A Place-based Examination of Racial Residential Integration in U.S. Suburbs, 2000-10

By

Ankit Rastogi

A dissertation submitted in partial fulfillment of

the requirements for the degree of

Doctor of Philosophy

(Sociology)

at the

UNIVERSITY OF WISCONSIN-MADISON

2020

Date of final oral examination: 6/16/2020

The dissertation is approved by the following members of the Final Oral Committee:

Katherine Curtis, Professor, Community and Environmental Sociology

Michal Engelman, Associate Professor, Sociology

Myra Marx Ferree, Professor Emerita, Sociology

Pamela Oliver, Professor Emerita, Sociology

Laura Dresser, Clinical Assistant Professor, Social Work

Michael Bader, Associate Professor, Sociology, American University

Abstract

What futures emerge as racial and ethnic diversity expands, and people of color become the majority in the United States? The nation is experiencing immense demographic changes in which populations of color are growing as the white population ages and declines. With this shift, racial and ethnic diversity has moved from the city core to places typically thought of as white spaces. Most people of color now live in suburbs and immigration to rural areas is a demographic lifeline for declining small towns. As racial segregation is the norm in the U.S., this growing diversity has far-reaching implications for racial inequality and may provide the basis for a more equitable society. However, there is a dearth of research on diversity outside the city and its outcomes. Will these demographic shifts lead to greater racial integration or fragmentation in American society?

My dissertation grapples with this question by exploring the emergence of racial residential integration in suburbs across the nation. Drawing from Census data, the first article makes use of spatial analyses to identify the features of places that support integration. While prior research suggests that integrated communities are mere anomalies in a ubiquitously segregated landscape, I find that millions of people live in stably integrated communities. Destabilizing stereotypes of the "vanilla suburb," integrated places are most frequently multiethnic across Blacks, Latinxs, Asians, and whites. Furthermore, whites do not flee from multiethnic suburbs, precluding the homogenizing forces of re-segregation. Beyond racial and ethnic composition, specific local characteristics facilitate the emergence of these communities: unincorporated suburbs that lack local governments, which historically excluded people of color; new housing stock built after the passage of antidiscrimination legislation; and economies that support racial integration in workplaces like the military and public sector. Where conventional urban sociology focuses on industrial cities like Chicago or New York, my work points outward to sprawling metro areas like DC, Miami, and Riverside to understand a new sociology of suburbs, where whites and people of color live near each other in ways that are stable across time.

From a Civil Rights Movement perspective, residential integration may remedy the ills of segregation. For my second and third articles, I focus on two key outcomes, public education and income, to assess whether racial integration in communities indicates movement towards racial equality. Using geocoded data from the National Center for Education Statistics, I investigate the relationship between integrated communities and integration in schools. Historically, public schools are crucial institutions for the upkeep of segregation; however, I find that integrated suburbs host public schools with both high white enrollment and multiethnic diversity. Thus, students of color attend schools with white students, generally representing substantive cross-racial contact within institutions. Second, I explore economic inequality as it materializes across suburbs. Using median household income data, I find that integrated suburbs display smaller racial-economic disparities compared to other areas types like predominantly Black, predominantly Latinx, and micro-segregated, diverse environments. Both Black and Latinx median household incomes are roughly 20% higher in integrated suburbs compared to other area types, while whites' and Asians' substantially higher median household incomes remain unchanged across areas. Therefore, integrated places show smaller gaps in income between different racial groups, pointing towards greater equality.

Using a spatial, place-based approach, I contend that the demography of the twenty-first century requires new theory that centers on multiethnic race relations as the U.S. undergoes rapid demographic change. While study after study details the causes and consequences of rigid urban segregation, this project contributes to an understanding of how multiethnic communities outside the city provide openings for racial integration to emerge and persist. Furthermore, findings may guide the formation of policies that mitigate the social problems of entrenched segregation.

Multiethnic diversity in local contexts may attenuate white prejudice, allow communities to unsettle persistent forms of racial discrimination, and signal future trends as the US grows increasingly diverse. Most importantly, racial residential integration may be a path toward a more equitable society that provides people of color access to the higher quality place-based resources generally available to urban and suburban whites.

Acknowledgements

I was fortunate to have the support and mentorship of the Departments of Sociology and Community and Environmental Sociology at the University of Wisconsin-Madison. First, I thank my mentor and dissertation chair, Katherine Curtis. Her formidable intellect, compassion, style, and grace, combined with her unwavering commitment to racial justice, models exactly the type of scholar I want to be. I do not believe that anyone else in the practice of sociology could have been my advisor. What fortune that the universe brought us together!

Myra Marx Ferree provides incredibly generous and equally challenging mentorship. She delivers sharp criticism while always supporting me doing my work on my own terms. She taught me how to write an academic paper—it is impossible for me to communicate my gratitude in words. Moreover, her support of students of color is clear and obvious. When I entered the program, Pam Oliver was the chair, and she was supportive from day one. Her presence as someone concerned with race was integral for me to function within Sewell. Further, I will always value her openness to listening to students' experiences of graduate school. Michal Engelman supported me from early on as well and showed me that the practice of demography need not center the white, heteropatriarchal, colonial frameworks of family demography. My work stands on Mike Bader's, a fellow Marylander, who understands firsthand the importance of people of color in suburbs. I also want to thank Joan Fujimura. I can only aspire to her level of fierceness. She taught me that I too can be a person of color that does what I love and not back down to whiteness.

My co-conspirators in graduate school sustained me through both the misery and beauty of the last five years. I first want to thank my queer femmes. Di Wang pushes me to think about how one can be both an activist and scholar, all while wearing military heels and burning glitter without regard to her respiratory health, because, yes, glitter is that important. Elena Hight models anger, compassion, and sensitivity and inspires me both with her research and activism.

Kristina Fullerton Rico sees me, and her steadfast support brings so much joy. She introduced me to pulparindos and my life will never be the same. Youbin Kang is always down for anything from talking theory to getting on the dancefloor. Moreover, after I long gave up on departmental dynamics, she reminds me that fighting for equity is worth it. Ike Leslie once said, "I don't trust anyone who hasn't experienced depression." From that moment, I knew we were going to be friends and their support has gotten me through graduate school. I am grateful for Annaliese Grant and their fiery, no-nonsense attitude. We are in this together!

Adam Talkington constantly reminds me what heartfelt intellectual curiosity looks like and I have treasured every conversation we have had. I thank Jake Carlson for his deep kindness and, by shaking up how we think about gentrification, he challenges and destabilizes the ways I think about metropolitan dynamics. Andrew Wolf, I will not forget our time with Solange in the Badlands.

Through informal communications as well as at conference presentations, I benefited tremendously from conversations and feedback from Michelle Robinson, Juan Pedroza, Elizabeth Roberto, Angie Simms, Jenifer Bratter, Heather O'Connell, Aliya Saperstein, Dave Van Riper, and Christine Schwartz. I am grateful for how they make academia a more welcoming place.

My community is always with me. You are my greatest supporters. Through you, I see liberation, and I will never stop learning from you. Much love to Hilary Abe, Aza Abe, Erica Jones, Marika Plater, Rye Young, Adrian Gordon, Sara Perl Egendorf, Howie Fisher, Myles Lennon, Wei Zhang, Anna Li Sian, Jen Swanda, Eva Wo, Tyler Burdenski, Amelia Smith, Gena Seroogy, Lauren Miller, Annie Bickerton, Zave Martohardjono, Amber Kelsie, Vicky Moors, Sean Murray, Schuyler Mapp-Williams, Mette Loulou Von Kohl, Liz Carlin, Nell Schaefer, and Ayanna Drakos.

My parents, Rita and Subhash Rastogi, are in my heart, and without them, none of this would be possible. With them, I have lived my multiethnic suburban life. I am grateful for my ancestors that fought against the British colonial regime. I have inherited my defiant attitude from all the freedom fighters in my family.

Table of Contents

Abstract i

Acknowledgements iv

Table of Contents vii

Preface 1

The Conditions of Stable Racial Residential Integration in U.S. Suburbs, 2000-2010 7

1.1 Measuring suburbs as places 9

1.2 Stable diversity, stable integration, and anti-Blackness 11

1.2.1 The (a)spatial components of diversity and integration 12

1.2.2 The temporal component of stable diversity and integration 14

1.2.3 Anti-Blackness and the multiethnic contexts of stable integration 15

1.3 The characteristics of places and metro areas that support integration 18

1.4 Data and methods 21

1.4.1 Data 22

1.4.2 Methodology 25

1.4.3 Analytic Strategy 29

1.5 Results 33

1.5.1 The link between racial and ethnic composition and residential integration 33

1.5.2 The place and metropolitan characteristics of residential integration 41

1.6 Discussion and Conclusion 46

The Relationship between Racial Residential Integration in Suburbs and Local Public Schools 51

2.1 The historical links between communities, schools, and white flight 54

2.2 How residential integration in suburbs in the 21st century is different 56

2.3 Hypotheses 58

2.4 Data and Methods 59

2.4.1 Data 59

2.4.2 Analytic Strategy 65

2.5 Results 69

2.5.1 Explaining the relationship between residential integration and diversity in schools 69

2.5.2 The relationship between residential integration and white student enrollment 72

2.6 Discussion and Conclusion 76

A Place-based Examination of Racial Residential Diversity, Integration, and Racial-income Inequality in U.S. suburbs 81

3.1 Suburbanization and racial inequality in places 84

3.1.1 Suburbanization and racial-economic exclusion 84

3.1.2 Macro-segregation and Racial Inequality 86

3.1.3 Racial Diversity, Micro-segregation, and Racial Inequality 88

3.1.4 Racial Micro-integration and Racial Inequality 90

3.2 Data and Methods 93

3.2.1 Data 93

3.2.2 Racial inequality across place types analysis 95

3.2.3 Racial inequality within suburbs analysis 100

3.3 Results 102

3.3.1 Median household incomes across place types 102

3.3.2 Disparities in median household incomes within suburbs by multiethnic diversity 107

3.3.3 Disparities in median household incomes within suburbs by integration 111

3.4 Discussion and Conclusion 115

Conclusion 119

Appendix 121

Appendix A: Chapter 1 121

Appendix B: Chapter 2 123

Appendix C: Chapter 3 125

References 129

Preface

Suburbanization was numerically the greatest spatial transformation of the American populace during the twentieth century. At the turn of the century, the population was largely divided between rural areas, where most U.S. residents lived, and central cities. Central cities were growing substantially at the time. Miami had just officially incorporated in 1896, and older cities like Philadelphia had yet to annex much of their land area. However, by 1990, the population distribution changed radically such that many central cities had peaked with declining populations and most people lived in suburbs (Hunter and Robinson 2016; Lacy 2016). In 2020, some central cities' populations have rebounded (e.g., New York, DC), but others still lose residents to suburbs (e.g., Baltimore, Chicago).

Understanding suburbanization allows us to understand the changing spatial scales of metropolitan, racial residential segregation. At the heart of it, suburbanization was a racial project critical to white resource hoarding. To maintain political control, whites established legal autonomy in suburbs to separate themselves from the influence of growing populations of color in central cities (Jackson 1987; Rothstein 2017; Trounstine 2018). Whites, by living in suburbs, could "protect" their property values and tax bases, ensuring that people of color would not benefit from high quality public services.

This racial-spatial separation across political regimes marked a key shift in the dynamics of segregation (Trounstine 2018). At the turn of the century, segregation often occurred in local, central city neighborhoods. For example, in northern cities, Blacks typically lived in predominantly white neighborhoods spatially sequestered on blocks or streets. By 1940, whites segregated themselves from people of color across neighborhoods, yet within the same city. By 1970, suburbs proliferated creating the stereotypical geography of the highly resourced, white suburb and the disadvantaged, Black or Brown central city.

While most contemporary studies of racial settlement focus on this post-1970s racial landscape, we have again seen tremendous shifts in the spatial scale of racial segregation, this time marked by the suburbanization of people of color in the twenty first century. While metropolitan residential segregation *across* central cities and suburbs remains remarkably persistent, declines in overall levels of residential segregation are largely attributable to declines in segregation *within* such places (Lichter, Parisi, and Taquino 2015b). Furthermore, durable, multiethnic census tracts are located almost entirely within suburbs (Bader and Warkentien 2016). Growing racial diversity alongside declining segregation in suburbs creates openings for new understandings of race, place, and cross-racial exposure.

My dissertation takes a population-level approach to describe racially integrated suburbs. Scholars of racial settlement have largely missed the explosion of local racial diversity in suburbs, resulting in glaring misconceptions regarding people of color in suburbia. Public discourse and the sociological literature often paints a picture of diverse suburbs as old, inner-ring communities in states of decline resulting from the displacement of people of color from gentrifying central cities (e.g., Hanlon 2009). However, as of 2010, most Blacks, Asians, Latinxs, and Native Americans lived in suburbs (Frey 2018; Keeler 2016). A handful of gentrifying neighborhoods in Brooklyn, Seattle, and DC cannot explain the spatial distribution of more than 60 million people of color. To paraphrase Douglas Massey, gentrification is a drop in the bucket compared to the general outflows of central city residents to suburbs (Massey 2002).

The time is right to home in on suburbs to understand a twenty-first century set of race relations defined by racial-spatial proximity, especially as growing racial and ethnic diversity reshapes the demographic and political fabric of the nation. My dissertation aims to describe what integrated-diverse suburbs might look like to create a knowledge base upon which we can generate empirically grounded hypotheses about race and place in U.S. suburbs and the nation more broadly.

In Chapter 1, I begin by proposing an analytic concept of racial residential integration, which differs from racial diversity. Conventional research typically conflates racial diversity with integration. However, given that segregation may occur at small spatial scales, highly diverse places can be segregated or integrated. Oftentimes, the most diverse cities are the most segregated like New York City or Los Angeles (Holloway, Wright, and Ellis 2012). Familiar dynamics of spatial separation occur in segregated-diverse communities where advantaged whites monopolize resources and maintain social distance from people of color (Mayorga-Gallo 2014; Spitz 2015; Tach 2014). Integration presents a different spatial pattern at this micro-level that may disrupt the spatial mechanisms of segregation and challenge the American racial project, potentially creating a foundation for substantive cross-racial interaction.

I define residential integration as a spatial distribution that is the opposite of segregation. If a place is segregated when people of different races and ethnicities live apart from each other, a place is integrated when people of different races and ethnicities live near each other. In contrast, racial diversity refers to a racial and ethnic composition containing several racialized populations represented equally. For example, a highly diverse place could include Native Americans, Blacks, Latinxs, Asians, and whites, each composing 20% of the population. Diversity is a population characteristic while integration describes the spatial distribution of this characteristic within places, the grounds on which cross-racial interaction likely occurs.

Using Census data for 2000 and 2010, Chapter 1 identifies where highly integrated suburbs are located, the kinds of racial diversity under which integration is more likely, and the local characteristics that they share. Integrated suburbs tend to cluster in sprawling, fragmented metropolitan areas with relatively small central cities like greater DC and the San Francisco Bay area.

These suburbs are most frequently multiethnic across Blacks, Latinxs, Asians, and whites, suggesting that multiethnic communities may moderate the white, anti-Black design of segregation. Further, integrated suburbs tend to have newer housing stocks built after the Fair Housing Act, lack local governments which historically exclude people of color, and economic bases that are stimulated by the federal government, which disproportionately provide middle-class jobs to people of color.

Chapter 2 explores whether racial residential integration represents racial integration in other domains of life using the case of public education. When discussing residential integration, I often receive pushback from central city scholars arguing that residential integration does not reflect substantive, cross-racial exposure. I test this proposition using public education because public schools are among the most important public good linking communities to residents' achievement. At the same time, as evidenced by the landmark court case *Brown v. Board* (1954), public schools are a historical driver of racial segregation. Using Census data and data from the National Center for Education Statistics, I find that, while public schools in integrated suburbs show lower levels of racial diversity than the suburb at large, schools still show high levels of multiethnic diversity and persistent white enrollment. This finding indicates that, in integrated suburbs, different racialized groups share space within important institutions, marking a stark divergence from the dynamics of racial isolation and white disinvestment from public services.

Chapter 3, the last chapter, explores how racial income inequality distributes across and within suburbs depending on their racial context. The stereotype of the disadvantaged, diverse, inner-ring suburb is relatively unsubstantiated by the social science literature. To my knowledge, all recent qualitative studies of diverse suburbs occur in middle-class or affluent settings (Cheng 2013; Douds 2020; Lung-Amam 2017). This chapter examines the disconnect between public discourse and these qualitative studies by investigating racial inequalities in median household income in suburbs across the spectrum of diversity and integration. My findings complement work on middle-class suburbs: highly integrated suburbs typically have higher median household incomes than the national value for Blacks, Latinxs, Asians, and whites. Notably, whites in integrated suburbs have higher median household incomes than their counterparts in predominantly white suburbs. Blacks earn the most in highly integrated suburbs and earn the least in micro-segregated, diverse suburbs, substantially lower than those in predominantly Black suburbs. Moreover, highly integrated suburbs exhibit smaller disparities between higher-earning Asians and whites and lower-earning Blacks and Latinxs. For example, in the most integrated suburbs, Black median household income reaches near parity with white median household income.

All told, this dissertation largely emerges from my life experience growing up in Silver Spring, MD, a suburb of Washington, DC. Moving through multiethnic spaces was a part of my daily life. I went to multiethnic schools and always had friends of different races and ethnicities. Most other suburbs around Silver Spring are also multiethnic (for examples, see Gaithersburg or Rockville). This was true in the 1990s and it is even more true now as the suburban population has exploded. In Montgomery County, MD alone, hundreds of thousands of people live in these multiethnic, racially integrated suburbs.

What strikes me is not the racial context of these suburbs, but rather the ordinariness of suburban life. Consistent with my life experience, qualitative studies find that interracial interaction is an everyday experience that people generally move through with ease and joy in these predominantly middle-class, suburban spaces (Cheng 2013; Lung-Amam 2017). Further, there is nothing extraordinary about the physical structure of these communities. They are defined by private transportation, single-family homes, and big box stores. Even the “ethnic” grocery stores are large national chains that have the same set up in central Jersey as they do in the East Bay of San Francisco.

My dissertation moves us closer to understanding these spaces. Contrary to folk concepts of racial integration, suburbs like Silver Spring are not unique—multiethnic, racially integrated suburbs exist in many major metropolitan areas, representing 10s of millions of individuals. Moreover, there are different racial logics at play in these suburbs than in central cities. Young people of different races and ethnicities attend the same schools, access the same institutional resources, and are socialized to live and work in multiethnic environments. Finally, these suburbs are predominantly middle-class spaces where people of color get to live the banality of suburban life.

What does it mean for people of color to occupy on large scale suburban spaces that whites historically have denied them? And what does place have to do with it? Given the overwhelming sociological focus on post-1970s racial isolation and central city disadvantage, I think the time is right to write a new story, which requires new theory and new evidence on multiethnic social relations as the U.S. grows increasingly diverse.

Chapter 1

The Conditions of Stable Racial Residential Integration in U.S. Suburbs, 2000-2010

Suburbs now contribute more to American racial and ethnic diversity than ever before. While postwar suburbanization and white flight in the 20th century constructed suburbs as a white domain (Boustan 2010; Jackson 1987), the majority of people of color and immigrants now live in suburbs (Frey 2018; Keeler 2016; Lacy 2016). Understanding the suburbanization of people of color is fundamental to understanding the spatial production of racial inequality as growing multiethnic diversity reshapes the social, economic, and political fabric of the nation (Lichter 2013). For example, in greater Atlanta and Washington, DC, roughly 80% of Black residents live outside the central city (Lacy 2016). In multiethnic metro areas like New York and Houston, census tracts comprising Blacks, Latinxs, Asians, and whites together are almost entirely located in suburbs (Bader and Warkentien 2016).

The arrival of racial diversity to suburban communities may indicate a pivotal divergence from entrenched patterns of metropolitan segregation; however, while related, growing diversity does not necessarily translate to growing integration. A community can be simultaneously diverse and segregated like many central city neighborhoods where groups experience little cross-racial exposure (Mayorga-Gallo 2014; Spitz 2015; Tach 2014). Distinguishing integration from diversity is important for the study of racial inequality because residential segregation is fundamental to the maintenance of the American racial order, in which whites spatially monopolize key resources to the harm of people of color, like public education (Logan, Minca, and Adar 2012), wealth (Flippen

2004), employment opportunities (Kneebone and Holmes 2015), and electoral representation (Kruse 2005), among many other factors broadly affecting American society. In contrast, residential integration disrupts the spatial mechanisms of segregation and may provide people of color access to resources previously only available to whites. Thus, studying the local contexts of growing diversity and integration in suburbs is now crucial for understanding paths to a more equitable society.

I analytically differentiate diversity from integration to ask: (1) In suburbs, under what kinds of racial diversity is integration more likely to emerge? (2) What are the contextual, place-specific conditions that support racially integrated suburbs compared to more segregated, diverse suburbs? I define *diversity* as the aspatial property of the population composition of place (Fowler, Lee, and Matthews 2016). A place is diverse when it is composed of residents of different racial and ethnic groups. Alternatively, I define *integration* as the internal spatial arrangement of diverse communities; a place is integrated when people of different races and ethnicities live near each other. In this formulation, diversity is not the binary opposite of segregation, as diverse places can exhibit varying levels of integration. For example, New York City is one of the most diverse places in the nation with substantial representation of Black, Latinx, Asian, and white residents. Concurrently, New York is highly segregated where different racial and ethnic groups are spatially separated across neighborhoods (Holloway et al. 2012). In contrast, Fort Bend, TX, a suburban county of Houston, is the second most diverse county in the nation, but residents have neighbors of different races and ethnicities, and Fort Bend boasts racially integrated churches and high-performing public schools (Douds 2020).

Engaging four dominant theories of segregation – place stratification, spatial assimilation, residential preferences, and social structural sorting – I propose key attributes that explain the stability of integrated communities. For example, I highlight how anti-Black racism may prevent Blacks from living in integrated suburbs and how economies that disproportionately provide middle-class jobs to people of color may perpetuate stable integration. Findings suggest that several critical place characteristics may contribute to the persistence of residential integration: multiethnic communities including Blacks, Latinxs, Asians, and whites; new housing development; unincorporated communities; greater metropolitan suburbanization; and lastly, local economies stimulated by the federal government.

The results of this study shed light on the specific social, economic, and political conditions that provide fertile ground for integration as well as the importance of suburbanizing populations of color. I identify nearly 1,500 highly integrated suburbs in which 31 million people lived in 2010. In an era of public racial animus, I illuminate the co-existence of contrary realities where tens of millions of Americans live among people of different races and ethnicities in suburban communities. Racial residential segregation is fundamental for the inequitable distribution of material resources across groups (Massey and Denton 1993). While residential integration may not eliminate racial inequality (Douds 2020), integration may provide people of color access to higher quality, place-based resources generally available to metropolitan whites. Moreover, integration may help socialize whites to live and work in an increasingly diverse, democratic society.

1.1 Measuring suburbs as places

As the majority of all groups of color now live in suburbs (Frey 2018; Keeler 2016; Lacy 2016), this study emphasizes the importance of suburban communities to the widespread emergence of local racial and ethnic diversity and integration. However, suburbs have been defined in a number of ways, and there is not widespread agreement on what constitutes a suburb (Lacy 2016). With regard to geographic boundaries, I use the term "suburb" to refer to the space beyond the central city within a metropolitan area (i.e., an urbanized area with a central city) (Fowler et al. 2016; Lacy

2016; Lichter et al. 2015b). Given the central focus on suburbs, I exclude nonmetropolitan areas from this analysis as they compose rural America.[1]

In line with a growing area of scholarship on metropolitan processes, I use "census places" rather than census tracts as the geographic unit of analysis, and thus a suburb is a census place that is not the central city of a metropolitan area. I choose to study places because there is a "placeness" to suburban life identifiable by the names of suburbs. Places are cities, boroughs, towns, villages, and other communities recognizable by name.[2] Most places are incorporated into government jurisdictions, while others are defined by the census in cooperation with local officials. Most importantly, places are socially recognized by community members, regardless of legal status, and residents across a metropolitan area know places by name and reputation (Bader and Krysan 2015; Krysan and Bader 2007). The names of places can signal their racial climate. For example, Gardena is a suburb in Los Angeles County known for its high concentration of Japanese Americans and Shaker Heights is a suburb of Cleveland known for its Black-white diversity (Meckler 2019). These recognizable racial contexts have material impacts that can promote integration or reproduce segregation. For example, whites in the Detroit and Chicago metro areas are "very unlikely" to consider moving to places where whites are known to be the minority (Bader and Krysan 2015; Krysan and Bader 2007).

Several prominent studies argue that political processes and the symbolic meaning of suburbs as places contribute substantially to residential sorting within metropolitan areas (Hall, Tach, and Lee 2016; Lee and Sharp 2017; Lichter et al. 2015b; Tach et al. 2019). For example,

---

[1] The Economic Research Service at the U.S. Department of Agriculture provides classifications for rural and urban areas. These rural-urban continuum codes may be found at the following link: https://www.ers.usda.gov/data-products/rural-urban-continuum-codes (retrieved April 6, 2019).

[2] Definitions of Census geographies may be found in "Appendix A: Geographic Terms and Concepts" at the following link: https://www2.census.gov/geo/pdfs/reference/GTC_10.pdf (retrieved April 6, 2019).

Lichter and colleagues (2015) find that declines in metropolitan area segregation are largely attributable to such declines within places. However, simultaneously segregation between different suburbs and segregation between central cities and suburbs have increased. Fowler and colleagues (2016) report that central cities contribute to overall metropolitan diversity less than they did in 1980, while the inner-ring suburbs experienced substantial increases in diversity during the same period. These studies contend that places are an important social-political scale to investigate the emergence of diversity and integration specifically when analyzing the significance of suburbs for racial trends.

