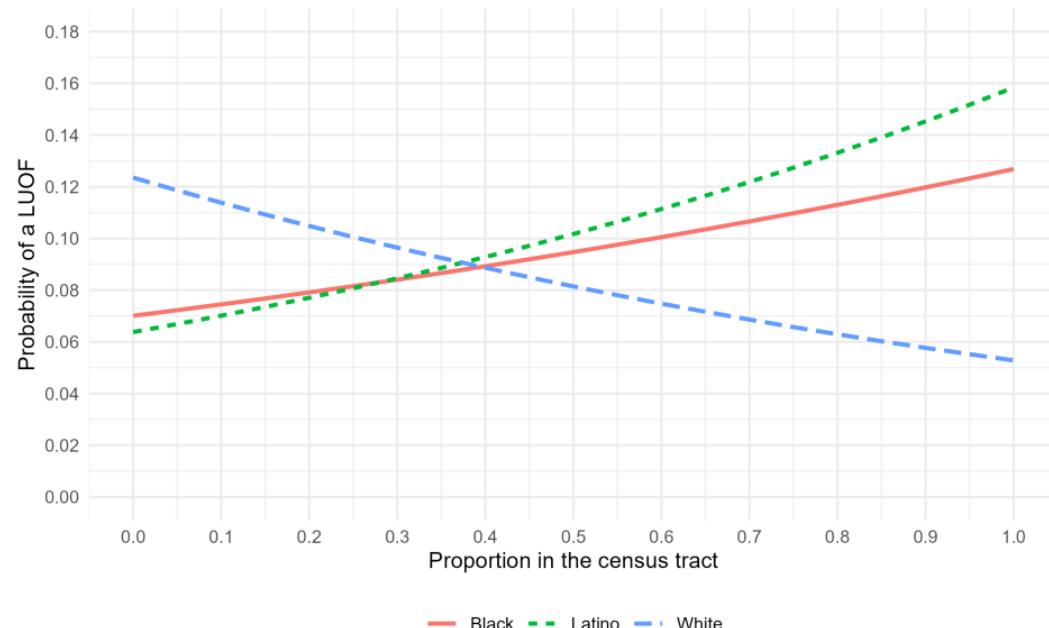
$$e^{-0.1326502} = 0.8758$$

$$0.8758 - 1 = -0.1242$$

For every \$10k in income  $\rightarrow 12.42\%$  decrease in the odds of a census tract experiencing at least one LUOF.

# Logistic Regressions: Race/Ethnicity

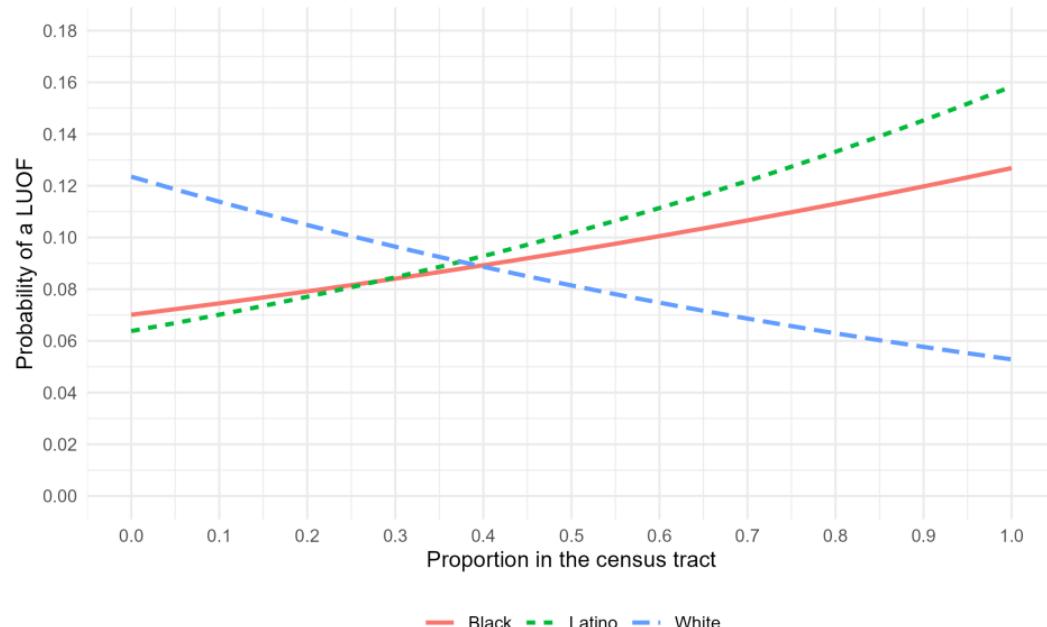
Predicted Probability of a LUOF, 2015-2020