1.2 Stable diversity, stable integration, and anti-Blackness

I now turn to my first empirical objective: analyzing the kinds of diversity that give rise to place-based *integration* within American suburbs. Most studies focus on racial segregation and isolation as outcomes; however, studying the positive state of integration offers new insight into the spatial processes of sustained cross-racial exposure within suburban communities. Understanding integration in communities is specifically important as diversity rapidly grows both within suburbs, where now the majority of people of color live, and across the nation. However, there is currently no consensus in the literature regarding the definitions and measurement of racial diversity and residential integration (Sin and Krysan 2015). This section defines the (a)spatial and temporal components of diversity as well as stable integration that I proceed with in the analysis. Further, by differentiating diversity from integration, this section proposes how integration may occur under certain forms of diversity defined by anti-Blackness.

1.2.1 The (a)spatial components of diversity and integration

As racial diversity spreads across American suburbs, growing diversity does not necessarily translate to growing integration. Distinguishing integration from diversity is important for the study of racial inequality because these phenomena likely reflect the broader race relations at play within diversifying communities. For example, diverse cities are often the most segregated (Holloway et al. 2012). Highly diverse central city neighborhoods maintain entrenched patterns of racial segregation, where residents enact racially isolated activity spaces and more advantaged whites monopolize resources (Mayorga-Gallo 2014; Spitz 2015; Tach 2014). As a result, urban scholars remain skeptical of the idea that residential diversity indicates racial integration. However, diversity has moved outward from the city providing a new spatial pattern to understand whether diversity can exist alongside integration. Several case studies of diverse suburbs suggest that residents may live near each other, experience substantive cross-racial interaction, have multiethnic social networks, and participate in integrated civic institutions (Cheng 2013; Douds 2020; Lung-Amam 2017).

Conceptually, I use the term *diversity* to refer to an aspatial property of places (Fowler et al. 2016). Diversity describes the overall population composition of a place; a place is diverse when it comprises people of different races and ethnicities, regardless of their spatial distribution. Studies often use typologies of absolute cutoffs to describe diversity in multiethnic contexts. For example, some studies specify that a space must be at least 10% Black, Asian, Latinx, and white to be considered fully multiethnic, while a place that is greater than 90% white is "all white" (e.g., Hall, Crowder, and Spring 2015).

I use the term residential *integration* to refer to the spatial arrangement of different racial and ethnic groups within diverse places. A place is integrated when people of different races and ethnicities live near each other. Diversity is directly related to integration—diversity is a prerequisite for integration (i.e., a racially isolated place is by construction segregated and cannot be integrated). However, places with similar levels of diversity may have varying levels of integration. Studies typically measure integration and segregation using "evenness" measures like the Index of Dissimilarity or the Information Theory Index. These measures reveal the extent to which members of different racial and ethnic groups are evenly spread within a space. Further, these measures are formally independent of diversity, thus providing methods to calculate integration across different racial and ethnic compositions.

To visualize this difference between diversity and integration, Figure 1.1 provides hypothetical examples of places that display varying levels of diversity and integration. Figures 1.1a and 1b represent highly diverse places that contain Blacks, Latinxs, Asians, and whites equally; however, in 1a, each group is completely spatially separated (maximum segregation), while in 1.1b, each group is evenly distributed throughout the grid (maximum integration). Figures 1.1c and 1.1d show the same patterns of separation and proximity, except in moderately diverse places comprising only two groups. To reiterate, diversity describes the compositional aspect of places, while integration emphasizes the spatial distribution of diversity within places.

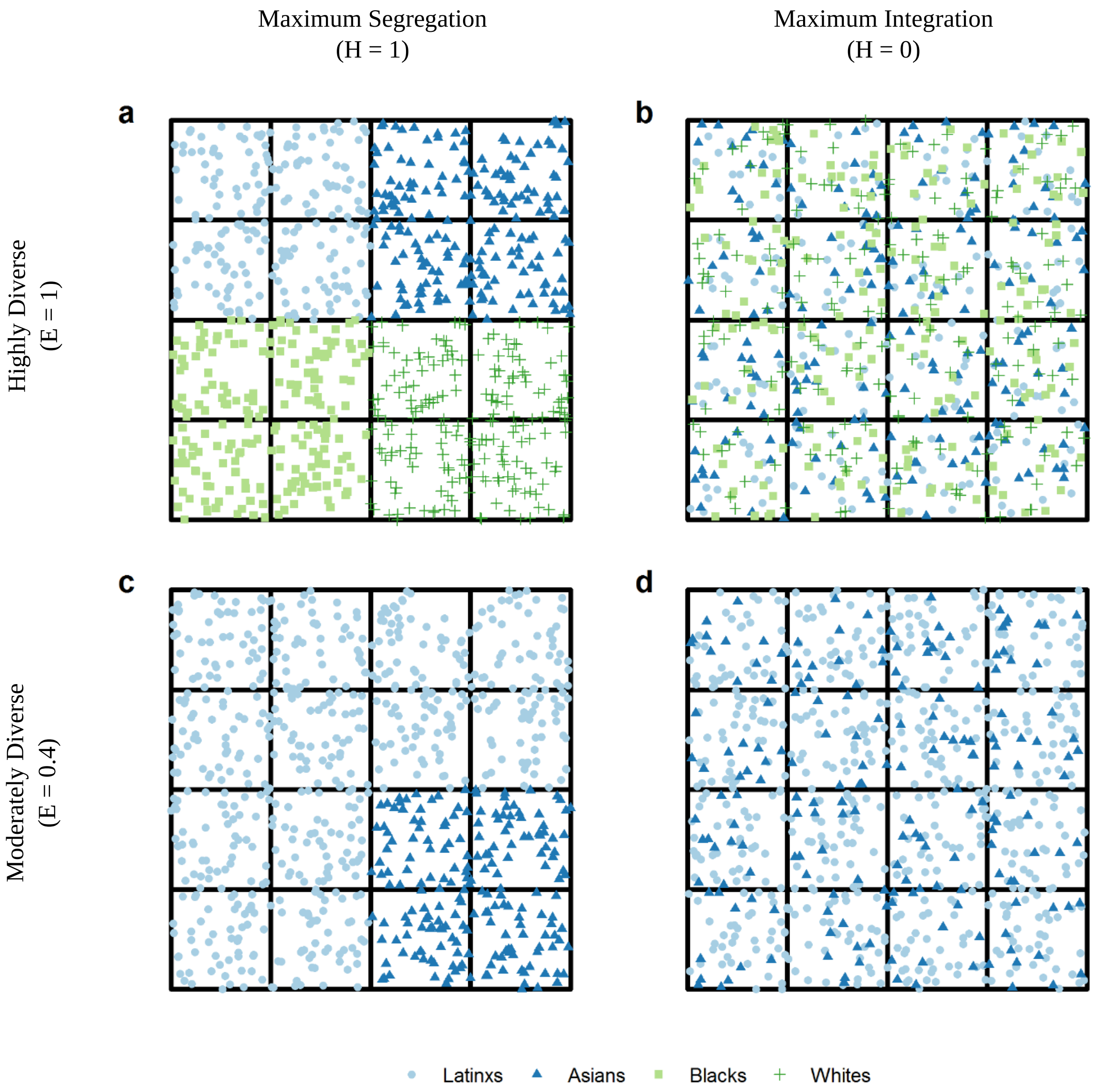

Maximum Segregation
(H = 1)
Maximum Integration
(H = 0)
Highly Diverse
(E = 1)
Moderately Diverse
(E = 0.4)
a
b
c
d
Latinxs
Asians
Blacks
Whites

Figure 1.1 Illustration Comparing Diversity and Integration among Four Hypothetical Places.

1.2.2 The temporal component of stable diversity and integration

In the United States, place-based diversity historically has been only a momentary status on the path to re-segregation. For example, in the mid-20th century, increasing diversity stemming from desegregation and a rapidly urbanizing Black population catalyzed a moral panic among whites, and, as a result, white flight and rapid re-segregation occurred (Boustan 2010; Kruse 2005). More recently, cycles of urban renewal and gentrification precipitate an influx of white residents into predominantly people-of-color neighborhoods, creating an alternative form of racialized change in the direction of white homogeneity (Hyra 2012).

In contrast, racially integrated, suburban communities have emerged and remain stable over decades (Bader and Warkentien 2016). Given the vast literature exploring whites' aversion to living near people of color, specifically Blacks, throughout American history, stable integration suggests a new form of race relations is at play where people of color and whites coexist. Stably integrated suburbs indicate a loosening of the 20th century racial boundaries that structure the dynamics of segregation, white flight, and re-segregation. These communities do not display white flight or rapid gentrification like central city neighborhoods. Further, these suburbs are oftentimes affluent, boast highly desirable school districts, and are not defined by the displacement of people of color (Cheng 2013; Douds 2020).

In this analysis, I specifically only examine suburbs where diversity and integration are stable across time. Instead of taking a racialized change-over-time approach, my goal is to understand the persistence of *stable* racially integrated suburbs amongst *stable* diversity in the 21st century. I only examine diverse communities as diversity is a prerequisite to integration (i.e., integration cannot occur in racially homogeneous places). Elaborated further in the methods section, I use a 10-year time horizon to determine stability of integration over the 2000 and 2010 censuses and consider a suburb to be stably integrated if it displays integration over this decade.

1.2.3 Anti-Blackness and the multiethnic contexts of stable integration

Differentiating stable diversity (the racial and ethnic composition of a place) and integration (the spatial distribution of diversity) provides a way to understand whether integration occurs under certain forms of diversity. In the contemporary U.S., Blacks are the group of color most segregated from whites compared to Asians and Latinxs (Massey 2015). The historical nature of anti-Blackness (e.g., slavery, Jim Crow, legal segregation, disenfranchisement, mass incarceration) suggests that diverse suburbs inclusive of Blacks will be the least likely to be integrated. I draw from place stratification and racial residential preferences theories to explain the anti-Blackness of racial settlement.

Place stratification theory argues that white institutional discrimination against people of color governs racial settlement patterns. Throughout American history this discrimination specifically targeted Blacks to create segregated spaces (Charles 2003; Massey and Denton 1993). For example, the New Deal era Home Owners' Loan Corporation created "redlining" maps by explicitly taking into account the Black composition of neighborhoods (Nelson et al. 2016). Banks refused to make loans in redlined neighborhoods (i.e., neighborhoods where Blacks lived), creating racially isolated spaces and simultaneously disinvesting from Black communities. Despite the passage of Civil Rights legislation, discriminatory lending practices still exist — racial gaps in loan denial and mortgage costs are nearly identical to those in the 1970s (Quillian, Lee, and Honoré 2020). Other examples of anti-Black discrimination abound like Jim Crow segregation, restrictive housing covenants, legally segregated postwar public housing, real estate steering, and blockbusting, among many others (Boustan 2010; Kruse 2005; Rothstein 2017).

Residential preferences theory also contends that *anti-Blackness* governs the racial and ethnic composition of integration, where whites, Latinxs, and Asians are all less likely to integrate with Blacks than other groups. Where place stratification emphasizes the role of institutional discrimination, preferences theory suggests that racial settlement reflects the racial preferences of individuals in the home search process. These preferences typically reflect anti-Black racism by whites and non-Black people of color. For example, white home-seekers in Detroit and Chicago are very unlikely to consider places with a substantial Black population (Bader and Krysan 2015; Krysan and Bader 2007). In Los Angeles, Asians and Latinxs also express an unwillingness to live near Black neighbors (Charles 2006).

However, with liberalizing racial attitudes, residential preferences may have changed such that *multiethnic contexts* with Latinxs and Asians moderate anti-Black racism and support Black-white integration. For example, scholars have argued that Asians and Latinxs "buffer" Black-white race relations, where whites become less prejudiced against Blacks after exposure to other populations of color (Farley and Frey 1994; Parisi, Lichter, and Taquino 2015). Furthermore, qualitative research suggests that residents embrace diversity and articulate a desire to preserve the social structure within multiethnic environments (Cheng 2013; Douds 2020; Nyden, Maly, and Lukehart 1997). In greater DC, survey research indicates that whites report high satisfaction, more so than their people-of-color counterparts, in neighborhoods that are at least 10% Black, Latinx, Asian, and white without a majority (Bader 2016). Together, these findings suggest that racial ideologies and residential preferences have changed such that multiethnic communities across Blacks, Latinxs, Asians, and whites may promote and sustain integration.

Place stratification theory and the residential preferences literature suggest the following hypotheses:

> *Hypothesis 1: The Anti-Blackness of Integration*. Stable integration may be more likely to occur under certain forms of diversity. Both place stratification and residential preferences theories suggest that Blacks will live in integrated suburbs at the lowest rates.

Hypothesis 2: Multiethnic Contexts. Residential preferences theory suggests that multiethnic suburbs with Asians and Latinxs will support the highest levels of Black-white integration.

1.3 The characteristics of places and metro areas that support integration

I now turn to my second empirical aim: investigating the features of places and metropolitan areas that distinguish stably integrated communities from more segregated, diverse spaces. While positive theories of residential integration are lacking in the literature, dominant theories of residential segregation implicate a wide range of contextual characteristics that may bring about residential integration. Drawing on three segregation theories (i.e., place stratification, social structural sorting, and spatial assimilation), I propose four key determinants of residential integration in suburbia: (1) new housing stock, (2) metropolitan political fragmentation, (3) political incorporation, and (4) economies fueled by the federal government.

According to place stratification theory (i.e., theory of institutional discrimination), new housing built after the Fair Housing Act of 1968 will facilitate the emergence of integration. The legacies of legal discrimination (e.g., redlining and lending discrimination, legally segregated public housing) constrain the residential mobility options for populations of color (Rothstein 2017). However, newer housing development may transcend the enduring effects of pre-Fair Housing Act segregation. Furthermore, in suburbs, new housing incorporates predominantly white rural spaces into the sprawling suburbanization of metropolitan areas. As suburbs expand outward overtaking the rural, particularly in high population growth regions like the Sunbelt, these new housing developments offer ground for diverse and integrated suburbs to emerge.

With expanding suburban populations of color, more suburbanized metro areas may support more integrated communities under place stratification theory. The sociological literature refers to the proliferation of suburbs as "metropolitan political fragmentation," because in the mid-20th century, suburbs "fragmented" from central cities and incorporated to establish their legal autonomy. Suburban regimes created laws and regulations that prohibited entry by people of color, specifically Blacks during desegregation (Jackson 1987; Kruse 2005). Today, greater fragmentation (i.e., suburbanization) still supports segregation between the central city and suburbs and between suburbs themselves (Lichter et al. 2015b). This finding suggests that predominantly white suburbs still exclude people of color. However, Lichter and colleagues find in the same study that fragmentation contributes to declines in within-suburb segregation. This result suggests that greater integration occurs within specific suburbs, even as segregation increases between communities in more fragmented metro areas. Essentially, more suburbanized metro areas may contain homogeneously white suburbs that exclude people of color, but simultaneously, they may also support other suburbs that are diverse and integrated.

According to place stratification theory, unincorporated suburbs are more likely to support integration as they lack the legal power (e.g., mayors, city councils) to exclude people of color from their boundaries via policy or to sequester people of color via zoning. Contrary to the conventional wisdom of the all-white unincorporated urban fringe, many metro areas contain highly racially diverse, unincorporated, census-designated places. In greater Atlanta, unincorporated suburbs on average are 64% people of color while legally incorporated suburbs are 38% people of color (author's calculations, Census 2010). New Orleans shows a similar pattern where unincorporated suburbs are 43% people of color on average, while incorporated suburbs are 25% people of color. Without local governments like city councils that implement racially exclusive policies, unincorporated places may support the emergence of integration as diversity continues to spread outward from the city.

The social structural sorting perspective suggests that economies stimulated by the federal government figure prominently in creating integrated suburbs. Social structural sorting argues that racially disparate information networks condition individual residential mobility decisions that perpetuate segregation (Krysan and Crowder 2017). For example, based on kinship and social networks, people of color may only have knowledge of neighborhoods with large populations of color, and thus may only choose to move to these neighborhoods. Because the current study draws from Census data, it is difficult to analyze the "social" aspect of this perspective, but employment plays a central role in the "structural" aspect of social structural sorting. Individuals move to specific places to reduce commute times and improve quality of life. Furthermore, kin are likely to follow these individuals, expanding social networks that may see a specific community as a desirable place to live. Thus, jobs that are more equally distributed across racial and ethnic groups may sustain in-migration by diverse populations, stabilizing integration over time. Hubs for the military, public sector, and public universities demonstrate both high diversity and low segregation scores (Farley and Frey 1994; Lee and Sharp 2017). Furthermore, the military and public sector boast high levels of employment integration (Diprete and Soule 1986; Moskos and Butler 1996; Moulton 1990), and the diversity that these work environments foster may cultivate cosmopolitan communities that welcome integration and continue to sustain integration over time.

Lastly, spatial assimilation theory may also apply to these employment bases, where greater economic equality produced by government institutions supports residential integration. Spatial assimilation specifically argues that segregation results from socioeconomic differences between racial and ethnic groups as well as levels of acculturation for immigrant-rich populations of color (Charles 2003; Massey and Denton 1985). This theory implies that upward mobility by people of color, such as increased income or education, will support movement into whiter, middle-class communities, thus fostering residential integration. While evidence for spatial assimilation is modest (i.e., race is not a substitute for class processes),[3] the spatial assimilation model may still pertain to economies stimulated by the federal government. The military and public sector display high representation of people of color within positions of authority and these institutions exhibit smaller racial disparities in wages compared to the private sector (Diprete and Soule 1986; Moskos and Butler 1996; Moulton 1990). The racial-economic equality generated by employment integration may promote integration in the surrounding environs.

Place stratification, spatial assimilation, and social structural sorting theories suggest the following hypotheses:

> *Hypothesis 3: The Place-based Characteristics that Shape Integration*. Under place stratification theory, new housing stock, greater metropolitan political fragmentation (i.e., suburbanization), and unincorporated suburbs will be positively associated with residential integration. Under the spatial assimilation and social structural sorting perspectives, government economies (i.e., military, public-sector, and public universities) will be positively associated with integration.

1.4 Data and methods

---

[3] Prior studies of metropolitan areas suggest that Black-white segregation is independent of income and wealth inequality (Charles 2003; Crowder, South, and Chavez 2006; Lichter et al. 2015b). Moreover, wealthy Blacks are more likely to live in poorer neighborhoods than poor whites (Sharkey 2014). Notably, declines in Asian-white and Latinx-white segregation have stalled despite growth in shares of second and later-generation residents (Massey 2015). These finding suggest that intergenerational "acculturation" does not lower barriers to integration or support achieved desires to integrate with whites.

1.4.1 Data

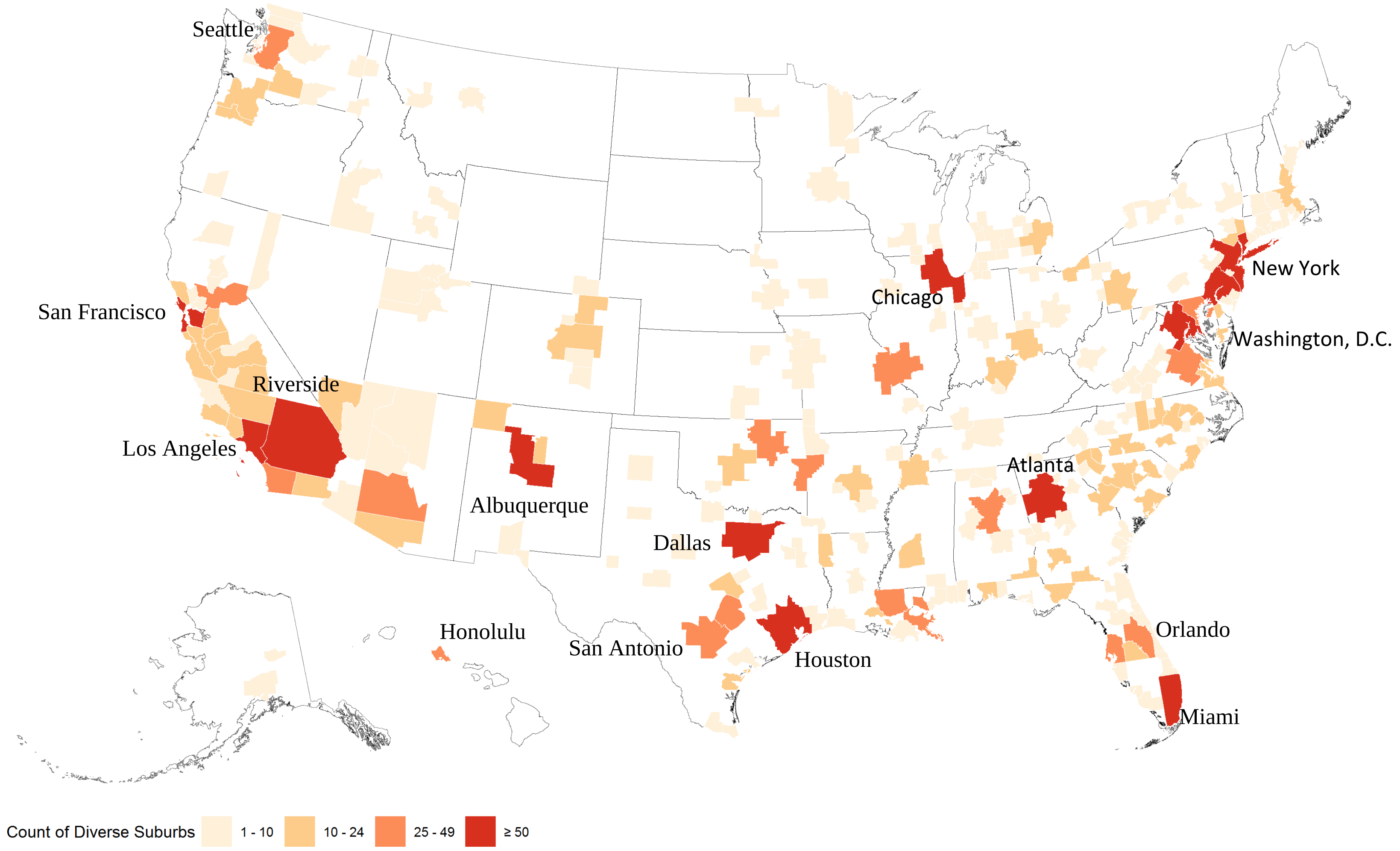
To define stable diversity and integration, I draw on place-level racial and ethnic composition data from the 2000 and 2010 Decennial Censuses. I obtained these data, including shapefiles, from the National Historical Geographic Information System (NHGIS) (Manson et al. 2017). Given my questions examining stable diversity and stable integration, I identify suburbs that maintain stable integration between the 2000 and 2010 censuses. This time period roughly marks the contemporary epoch with large Asian and Latinx populations across the nation in both multiethnic regions and new immigrant destinations. Furthermore, my data are limited to this decade because NHGIS readily provides racial and ethnic count variables in Census 2000 standardized to 2010 place boundaries and public-sector employment, a key variable in this analysis, is only available for places starting in 2000. I extended the analysis to include 1990 without the employment sector variable, and the remaining regression parameter estimates are robust in direction, magnitude, and significance (results provided upon request).

For sample selection, I begin with all metropolitan census places with American Community Survey data for the 2008-12 5-year estimates (n=14,808). I first exclude central cities, which the Census defines as places with the largest population in the metro area. This criterion results in 14,442 suburbs across the nation.

I then limit the sample to stably diverse suburbs. The measurement of residential integration requires a nontrivial share of diversity because racially homogenous places by construction cannot be integrated across different racial or ethnic groups. Studies typically use a threshold of 90% to deem a place monoracial (e.g., Farrell and Lee 2011; Hall et al. 2015); however, for this analysis of integration, I use a stricter threshold of 80% as places greater than 80% one group are still quite homogeneous. Therefore, I limit the sample to suburbs that are at maximum 80% one racial or ethnic group. Furthermore, to exclude suburbs undergoing rapid change, I guarantee stability of this composition by imposing this threshold for both 2000 and 2010. This threshold provides a range of places that are highly diverse to those that are moderately less diverse than the nation at large in 2010 (13% Black, 16% Latinx, 5% Asian, and 64% white) (Humes, Jones, and Ramirez 2011) and excludes 10,906 places, of which 95% are predominantly white, 1.5% are predominantly Black, 2.5% are predominantly Latinx, and 1% are predominantly Native American. No places exhibit Asian dominance. Appendix Table A.1 provides sensitivity analyses for the 80% threshold using a more conservative threshold, 70%, to define stable diversity. Regression parameter estimates' magnitude, direction, and significance are robust to cutoff specification.

The final analytic sample includes 3,536 suburbs that remained stably diverse between the 2000 and 2010 censuses. The sample represents 66 million residents in 2010, accounting for more than 50% of the American suburban place population, highlighting the substantial diversity of suburban America. Figure 1.2 maps the sample by metropolitan area. While located throughout most of the country, these suburbs largely cluster in major coastal metropolitan areas (e.g., DC, Atlanta, Riverside, Los Angeles) as well Texas, the Southwest, and greater Chicago.

Figure 1.2 Clustering of Stably Diverse Suburbs (n) by Metropolitan Area (Census 2000 and Census 2010, total n = 3,536)


Seattle
San Francisco
Riverside
Los Angeles
Albuquerque
Honolulu
San Antonio
Dallas
Houston
Chicago
New York
Washington, D.C.
Atlanta
Orlando
Miami
Count of Diverse Suburbs
1 - 10
10 - 24
25 - 49
≥ 50

1.4.2 Methodology

Among the final analytic sample (n = 3,536) of stably diverse suburbs, I calculate H, a widely used measure of the spatial evenness of racial and ethnic diversity among multiple groups (Lichter et al. 2015b; Reardon and Firebaugh 2002). I specifically calculate H because it easily handles multiple racial and ethnic groups and, thus, is suitable for multiethnic environments. Figure 1.1 provides an illustration of how H may be implemented in multiethnic contexts. The other popular evenness measure, the Index of Dissimilarity, only applies to two-group scenarios, and thus, is unsuitable for an analysis of multiethnic integration (Massey and Denton 1993). I focus on all Latinxs and non-Latinx Blacks, Asians/Pacific Islanders, American Indians/Alaska Natives, whites and others. The "other" category comprises the census category "other" and non-Latinx multiracial individuals.

H measures how closely the diversity of constituent subunits mirrors the diversity of the place of interest. I use census blocks as the subunit for places, and thus, the comparison is between block diversity and overall place diversity. The level of diversity is defined as entropy (E):

$$(1)\ E = -\sum_{r=1}^{R} \pi_r log\ (\pi_r)$$

where π_r is the place's share of racial or ethnic group r. When reporting E in the results section, I scale E to be between 0 and 1 by dividing E by the log of the number groups. For scaled E, 0 indicates complete homogeneity, and 1 indicates maximum diversity (equal representation of all groups). To visualize E, Figures 1.1a and 1.1b represent maximum place diversity across four groups and Figures 1.1c and 1.1d represent moderate place diversity. I calculate E for each block (i) to derive E_i. H compares E and E_i and is defined as

$$(2)\ H = \sum_{i=1}^{M} \frac{t_i(E - E_i)}{ET}$$

where t_i is the total population count in block i, and T is the total population count of each place. The index ranges from 0 to 1, where 0 indicates that the diversity of each block matches perfectly the overall place diversity (maximum integration) and 1 indicates that each block contains only one group (maximum segregation). Figures 1.1a and 1.1c display H values of 1 and 1.1b and 1.1d display H values of 0. Values above 0.4 are typically considered moderately-highly segregated and not integrated. For context, the highly segregated cities proper of Chicago and Atlanta have 2010 H values of 0.57 and 0.52, respectively, suggesting low integration.

The focus of this inquiry is to understand the contexts of highly integrated places. I consider a place to be stably integrated if $H \leq 0.20$ for both census years, indicating that the place maintained high levels of integration over the decade. Interviews with residents of select integrated communities suggest that communities that meet this threshold support substantial cross-racial interaction where residents maintain multiethnic social networks.[4] Appendix Table A.1 provides sensitivity analyses using a more conservative cutoff of $H \leq 0.15$—regression parameter estimates' magnitude, direction, and significance are generally robust to cutoff specification, even as half of the integrated sample is lost. Further, I conducted a regression using the continuous measure H and regression parameter estimates are in the same direction and significance (results provided upon request).

Among the sample of 3,536 stably diverse suburbs, 1,455 suburbs display stable integration between the 2000 and 2010 decade. These stably integrated places cover 41% of the final analytic sample, represent 31 million residents in 2010, roughly 12% of the national metropolitan population.

---

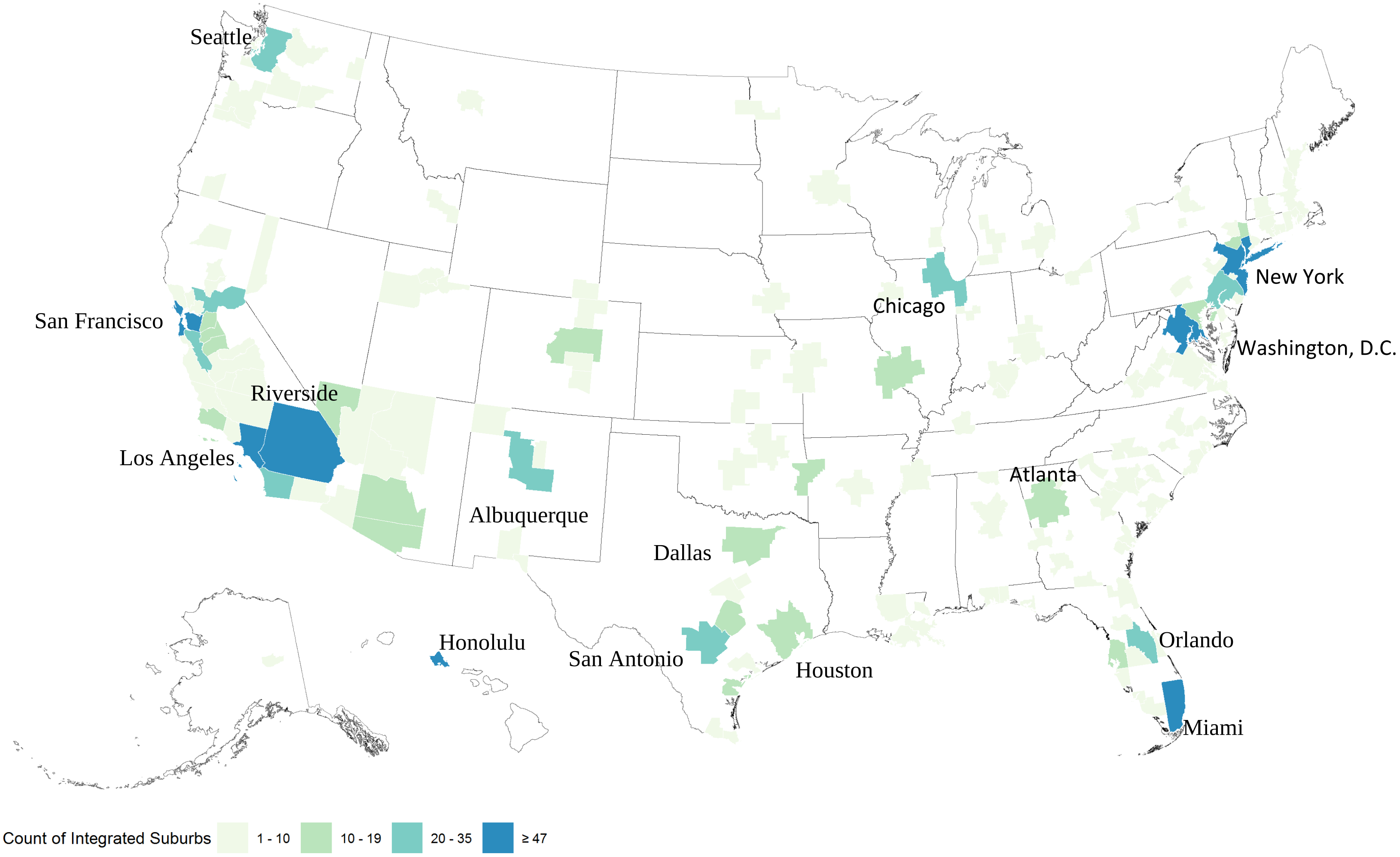
[4] I visited communities around this threshold in greater DC and Clarksville, TN, and I conducted informal interviews with residents in greater Houston and Killeen, TX, as well as the San Francisco Bay. I investigated residents' impressions of diversity and integration within these areas as well as their perceptions of cross-racial interaction.

Due to their very small shares in the sample, I exclude Native Americans from the proceeding analyses and focus only on Blacks, Latinx, Asians, and whites.[5] Figure 1.3 maps how stably integrated suburbs cluster by metropolitan area.

---

[5] Native Americans compose approximately 0.5% of the sample. Only 155 places contained Native American shares greater than 5% in 2010. For comparison, the next smallest category, Asians, constitute shares of at least 5% for 1,007 places in the sample. While this analysis excludes Native Americans, Native Americans disproportionately contribute to diversity in rural America. The history of Native American "termination" by assimilation provides a contrasting theoretical framework for residential integration (i.e., integration as the result of discrimination and genocide). Future research may look to this often-understudied group to further illuminate how spatial distributions reflect heterogeneous race relations and resulting residential settlement patterns.

Figure 1.3 Clustering of Stably Integrated Suburbs (n) by Metropolitan Area (Census 2000 and Census 2010, total n = 1,455)


Seattle
San Francisco
Riverside
Los Angeles
Albuquerque
Honolulu
San Antonio
Dallas
Houston
Chicago
Atlanta
New York
Washington, D.C.
Orlando
Miami
Count of Integrated Suburbs
1 - 10
10 - 19
20 - 35
≥ 47

1.4.3 Analytic Strategy

I use logistic regression to regress the indicator of stable integration on several critical independent variables and potential confounders. Racial and ethnic count variables are easily standardized across censuses, so I use 2000 data to predict stable integration over the decade. However, other place-based variables standardized to 2010 boundaries are not readily available for 2000, and thus, I use cross-sectional data (2010 census and ACS 2008-2012 5-year estimates) to predict integration. Moreover, many key variables (e.g., government economies) are unlikely to change rapidly over the course of the decade.

Dependent variable: I seek to understand the contexts of highly integrated suburbs, and the indicator of stable racial residential integration serves as my dependent variable (places for which $H \leq 0.20$ for both census years). I label places that do not demonstrate stable integration as diverse-low integration places, and thus the comparison is between diverse-highly integrated places and diverse-low integration places.

Independent variables:

Racial and ethnic composition (2000 data): I classify the racial and ethnic composition of each place using the 25% criterion first proposed by Logan and Zhang (2010). I consider a place to have a substantial presence of a group if the share of residents in that place is at minimum 25% of their share in the total sample. This method posits that a group is substantively absent from a place if it does not meet this threshold. For example, in 2000, Latinxs composed 19.5% of the sample; I consider a place to have a substantial Latinx presence if it is at least 4.9% Latinx (i.e., 19.5%*0.25). Using the 25% criterion, I create indicator variables for Black, Latinx, Asian, and white presence.

I test whether places comprising Asians or Latinxs moderate Black-white integration beyond the additive components of the main effects of each group. In regression analyses, I parameterize multiethnic contexts with separate Black*Asian*white, Black*Latinx*white, and a Black*Latinx*Asian*white interaction terms (e.g., a term for suburbs with Blacks, Asians, and whites all present, etc.). However, the Black*Asian*white and Black*Latinx*Asian*white terms did not improve overall model fit and provided similar results as the more parsimonious model with only the Black*Latinx*white interaction. Consequently, I report results from the model only including the Black*Latinx*white interaction term, and other models are included in Appendix Table A.2.

Government economies: Following Lee and Sharp (2017), I classify a place as a military hub if the share of residents in the labor force employed in the Armed Forces is twice the national share. I use the same rule for civilian public sector employment (local, state, or federal employment) and public university enrollment. This approach yields institutional hub cutoffs of 1.4%, 29.8%, and 41.7%, respectively. Given the relatively small threshold for military hubs, I conducted a sensitivity analysis where I consider military hubs to be places in which 10% or more of the labor force was in the Armed Forces (See Appendix A). The resulting odds ratio was more than 4-times the magnitude of the reported results. Hence, the reported results below provide a conservative estimate of the association between integration and military presence.

New housing stock, unincorporated status, and metropolitan political fragmentation: I calculate new housing stock as the share of units built after 1970. I choose 1970 since this is the first census that marks the post-Fair Housing Act period. The NHGIS provides data on whether a place is legally incorporated or designated by the Census (unincorporated); I include an indicator for places that are unincorporated. Lastly, I use a measure of political fragmentation that relies on the share of residents belonging to different places (Bischoff 2008; Crowder, Pais, and South 2012).[6] This index calculates the probability that two residents from the same metropolitan statistical area

---

[6] I calculate fragmentation as $\sum_{i=1}^{k} P_i(1 - P_i)$, where P_i is the proportion of residents in the metropolitan area living in place i.

(MSA) live in different places (in the sample of all places in the metropolitan area). I use this measure over other formulations (e.g., the number of places in a metro area per 1,000 residents from Lichter and colleagues (2015b)), because it specifically reflects the degree of suburbanization in relation to the size of the central city. Consequently, MSAs with smaller central cities with greater populations distributed across sprawling suburbs (e.g., San Francisco) will appear more fragmented than metro areas with large concentrations in the central city (e.g., New York).

Control variables: Nativity may confound the relationship between racial and ethnic composition and residential integration. Therefore, I control for nativity, which is measured as the percent of residents that are foreign-born. Metropolitan diversity represents the potential pool of residents that cities and suburbs pull from. I calculate metropolitan diversity as the entropy score (Eq. 1) for each place's associated MSA. The availability of rental units may provide opportunities for integration across socioeconomic class, which has strong links to race in the U.S.—I use the percentage of units that are renter-occupied to capture renters.

I control for place land area (measured in square kilometers) and population because larger places necessarily allow for greater spatial differentiation. I take the log of each of these variables to reduce the statistical leverage of outliers. I also control for metropolitan size as large metropolitan areas may allow for greater clustering of integrated places. Using the US Department of Agriculture 2013 Rural-Urban Continuum Codes,[7] I classify places as situated in a large MSA when the MSA contains at least 1 million residents. Medium metropolitan areas are those comprising 250 thousand to 1 million residents and small metropolitan areas are those comprising less than 250 thousand residents. Lastly, I include an indicator for places in states on the East or West coasts or southern border because multiethnic areas are disproportionately located in these regions (Zhang and Logan

---

[7] Please see the following link for the Economic Research Service Rural-Urban Continuum Codes: https://www.ers.usda.gov/data-products/rural-urban-continuum-codes/ (Accessed April 6, 2019).

2016). I use this variable to account for unobserved regional level factors that might attract a number of racial and ethnic groups and concurrently influence residential integration. For ease of interpretation, I mean-center all continuous variables and scale percentage variables (nativity, renter-occupied units, political fragmentation, and new housing stock) to units of 10 percentage points.

Finally, I use two methods to address spatial autocorrelation. First, because suburbs are embedded within MSAs, have relationships to specific central cities, and are likely correlated due to spatial proximity, I cluster the variance within MSAs using the robust sandwich estimator with generalized estimating equations. This estimator is referred to as robust because it provides reliable inference with imbalanced designs and potential misspecification of the covariance structure (Ziegler 2011). This study design is imbalanced as MSAs have different numbers of suburbs. Second, I model localized spatial autocorrelation by including a dummy variable for whether each place in the sample is adjacent to a stably integrated place. I define adjacency as places that share any part of their borders. This variable represents the substantive role of spatial proximity to integrated places in supporting integration. For example, integrated places may be more likely to sustain integration if they are also surrounded by other integrated places.

To summarize, the following equation represents the regression model:

$$(3)\ logit\left(E\left[integrated_p\right]\right) = \beta_0 + \beta_1 race_p + \beta_2 gov_p + \beta_3 house_p + \beta_4 uninc_p + \beta_5 frag_m + \delta controls + \gamma lag_p + e_p$$

where $integrated_p$ refers to whether a place was stably integrated between 2000 and 2010; β_0 is the intercept; $race_p$ refers to a vector of dummy variables reflecting the 2000 place racial and ethnic composition as measured by the 25% criterion (i.e., the presence of Blacks, Latinx, Asians, whites and the interaction term for Black-Latinx-white places); gov_p denotes a vector of dummy variables reflecting whether a place was a hub for the public sector, military, or public universities; $house_p$ refers to the percent of housing built after 1970; $uninc_p$ refers to whether a place was unincorporated versus incorporated; $frag_m$ denotes the level of suburbanization in a metropolitan area as reflected by the political fragmentation index; $controls$ denotes vector of other place, metropolitan, and region covariates with associated parameter estimates δ; lag_p is the spatial lag measure with associated parameter estimate γ; and finally, e refers to the error term.

1.5 Results

Racial residential integration is a widespread trend—the analytic sample contains 1,455 highly integrated suburbs in which roughly 31 million Americans live. The central empirical objectives of this paper are to understand (1) the racial and ethnic composition of residential integration within these suburbs, and (2) the place and metropolitan conditions that shape residential integration in the context of growing diversity in American suburbs. I begin this section by first examining how anti-Blackness and multiethnic spaces influence integration. I follow with results regarding the roles of new housing stock, metropolitan political fragmentation, incorporated status, and government economies.

1.5.1 The link between racial and ethnic composition and residential integration

The following results regarding the racial and ethnic composition of residential integration contain three central findings with implications for theories of segregation and the American racial order. First, consistent with the anti-Blackness hypothesis, integration occurs least often in places with Black presence, followed by Latinxs, and Asians live in integrated communities at the highest rates. Second, multiethnic contexts including Asians substantially support Black-white integration, suggestive of an Asian buffering effect; while Latinx presence associates with only moderate increases in Black-white integration. Third, fully multiethnic places with all four groups show the highest rates of Black-white integration.

The anti-Black nature of racial settlement. Table 1.1 shows the frequency distribution of places typed by 2000 racial and ethnic composition across integration status. Overall, 41 percent of diverse suburban places are stably integrated, but 11 percent of places shared between Blacks and whites only experienced stable integration, the lowest among all racial and ethnic combinations. For comparison, Asians show the highest rates of living in integrated communities; integrated suburbs compose 88% of bi-racial Asian-white places. Bi-ethnic Latinx-white places display an even representation of integration (40%) compared to overall sample.

Table 1.1 Frequency distribution of places (n) by multiethnic place type (25% criterion) and integration status in the 2000 Census.

	Diverse-Low Integration	Integrated	Integrated (%)
A	1	14	93
AW	9	68	88
B	1	0	0
BA	0	3	100
BAW	107	129	55
BL	30	7	19
BLA	13	6	32
BLAW	237	501	68
BLW	424	101	19
BW	743	89	11
L	4	2	33
LA	2	12	86
LAW	136	284	68
LW	329	218	40
W	45	21	32
Total	2081	1455	41

Note*:* A = Asian, B = Black, L = Latinx, W = White. Asian-alone place types have large multiracial populations and completely exist within the Honolulu metro area. Latinx-alone place types are located in the Southwest and West with large Native American populations. White-alone place types typically have large Native American populations and 77% of these places are in Oklahoma.

Integration by race and ethnicity at the metropolitan level continues to underscore the anti-Blackness of segregation, where Asians and Latinxs experience greater exposure to whites at the metropolitan level. Table 1.2 provides the racial and ethnic composition of MSAs comparing MSAs with large clusters of integrated places (high-integration MSAs) against diverse MSAs with relatively small clusters of integrated places (diverse-low integration MSAs). Notably, high-integration MSAs generally display small Black populations; for example, Honolulu, Albuquerque, and Seattle have extremely small Black populations (2%, 2%, 5%, respectively). DC, New York, and Miami are the only high integration MSAs with Black shares larger than the national composition (12% Black). In contrast, the diverse-low integration MSAs are much Blacker than the high integration MSAs, again speaking to the anti-Black nature of racial settlement in the US. For example, Chicago, Atlanta, and Philadelphia are notably segregated cities with sizeable Black populations, while the greater metro areas maintain white majorities. On average, these diverse-low integration MSAs are 16% Black while the high integration MSAs are 10% Black.

Table 1.2. The Racial and Ethnic Composition of the 10 MSAs with the Largest Clusters of Integrated Suburbs and the 10 Most Diverse MSAs that did not Rank among the Top 10 (2010 Census)

	Places (n)			MSA	Race and ethnic composition (%)				
MSA	Integrated	Sample	MSA	Fragmentation	Black	Latinx	Asian	White	Diversity
High Integration									
DC	141	178	340	0.85	25	14	9	49	0.81
New York	112	232	750	0.67	16	23	10	49	0.81
Los Angeles	99	133	182	0.89	7	44	15	32	0.80
Miami	69	111	168	0.86	20	42	2	35	0.75
San Francisco	59	77	137	0.93	8	22	24	42	0.85
Riverside	56	86	130	0.93	7	47	6	37	0.74
Honolulu	47	51	53	0.84	2	8	52	19	0.78
Seattle	35	38	204	0.90	5	9	12	68	0.65
Albuquerque	33	50	77	0.53	2	47	2	42	0.66
Sacramento	31	45	83	0.86	7	20	12	56	0.77
Diverse-Low Integration									
Chicago	27	95	388	0.85	17	21	6	55	0.74
Houston	19	87	161	0.53	17	35	7	40	0.80
Atlanta	14	86	167	0.41	32	10	5	51	0.73
Philadelphia	21	72	293	0.49	20	8	5	65	0.64
Dallas	19	71	220	0.87	15	27	5	50	0.76
San Antonio	20	49	72	0.45	6	54	2	36	0.63
Orlando	24	45	101	0.68	15	25	4	53	0.74
Richmond	8	38	59	0.50	29	5	3	60	0.63
Austin	13	37	64	0.54	7	31	5	55	0.69
Phoenix	11	37	86	0.81	5	29	3	59	0.66

Note: High Integration MSAs are sorted by number of stably integrated suburbs. Diverse-low integration MSAs are sorted by number of stably diverse suburbs that met the 80% sample inclusion criterion. Diversity is calculated as the Entropy index (Eq. 1); however, I scale diversity to range between 0 and 1.

The high integration MSAs are disproportionately western MSAs with large Asian populations (see Figure 1.3). With the exceptions of Miami and Albuquerque, which are both 2% Asian, Asians live in more than 85% of integrated places among these MSAs. Notably, Honolulu, which is majority Asian and Pacific Islander, shows large clustering of integrated places despite its small size in terms of both population and number of places. Seattle is the whitest MSA among the high integration MSAs, and Asians are the largest population of color composing 12% of greater Seattle. By comparison, the diverse, but low integration MSAs show relatively small shares of Asians. On average these MSAs are 4% Asian. Houston is the most Asian MSA in this list and it is still only 7% Asian.

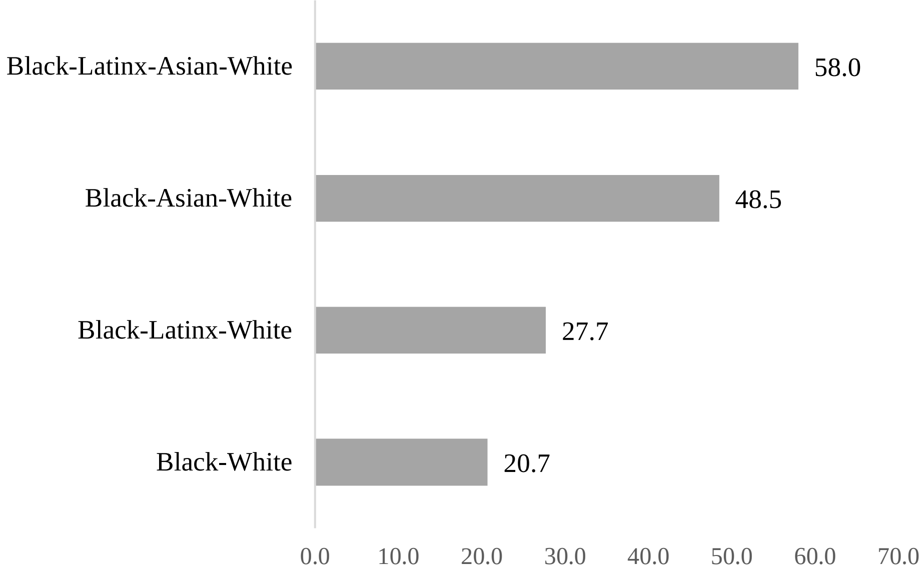
Latinxs fall in between Blacks and Asians and similarly drive diversity in both the high integration MSAs and the diverse-low integration MSAs. At 16% of the 2010 national population, Latinxs on average compose 28% of the high integration MSAs and 25% of the diverse-low integration MSAs. Despite Albuquerque's small size and low diversity, it appears among the high integration MSAs because integration occurs entirely across places with only Latinxs and whites present. In sum, these descriptive analyses suggest that suburban integration is least likely to occur in metro areas with large Black populations and most likely to occur in areas with larger Asian populations, with Latinxs falling in the middle.

Multiethnic communities moderate Black-white integration. Consistent with the multiethnic contexts hypothesis, multiethnic settings show higher levels of Black-white integration. Black-white integration is highest in communities with Asian presence, while evidence for a Latinx buffering effect is more modest. Returning to Table 1.1, when Asians are present, the rate of integration in places with Blacks and whites grows to 55% (Black-Asian-white places). Black-Latinx-white places, however, show only a moderately higher rate of integration compared to Black-white places, (19% vs. 11%), which is still substantially below the sample rate of integration (41%). The combination of both Latinxs and Asians dramatically improves Black-white integration. The most multiethnic settings, Black-Latinx-Asian-white places, display the highest rate of Black-white integration (68%).

The metropolitan results in Table 1.2 continue to emphasize how multigroup diversity shapes integration. Many of the high integration MSAs are generally among the most racially diverse areas in the nation with smaller than average white populations and large shares of each population of color. Several of these MSAs show pluralities by populations of color: Los Angeles, Miami, Honolulu, Riverside, and Albuquerque. In comparison, many diverse-low integration MSAs lean toward bi-racial or bi-ethnic compositions (e.g., San Antonio, Richmond, Austin, and Phoenix). Eight out of 10 of these MSAs display white majorities.

Multivariable analysis. I now turn to results generated by multivariable logistic regression analysis to understand the association between racial and ethnic composition and residential integration, net of other place, metropolitan, and regional characteristics; geographic nesting within MSAs; and localized spatial autocorrelation. Figure 1.4 reports the predicted probabilities of integration by multiethnic place type focusing on places where Blacks and whites live together (for all parameter estimates, see Appendix Table A.2).

Figure 1.4 Bar Chart of Predicted Probabilities (%) of Black-White Stable Integration in Suburbs between 2000 and 2010 by Multiethnic Composition in 2000 (25% Criterion), Generated by Multivariate Logistic Regression.



Note. Results correspond to Model 1 in Appendix Table A.2 and includes the main effects for government hubs, land area, population size, nativity, rental units, new housing stock, legal incorporation, size of MSA, MSA fragmentation, MSA diversity, coastal/southern border state location, and spatial autocorrelation. I generate these probabilities by setting all continuous variables to their mean, for suburbs in a coastal/border state that are not a government hub.

These estimates support the descriptive evidence provided in Tables 1-3: Black-white integration is rarest without the presence of Asians; Latinxs show limited buffering; and integration is most common in fully multiethnic communities. In Black-white places, the predicted probability of integration is 20.7% and in Black-Latinx-white places this probability is 27.7%. But in places with Asians, the predicted probability more than doubles to 48.5% in Black-Asian-white places and 58.0% in Black-Latinx-Asian-white places. These results clearly confirm that Asian presence fundamentally alters racial dynamics of place, even after controlling for key place and metropolitan characteristics (e.g., percent foreign born), and that the most multiethnic places with all four groups together synergistically produce integrated communities at higher rates than any other Black-white combination.