Dependent Var: LUOF $\geq 1$						
Proportion	Coefficient	Std. err.	z	P >  z	[95% conf. interval]	
Black	0.655957	0.055286	11.86	0.000	0.547598	0.764316
White	-0.926671	0.041876	-22.13	0.000	-1.008746	-0.844597
Latino	1.015783	0.051397	19.76	0.000	0.915046	1.116519

# Logistic Regressions: Race/Ethnicity

Predicted Probability of a LUOF, 2015-2020



Dependent Var: LUOF  $\geq 1$

Proportion	Coefficient	Std. err.	z	P >  z	[95% conf. interval]
Black	0.655957	0.055286	11.86	0.000	0.547598 0.764316
White	-0.926671	0.041876	-22.13	0.000	-1.008746 -0.844597
Latino	1.015783	0.051397	19.76	0.000	0.915046 1.116519

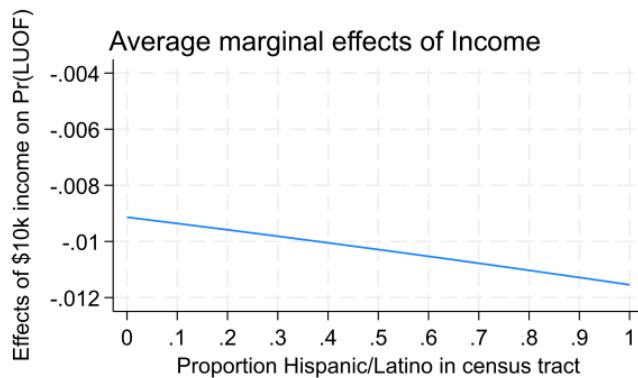
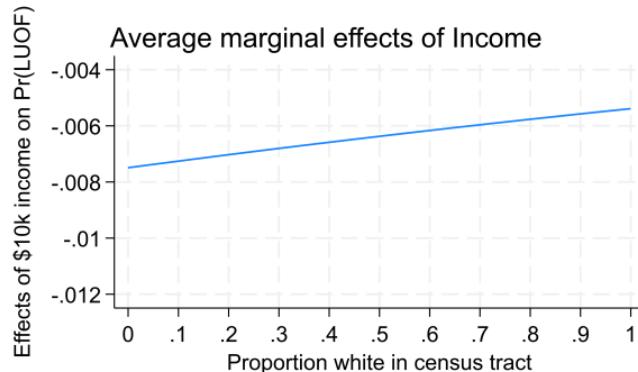
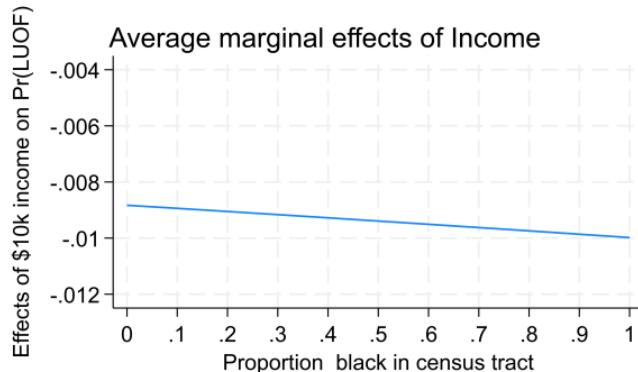
Change in odds for every 0.10 in proportion:

$$\text{Black: } e^{0.655957 \times 0.1} - 1 = 0.06779 \rightarrow 6.78\%$$

$$\text{White: } e^{-0.926671 \times 0.1} - 1 = -0.0885 \rightarrow -8.85\%$$

$$\text{Latino: } e^{1.015783 \times 0.1} - 1 = 0.1069 \rightarrow 10.69\%$$

# Logistic Regressions: Marginal Effects



# Table of Contents

1 Research Question and Design

2 Literature Review

3 Findings: Race and Tract Income

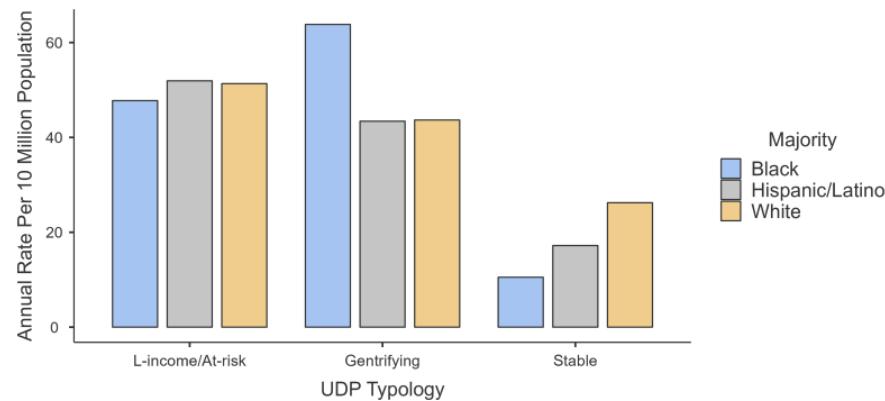
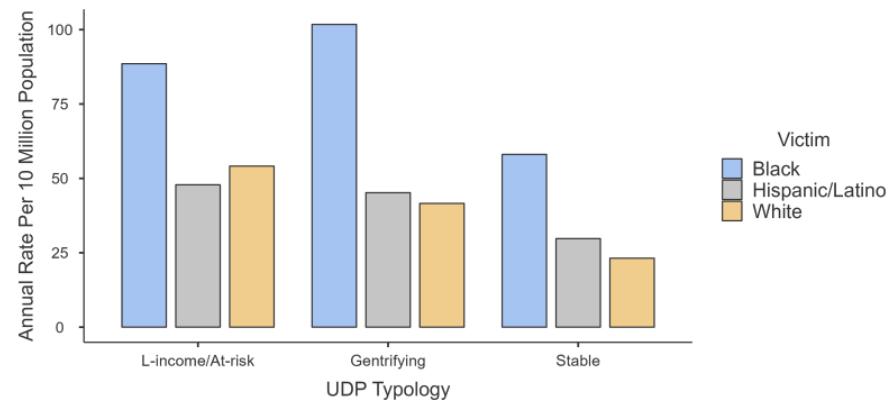
4 Findings: Gentrification