1.5.2 The place and metropolitan characteristics of residential integration

The results thus far show which racial and ethnic groups are integrating with each other in American suburbs with special attention to Black-white integration. I now discuss the remaining characteristics that influence the emergence of integration: new housing stock, unincorporated legal status, metropolitan fragmentation, and government economies. Table 1.3 reports the descriptive statistics of these place-based characteristics across integration status.

Table 1.3. Descriptive Statistics of the Local Characteristics of Places and Associated MSAs by Integration Status (2008-12 ACS 5-year Estimates and 2010 Census)

	Stably Integrated (n=1,455)	Stably Diverse-Low Integration (n=2,081)
Institutional hub (%)		
Military	18.0	6.6
Public university	4.1	2.9
Public-sector	11.5	7.3
New Housing (%)	62.8	56.0
Unincorporated (%)	53.9	27.7
MSA Fragmentation (mean)	0.73	0.61

First, supporting place stratification theory, unincorporated suburbs (i.e., suburbs without government jurisdictions) display striking overrepresentation among stably integrated suburbs. Over half of unincorporated suburbs, 53.9 percent, remained stably integrated, compared to only a quarter, 27.7 percent, of incorporated suburbs. These results support the hypothesis that unincorporated places lack the mechanisms to exclude people of color or to sequester people of color in specifically zoned areas.

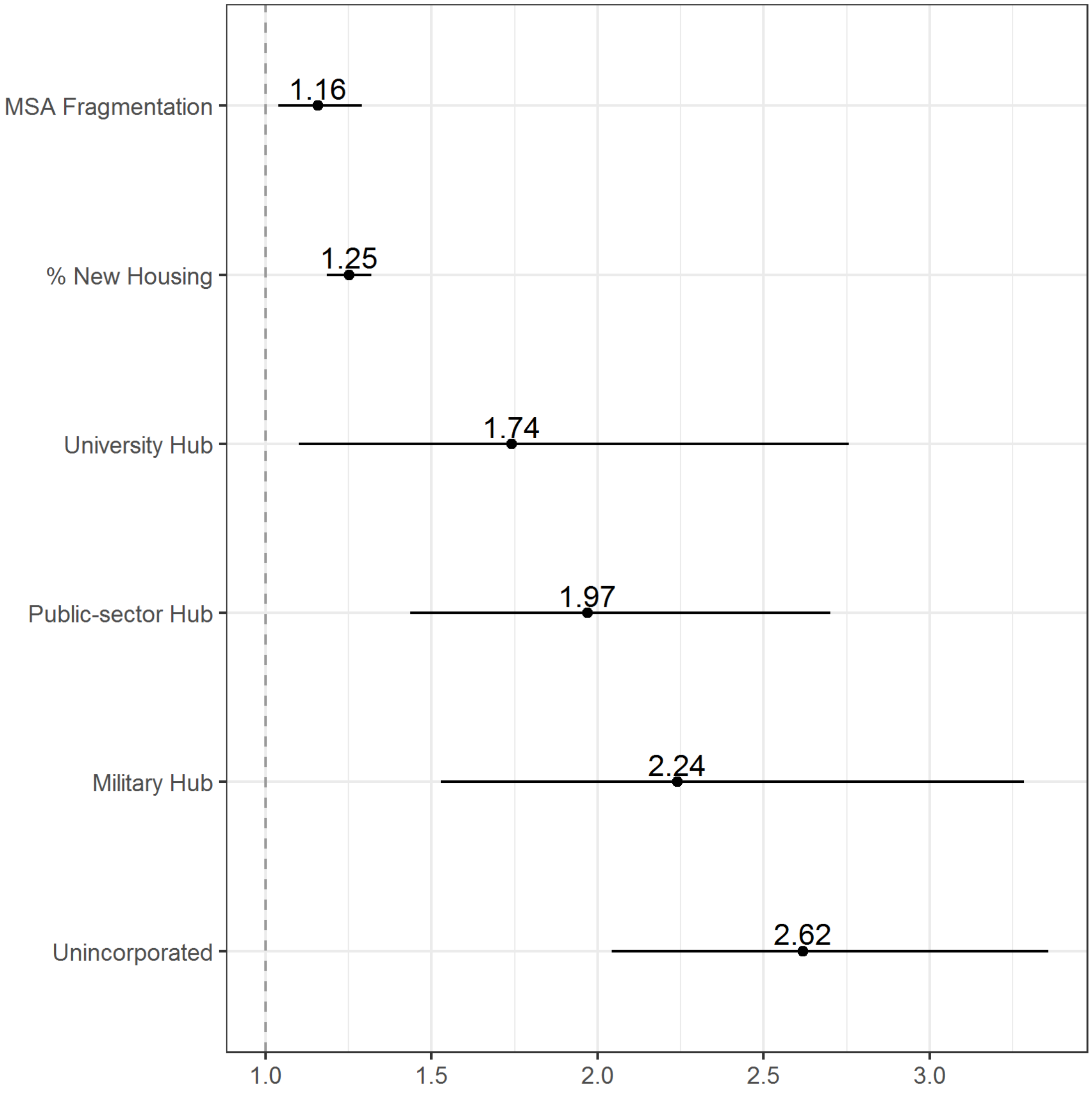
Stably integrated places are more frequently located in more fragmented metro areas on average (0.73 vs. 0.61), supporting the hypothesis that greater suburbanization may lead to the emergence of integration. As a reminder, I calculate fragmentation as the probability that two residents live in different places within the metro area. The size of the central city heavily influences this probability. MSAs with smaller central cities and expansive suburbs will appear more fragmented than large cities with concentric circle industrialization and development. In Table 1.2, many of the high integration MSAs are large MSAs with small central cities. For example, greater DC cuts across political boundaries (DC, Maryland, and Virginia) and has a sprawling spatial structure where the population is divided among many suburban municipalities with only 10% of the population living in the city. By comparison, the diverse-low integration MSAs in Table 1.2 have a much lower average fragmentation compared to the high integration MSAs (0.61 vs. 0.83). Many of these diverse-low integration MSAs have larger central city populations relative to the overall MSA (e.g., Chicago, Houston, and Philadelphia). Since fragmentation reflects suburbanization, this structure makes it such that smaller proportions of residents will access integrated communities in the suburbs.

The government hub variables support the proposed hypotheses generated by social structural sorting and spatial assimilation theories: the diversity created by government employment (i.e., military, public sector, and public universities) disproportionately supports integrated suburbs. Military and public sector hubs display substantial overrepresentation among integrated places (18.0% vs. 6.6%; 11.5% vs. 7.3%). Evidence is weaker for university hubs, which compose a modestly larger share of integrated places (4.1% vs. 2.9%).

Lastly, consistent with place stratification theory, integrated suburbs have moderately higher housing stock built after the passage of the Fair Housing Act. On average, 62.8% of the housing stock in stably integrated suburbs was built after 1970, while 56% of the housing stock on average was built after 1970 for diverse-low integration suburbs.

Multivariable analyses: Finally, I turn to results produced by multivariable logistic regression analysis to examine how these place-based characteristics associate with integration after controlling for population composition, other place and metropolitan characteristics, nesting within MSAs, and spatial autocorrelation. Figure 1.5 reports the odds ratios and 95% confidence intervals generated by logistic regression for critical place-based characteristics, excluding the racial and ethnic composition variables previously discussed (for all parameter estimates, see Appendix Table A.2). These results reinforce the descriptive evidence presented in Table 1.3.

Figure 1.5 Graph of Odds Ratios and 95% Confidence Intervals from the Logistic Regression Predicting Integration.



Note. Results correspond to Model 1 in Appendix Table A.2 and includes the main effects of the racial and ethnic composition variables as well as the interaction term for Latinx buffering between Blacks and whites. This model further controls for land area, population size, nativity, rental units, size of MSA, MSA diversity, coastal/southern border state location, and spatial autocorrelation. For interpretability of coefficient sizes, I scaled fragmentation and new housing variables to 10 percentage-point units. For example, a 10 percentage-point increase in fragmentation associates with an odds ratio of 1.16.

As hypothesized by place stratification theory, unincorporated status displays a large positive odds ratio (2.62), the largest of any other characteristics included in this analysis. Unincorporated suburbs in general lack the legal jurisdiction to create policies that preclude entry by people of color, supporting integration especially as populations of color continue to suburbanize.

Metropolitan political fragmentation shows a strong positive association with the odds of place-level integration, consistent with hypotheses on suburbanization generated by place stratification theory. A 10% increase in fragmentation associates with a 16% increase in the odds of integration. Moving from the first quartile (0.52) to the third quartile (0.83) equates to a 58% increase in the odds of stable integration ($1.16^{(0.83-0.52)*10} = 1.58$, where fragmentation is scaled to 10 percentage-point units). More suburbanized metro areas support more integrated communities.

As hypothesized by place stratification theory, new housing stock built after the passage of the Fair Housing Act shows a strong, positive association with the odds of integration—moving from the 1st quartile (12%) to the 3rd quartile (38%) associates with an increase of the odds of integration by 79% ($1.25^{(0.38-0.12)*10} = 1.79$, where percent new housing is scaled to 10 percentage-point units). New housing provides openings for new arrivals beyond the specter of legal racial discrimination.

Consistent with the government economies hypotheses, the economic base of place highly influences the possibility for residential integration. Military hubs show a large positive odds ratio of 2.24. Public sector hubs also associate with increased odds of integration by approximately 2-times (OR: 1.97), and university hubs associate with an increased odds of integration by 1.74. These strong associations provide further support for prior work that argues that these institutions are inversely related to segregation. These institutional hubs attract racially and ethnically diverse populations and undergird residential integration in unexpected geographies. Military hubs like Schofield Barracks and Kaneohe Marine Corps Station compose the only Black-Latinx-Asian-white integrated places in the Honolulu metro area, which is defined by a largely Asian/white racial composition. Integrated university hubs include places external to diverse MSAs like College, AK (University of Alaska-Fairbanks) and Kennesaw, GA (Kennesaw State University)

.

1.6 Discussion and Conclusion

In this article, I argue for a new sensitivity to emerging patterns of stable residential diversity and integration in the United States. I update prior research on racial settlement by examining the spatial distribution of race and ethnicity within stably diverse suburbs, the places most associated with increasing integration and declining racial segregation. I find that 31 million Americans lived across roughly 1,500 highly integrated suburbs in 2010. As racial and ethnic diversity spreads rapidly across the country, what growing diversity means for racial inequality depends crucially on how diversity spatially translates to integration or segregation within suburbs.

Results of this analysis support several specific conclusions. First, differentiating residential integration from diversity shows that integration is more likely to occur under certain forms of diversity defined by familiar patterns of anti-Black racism. Highly diverse MSAs with large Black populations like Chicago, Houston, and Atlanta show relatively small clusters of integrated suburbs, while high integration MSAs tend to be Western MSAs with small Black populations. At the suburb-level, Blacks have the lowest probability of living in integrated communities with whites. However, when Blacks and whites live alongside Asians, the probabilities of integration increase two to three-fold, generally representing an increase between Black-white interracial contact. Communities with Blacks, Latinxs, Asians, and whites together associate with the highest probabilities of Black-white integration

The difference between Latinx and Asian presence points out distinctions in the American racial order. Where prior research articulates the anti-Black color line as the exception (Parisi, Lichter, and Taquino 2011), this study alternatively suggests Asians as the "exceptional" population of color as Blacks and Latinxs experience more rigid racial boundaries. Despite large population growth in recent decades among Asians, the presence of Asian diversity does not seem to trigger high levels of segregation. Metropolitan areas with relatively large Asian populations such as Honolulu and Seattle show high frequencies of place-level integration.

In contrast, Latinx presence, while statistically significant, displays a small effect on Black-white integration. These results may reflect anti-Black sentiments among white Latinxs, or alternatively anti-immigrant sentiment and "Brown" racialization. For example, Latinx populations in "new immigrant destinations," throughout the South, Midwest, and Mountain West display markedly high residential segregation scores (Lichter, Parisi, and Taquino 2016). Furthermore, recent declines in Black-Latinx segregation exceed declines in Latinx-white segregation, suggesting increasing incorporation into Black communities (Lichter, Parisi, and Taquino 2015a). While Latinxs do not experience the same levels of racial isolation as Blacks, increasing Brownness for Latinxs may result in greater segregation from whites, especially in contrast to Asians.

Second, beyond racial and ethnic composition, the local characteristics of places and metropolitan areas must go beyond the reach of enduring racial discrimination for stable residential integration to arise. For example, unincorporated suburbs may provide new ground for integration to persist without the legal boundaries to exclude people of color, specifically as racial and ethnic diversity increasingly moves further from the city core. Greater metro area suburbanization may increase overall metropolitan segregation by sorting white people into specific suburbs (Crowder et al. 2012; Lichter et al. 2015b); however, where many suburbs preserve their white homogeneity, others in juxtaposition maintain their cosmopolitan identity. New housing stock allows places to transcend pre-Fair Housing Act segregation and provides space for expanding suburban communities of color as the U.S. grows more diverse.

Hubs of government funding (i.e., military, public-sector employment, and public universities) show particularly strong associations with integration. Employment has massive consequences for residential choice—people will try to live near where they work to reduce commute times and improve quality of life. These hubs pool together residents of different races and ethnicities across diverse geographies. Furthermore, these institutions support employment integration across occupational rank, which facilitates cross-racial contact within institutional space and simultaneously moors diverse populations to place. Integrated economies thus provide openings for integrated communities.

Third, results reflect other studies showing that analyses of racial settlement pivot critically on the spatial scale at which diversity, segregation, and integration are observed. Shifting the geographic unit to a socially meaningful construction of place in suburbia changes our understanding of integration to a phenomenon that co-occurs with entrenched metropolitan segregation. Many metro areas with large clusters of integrated suburbs are concurrently some of the most segregated when using metro areas as the unit of analysis. For example, as of 2010, greater DC's Black-white dissimilarity was 0.64 (i.e., 64% of the Black and white population would have to move census tracts to achieve complete integration) and DC displays dramatically increasing Latinx-white dissimilarity in recent decades (1980: D=0.32, 2010: D = 0.48) (Logan and Stults 2011). However, at the same time, DC's suburbs show the highest frequency of integration across all four racial and ethnic groups when using places as the unit of analysis. Racial and ethnic groups may be unevenly distributed across a metropolitan area, for example, with high segregation between the central city and suburbs or between individual suburbs (Lichter et al. 2015b), while simultaneously supporting clusters of diversity and integration within specific suburbs.

This study is not without its limits. I use dominant theories of segregation to propose characteristics that support stable integration. These theories often overlap to produce similar hypotheses; however, due to the use of Census data, this study cannot distinguish between the mechanisms proposed by these theories. For example, I show that Blacks are the least likely of all racial and ethnic groups to access integrated communities; however, I did not identify empirically the anti-Black racial ideologies that govern residential preferences in diversifying suburbs. Furthermore, I did not identify variation in anti-Black political regimes and anti-Black housing policies within incorporated suburbs. Nevertheless, results motivate future research in this vein to understand how individuals within integrated communities negotiate residential preferences and how political processes exacerbate segregation or promote integration.

This study provides a point of departure for future research. It bridges conventional studies of multiethnic census tracts with recent research that asserts the importance of the political and social boundaries of place (Fowler et al. 2016; Hall et al. 2016; Lichter et al. 2015b; Tach et al. 2019). Given the "placeness" to suburban life identified by the names of suburbs, this analysis supplies the geographic basis for understanding the downstream effects of residential integration on place-based processes such as school integration or healthcare access. Understanding how residential integration shapes racial integration in other spheres of life may provide paths to a more equitable society.

Lastly, this study identifies stable integration as a population-level phenomenon affecting tens of millions of people in American suburbs across the nation. Many qualitative analyses of stable residential diversity point to specific, exceptional places like Southeast Seattle or the famed Black-white racially integrated suburb, Shaker Heights, OH (Lumley-Sapanski and Fowler 2017; Meckler 2019). However, this analysis finds thousands of suburbs that are both more multiethnic and more racially integrated than Shaker Heights. The emergence of widespread diversity in suburbia requires new sites of analysis and theory to understand how residential dynamics impact race relations, especially as the US becomes increasingly racially diverse.

Chapter 2

The Relationship between Racial Residential Integration in Suburbs and Local Public Schools

The United States now exhibits unprecedented levels of racial and ethnic diversity, specifically in suburban communities across the nation (Bader and Warkentien 2016; Douds 2020). The majority of Black, Latinx, Asian, and Native Americans now live in suburbs (Frey 2018; Keeler 2016) and stably diverse communities are almost entirely located in suburbs (Bader and Warkentien 2016). These multiethnic spaces deviate from historical patterns of persistent metropolitan racial segregation and may offer new paths to a more racially integrated society. However, prior research on the effects of residential integration typically relies on metropolitan areas as the unit of analysis (e.g., Light and Thomas 2019; Samila and Sorenson 2017), which all remain substantially segregated, despite moderate declines in recent decades (Massey 2015). Little research addresses the potential consequences of racial residential integration in local communities, especially in suburbs as the primary site of integration in the 21st century.

Growing racial diversity and integration in suburbs has the power to reshape the social and political fabric of the nation; but, the effects of these demographic processes depend critically on how they translate to other domains of social life. For example, does residential integration reflect substantive cross-racial interaction? Do residents of different races and ethnicities participate in the same civic institutions in diverse suburbs? Scholars of diverse, central city neighborhoods remain skeptical, because residents often form micro-segregated, racially isolated activity spaces which nullify the potential for multiethnic interaction that residential diversity presents (Mayorga-Gallo

2014; Spitz 2015; Tach 2014). However, the suburbanization of people of color offers new encouraging evidence that whites and people of color may coexist and share space. For example, in highly multiethnic suburbs in greater Los Angeles and Houston, residents embrace diversity and report high satisfaction with their communities (Cheng 2013; Douds 2020). Furthermore, school districts in these case study communities maintain racially integrated, locally zoned public schools. Given that multiethnic, integrated communities exist almost entirely in suburbs (Bader and Warkentien 2016), these case studies may represent a national trend towards integration within suburban schools embedded within residentially integrated suburbs.

In this analysis, I examine how the diversification of American suburbia across the nation may lead to social integration using the case of public education. Studying whether growing residential diversity filters into public education may provide new insight regarding the ways place informs racial boundaries as well as into the spatial production of racial inequality. Schools represent a key set of resources available to communities as well as the possibility of cross-racial interaction within institutions. Public schools draw students from the local community, specifically in suburbs, and directly connect community context to achievement and other life outcomes. Moreover, as evidenced by the historic school desegregation case *Brown v. Board*, schools are key sites of racial segregation, by which whites hoard resources to the detriment of people of color (Supreme Court of the United States 1954). Thus, if school integration arises from residential integration, then new sets of social relations are at play that are not defined by the spatial separation of whites from people of color.

Where prior research investigates how diverse neighborhoods shape school enrollment compared to monoracial environments (Bischoff and Tach 2018), I examine how residential integration shapes schools in diverse suburbs. I distinguish a concept of integration from diversity because each represents a different system of race relations, where diverse places can demonstrate varying levels of integration. As racial diversity expands across the nation, diversity does not necessarily equate to meaningful cross-racial exposure within communities. For my purposes, *diversity* refers to the racial and ethnic composition of a place, where *integration* refers to the spatial distribution of diversity within a place (i.e., when people of different races and ethnicities live near each other) (Fowler et al. 2016). Here, integration is the opposite of segregation, and may only arise under conditions of diversity. Conversely, without spatial proximity, racial segregation across blocks or neighborhoods may explain the dynamics of micro-segregation among stably diverse, urban populations.

My central empirical objective is to analyze how residential integration influences public school composition within the context of diverse suburbs, the places most associated with declining segregation (Lichter et al. 2015b). Using Census 2010, American Community Survey 2008-12 5-year estimates, and 2009-10 school year data from the National Center for Education Statistics, I address two central questions. First, I ask whether higher levels of residential integration support multiethnic diversity in schools. By focusing on multiethnic diversity in schools and communities, I examine whether residential integration indicates social integration, that is, the sharing of institutional space by students of different races and ethnicities. Second, I ask whether residential integration in diverse suburbs affects white enrollment. By specifically examining white students, I investigate whether whites exit public education as diversity grows in schools. Historically, whites flee integrated schooling, creating racially isolated schools (Kruse 2005), but the new context of suburban integration may sustain white student enrollment as people of color suburbanize.

By asking these questions, I examine how residential integration in the 21st century impacts local race relations within American suburbia. Findings of this study suggest that residentially integrated places host public schools that are more multiethnic than those in more segregated environments, even after controlling for key place-based characteristics like the level of diversity within the residential community. Furthermore, integrated suburbs display moderately whiter student bodies compared to more segregated environments, suggesting that whites do not disproportionately opt out of public education as suburbs diversify and integrate. These results suggest that integration represents a new production of racial boundaries where people of different races and ethnicities share institutional space. Furthermore, results of this analysis shine light on how growing integration in the context of growing national diversity may affect racial inequality for decades to come as schools shape opportunities over the life course.

2.1 The historical links between communities, schools, and white flight

Millions of Americans now live in stably diverse suburbs (Bader and Warkentien 2016; Frey 2018), and what this local diversity means for racial inequality depends crucially on how it filters into public education. Schools play an important mediating role between community context and students and their guardians. Schools represent resources available to the community and affect residential sorting by influencing decisions for home-seekers with children. Furthermore, school quality directly affects real estate values for all residents, regardless of family structure (Jargowsky 2014). In turn, real estate values impacts school quality because nearly half of public school finances come from local property taxes (Wirt et al. 2000).

At the same time, public schools are critical sites of segregation, linking racial segregation within communities to schools. As evidenced by the landmark school desegregation case *Brown v. Board*, whites as a powerful group historically hoard resources via school segregation, forcing students of color to attend underfunded, racially isolated institutions (Reardon and Owens 2014; Supreme Court of the United States 1954). Furthermore, whites disinvest from communities undergoing diversification specifically to evade school integration. For example, federally mandated school desegregation in the wake of *Brown* precipitated white flight in southern communities (Clotfelter 2004; Kruse 2005). In the late 1950s, using a strategy known as "massive resistance" to integration, politicians in Virginia closed public schools to block integration, and diverted state funds to provide vouchers to whites attending segregated private schools (Kruse 2005). These politicians, and, presumably, their constituents would rather have no public schooling than integrated public schooling.

Recent research documents whites' continued aversion to integrated schooling. For example, despite the passage of antidiscrimination legislation, the average student of color now attends a school with fewer white students than the average student of color in 1970 (Fiel 2013). Interviews and experimental vignette studies find that whites display strong preferences for "white" schools and avoid schools with large Black shares (Billingham and Hunt 2016; Saporito and Lareau 1999; Schneider and Buckley 2002). Moreover, these studies find that racial and ethnic composition matters more to parental judgments of quality than even state test scores and academic performance.

Even as communities diversify, private schools and the recent expansion of school choice programs provide whites access to whiter schools. In diverse, urban environments, private schools and school choice programs contribute to racial segregation across schools (Saporito and Sohoni 2006). In addition, white student enrollment diverges more from white neighborhood composition in neighborhoods with more options to exit locally zoned public schools (Bischoff and Tach 2018)—that is, whites disproportionately opt out of local public schools when there are more options to exit public education in diverse environments. For example, in New York City, more than 25% of students attend a private or charter school (Brody 2019). Whites make up 25% of New York City's population aged 5-17 (author's calculations, ACS 2018 5-year estimates), and traditional public schools are less than 15% white, suggesting that roughly 40% of white students do not attend traditional public schools (Kucsera and Orfield 2014).

2.2 How residential integration in suburbs in the 21st century is different

While a vast literature documents the strategies that white guardians implement to avoid integrated schools, little research identifies the widespread emergence of stable racial diversity in suburbs and its relationship to schooling. Furthermore, little research assesses the "positive" factors that may support school integration in the context of rapid diversification. In this section, I draw on theories of racial attitudes and white flight that may shape the link between diverse communities and public schools.

Racial attitudes: Given the prominence of white prejudice in the US, school integration may only emerge if whites can tolerate being near people of color. While diverse central cities remain persistently segregated as a legacy of legal discrimination, the diversification of suburbia largely coincides with shifting racial attitudes in the 21st century (Frey 2018). In stark contrast to previous decades, recent survey research finds that nearly three quarters of white liberals now report that racial discrimination is the "main reason why many [B]lack people can't get ahead," compared to roughly 40% of white liberals in 1995 (Khalid 2019). Furthermore, multiethnic diversification disproportionately occurs in coastal metro areas known for liberal attitudes (Zhang and Logan 2016). As white liberals acknowledge racism as a structural feature of American society and perhaps actively appreciate diversity, they may become more willing to integrate with people of color and more willing to send their youth to schools with students of color.

Residential integration as a demographic process may support cross-racial contact on the ground, which in turn may shape racial attitudes as communities diversify. Group contact theory proposes that "positive" contact between racial and ethnic groups reduces racial prejudice (Allport 1954; Pettigrew 1998). When individuals share neighbors of different races and ethnicities, they are more likely to experience greater cross-racial contact that supports social integration. This is specifically important for suburbs as the places most associated with increasing integration. In the DC Area Survey, suburban whites that live in neighborhoods that are at least 10% Black, 10% Latinx, and 10% Asian report high satisfaction with their residential contexts (Bader 2016). Case studies of highly integrated suburbs in greater Los Angeles and Houston report that residents of all races and ethnicities actively embrace diversity and articulate diversity as a normative value that improves communities (Cheng 2013; Douds 2020). Simultaneously, these school districts boast racially integrated public schooling. If suburban racial integration produces "positive" cross-racial exposure among neighbors, then more harmonious racial attitudes will emerge that will support integration and diversity in public schools.

Local characteristics that prevent white flight: Even if hostile racial attitudes among whites endure, several local characteristics in the contemporary, suburban U.S. may prevent whites from enacting historical avoidance strategies. First, suburbs host fewer private schools compared to urban school districts, providing fewer options for whites to exit public education (Broughman, Swaim, and Hryczaniuk 2011). Therefore, by opting into a diverse suburb or staying in a suburb undergoing diversification, students are more likely to attend locally zoned public schools with diverse student bodies. In an analysis focusing on white youth only, whites in suburban settings are more likely to attend locally zoned public schools compared to those in urban districts, suggesting that school choice plays a smaller role for whites in suburban communities (Bischoff and Tach 2018).

Second, beyond opportunities to exit public education, suburban school quality may sustain multiethnic diversity inclusive of whites. Suburban school districts often boast high performing schools. For example, Fort Bend, TX is the second most racially diverse county in the nation and Fort Bend's school district is widely considered to be among the best in greater Houston (Douds 2020). At the same time, Fort Bend displays a *growing* white population and local public schools demonstrate sustained white enrollment. This is true, despite widespread support among whites for overtly racist presidential candidates like Donald Trump. Due to desirability, highly diverse and advantaged suburban contexts like Fort Bend may maintain racially integrated, multiethnic public schools.

Third, high costs of living in highly diverse metro areas may prevent whites from leaving diverse suburbs for all-white settings. Middle-class whites in these contexts are unable to move to white spaces and simultaneously maintain proximity to urban amenities. For example, similar to Fort Bend TX, Montgomery County MD is a highly diverse, suburban county in greater DC (18% Black, 14% Asian, 20% Latinx, and 43% white; ACS 2018 1-year estimates). Further, racial diversity is sprawling, rather than concentrated in the nearly urban old suburbs. Highly diverse contexts extend outward an hour commuting distance from the central city. Among the whitest suburbs are inner ring suburbs with high barriers to entry; for example, Bethesda, MD is 75% white and has a median house value of $900,000. Therefore, middle-class whites from highly diverse suburbs cannot easily move to Bethesda. Essentially, the high costs of living in conjunction with the relative ubiquity of racial diversity in greater DC offers white residents few options to escape being near people of color if they want a larger home and better school.

2.3 Hypotheses

Based in theories of racial attitudes and white flight, the recent suburbanization of diversity points to specific hypotheses regarding how residential integration may influence public school racial and ethnic composition. First, spatial proximity in integrated contexts in the 21st century may represent liberalizing racial attitudes that will support both diversity and white student enrollment in locally zoned public schools. Second, the contextual features of integrated suburbs (i.e., few educational exit options, community desirability, and affordability) make them such that residents will be more dependent on the community, by choice or lack thereof, sending their youth to public schools, thus facilitating both multiethnic diversity and higher white student enrollment.

2.4 Data and Methods

2.4.1 Data

Public elementary schools serve as the unit of analysis, as elementary schools typically represent the local community context more than middle or high schools (Bischoff and Tach 2018). Data come from the 2009-10 Public Elementary/Secondary School Universe Survey in the Common Core of Data (CCD), collected by the National Center for Education Statistics (NCES) (Chen et al. 2012). These data provide school-level racial and ethnic composition and I focus on Latinxs and non-Latinx Blacks, Asians, and whites. I combine Pacific Islanders with Asians for schools that disaggregate the two groups. I performed a longitudinal analysis for school years 2006-2015, however the time trend was not significant for the school percent white analysis, and substantively small for the school diversity analysis (results provided upon request). These results suggest that the association between residential integration and school composition changed little over this 10-year period. For simplicity, I only report this cross-sectional analysis for the 2009-10 school year.

Given that this analysis focuses on the diversification of suburbia, this analysis is limited to schools nested within suburbs. I define suburbs as non-central city census places within metropolitan areas. Non-metropolitan areas are typically considered rural (Economic Research Service 2015), and thus I exclude nonmetropolitan areas as being non-suburban. Therefore, I examine the suburban areas beyond the central city. I nest public schools within suburban census places by geocoding the latitude-longitude coordinates of each school to census place shapefiles.[8]

The Census defines places as cities, boroughs, towns and villages that metropolitan residents identify by name (Bader and Krysan 2015; Krysan and Bader 2007; US Census Bureau 2015). These geographic units suit the current analysis because census places are consistent with the concept of a suburb in which local areas compose social and symbolic communities (Fowler et al. 2016; Gieryn 2000; Hall et al. 2016; Lichter et al. 2015b; Tach et al. 2019). Most such places are incorporated and correspond to governmental jurisdictions, and thus are responsible for policy and the provision of goods. Unincorporated places (i.e., Census-designated places; CDPs) are defined by the Census in cooperation with local officials, and still represent socially recognized communities identifiable by name. Many suburban places are coextensive with school districts (e.g., Scarsdale Public Schools in Scarsdale, NY). When places are embedded within a larger school district (e.g., counties), suburban places spatially differentiate both the housing market and associated school zoning. Like most standard geographies (i.e., census tracts, counties, metro areas), places vary in size, population, and density, which I address by controlling for total population and land area in regression analyses.

Place-level racial and ethnic composition data come from the 2000 and 2010 Decennial Censuses with other place-based variables coming from American Community Survey's (ACS) 2008-12 five-year estimates (i.e., the estimates centered on 2010). I obtained these data from the National

---

[8] This analysis presents a limitation regarding the relationship between schools and communities: school attendance areas do not perfectly nest within places. Prior research explicitly uses school attendance boundaries (Bischoff and Tach 2018). However, these data are unsuitable for the current analysis because of low coverage across the nation, specifically in regions that contribute substantially to American racial and ethnic diversity like California, Hawaii, and the coastal Northeast from New Jersey to Massachusetts (The College of William and Mary and the Minnesota Population Center 2011). Although imperfect, by using places, I argue that residents live in a specific city or suburb with a context for public education (e.g., Philadelphia public schools vs. the public schools of Lower Merion, a wealthy suburb of Philadelphia).

Historical Geographic Information System (NHGIS), which provides time series, spatial, racial count data standardized to 2010 geographies (Manson et al. 2017).

Defining diversity (sample selection): While conventional research typically compares diverse places to segregated, monoracial environments, this analysis focuses on how varying levels of integration among diverse suburbs may influence public schooling. I define diversity as the racial and ethnic composition of a place, and I define integration as a spatial distribution of diversity in which people of different races and ethnicities live near each other.

Because integration can only emerge in places that display diversity, I limit the sample of all suburbs (i.e., metropolitan census places that are not the central city) to those that demonstrate at least moderate levels of diversity. I exclude monoracial places, which I define as those that are greater than 80% one racial or ethnic group.[9] To ensure that my classification of them as monoracial represents a stable characteristic of the place, I impose this criterion of exclusion on both the 2000 and 2010 censuses. This threshold constructs a category that includes a range of places, from those that were highly diverse to those that were moderately less diverse than the nation as a whole in 2010 (64% white). Therefore, the sample of places included for analysis displays stable diversity over the decade and excludes relatively monoracial places or places experiencing re-segregation. The appendix includes sensitivity analyses with a more conservative threshold of 75% of one racial or ethnic group; regression parameter estimates' magnitude, direction, and significance are robust to cutoff specification.

Second, I limit the sample to places with a substantial presence of both whites and at least one population of color. I include whites in the entire sample, because I am particularly interested in how whites as a powerful group behave in diverse and integrated settings. I exclude suburbs that are less than 15% white, because arguably, places that are less than 15% white have very small shares of whites. At the same time, the threshold is small enough to include highly multiethnic suburbs, for example, Vallejo, CA (19% Black, 29% Latinx, 25% Asian, 22% white, 5% other, American Community Survey 2018 1-year estimates). The appendix includes sensitivity analyses with a more conservative threshold of 20% white; regression parameter estimates' magnitude, direction, and significance are robust to cutoff specification.

---

[9] See Appendix Tables B.1 and B.2 for sensitivity analyses for these composition cutoffs. Using more conservative cutoffs, where places are at minimum 20% white or a maximum of 75% one racial or ethnic group produces odds ratios nearly identical to this analysis. I consider these cutoffs more conservative because they restrict the sample to places that are either whiter or more racially and ethnically diverse than the original sample.

These exclusion criteria restrict the sample to 2,304 stably diverse suburbs with 8,841 elementary schools nested within their boundaries. These schools are responsible for educating 4.8 million elementary school students of which 18% are Black, 35% are Latinx, 9% are Asian, and 35% are white. These students compose 46% of public elementary school students in suburbs and 21% of all public elementary school students.

Dependent variables: This analysis explores the influence of racial integration and other place-based characteristics on two outcomes. To address whether integrated suburbs display higher levels of multiethnic diversity, I define school-level multiethnic diversity using the entropy index across Blacks, Latinxs, Asians, whites, and others. The entropy score (E) is defined as

$$E = -\sum_{r=1}^{N} \pi_r log\,(\pi_r) \qquad (1)$$

where π_r is the school's share of race or ethnic group r, for Blacks, Latinxs, Asians, whites, and others, and N is the number of groups (5). I scale the entropy score by log(5) (i.e., the log of the number of groups) so that the scaled score ranges from 0 to 1. A value of 0 indicates that the school comprises one group, the minimum level of diversity, and 1 indicates maximum diversity, when each group composes equal proportions (i.e., 20%).

To address whether integrated suburbs sustain white student enrollment, I calculate the share of white students in schools, defined as the number of white students enrolled in the school divided by the total school enrollment for the 2009-10 school year in the CCD.

Independent variable, residential integration: The focal explanatory variable measures the level of racial integration within each suburb. To define integration among the sample of stably diverse places, I calculate H, a widely established index that measures the spatial evenness of racial and ethnic diversity (entropy, Eq. 1) among multiple groups (Lichter et al. 2015b; Reardon and Firebaugh 2002).[10] H measures how closely the diversity of constituent subunits mirror the diversity of the place of interest. Because census blocks nest neatly within all higher levels of census geography, I use census blocks as the subunit for places, and thus, the comparison is between block diversity and overall place diversity. I calculate E (Eq. 1) for each place and also for each block (i) within each place to derive E_i. H compares E and E_i and is defined as

$$H = \sum_{i=1}^{M} \frac{t_i(E-E_i)}{ET} \qquad (2)$$

where t_i is the total population count in block i, and T is the total population count of each place. The index ranges from 0 to 1, where 0 indicates that the diversity of each block matches perfectly the overall place diversity (maximum integration) and 1 indicates that each block contains only one group (maximum segregation). Values above 0.4 are typically considered moderately to highly segregated and not integrated. For example, based on these calculations, the segregated cities of Houston and St. Louis have 2010 values of 0.41 and 0.47, respectively.

---

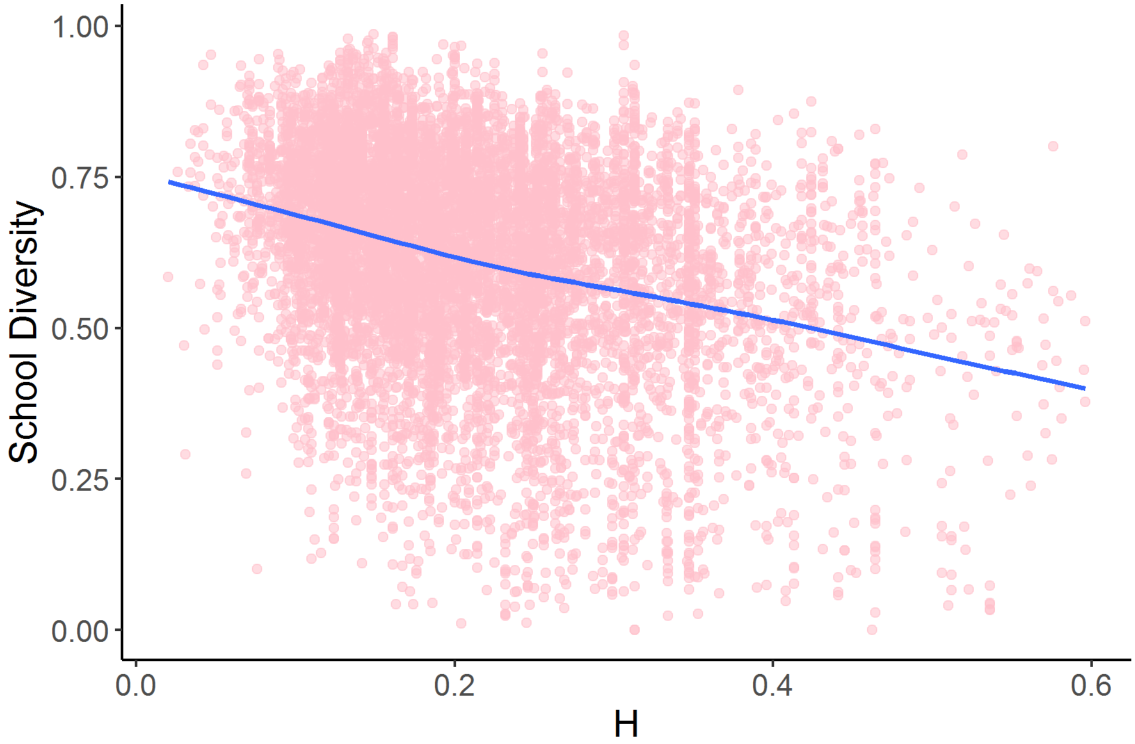
[10] The Index of Dissimilarity is another standard measure for spatial evenness used in segregation research (Massey and Denton 1993); however, it can only be used to compare two groups (e.g., comparing Blacks and whites) and therefore is unsuitable for an analysis of multiethnic diversity.

Table 2.1 provides the descriptive statistics for the sample. Schools on average show moderate diversity scores in stably diverse suburbs (61.5) and range from completely homogenous to near-maximum diversity. In addition, school diversity varies by residential integration. Figure 2.1 graphs school diversity against place integration (H). As residential integration increases (lower values of H), school diversity on average increases, supporting the hypothesis that residential integration may facilitate school integration.

Table 2.1 Descriptive Statistics for 2010 Public Schools (n = 8,841) and Associated Suburbs

	Mean	SD	Range
Place H	21.4	9.4	(2.0, 92)
School percent white	35.5	23.2	(0.0, 100)
Place percent white	49.2	16.1	(15.2, 79.9)
School diversity	61.5	17.6	(0.0, 98.6)
Place diversity	67.8	10.9	(33.1, 95.4)
Charter (share)	4.3		
Magnet (share)	3.4		
Place location type (share)			
Suburb	81.9		
Urban fringe	10.1		
Rural-urban interface	8.1		
Income inequality (Gini)	42.2	4.6	(16.9, 69.3)
Median House Value ($1k units)	265	175	(10, 1000)
Percent variables			
Homeownership	60.8	13.6	(0.0, 100.0)
Enrolled in private school	9.2	6.5	(0.0, 84.3)
65 or older	11.3	4.0	(0.0, 37.3)

Figure 2.1 Scatterplot with smoothed line graphing school diversity by place integration (H).



2.4.2 Analytic Strategy

Control variables: Using 2010 census and 2008-12 ACS 5-year estimates data, I control for several key place-based characteristic identified in previous work linking communities to schools. First, for the school diversity analysis, I control for place diversity, as calculated by the entropy index (Eq. 1), to examine how integration may influence school diversity beyond the level of diversity in the broader community. For the school percent white analysis, I control for place percent white to understand how integration may influence white student enrollment beyond the white composition of place.[11]

---

[11] Bischoff and Tach (2018) control for the percent of the population ages 5-9 that are white. However, I am interested in the community-level factors that sort whites into specific suburbs creating the context of racial integration rather than the direct link between the school aged white population and schools. As a result, I control for the overall place composition of white residents.

Educational exit options vary by urbanicity where more urban districts host higher numbers of private, charter, and magnet schools, which may operate as a means of exit from locally zoned public schools. I control for urbanicity using the CCD's urban-centric locale codes. Because this analysis includes only metropolitan places as defined by the Census, urbanicity ranges from dense, inner-ring suburbs to suburbs at the rural-urban interface at the outskirts of metro areas. I divide these codes into four categories: suburban (schools in principal cities that are not the central city and other suburbs), fringe (fringe towns and rural fringe), and rural (remote or distant towns or census-designated places). As a measure of exit from public education, I include the place-level percent of K-12 students enrolled in private schools. Because charter and magnet schools pull students from outside locally zoned attendance areas, I include an indicator for whether a school is a magnet or a charter.

Homeownership represents a direct investment in local public-schools and homeowners may be more likely to send youth to locally zoned public schools. I control for this association using the share of homeowner-occupied units. Further, since school funding, and thus desirability, is linked to local property taxes (Wirt et al. 2000), I control for median house value.

Places with larger elderly populations may display integration if an aging white population is gradually replaced by younger populations of color (Molotch 1969). This scenario would lead to fewer school-aged whites and thus lower white enrollment despite residential integration. To understand the potential influence of aging in place, I include the percent of residents that are 65 or older. Economically unequal contexts may support white exit from public schools if advantaged whites disproportionately utilize school choice options (Bischoff and Tach 2018). To capture income inequality, I use the Gini coefficient provided by the ACS.

Because greater land area and larger populations allow for greater differentiation across schools within places, I control for both land area and population by using their logged form to decrease the statistical leverage of outliers. Finally, for ease of interpretation, I mean center all continuous variables and scale percentage variables to 10 percentage-point units.

Regression analysis: First, I examine the racial and ethnic diversity of schools as calculated by the scaled entropy index (Eq. 1). Here, entropy is a proportion variable—the diversity of the school as a percent of the maximum possible diversity across the five racial and ethnic groups (i.e., Black, Latinx, Asian, white, other). Since this measure of diversity is a continuous proportion (i.e., does not arise from count data), I conduct a mixed effects model with a beta distribution and a logit link. I cluster the variance across schools within places using the robust sandwich estimator. This estimator is referred to as robust because it provides reliable inference with imbalanced designs and potential misspecification of the covariance structure with large samples (Ziegler 2011). This estimator is particularly important for this analysis because the number of schools within places varies widely.

I include fixed effects for metropolitan areas to control for unobserved, metropolitan-level characteristics (e.g., region, racial and ethnic composition). I include an interaction term between H and place diversity to investigate if the effect of integration differs with increasing place diversity. I exponentiate the parameter estimates and report the results in odds ratios. I also report average marginal effects and figures of predicted school diversity.

I address spatial clustering because local racial and ethnic diversity clusters across places creating uneven distributions within metropolitan areas. In this way spatial clustering broadens the window of residential and school choice potentially to a group of neighboring suburbs. I calculate the average place diversity for the three closest suburbs using the nearest neighbors method based on central longitude-latitude coordinates of places.[12] I use this method instead of the more common adjacency method because suburbs sometimes are spatially proximate without sharing boundaries due to idiosyncratic boundaries.

---

[12] I also ran a model using the 5 nearest neighbors. Results are similar (provided upon request).

The following regression equation represents the school diversity analysis,

$$log\left(E\left[\frac{p_{s(diversity)}}{1-\ p_{s(diversity)}}\right]\right) = \beta_{0m} + \beta_1 H_p + \beta_2 diversity_p + \beta_3 H_p * diversity_p +\ \delta' X_p +\ \gamma' Q_p + e \qquad (3)$$

Where $p_{s(diversity)}$ refers to the scaled entropy score of schools; $diversity_p$ refers to the scaled entropy score of places; β_{0m} is a vector of MSA-specific intercepts; H_p refers to the measure of residential integration; $\mathrm{X_p}$ denotes a vector of other place-based covariates with associated parameter estimates δ; Q is the spatial lag measure with associated parameter estimates γ; and e refers to the error terms.

Second, I investigate white enrollment in public schools to analyze white exit from locally zoned public schools in diverse and integrated suburban contexts. Because the percent of students that are white is a proportion variable that arises from count data (i.e., the count of white students in a school), I use mixed-effects logistic regression to regress the school percent white on the measure of integration, H. Exploratory analyses suggest a curvilinear relationship and thus I also include a quadratic term for H. I cluster the variance across schools within places and use the robust sandwich estimator. Lastly, I include a spatial clustering variable that calculates the average percent white for the three closest suburban places.

The following regression equation represents the school percent white analysis,

$$log\left(E\left[\frac{p_{s(white)}}{1-p_{s(white)}}\right]\right) =\ \beta_{0m} + \beta_1 H_p + \beta_2 H_p^2 + \beta_3 white_p +\ \delta' X_p +\ \gamma' Q_p + e \qquad (4)$$

where $p_{s(white)}$ refers to the share of white students in the school and $white_p$ refers to the place's share of white residents.

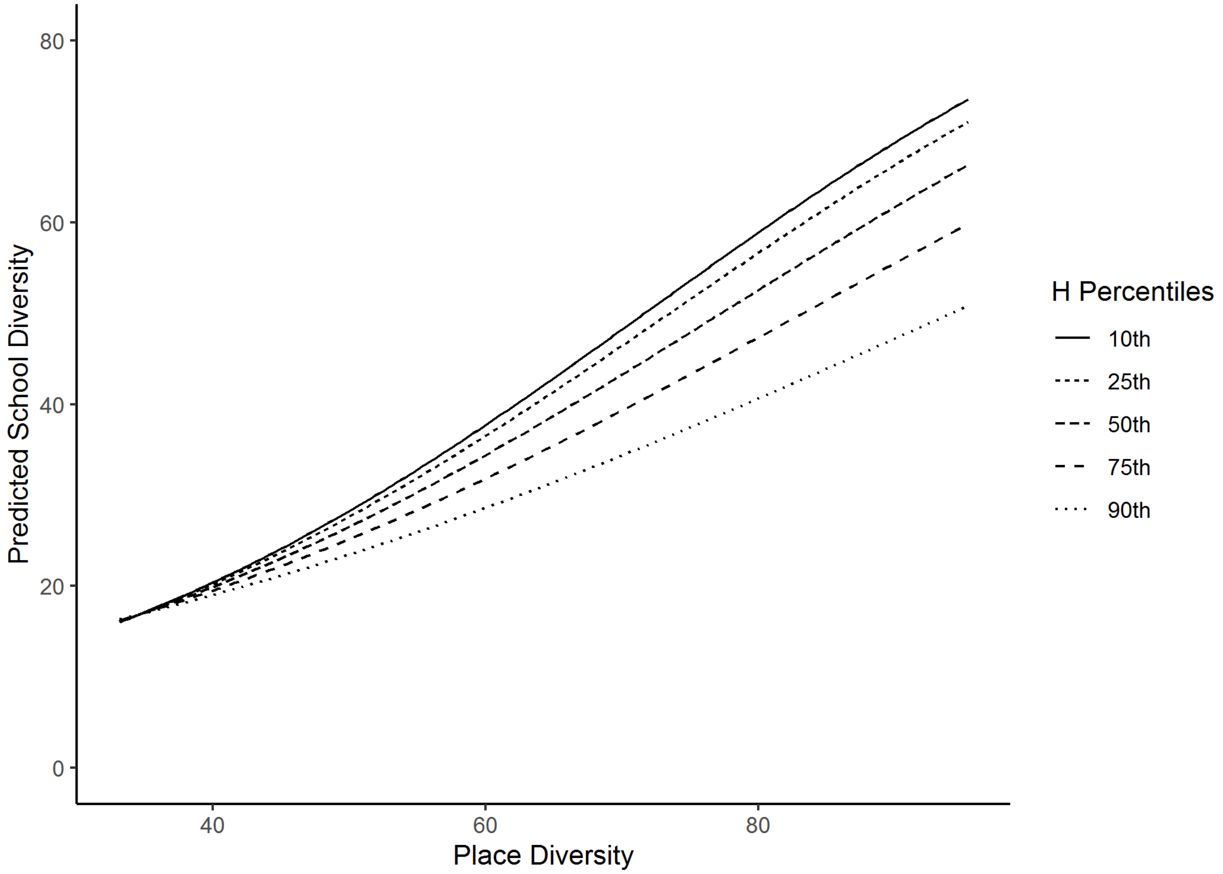
2.5 Results

2.5.1 Explaining the relationship between residential integration and diversity in schools

In this analysis, I set out to understand if residential integration represents social integration in other domains of life using the case of public education within diverse suburbs. I find that schools in integrated suburbs demonstrate higher levels of multiethnic diversity within each school compared to those in more segregated but similarly diverse suburbs.

Multivariable analyses support the descriptive evidence of bivariate association displayed in Figure 2.1. Figure 2.2 graphs the predicted probabilities of school diversity, generated by beta regression, showing the interaction effect of place integration and place diversity on school diversity. As hypothesized, schools in suburbs with higher levels of integration (lower H) display higher levels of multiethnic diversity compared to diverse-low integration places. At the mean of place diversity (entropy = 68), schools in highly integrated suburbs (10th percentile of H) are nearly 50% more diverse than schools in similarly diverse, yet segregated suburbs (90% percentile of H) (46 vs. 33, respectively). The average marginal effect comparing the 10th percentile to the 90th percentile of H is a 12.1 percentage-point difference in school diversity. These results indicate that residential integration (i.e., an "even" spatial distribution of available diversity) associates with more diverse student bodies in schools. Alternatively, schools show lower diversity scores (i.e., are more homogenous) when nested in diverse but residentially segregated suburbs.

Figure 2.2 Line graph of predicted school diversity (entropy), generated by beta regression, by place diversity (entropy) and level of integration (H).



While the focus of this analysis is residential integration, previous work has shown that several other place characteristics influence school diversity. Table 2.2 provides the odds ratios generated from beta regression predicting school diversity. Notably, the spatial clustering of racial diversity across neighboring suburbs does not show a significant association with school diversity. The ways that multiethnic diversity shapes schools in groups of suburbs does not seem to matter given the focal suburb's level of diversity.

Table 2.2 Odds ratios produced by beta regression predicting school-level diversity

Percentage variables[a]		
Place diversity	1.44	(1.40, 1.48)
H	0.79	(0.77, 0.82)
H*diversity	0.93	(0.92, 0.95)
Income inequality	0.98	(0.94, 1.04)
Homeownership	1.02	(1.01, 1.04)
65 or older	1.26	(1.19, 1.34)
Private school enrollment	1.00	(0.96, 1.03)
Median house value[b]	1.09	(1.06, 1.11)
Charter	0.76	(0.68, 0.84)
Magnet	0.94	(0.84, 1.06)
Urbanicity (ref: Suburb)		
Urban fringe	1.10	(1.03, 1.18)
Rural-urban interface	1.08	(1.01, 1.15)
Spatially lagged place diversity	1.11	(0.90, 1.36)
Log land area	1.07	(1.04, 1.11)
Log population	0.94	(0.92, 0.97)
Metropolitan fixed effects	*	

a. Percent variables were scaled to 10 percentage-point units for ease of interpretation. For example, a 10% increase in homeownership associates with an odds ratio of 1.05.

b. Median house value was scaled to units of $100,000.