5 Discussion

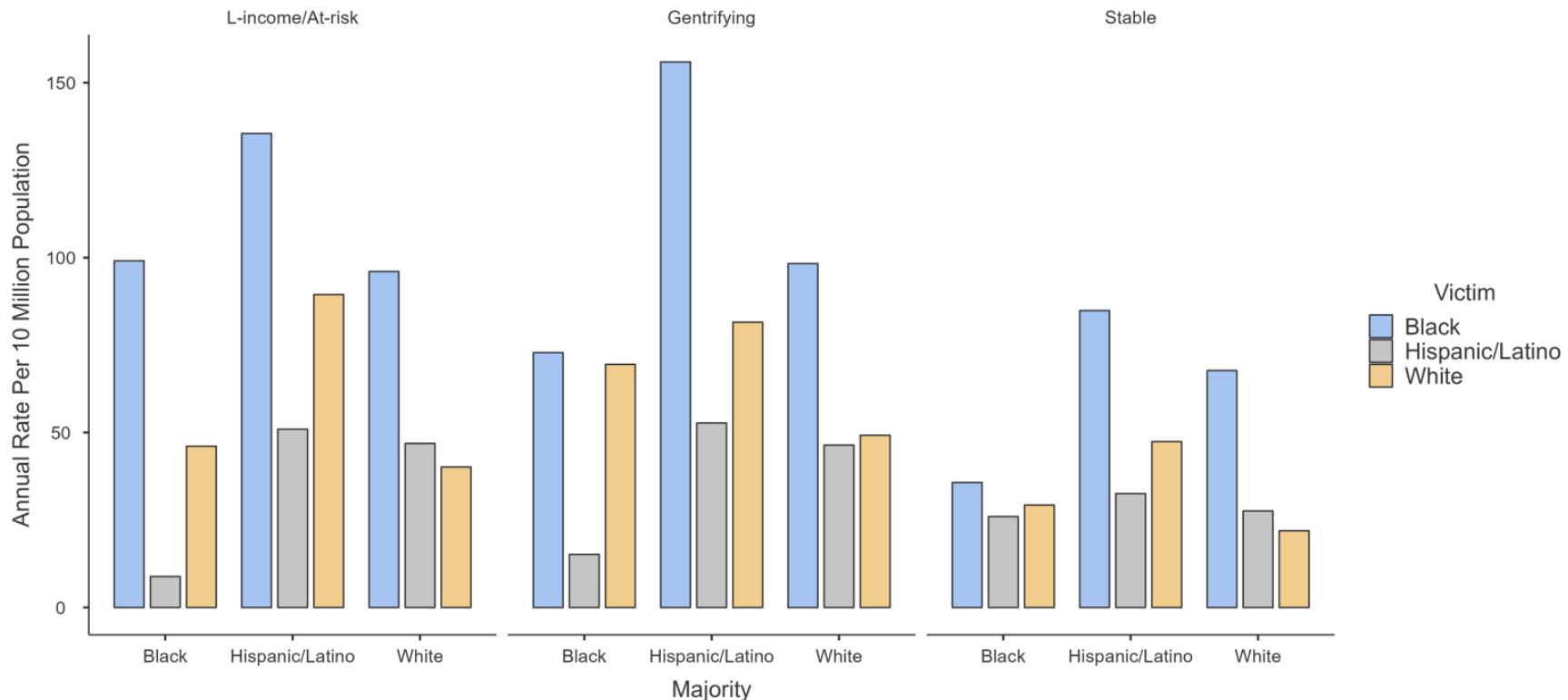
## Gentrification Typologies

Typology	LUOF Count	Population	Annual Rate Per 10M Population
Low-income or at-risk (LIR)	2,476	72,763,075	56.71
Gentrification in progress (GIP)	541	17,818,282	50.60
Stable: mixed or high-income (SMOHI)	3,403	225,877,492	25.11

# Gentrification and Race



# Three Way Interaction: Gentrification, Majority Race & Victim's Race



# Table of Contents

1 Research Question and Design

2 Literature Review

3 Findings: Race and Tract Income

4 Findings: Gentrification

5 Discussion

## Findings: Discussion

- A clear relationship between median household income in census tracts where lethal uses of force (LUOFs) occurred.
- Though it would be a stretch to infer causality based strictly on these observational findings.
- Racial subordination needs to be understood in the context of economic relations and how those also contribute to the likelihood of a LUOF (C. Johnson 2016; Wacquant 2010).
- The relationship between the Urban Displacement Project's typologies is unclear and inconclusive.
- Census tracts identified as gentrifying did not have higher LUOF rates compared to low-income/at-risk-of-displacement tracts.
- However, the rate for blacks in gentrifying tracts was higher.

# Bibliography

-  Feldman, Justin (June 23, 2020). "Police Killings in the US: Inequalities by Race/Ethnicity and Socioeconomic Position". In: *People's Policy Project*. URL:  
<https://www.peoplespolicyproject.org/project/class-and-racial-inequalities-in-police-killings/>.
-  Feldman, Justin M. et al. (Mar. 2019). "Police-Related Deaths and Neighborhood Economic and Racial/Ethnic Polarization, United States, 2015–2016". In: *American Journal of Public Health* 109.3, pp. 458–464. DOI: 10.2105/AJPH.2018.304851. URL:  
<https://ajph.aphapublications.org/doi/10.2105/AJPH.2018.304851>.
-  Johnson, Cedric (2016). "Afterword: Baltimore, The Policing Crisis, and the End of the Obama Era". In: *Urban Policy in the Time of Obama*. Ed. by James DeFilippis. University of Minnesota Press, pp. 302–322. ISBN: 978-0-8166-9659-8. JSTOR:  
10.5749/j.ctt1gpcc5p.23. URL: <http://www.jstor.org/stable/10.5749/j.ctt1gpcc5p.23>.
-  — (2019). "Trumpism, Policing, and the Problem of Surplus Population". In: *Labor in the Time of Trump*. Ed. by Jasmine Kerrissey et al. Cornell University Press, pp. 169–188. ISBN: 978-1-5017-4662-8. URL:  
[https://muse.jhu.edu/pub/255/edited\\_volume/chapter/2470411](https://muse.jhu.edu/pub/255/edited_volume/chapter/2470411).
-  Johnson, Cedric G (Mar. 2023). *After Black Lives Matter: Policing and Anti-Capitalist Struggle*. London, England: Verso Books. 460 pp.  
URL: [https://www.google.com/books/edition/After\\_Black\\_Lives\\_Matter/0bWtEAAAQBAJ](https://www.google.com/books/edition/After_Black_Lives_Matter/0bWtEAAAQBAJ).
-  UDP (Mar. 10, 2023). *Displacement and Gentrification Typologies*. The Urban Displacement Project @ UC Berkeley. URL:  
<https://github.com/urban-displacement/displacement-typologies>.
-  Wacquant, Loïc (2010). "Class, Race & Hyperincarceration in Revanchist America". In: *Daedalus* 139.3, pp. 74–90. JSTOR: 20749843.  
URL: <https://www.jstor.org/stable/20749843>.