After controlling for suburb racial diversity and spatial clustering, communities with older populations support greater diversity within public elementary schools (OR: 1.26, 95% CI: 1.19, 1.34). Moving from the 10th percentile (8%) to the 90th percentile (15%) results in an increased odds of school diversity of 18% ($1.18 = 1.26^{(0.15-0.08)*10}$, where place percent 65 and older is scaled to 10 percentage-point units). In contrast to 20th century patterns of white decline, aging in place now may occur alongside in-migration by multiethnic younger populations that are reflected in public schools. Here, even if whites are declining in place, racial isolation does not follow for groups of color.

As for school choice options, private school enrollment does not show a significant effect on school diversity (OR: 1.00, 95% CI: 0.96, 1.03). Private school choice options may negatively impact white enrollment on average, but this analysis suggests that they do not create racially isolated schools in suburbs, marking a departure from the historical narrative of white flight. However, charter schools are substantially less diverse than regular schools reducing the odds of diversity by 24% (OR: 0.76, 95% CI: 0.68, 0.84). This pattern may be the result of certain charter schools that select for students of color and concurrently, other charter schools that operate as exit options for whites. Urban fringe schools show 10% higher odds of school diversity compared to suburban schools (95% CI: 1.03, 1.18), and notably, schools at the rural-suburban interface show an 8% higher odds of school diversity (95% CI: 1.01, 1.15). As racial diversity spreads further from the central city core, more opportunities for racially diverse, public education arise.

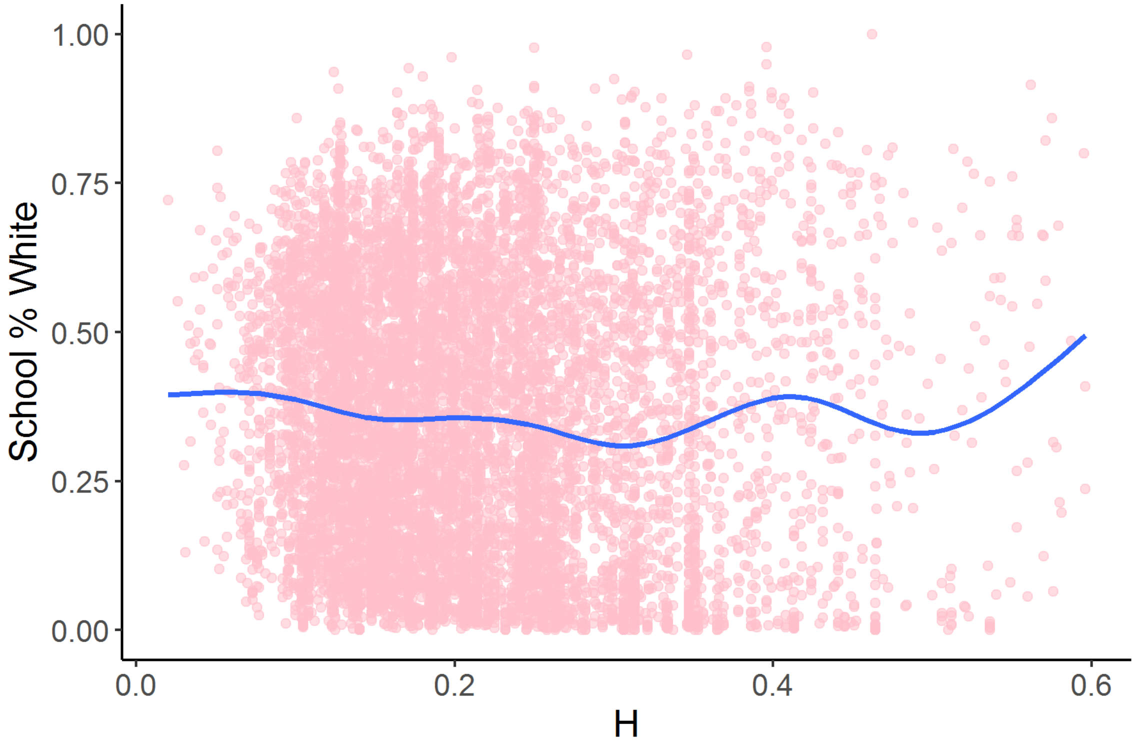
While the effect is relatively small, suburbs with higher homeownership rates support more diverse public schools (OR: 1.02, 95% CI: 1.01, 1.04), suggesting that residents in places with high homeownership rates may be more invested in their community as indicated by public school enrollment. Further, places with higher median house values show greater school diversity (OR: 1.09, 95% CI: 1.06, 1.11), consistent with the hypothesis that "desirable' communities may facilitate racial integration in schools.

2.5.2 The relationship between residential integration and white student enrollment

I seek to understand whether whites, as a powerful group, send their youth to public schools within diverse and integrated suburban environments in the 21st century. Where the previous section investigates multiethnic diversity, this section follows and asks: if residential integration supports greater diversity in public schools, is it because whites are exiting public education? The following results indicate that whites do not disproportionately opt out of public education in integrated suburbs, showing new patterns of integration not defined by white decline.

Returning to Table 2.1, schools show much lower average shares of whites compared to suburbs in which they are embedded (36% vs. 49% respectively). This finding is generally consistent with prior research that documents white exit from public education in diverse places, as well as the above observation about whites aging in place as younger, more diverse populations move in. In addition, school white composition does not seem to vary by levels of residential integration. Figure 2.3 graphs school percent white by place integration and shows no discernible relationship between the two variables. This finding supports the hypothesis that whites do not disproportionately opt out of public education in more integrated suburban settings.

Figure 2.3. Scatterplot with smoothed line graphing school percent white by place integration (H).



Notably, in contrast with the bivariate descriptive evidence, multiple regression analyses find that suburbs with higher levels of residential integration show moderately whiter student bodies, supporting hypotheses on the liberalization of racial attitudes. Table 2.3 reports the odds ratios generated by logistic regression predicting the school's share of white students. A 10 percentage-point decrease in H (i.e. increasing integration) associates with an odds ratio of 1.06 (1.06 = 1/[0.91 * 1.04], where H is scaled to units of 10 percentage-points). This result indicates that schools in integrated suburbs are whiter than more segregated suburbs. The respective average marginal effect across the interquartile range of H is a 2.5 percentage-point increase in the predicted share of white students, even after holding place percent white constant. Ultimately, as schools become more diverse in integrated suburbs, white populations are staying enrolled at higher rates compared to more segregated settings. While the effect is not massive, this pattern still diverges from deep histories of racial-spatial proximity and white flight.

Table 2.3. Odds ratios produced by logistic regression predicting school-level percent white.

Percent variables[a]		
Place white share	1.64	(1.60, 1.67)
H	0.91	(0.87, 0.95)
H^2	1.04	(1.03, 1.06)
Income inequality	1.03	(0.97, 1.09)
Homeownership	1.04	(1.02, 1.06)
65 or older	0.83	(0.78, 0.89)
Private school enrollment	0.83	(0.78, 0.88)
Median house value[b]	1.08	(1.05, 1.10)
Charter school	1.25	(1.09, 1.43)
Magnet school	0.86	(0.75, 0.98)
Urbanicity (ref: Suburb)		
Urban Fringe	1.45	(1.27, 1.67)
Rural-Urban Interface	1.46	(1.29, 1.65)
Spatially lagged percent white	1.28	(1.09, 1.50)
Log land area	1.03	(0.99, 1.08)
Log population	1.00	(0.95, 1.05)
Metropolitan fixed effects	*	

a. Percent variables were scaled to 10 percentage-point units for ease of interpretation. For example, a 10% increase in homeownership associates with an odds ratio of 1.05.

b. Median house value was scaled to units of $100,000.

The spatial clustering of percent white across suburbs shows a substantial positive association with school white composition (OR: 1.28; 95% CI 1.09, 1.50), even after controlling for the focal suburb's share of whites. These results suggest that clusters of suburbs may represent a school choice set for whites—whites are more likely to enroll in public education in diverse and integrated suburbs when neighboring suburbs also have larger white shares.

A constellation of other place-based characteristics may promote or inhibit white enrollment in diverse, suburban communities. While private schools do not seem to shape multiethnic diversity in schools, private school enrollment appears to be a means to opt out of public education for white students. Moving across the IQR (6.5% to 13.7%) associates with a 13% decline in the odds of white student enrollment ($0.87 = 0.83^{(0.137 - 0.065)*10}$, where private school enrollment is scaled to 10 percentage-point units). Consistent with white exit hypotheses, suburban charter schools are significantly whiter than locally zoned public schools, while magnet schools are significantly less white (OR: 1.25, 95% CI: 1.09, 1.43; 0.86, 95% CI: 0.74, 0.98, respectively). Collectively, while school choice options show little or no influence on multiethnic diversity, they do seem to operate as a means of white exit.

Consistent with hypothesis on urbanicity and white exit, diverse suburbs farther from the central city show whiter student bodies when holding place percent white constant. Schools at the urban fringe and rural-suburban interface schools show dramatically whiter student bodies (OR: 1.45 and 1.46, respectively) compared to suburbs more proximate to the central city.

Consistent with the hypothesis on aging in place and integration, places with larger elderly populations host public schools with smaller white enrollment. Aging populations may contribute to diversity in places where younger people are disproportionately people of color. A 10% increase in the share of the population 65 and older associates with a decline in the odds of white student enrollment by 17% (OR: 0.83, 95% CI: 0.78, 0.89).

Lastly, homeownership is associated with whiter student bodies (OR: 1.04, 95% CI: 1.02, 1.06), and greater median house value also associates with white student enrollment (OR: 1.08, 95% CI: 1.05, 1.10, respectively). Together, these findings lend support to the hypothesis that residents may be more invested in public institutions in more "desirable" communities, for example, Fort Bend, TX, as mentioned in the theory section.

2.6 Discussion and Conclusion

Expanding racial and ethnic diversity in suburban America provides new sites for racial residential integration to emerge and persist; but the consequences of residential integration for racial inequality depend on how integration translates into other social spheres. Public education is an important institution to understand integration because it is both a historical driver of racial residential segregation and fundamentally shapes the life chances of residents. While historically desegregation catalyzes white flight (Kruse 2005), this analysis points to a new pattern of race relations where some whites may choose to share institutional space with different groups of color. Integrated suburbs, along with a specific constellation of place-based characteristics, display schools with increased multiethnic diversity compared to diverse suburban environments that are more segregated, suggesting that social integration exists within residentially integrated suburbs.

Moreover, integrated suburbs can sustain white student populations. In an analysis across the central city-suburb gradient, Bischoff and Tach (2018) find that white students attend locally zoned public schools at higher rates in multiethnic suburbs than even majority white settings, regardless of urbanicity. This analysis complements these findings by showing that integration and segregation (i.e., the spatial distribution of diversity) are key dimensions by which white student enrollment varies among diverse contexts. Given the persistence of school segregation in the United States, most research focuses on the ways that whites flee public education in diverse communities (Fiel and Zhang 2019; Reardon and Owens 2014). However, the widespread trend towards integration in suburbs across the nation may provide the geographic foundation for greater integration within schools, where whites participate in the same institutions as people of color. At the same time, this trend may be offset in part by investments in charter and private schools. If public policy continues to increase and subsidize options to exit locally zoned schools, the size and effect of residential integration may decline.

This analysis is among the first to use a population approach to examine residential integration in local suburbs and its potential effects. Prior research typically investigates the effects of increasing residential integration using metropolitan areas as the unit of analysis (Light and Thomas 2019; Samila and Sorenson 2017). However, all metro areas remain substantially segregated (Massey 2015) and simultaneously do not represent communities that participate in local, place-based processes. In this regard, scholarly attention to metro areas leaves unexamined how high levels of residential integration shape race relations within local communities and their institutions. Future research on the effects of integration may continue this line of inquiry by focusing on the socially recognized boundaries of suburbs, the communities most associated with increasing integration and cross-racial exposure (Lichter et al. 2015b).

Moreover, future demographic research may build on this article by investigating how racial integration may influence racial inequality in student outcomes like academic performance, test scores, or disciplinary outcomes. Prior research of diverse suburbs typically examines case studies of racially integrated, diverse suburban schools (Lewis-McCoy 2014; Musto 2019). These studies find familiar patterns of racial inequality produced within integrated education. For example, in a multiethnic middle school in suburban Los Angeles, Musto (2019) finds that white and Asian students are overrepresented in higher-level courses while Latinx students are disproportionately tracked into lower-level courses. However, to create a fuller picture of diversity within schools, the time is right to engage a broader national study of the relationship between integration within suburban schools and student outcomes.

Beyond residential integration, this analysis points to key place-based characteristics that influence the racial and ethnic composition of suburbs and their nested schools. For example, homeownership indicates investment into the local community and suburbs with higher homeownership rates also support both white student enrollment and multiethnic diversity. Policies that support homeownership, which the government has systematically denied to people of color throughout American history (McCargo and Strochak 2018; Rothstein 2017; Trounstine 2018), may facilitate greater racial integration in the US.

Furthermore, this analysis provides new findings regarding the relationship between aging in place and increasing local racial and ethnic diversity in suburbs. Prior research does not find a significant association between aging and white decline (Logan and Zhang 2010); however in this analysis, aging in place associates with lower white student enrollment and increased school diversity. These results suggest that aging whites are replaced by younger people of color, and that these people of color come from different racial and ethnic backgrounds. Even if whites leave diverse suburbs or do not migrate into diverse suburbs, younger people of color in these places do not experience racial isolation. As the white population declines nationally (Lichter 2013), different populations of color may mediate racial isolation and exposure, potentially mitigating the social problems of segregation. Diversity across different populations of color merits further research and requires new theory regarding multiethnic places and cross-racial interaction.

This analysis contributes to a nascent research agenda on place-based, racial processes in suburbs; however, social processes typically occur at multiple spatial scales. I use census places as the geographic unit in which to embed schools, as places are the closest census geography that maps onto the concept of a suburb as a community with a name. While the names of suburbs flag school quality and climate, school attendance boundaries do not always map perfectly onto suburbs. Future research may investigate how suburbs spatially differentiate school districts. Further, if comprehensive data become available, future research may investigate how school attendance boundaries differentiate residential space within suburbs.

While traditional theories of diverse communities come from urban contexts (Lumley-Sapanski and Fowler 2017; Nyden et al. 1998; Tach 2014), findings of this study show the widespread diversification of suburbia disproportionately supports social integration as indicated by shared space in schools. While whites often leave public schooling as communities diversify, specific suburban contexts of racial integration may support cross-racial exposure within schools. Future research may build upon these findings by exploring how residential and school integration may affect community race relations and student achievement.

Racial integration now may provide students of color access to higher quality place-based resources and reduce racial inequality. Integrated schools show better math outcomes for students (Mickelson and Bottia 2010) as well as reductions in prejudice and negative stereotypes (Pettigrew and Tropp 2006). Further, segregated white schools leave white students unprepared to live in a multiethnic society (Jayakumar 2008). Racially integrated schooling may cultivate greater cultural competency among all students, and specifically prepare white students to live and work in an increasingly multiethnic society. As these students in integrated schools age, they may foster greater equity in American society and provide the basis for a democracy that does not center white anxiety. In this regard, racial integration is particularly salient for racial stratification as the nation moves toward being majority people of color and white wealth potentially becomes concentrated among fewer white individuals (Lichter 2013).

Chapter 3

A Place-based Examination of Racial Residential Diversity, Integration, and Racial-income Inequality in U.S. Suburbs

The U.S. is undergoing unprecedented growth in racial and ethnic diversity, particularly in suburbs. As of 2010, the majority of Blacks, Asians, Latinxs, Native Americans, and whites lived in suburbs (Keeler 2016; Lacy 2016). Further, in contrast with diverse central cities, at least some suburbs have integrated, where these racialized groups live near each other and residents have multiethnic social networks (Cheng 2013; Douds 2020; Lung-Amam 2017; Rastogi 2019). While segregation and white resource hoarding are intimately intertwined (Rothstein 2017; Trounstine 2018), it is not clear how twenty-first century racially diverse and integrated suburbs affect racial inequality.

In this analysis, I examine how racial-economic inequality, measured by median household income, takes shape in suburbs. Most research on racial residential diversity focuses on central city environments and finds micro patterns of racial segregation that also occur along class lines (e.g., Mayorga-Gallo 2014; Tach 2014). However, suburbs provide a different socio-spatial landscape for racial diversity. For example, in contrast to central cities, suburban regimes select on economic status through exclusionary measures like land-use regulations (e.g., single-family zoning), creating socioeconomically and racially homogeneous environments in order to preserve property values and "protect" tax bases (Jackson 1987; Trounstine 2018). As racial barriers to entry are lowered in suburbs, economic homogeneity may persist, potentially allowing middle-class people of color to live alongside whites. Further, through shared community resources (e.g., schools, healthcare), integration may foster the transmission of advantage to groups of color, potentially mitigating inequality historically generated by racial segregation.

Using Census data for 2000 and 2010, I analyze how racial income inequality manifests in three suburban place-types: macro-segregated, micro-segregated, and micro-integrated suburbs. Following Lichter, Parisi, and Taquino (2015), I take a place-based approach, in which census places (e.g., municipalities) serve as the unit of analysis. In this place-based approach, *macro-segregation* refers to the conventional understanding of segregation where racially homogeneous environments create a segregated landscape between places (e.g., Black suburbs and white suburbs). However, with growing within-place diversity, patterns of *micro-segregation* emerge, where places can be highly diverse but still feature the spatial separation of racialized groups. Here, segregation occurs across blocks rather than across neighborhoods or cities and suburbs. Micro-segregation defines the experience of many diverse central city neighborhoods where racialized groups inhabit distinct activity spaces and remain socially distant (Mayorga-Gallo 2014; Tach 2014). Lastly, I define *micro-integrated* suburbs as those that contain racially diverse populations where people of different races and ethnicities live near each other. Residential integration deviates from patterns of macro-segregation because diverse populations live in one community. Residential integration differs from micro-segregation because different groups share residential space and local amenities within the community. Qualitative studies find that, in highly integrated suburbs, residents have substantive cross-racial friendships and romantic relationships, and experience racially integrated public schools and shopping centers (Cheng 2013; Douds 2020; Lung-Amam 2017).

This analysis centers on two questions central to the study of place-based racial inequality: (1) How do racial/ethnic group-specific median household incomes distribute *across* macro-segregated (i.e., predominantly Black, Latinx, or white), micro-segregated-diverse, and micro-integrated-diverse suburbs? (2) How does racial inequality in median household income take shape *within* suburbs along the spectrum of multiethnic diversity and integration? This study takes a multiethnic approach to inequalities and analyzes the incomes of Blacks, Latinxs, Asians, and whites, as well as the six pairwise disparities between the groups.

My findings suggest that racial diversity and integration operate as intertwined, yet distinct processes where micro-integrated, diverse suburbs show populations with higher incomes than their counterparts in micro-segregated, diverse, and macro-segregated, predominantly one-group suburbs. Blacks earn the highest in micro-integrated suburbs, earn the lowest in micro-segregated suburbs, while predominantly Black suburbs fall in the middle. Latinxs follow a similar pattern although with the lowest incomes in macro-segregated, predominantly Latinx suburbs. Notably, whites' and Asians' considerably higher incomes show little variation across place types. Collectively, these results suggest that the racial context of suburbs matters most for Blacks and Latinxs, the populations that earn less nationally compared to whites and Asians.

Second, after controlling for the level of diversity within the community and other key characteristics, within-suburb disparities between racialized groups are typically smaller in suburbs with higher levels of integration. For example, Blacks and whites approach near parity in median household income in the most integrated suburbs. The one exception is that Asians, the population with the highest median income nationally, become more advantaged relative to whites in the most integrated suburbs. These results suggest that racial diversity alone does not mitigate the effects of macro-segregation: familiar patterns of racial inequality persist in micro-segregated, diverse suburbs, while racially integrated suburbs may provide a new avenue for racial equality.

While an extensive literature analyzes how macro-segregation harms people of color and drives racial inequality (e.g., Charles 2003; Massey and Denton 1993), this study contributes to a growing literature on micro-segregation and micro-integration in diverse suburbs. As racial and ethnic diversity expands across the nation, suburban spaces provide opportunities to analyze how racism adapts to new environments of racial-spatial proximity or, potentially, provides new pathways to racial equality. For example, where macro-segregation physically separates people of color from quality education (Reardon and Owens 2014) and employment (Fernandez and Su 2004), what happens when racialized groups experience the same local government (or no local government) and share material resources in a subset of the macro-integrated suburbs?

3.1 Suburbanization and racial inequality in places

The central empirical aim of this study is to investigate how racial inequalities in median household income manifest both *across* and *within* suburbs by levels of diversity and integration. I examine suburbs as they are sites of rapid racial diversification as well as the places most associated with increasing integration (Bader and Warkentien 2016; Rastogi 2019). This section theorizes the relationship between suburbanization and racial-economic inequality in three place-types: macro-segregated, predominantly one-group suburbs; micro-segregated, diverse suburbs; and micro-integrated, diverse suburbs.

3.1.1 Suburbanization and racial-economic exclusion

U.S. suburbanization is deeply embedded within the history of white anti-Black animosity and exclusion. In large part, mid-20th century suburbanization was a racial project in which whites left central cities to create racially homogeneous suburban communities (i.e., "white flight") (Boustan 2010; Kruse 2005). Many suburbs incorporated to maintain white political domination within their boundaries by excluding Black influence as the Black population grew within central cities (Jackson 1987; Kruse 2005; Trounstine 2018). While the Supreme Court struck down racial zoning (i.e., "white only" communities) in 1917, explicit racial discrimination by builders and landlords barred people of color from entering all-white suburbs throughout most of the 20th century as exclusionary covenants on deeds remained common into the 1960s (Rothstein 2017; Trounstine 2018).

When racial discrimination in the housing market was theoretically outlawed by the Fair Housing Act of 1968, explicit racial exclusion shifted to economic exclusion with the same racist intentions and outcomes (Massey 2005; Rothstein 2017; Trounstine 2018). For example, one such exclusionary practice is low-density zoning, which requires the construction of only single-family units as detached buildings on large lot sizes (Manville, Monkkonen, and Lens 2020). These ordinances are widely recognized as effectually excluding people of color due to economic inequalities (Trounstine 2018). For example, in the court case *U.S. vs. City of Black Jack*, the Eighth Circuit Court prevented the political incorporation of a suburb because low-density zoning would have eliminated apartments, resulting in the exclusion of Blacks (United States Court of Appeals for the Eigth Circuit 1978).

Historically, low density zoning creates white, racially isolated communities, contributing to segregation across places. For example, given large racial inequalities in homeownership, low-density zoning both inflates property values and reduces the rental housing stock making entry by lower-income people of color more difficult (Pendall 2000). On average, municipalities with a low-density regime have less than half the share of Black residents than municipalities with higher-density regimes (i.e., multi-family units like duplexes or apartment buildings) (Pendall 2000). Between 1980 and 2000, metro areas with more high-density zoning racially desegregated more rapidly than those with greater low-density zoning (Rothwell and Massey 2009).

3.1.2 Macro-segregation and Racial Inequality

Suburbanization generated by these exclusionary practices creates a macro-segregated metropolitan landscape. By macro-segregation, I follow Lichter and colleagues (2015) and define it as the spatial separation of racialized groups across places, where places are conceptualized as municipalities or other symbolic communities, measured as census places (i.e. cities, towns, villages, and other areas recognizable by name). In this way, the stereotypical notions of the "chocolate city" and "vanilla suburb" reflects the metropolitan geography of macro-segregation. Further, as suburbs diversify, another example is the stereotype of the predominantly people-of-color inner-ring suburb and the white middle- or outer-ring suburb.

A vast literature explores how macro-segregation creates Black-white racial inequality in a wide array of outcomes[13]; here I focus on how residential segregation shapes economic outcomes. For example, macro-segregation puts physical distance between where people of color live and jobs, a phenomenon known as spatial mismatch (Fernandez and Su 2004). As jobs are increasingly located in wealthier, whiter suburbs, people of color have fewer job opportunities closer to them. Furthermore, employers use space to make hiring decisions, and macro-segregation creates stigmatized home addresses against which employers discriminate (Rosenbaum 1995). Macro-segregation and the resulting spatial mismatch contribute to greater joblessness among people of color (Massey and Denton 1993; Mouw 2000), more employment segregation across firms (Mouw 2002), and higher earnings inequalities between Blacks and whites (Thomas and Moye 2015).

The effects of macro-segregation may operate through a number of other pathways as well. For example, macro-segregation contributes to racial inequalities in wealth via homeownership in

---

[13] For historical overviews of the impacts of racial residential segregation see Massey and Denton (1993), Rothstein (2017), Trounstine (2018), Kruse (2005), and Reardon and Owens (2014). Notably, little research investigates how segregation influences the life experiences of Asians and Latinxs.

"desirable" communities (Shapiro, Meschede, and Osoro 2013). Macro-segregation harms the economic opportunities of people of color indirectly through access to quality public education, skills accumulation, and educational attainment (Quillian 2014; Reardon and Owens 2014). Compared to whiter places, racially isolated communities of color live in places with fewer public services and greater negative amenities like landfills and power stations along with increased exposure to pollution, which all contribute to populations' of color lower life chances (Trounstine 2018).

While macro-segregation typically creates concentrated disadvantage within communities of color, predominantly Black suburbs potentially diverge from this pattern. In recent decades, formally educated, middle-class Blacks have migrated from northern cities to predominantly Black suburbs in metro areas like DC and Atlanta (Lacy 2007, 2016). While these suburbs may not be as wealthy as predominantly white suburbs in the same metro area, they may be advantaged. For example, Lake Arbor MD is 92% Black with a median household income of $94k (American Community Survey 2018 5-year estimates). If suburbs like Lake Arbor are representative, then predominantly Black suburbs may show higher median household incomes than would be predicted by conventional theories of segregation.

Hypothesis 1: *Macro-segregation, racial isolation, and income*. By design, macro-segregation creates an inequitable landscape across suburbs favoring whites.

a. Predominantly white suburbs will show the highest median household incomes.
b. Predominantly Black or Latinx suburbs will show the lowest median household incomes.
c. However, predominantly Black suburbs may be an exception and show higher median household incomes if they arise from the migrations of advantaged Blacks.

3.1.3 Racial Diversity, Micro-segregation, and Racial Inequality

While macro-segregation endures across the nation and is the dominant lens through which we understand segregation, recent decades have shown widespread diversification within places, specifically in suburbs (Bader and Warkentien 2016; Rastogi 2019). By diversity, I refer to a composition of place that includes multiple racialized groups that are evenly represented. For example, Rodeo, CA is a highly diverse, middle-ring suburb of San Francisco that is 15% Black, 24% Latinx, 17% Asian, and 25% white, while nearby El Cerrito is moderately diverse (5% Black, 11% Latinx, 28% Asian, and 48% white) (American Community Survey 2014-18 5-year estimates).

This within-suburb racial diversity has the power to reshape the structure of segregation as whites and people of color share suburban resources under the same regimes. As of 2010, the majority of Blacks, Asians, Latinxs, and Native Americans lived in suburbs (Frey 2018; Keeler 2016; Lacy 2016). Furthermore, since 1980, inner-ring suburbs increasingly contribute to metropolitan racial diversity as central cities' populations have declined (Fowler et al. 2016). In 1980, 54% of the suburban population lived in a suburb that was greater than 90% one racial or ethnic group; this number declined to 15% in 2010 (Rastogi and Douds 2020).

Despite large-scale racial diversification, segregation can persist *within* suburbs as they diversify, a phenomenon referred to as micro-segregation (i.e., segregation within a suburban city, town, or village) (Lichter et al. 2015b; Tach 2014). Historically, the most diverse places are at the same time the most segregated, where racialized groups live apart, for example, across blocks (Holloway et al. 2012). At the turn of the century, Blacks in central cities often lived in predominantly white neighborhoods, separated by streets (Trounstine 2018). Today, in diverse, micro-segregated, central city neighborhoods, racialized groups remain socially distant, inhabit distinct activity spaces, and engage in cross-racial interaction that is often laden with conflict (Douds 2020; Mayorga-Gallo 2014; Spitz 2015; Tach 2014).

In these micro-segregated, diverse spaces, economic inequality often follows racial lines and more advantaged whites continue to monopolize resources. For example, whites show disproportionate representation in the leadership of civic associations as well as in political decision-making processes (Einstein 2019; Mayorga-Gallo 2014; Tach 2014), and access to high quality public education remains deeply segregated (Kucsera and Orfield 2014; Orfield, Siegel-Hawley, and Kucsera 2011). While little research directly connects micro-segregation within suburbs to income inequality, substantial racial inequalities may exist in these environments. For example, while income disparities are smaller than the nation at large, median household income differs markedly across populations in highly diverse, micro-segregated Queens, NY: Black $66k, Latinx, $57k, Asian $62k, white $74k (American Community Survey 2014-18 5-year estimates).

> *Hypothesis 2*: *Micro-segregation and income across suburbs.* Current evidence suggests that whites maintain higher levels of advantage than people of color within micro-segregated diverse settings.
>
> *a.* Whites in these suburbs will show similar median household incomes as those in predominantly white suburbs.
>
> *b.* Blacks and Latinxs will show lower median household incomes than whites.
>
> *c.* Given Asians' high median income nationally, Asians will have the highest median household income compared to whites, Blacks, and Latinxs.

Hypothesis 3: *Micro-segregation and income inequality within suburbs*. Micro-segregation in diverse suburbs will show large within-place disparities in median household incomes between higher-earning whites and Asians and lower-earning Blacks and Latinxs.

3.1.4 Racial Micro-integration and Racial Inequality

While the paradigm of micro-segregation rests on cases from central cities, in the contemporary U.S., many suburbs are both diverse and integrated. I define racial residential micro-integration as a spatial distribution where racialized groups live near each other as neighbors. This definition contrasts with macro-segregation, where racialized groups are separated spatially across places. Further, despite diversity being required for both micro-segregation and micro-integration, micro-integration differs from micro-segregation because racialized groups are not spatially separated within the boundaries of the suburb. In comparison to the entrenched segregation of central cities across the nation, in 2010, roughly 31 million individuals lived in a diverse, highly integrated suburb that was stably integrated for at least 10 years (Rastogi 2019).

Suburban, residential micro-integration marks a sharp departure from the spatial patterns of macro- or micro-segregation: these communities are not undergoing rapid racialized change (i.e., white flight or gentrification) and residents have multiethnic social networks (Cheng 2013; Douds 2020; Lung-Amam 2017). Residents of all races *including whites* articulate integration as a normative, desirable value that improves communities, and express a sense of superiority to the predominantly white, racially isolated suburbs in the same metro area (Douds 2020).

How might suburban residential micro-integration relate to economic inequality in ways that differ from macro- or micro-segregation? I draw on Douds (2020) and argue that residential integration primarily occurs in middle-class and affluent suburbs, allowing members of racialized groups with similar incomes to live near each other. As racial barriers to entry have been lowered (e.g., the Fair Housing Act, liberalizing racial attitudes among younger whites), the historically racially exclusive practices associated with suburbanization (e.g., low-density zoning) create a context of economic homogeneity that allows for racial integration as suburbs diversify. If racial conditions are ripe for entry by people of color, the high quality amenities of middle-class and affluent suburbs may anchor whites, facilitating integration and precluding the homogenizing forces of white decline (Douds 2020).

Douds uses the case of highly integrated Fort Bend County in suburban Houston and theorizes that the wealth and income homogeneity of Fort Bend promotes and sustains racial integration. Despite becoming the second most racially diverse county *in the nation* in recent decades, Fort Bend sustains a *growing* white population. At the same time, Fort Bend is the wealthiest county in state of Texas by median household income, and whites benefit from living in Fort Bend as their property values increase. Further, the homogeneous affluence of Fort Bend may narrow social distance between racialized groups. Residents have friends of different races and ethnicities and generally report a relative sense of “racial harmony.”

Notably, all qualitative studies suggest that integration occurs primarily in middle- to upper-class contexts in recent years, where racialized groups show relative economic parity (Cheng 2013; Douds 2020; Lung-Amam 2017). For example, in Cheng’s (2013) study of highly integrated Monterey Park, CA, a suburb of Los Angeles primarily composed of Asians and Latinxs, both Asian and Latinx median household incomes are $56k and the median house value is nearly $600k (American Community Survey 2014-18 5-year estimates). In a study of all suburbs across the nation, highly integrated suburbs are more advantaged than the average suburb on key characteristics like educational attainment, homeownership, and percent of residents in management or professional occupations (Rastogi and Douds 2020).

A note on spatial assimilation: Before moving on to hypotheses, it is worthy to note that I do not invoke spatial assimilation theory to discuss the mechanisms that drive the relationship between economics and racial settlement in this place-based analysis. Spatial assimilation theory argues that residential segregation results from racial differences in socioeconomic status as well as levels of acculturation for communities of color with large shares of immigrants (Charles 2003). Essentially, under this theory, upward socioeconomic mobility and acculturation will support the movement of people of color into whiter communities, facilitating integration. In contrast, I argue that middle- or upper-class suburbs may integrate *after* racial barriers to entry have been lowered, which may include income and wealth, but also racial attitudes and racial discrimination in the housing search process (Charles 2003) as well as segregated social networks that racially condition which suburbs constitute desirable places to live (Krysan and Crowder 2017).

First, the spatial assimilation model does not accommodate the rise of multiethnic, minority white communities that are highly advantaged. Given a national demography where whites are declining alongside growing multiethnic diversity (Lichter 2013), integration does not need to center on whiteness or the "acculturation" of people of color into a "white mainstream" in white suburbs. For example, Fort Bend TX is only 32% white.

Second, while spatial assimilation theory may apply to individual mobility decisions for Asians and phenotypically white Latinxs (however, notably not for Blacks) (Charles 2003), evidence largely does not support spatial assimilation theory for place-based understandings of racial settlement. For example, wealthy, predominantly white suburbs in diverse metropolitan areas remain predominantly white (e.g., Scarsdale, NY; Lower Merion, PA; Malibu, CA). Further, changing Black-white income inequality is not linked to Black-white segregation (Lichter, Parisi, and Taquino 2012; Lichter et al. 2015b) and affluent Blacks are more likely to live in poorer neighborhoods than poor whites (Logan 2011). When specifically taking suburbs into account, macro-changes in Asian-white and Latinx-white income inequality do not contribute to declines in within-place, micro-segregation (Lichter et al. 2015b). Notably, 2010 levels of metropolitan segregation between Asians and whites, and between Latinxs and whites, are nearly identical to those in 1980 despite growing shares of later-generation residents (Massey 2015).

> *Hypothesis 4*: *Residential integration and income across suburbs*. Contemporary studies find that highly integrated suburbs tend to be homogeneously affluent. Integrated suburbs will show higher median household incomes for all groups relative to micro-segregated, diverse suburbs or macro-segregated, non-diverse suburbs comprising that same group of color.

> *Hypothesis 5*: *Residential integration and income inequality within suburbs*. Racial disparities in median household income will be smaller in micro-integrated, diverse suburbs compared to micro-segregated ones.

3.2 Data and Methods

3.2.1 Data

Spatial unit of analysis—Census Places: In line with a growing literature on places (e.g., Fowler et al. 2016; Lichter et al. 2015; Tach et al. 2019), census places serve as the unit of analysis. These spatial units are ideal for this study because places are consistent with the concept of a suburb in which local areas compose "real" political and symbolic communities (Fowler et al. 2016; Gieryn 2000; Hall et al. 2016; Lichter et al. 2015b). Most places are incorporated and correspond to governmental jurisdictions, and thus are responsible for policy and the provision of goods. Unincorporated places (i.e., Census-designated places; CDPs) are defined by the Census in cooperation with local officials. These areas are socially recognized communities that residents across a metropolitan area know by name and reputation (Bader and Krysan 2015; Krysan and Bader 2007).

These recognizable reputations, identifiable by the name of suburbs, have material impacts that can promote integration or reproduce segregation. The names of suburbs signal both the racial and economic climate of suburbs. For example, Pasadena, CA is a suburb of Los Angeles that is known to be whiter and wealthier than other suburbs in the San Gabriel Valley like Alhambra or Monterey Park (Cheng 2013). Places form the basis for attraction or avoidance strategies in the housing search process and differentially influence residential mobility decisions across race and ethnicity (Bader and Krysan 2015; Krysan and Bader 2007). Recent studies find that changes in metropolitan segregation and diversity are largely attributable to changes across places (Fowler et al. 2016; Lichter et al. 2015b).

Defining suburb: While there's no single definition of suburbs, the term typically refers to parts of a metro area outside of the central city (Lacy 2016). Therefore, I define suburbs as metropolitan census places that are not the central city of a metropolitan area. Following Census definitions, central cities are the places with the largest populations within a metro area.

Data: I draw from place-level data from the 2000 and 2010 Decennial Censuses as well as the American Community Survey's (ACS) 2008-12 five-year estimates. I obtained these data, including shapefiles, from the National Historical Geographic Information System (NHGIS) (Manson et al. 2017).

I examine all suburbs that existed in 2010 with complete 2012 ACS data (n = 14,442). The data are limited to 2000 because median household income by race, the dependent variable, only became available starting in Census 2000.[14] Of the 2010 suburbs, 11,817 existed in 2000. Like others (e.g., Hall et al. 2016; Tach et al. 2019), I use contemporaneous place boundaries instead of standardized boundaries across censuses because land annexation (or cession) likely changes the racial and ethnic composition of the newly defined, socio-political conception of place. For example, the Atlanta government annexed more than 50,000 acres of suburbs in 1952, which, by intention, maintained a white majority within the city's limits (Kruse 2005). Notably, prior studies suggest that boundary changes are relatively infrequent and matter little for patterns of racial or economic diversity in places in recent years (Hall et al. 2016; Tach et al. 2019). Nevertheless, in regression analyses, I control for land area and population size to address shifting boundaries.

3.2.2 Racial inequality across place types analysis

Dependent variable: The first question of this study asks, how do group-specific median household incomes vary across suburban place types? The dependent variable is suburb-level median household income for Blacks, Latinxs, Asians, and whites. Values from Census 2000 are inflated to 2012 dollars to correspond to the ACS's estimates. For stability, I only include median household incomes when there are at minimum 25 householders for the respective race group within the suburb.

Independent variable: macro-segregation, micro-segregation, and integration: For this analysis, I divide suburbs into three place-types: macro-segregated, non-diverse; micro-segregated, diverse; and micro-integrated, diverse. I use a categorization scheme so that I can compare across place types in ways that are easily interpretable, for example, comparing predominantly white suburbs to predominantly Black suburbs or highly integrated suburbs.

---

[14] Census 1990 includes average median household income by race. However, the distribution of household income displays a positive skew making the average an inappropriate measure of central tendency.

First, I define macro-segregated, non-diverse suburbs as those primarily composed of one racial or ethnic group. While prior studies typically use a threshold of 90% to deem a place monoracial (Farrell and Lee 2011; Hall et al. 2015), given the large-scale diversification in the United States, I use a looser threshold of 80%. Arguably, a place that is 80% one racial or ethnic group is still relatively racially homogeneous. This results in three macro-segregated suburb types: predominantly white, predominantly Black, and predominantly Latinx. No suburbs were greater than 80% Asian.

Second, among the remaining diverse suburbs (those that are ≤ 80% one racial or ethnic group), I calculate levels of micro-segregation or integration using the information theory index (H). H is a widely used index that measures the spatial evenness of racial and ethnic diversity among multiple groups (Lichter et al. 2015b; Reardon and Firebaugh 2002). Other measures, like the Index of Dissimilarity, can only be calculated for two groups, making them unsuitable for this analysis of multiethnic diversity. H measures how closely the diversity of constituent subunits mirror the diversity of the place of interest. Using H, I define residential integration when a place's diversity is evenly spread within its boundaries. Because census blocks nest neatly within all higher levels of census geographies, I use census blocks as the subunit for places, and thus, the comparison is between block diversity and overall place diversity. Diversity is defined as entropy (E):

$$E = -\sum_{r=1}^{N} \pi_r \log(\pi_r) \tag{1}$$

where π_r is the place's share of race or ethnic group r. I calculate E for each block (i) to derive E_i. H compares E and E_i and is defined as

$$H = \sum_{i=1}^{M} \frac{t_i(E - E_i)}{ET} \tag{2}$$

where t_i is the total population count in block i, and T is the total population count of each place. This measurement strategy implies that residents on average in integrated places will be exposed to greater racial and ethnic diversity in their local environments (i.e., their neighbors on the block). Conversely, when a place shows an uneven distribution of diversity, blocks on average will show greater homogeneity than the place at large, indicating that residents are less likely to experience cross-racial interaction in their local environments compared to an integrated place. The index ranges from 0 to 1, where 0 indicates that the diversity of each block matches perfectly the overall place diversity (maximum integration) and 1 indicates that each block contains only one group (maximum segregation). Values above 0.4 are typically considered moderately to highly segregated and not integrated. For example, using these methods, the city of Baltimore has a value of 0.5, indicating high levels of within-place segregation.

Because of the numerical direction of H (0 = maximum segregation, 1 = maximum segregation), for interpretability, I reverse H for an index of integration so that 0 indicates maximum segregation and 1 indicates maximum integration:

$$Integration = 1 - H \tag{3}$$

I categorize a diverse place as integrated if $Integration \geq 0.8$. This measurement strategy is consistent with qualitative studies of highly integrated suburbs in suburban Los Angeles (e.g., Alhambra, Monterey Park) (Cheng 2013) and suburban Houston (e.g., Sugar Land) (Douds 2020). I refer to diverse places that are not integrated ($Integration \leq 0.8$) as micro-segregated. In regression analysis, I interact these place types with race to see if differences in group-specific median household incomes vary across place types.

Controls: I control for several place characteristics that may influence the racial and economic structure of the communities: the rental market, educational attainment, political incorporation, land area, population size, and metropolitan fixed effects. Greater availability of rental units may allow for economic integration that occurs across racial lines, specifically because people of color are disproportionately renters, so I include the percent of units that are renter occupied. I also include a quadratic term because exploratory analyses indicated a curvilinear relationship with median household income. Because a more highly educated population will tend to have higher incomes, I include the percent of residents 25 or older with a bachelor's degree as a measure of educational attainment. I interact both these terms with race given substantial racial inequalities in homeownership and educational attainment. I include an indicator for whether a suburb is legally incorporated because political regimes in incorporated places have the power to enact economically and racially exclusionary practices or not, reflecting local control preferences. Because greater land area and larger populations allow for greater spatial differentiation, I control for both land area and population by taking the log of these variables. I include fixed effects for metropolitan areas to control for metropolitan-level characteristics (e.g., metropolitan economies, cost of living, local racial attitudes, region, racial and ethnic composition) that influence the economic composition of local suburbs.

Further, I address localized spatial autocorrelation by constructing a spatial lag that captures how median household income clusters across nearby suburbs. Using all suburbs, I calculate the spatial lag variable by taking the average of median household incomes of the three-nearest places using the straight-line distances between the central latitude-longitude coordinates of each place.[15] I use the nearest neighbors method rather than adjacency because suburbs often have idiosyncratic boundaries and may be spatially proximate without sharing boundaries. I coerce symmetry (i.e., if place *i* is neighbors with *j*, then *j* must also be neighbors with *i*).

Regression analysis: I conduct gamma regression with a log link function because median household income is a non-negative continuous variable with a right skew. Because group-specific median household incomes are likely to be highly correlated within places, I use generalized estimating equations (GEE) to cluster the variance within places using the robust sandwich estimator. This estimator is referred to as robust because it provides reliable inference with imbalanced designs and potential misspecification of the covariance structure (Ziegler 2011). This analysis has an imbalanced design because different place types host different populations (i.e., not every suburb will have a median household income for the four groups of interest for both time points). I report predicted margins. In the appendix, I exponentiate the parameter estimates and report the results in "risk" ratios to simplify interpretation.

The following equation represents the regression analysis:

$$\begin{aligned}\log(\mathrm{E}[HHI_{prt}]) = {} & \beta_{0m} + \beta_1 year2010_t + \beta_2 race_{prt} + \beta_3 race_{prt} * \\ & year2010_{\,t} + \beta_4 placetype_{pt} + \beta_5 placetype_{pt} * race_{pt} + \\ & \delta' controls_{pt} + \gamma' splag_{pt} + e_{prt}\end{aligned} \tag{4}$$

---

[15] I conducted a sensitivity analysis using 5 nearest neighbors. The correlation between the 3-neighbors spatial lag and the 5-neighbors spatial lag was 0.96.

where HHI_{prt} refers to the median household income in suburb p for race group r in year t; β_{0m} refers to the metro area-specific intercept; $year2010_t$ refers to the dummy variable for year 2010 with reference group year 2000; $race_{prt}$ refers to the race group for whom the dependent variable is measured; $placetype_{pt}$ indicates the suburb was predominantly one-group, micro-segregated, or integrated; $controls_{pt}$ refers to a vector of control variables; $splag_{pt}$ denotes the spatial lag; and e_{prt} refers to the error term.

3.2.3 Racial inequality within suburbs analysis

Dependent variable: The second question of this study asks, how do group-specific median household incomes differ within suburbs by levels of diversity and integration? In this section, I conduct a regression of pairwise inequalities between the four racial and ethnic groups studied in this article. The dependent variable is the difference between group-specific median household incomes (Asian-Black, Asian-Latinx, Latinx-Black, white-Black, white-Latinx, white-Asian). For stability, I only include median household incomes when there are at minimum 25 householders for the race groups being compared. There are 10,025 suburb-year observations for the white-Black comparison; 11,381 for white-Latinx; 7,419 for white-Asian; 7,748 for Latinx-Black; 6,085 for Asian-Black; and 6,831 for Asian-Latinx.

Independent variables: diversity and integration. In this analysis, I use continuous measures of diversity (Eq. 1) and integration (Eq. 3). For interpretability, I scale entropy by dividing by log(5), the number of racial and ethnic groups, to be between 0 and 1, where 0 indicates complete homogeneity and 1 indicates maximum diversity. I remove predominantly Black or Latinx suburbs from this analysis so that very low-diversity suburbs refer only to predominantly white suburbs. I make this decision because, given the history of suburbanization and white resource hoarding, predominantly white suburbs are an important benchmark to measure racial inequality. Because I do this, instead of using the 5-place type scheme, I use continuous measures of diversity and integration.

Controls: I include the same control variables as the preceding analysis: share of renter-occupied units, share with a bachelor's degree or higher, political incorporation, log land area, log population, and metro area fixed effects. In addition, I include a control variable for overall median household income as the magnitude of disparities may change depending on the affluence of suburbs. Further, apart from metro area fixed effects, I include interaction terms between disparity type and each control to allow for variation across disparity types.

Regression analysis: In this analysis, disparities are normally distributed, and as a result, I conduct a linear regression. I use GEE methods with the robust sandwich estimator to address the imbalanced design (i.e., not every suburb has a disparity to report for every racial/ethnic combination in both years). The following equation represents the regression analysis:

$$\begin{aligned} \mathrm{E}[HHI\_Diff_{prt}] \\ &= \beta_{0m} + \beta_1 year2010_t + \beta_2 entropy_{pt} + \beta_3 entropy_{pt} \\ &\quad * year2010\,_t + \beta_4 integration_{pt} + \beta_5 integration_{pt} \\ &\quad * year2010_t + \delta' controls_{pt} + e_{prt} \end{aligned} \tag{5}$$

where HHI_Diff_{prt} refers to the difference in median household income between two racial/ethnic groups r in suburb p in year t; β_{0m} refers to the metro area-specific intercept; $year2010_t$ refers to the dummy variable for year 2010 with reference group year 2000; $entropy_{pt}$ refers to the level of racial and ethnic diversity; $integration_{pt}$ indicates the level of racial integration; $controls_{pt}$ refers to a vector of control variables; and e_{pt} refers to the error term.

3.3 Results

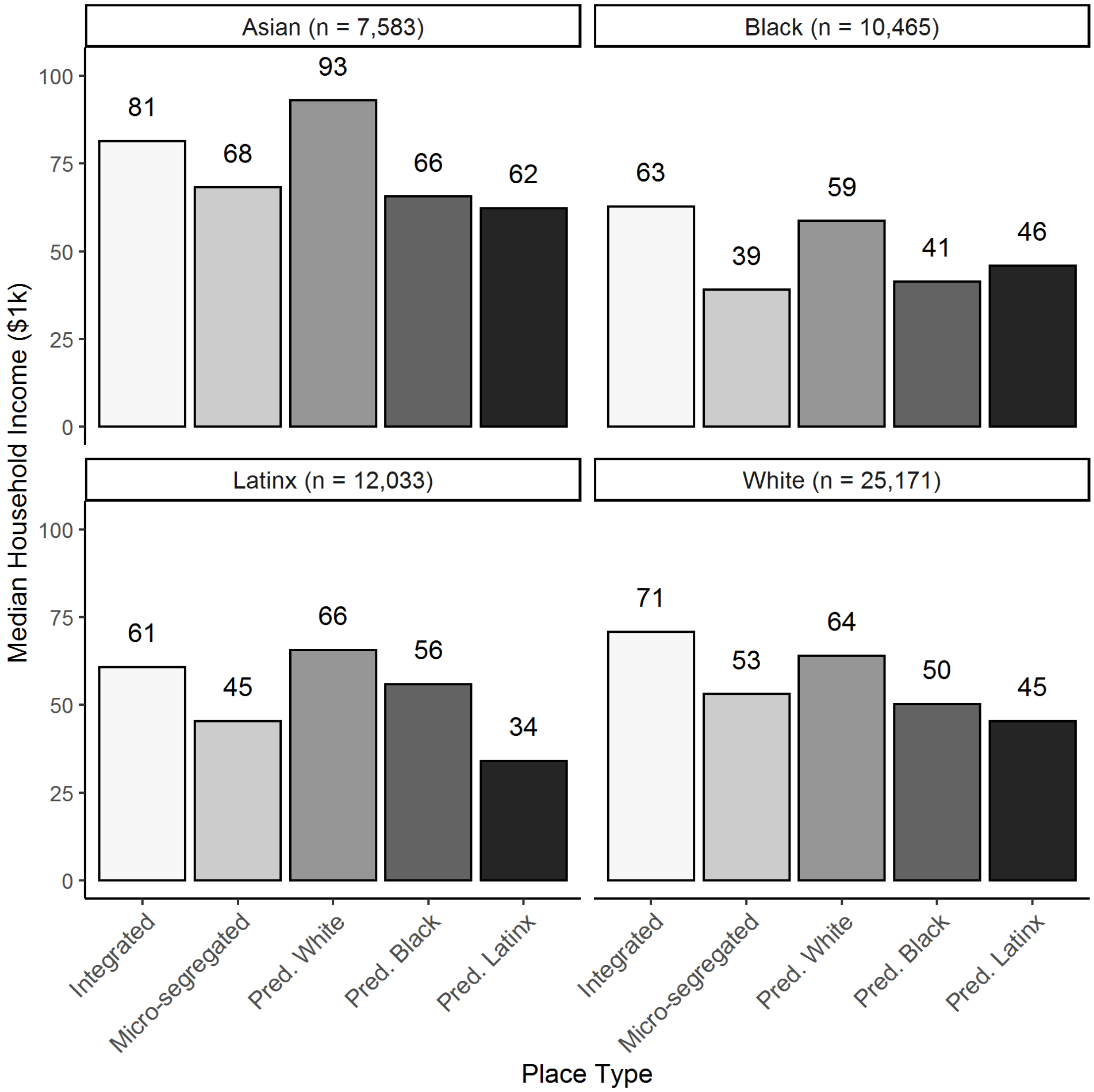
In this analysis, I set out to understand the suburban context of racial-economic inequality as suburbs racially diversify and integrate. I ask two questions: 1) How do racial/ethnic group-specific median household incomes distribute *across* macro-segregated (i.e., predominantly Black, Latinx, or white); micro-segregated, diverse; and micro-integrated, diverse suburbs? (2) How does racial inequality in median household income take shape *within* suburbs along the spectrum of multiethnic diversity and integration? Given the history of suburbanization, segregation, and disinvestment from communities of color, investigating local racial diversity and integration in suburbs is key to understanding the geography of American racial inequality.

3.3.1 Median household incomes across place types

First, I explore how median household incomes vary by race across five suburban place types: micro-integrated, diverse; micro-segregated, diverse; macro-segregated, predominantly white, predominantly Black, and predominantly Latinx suburbs (as a reminder, there were no suburbs that were greater than 80% Asian). This section contains three central findings: (1) micro-integrated suburbs show high median household incomes across all racial/ethnic groups; (2) Blacks and Latinxs in such integrated suburbs show substantially higher household incomes than those in micro-segregated suburbs, and those in macro-segregated predominantly Black or Latinx suburbs; (3) Asians' and whites' considerably higher median household incomes show little variability across place types. Collectively, these results suggest that the ways that racial-economic inequality takes shape across suburbs matters more for economically disadvantaged populations of color than advantaged populations.

Figure 3.1 reports the average median household income by race of householder and suburban place type. Overall, consistent with national inequalities in median household income, Asians earn more than any other group, followed by whites, with Blacks and Latinxs earning the least. This descriptive figure supports proposed hypotheses regarding advantage across suburb-types for the four racial and ethnic groups: Blacks, Latinxs, and Asians, tend to have higher incomes than their coethnics in predominantly white and micro-integrated, diverse suburbs while having lower incomes in micro-segregated, diverse suburbs as well as predominantly Black or Latinx suburbs. Blacks earn an average median of $63k in micro-integrated suburbs, higher than their counterparts' $59k in predominantly white suburbs, and roughly $20k greater than Blacks living in micro-segregated, predominantly Black, or predominantly Latinx suburbs ($39k, $41k, and $46k, respectively). Whites show a similar pattern where they earn the highest in micro-integrated settings ($71k), moderately higher than those in predominantly white suburbs ($64k); however, they also make less in micro-segregated suburbs ($53k). The result that whites as an advantaged population also earn less in this suburb type suggests that micro-segregation may characterize environments that are less advantaged overall for both whites and people of color. Contrasting from Blacks and whites, Asians and Latinxs both earn the highest in predominantly white suburbs, followed by micro-integrated suburbs. Latinxs earn the least in predominantly Latinx suburbs ($34k), lower than any other race-suburb-type combination.

Figure 3.1 Average Median Household Income ($1,000s) by Race and Suburban Place Type (Census 2000, Census 2010, American Community Survey 2008-12 5-year estimates)

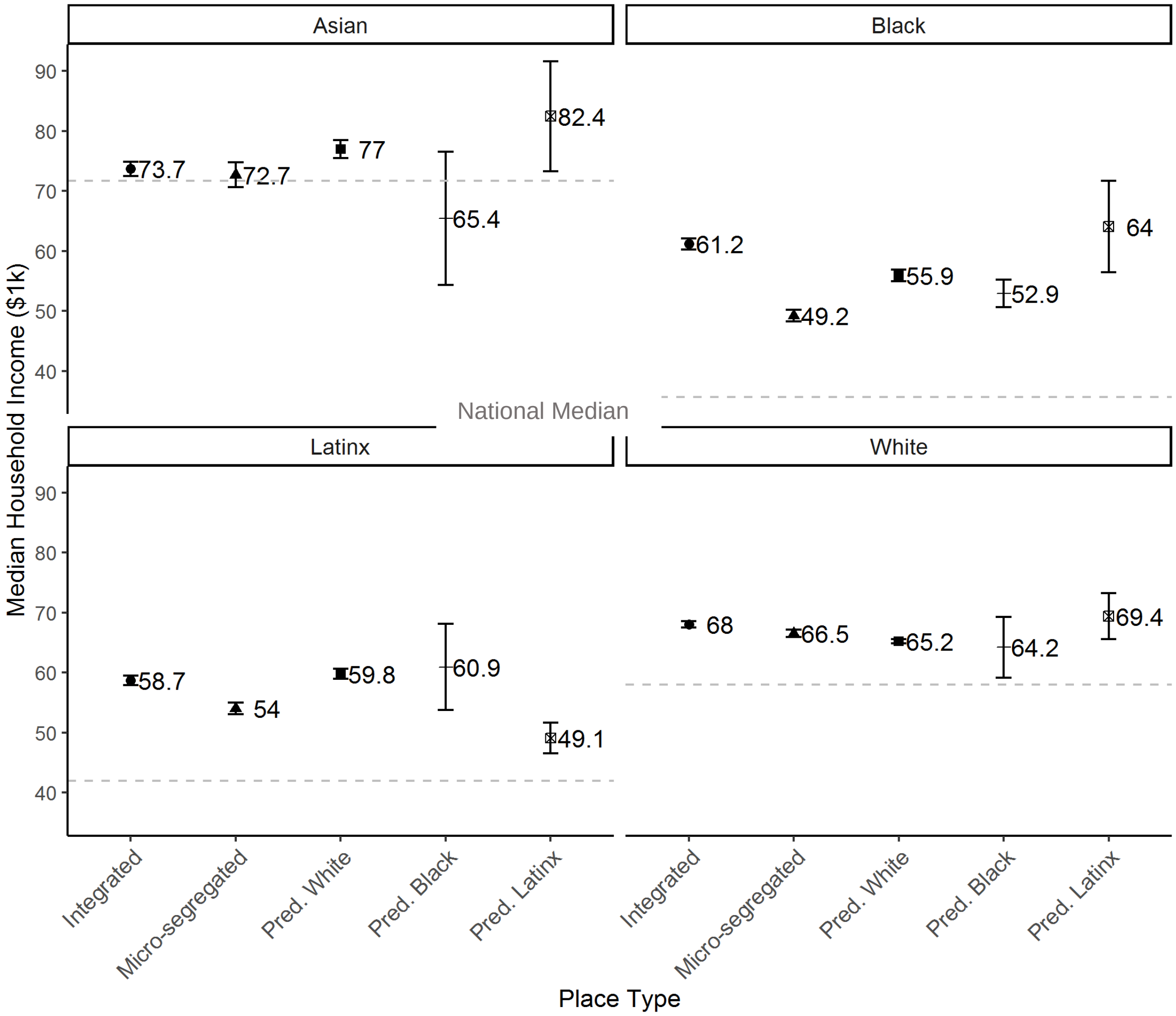


Note. Ns refer to suburb-years by racial and ethnic group. I report median household income in thousands of dollars and I inflated Census 2000 values to 2012 dollars to match the American Community Survey. By the 80% criterion, there were no predominantly Asian suburbs.

Multiple regression analysis generally confirms these descriptive findings that suggest that micro-integrated and predominantly white suburbs are more advantaged than micro-segregated suburbs for Blacks and Latinxs; however, differences between these place types are either small or statistically indistinguishable for Asians and whites. Figure 3.2 reports the predicted margins and

95% confidence intervals of median household income by race and suburban place type (for all parameter estimates, see Appendix Table C.1). These margins were generated by gamma regression with robust standard errors and controlling for several characteristics including spatial autocorrelation and metro area fixed effects.

Figure 3.2. Predicted Margins of Median Household Income ($1,000s) by Race and Suburban Place Type, Generated by Gamma Regression (n = 55,252 suburb-race-years, Census 2000, Census 2010, American Community Survey 2008-12 5-year estimates)



Note. I report median household income in thousands of dollars and inflate 2000 values to 2012 to match the ACS. This regression controls includes year fixed effects, share of renter-occupied units, educational attainment, political incorporation, land area, population, a spatial lag, and metropolitan fixed effects. Predominantly one-group suburbs were those that were greater than 80% one racial and ethnic group. Integrated suburbs were those that were diverse (≤ 80% one racial or ethnic group) and were highly integrated (*Integration* ≥ 0.8). Micro-segregated suburbs were those that were diverse and not integrated (*Integration* < 0.8).

Micro-integration shows the largest effect for Blacks: their predicted median household income in micro-integrated suburbs ($61k) is more than 20% greater than their coethnics in micro-segregated suburbs ($49k) and 10% greater than predominantly white suburbs ($56k). However, consistent with hypotheses on advantaged Black suburbanization, Blacks in predominantly Black suburbs ($53k) have a higher median income than those in micro-segregated contexts. In suburbs, macro-segregation may emerge when middle-class Black householders choose to live in contexts surrounded by other middle-class Blacks. Micro-segregated suburbs may show the lowest values for Blacks if inequitable zoning strategies spatially sequester lower-income populations of color.

For Latinxs, the contexts that create micro-integration host populations with higher medians as well. Consistent with hypotheses on advantage and micro-integration, Latinxs earn similar incomes in micro-integrated and predominantly white suburbs ($59k, $60k, respectively), and these incomes are 10% greater than those in micro-segregated suburbs ($54k) and 20% greater than those in predominantly Latinx suburbs ($49k).

In contrast to Blacks and Latinxs, Asians' earn the most in predominantly white suburbs ($77k), but their considerably high incomes do not differ statistically between micro-integrated and micro-segregated contexts ($74k vs $73k), and these values are higher than any other racial or ethnic group's estimate among all suburb-types. Whites show small, but statistically significant differences across micro-integrated, micro-segregated, and predominantly white suburbs ($68k, $67k, and $65k, respectively).

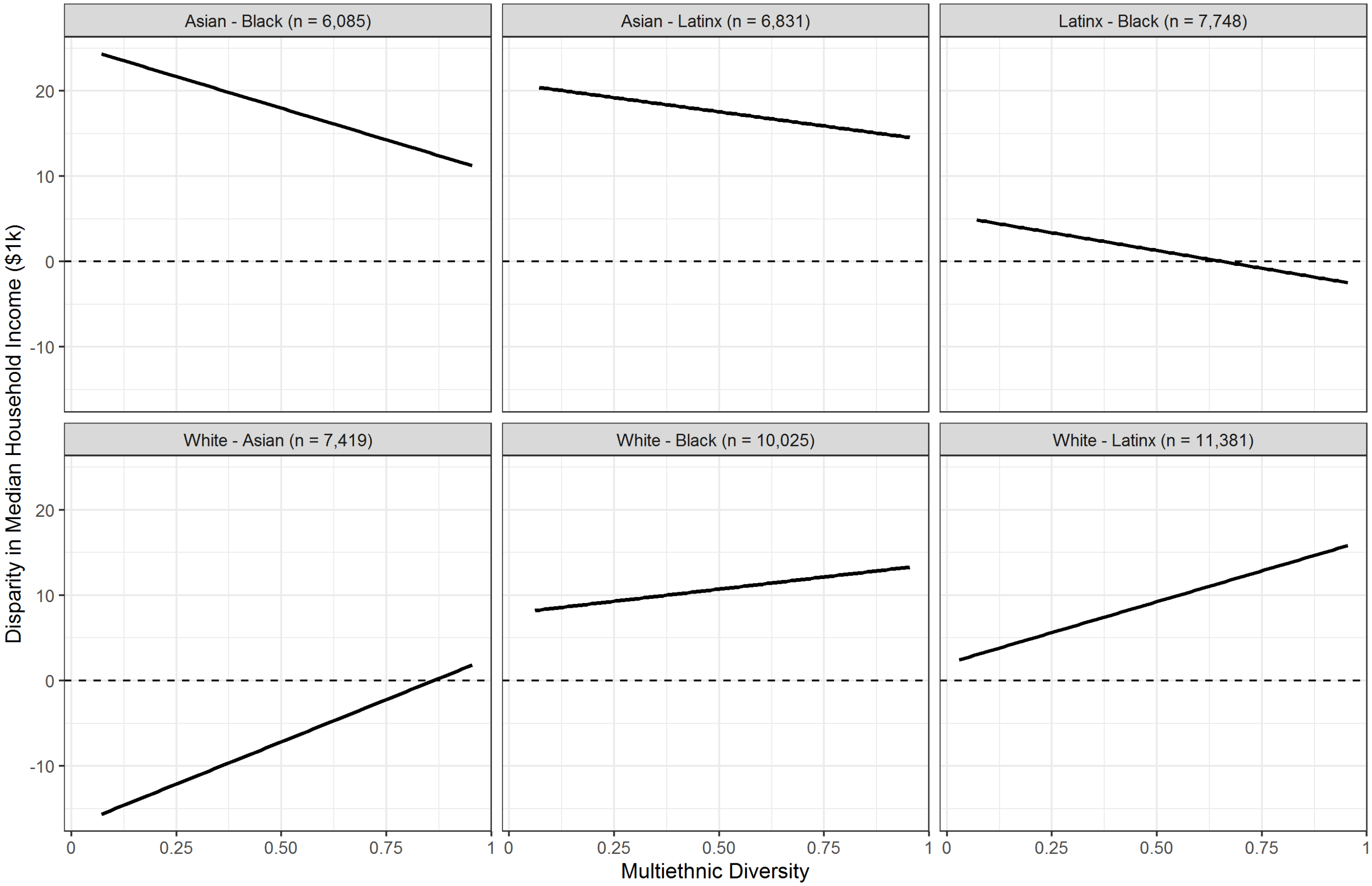
While micro-integrated suburbs are typically more advantaged, these results suggest that micro-segregated, diverse suburbs are associated with low incomes for Blacks and Latinxs. In this way, living in the same community without integration does not support movement towards equality. Further, racial context matters little for economically advantaged race groups, Asians and whites. On average, Asians and whites carry with them the mechanisms that support their advantage across suburbs. These spatial patterns suggest that diverse suburbs maybe as desirable as predominantly white suburbs or that the racial processes of integration may be unrelated to white or Asian economic standing.

3.3.2 Disparities in median household incomes within suburbs by multiethnic diversity

In this section, I examine how *within-suburb* disparities vary by levels of multiethnic diversity, and the following section examines the role of integration. Here, rather than using the five place-types, I examine multiethnic diversity and integration as continuous variables. This section has two central findings. First, compared to homogenous suburbs, suburbs with higher levels of diversity show larger within-place disparities between whites and Blacks and between whites and Latinxs (i.e., disparities grow with increasing multiethnic diversity). Second, Asians' economic advantage over whites and Latinxs narrows with increasing multiethnic diversity.

Figure 3.3 reports the smoothed means of within-suburb racial disparities by levels of multiethnic diversity. Positive values indicate the first group has a higher median household income on average while negative values indicate that the second group has a higher median household income. As hypothesized and consistent with national racial disparities in median household income Asians tend to make more than whites, while whites tend to make more than Blacks and Latinxs within suburbs.

Figure 3.3 Smoothed Conditional Means for Within-suburb Disparities in Group-specific Median Household Incomes ($1,000s) by Diversity (Census 2000, Census 2010, ACS 2012 5-year Estimates)

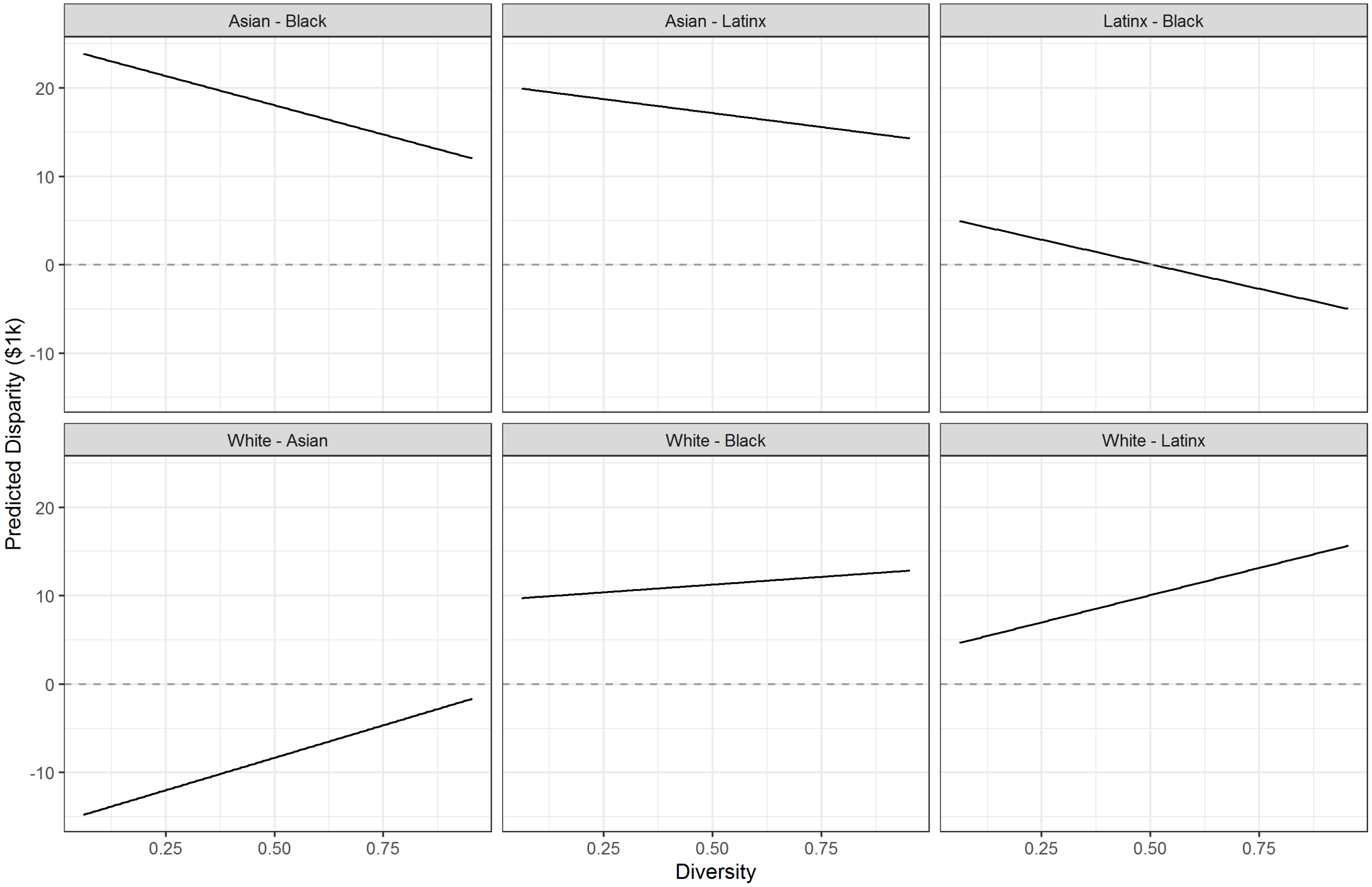


Note. Ns refer to suburb-years by racial and ethnic group. I calculate disparities as the median household income of the first group minus the second group (e.g., "Asian – Black" can be read as "Asian minus Black median household income"). I calculate diversity as the entropy index scaled between 0 and 1 (Eq. 1). I inflate Census 2000 dollar values to 2012 to match the ACS.

Whites are more advantaged relative to groups of color in suburbs with higher levels of diversity. The disparities widen against both Blacks and Latinxs with increasing diversity and the disparity closes with Asians with increasing diversity. This result likely reflects the lower median household incomes of Blacks and Latinxs in micro-segregated, diverse suburbs. Comparisons between groups of color all show smaller disparities with increasing diversity. Like in micro-segregated, diverse, central city spaces (e.g, Queens, NY), micro-segregation may arise as the legacy of housing discrimination confining lower-income Blacks and Latinxs to specific neighborhoods within suburbs. Alternatively, micro-segregation may arise from the spatial separation of single-family zoning from moderately priced units, allowing entry by lower income Blacks and Latinxs while creating a segregated landscape.

Multivariable analyses confirm descriptive evidence, where whites earn higher incomes compared to groups of color in suburbs with higher levels of multiethnic diversity. Figure 3.4 reports the results of multivariable regression with robust standard errors and metro area fixed effects (see Appendix Table C.2 for all parameter estimates). Disparities between whites and Blacks and between whites and Latinxs show larger disparities with increasing diversity. The slope is particularly dramatic for the white-Latinx comparison going from roughly +$5k in low diversity suburbs to nearly +$20k in high diversity suburbs. The white-Asian comparison shows the opposite association, further confirming descriptive analyses: increasing multiethnic diversity associates with narrowing disparities between whites and Asians approaching 0 in high diversity contexts. For comparisons across groups of color, disparities between Asians and Blacks and between Asians and Latinxs are smaller in suburbs with higher levels of diversity. Lastly, disparities between Latinxs and Blacks crossover 0 with increasing diversity, suggesting that Blacks earn higher incomes than Latinxs in the most integrated environments while Blacks remain the lowest earners in segregated-diverse suburbs.

Figure 3.4 Predicted Values for within-suburb Disparities in Group-specific Median Household Incomes ($1,000s) by Diversity, generated by linear regression (n = 49,489 suburb-disparity-years, Census 2000, Census 2010, ACS 2012 5-year Estimates)



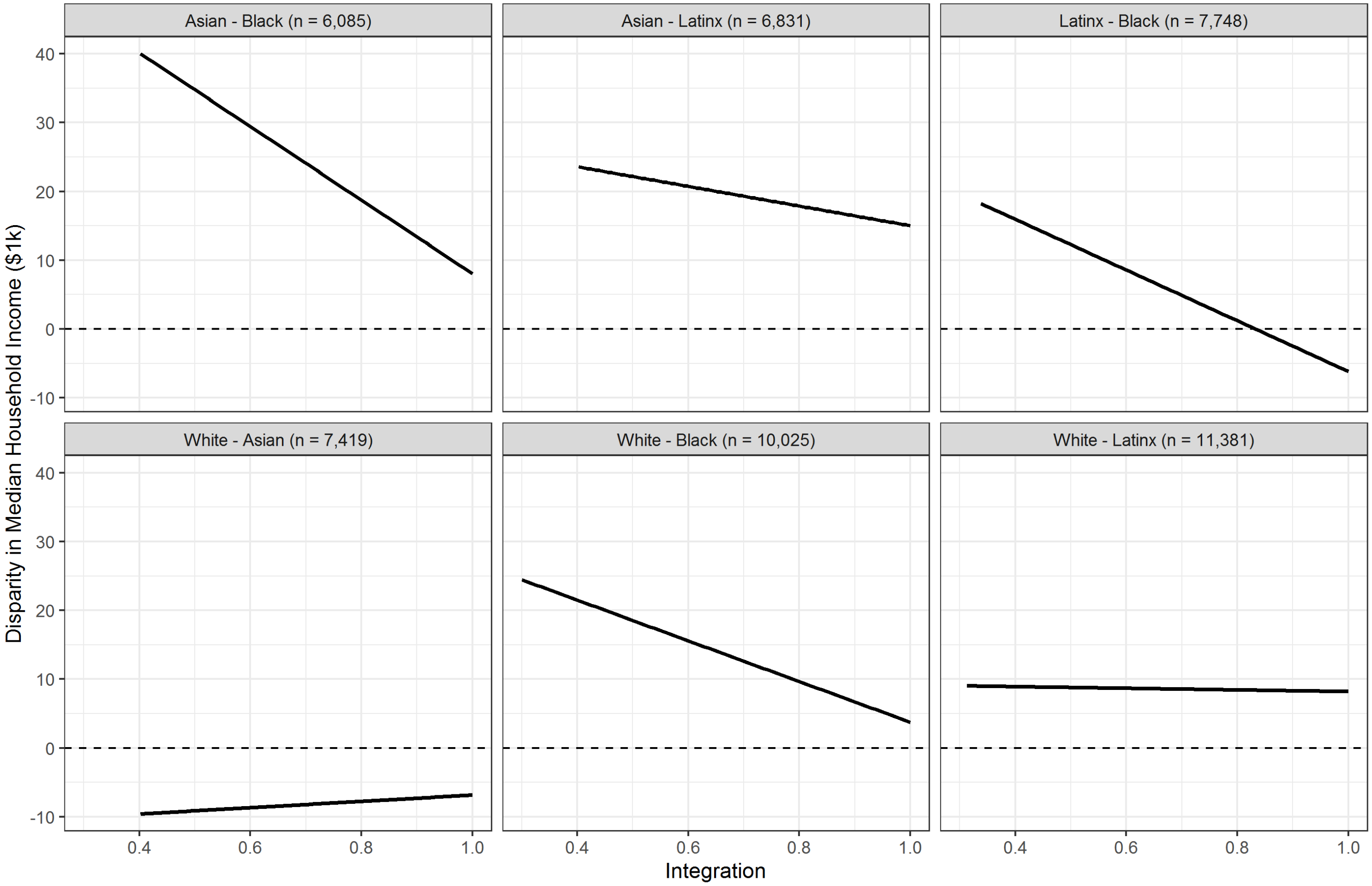
Note: This model includes estimates for integration as well as controls for overall median household income, educational attainment, rental units, incorporated status, land area, population, and metro area fixed effects. I calculate disparities as the median household income of the first group minus the second group (e.g., “Asian – Black” can be read as “Asian median household income minus Black median household income”). I calculate diversity as the entropy index (Eq. 1) and integration as the reversed H score (Eq. 3). I inflate Census 2000 dollar values to 2012 to match the ACS. I calculate the intercept using the San Francisco metro area.

3.3.3 Disparities in median household incomes within suburbs by integration

In this section, I investigate how racial residential integration shapes within-suburbs racial disparities in median household income. In contrast to the diversity analyses, Blacks and Latinxs show smaller disparities with Asians and whites in suburbs with higher levels of integration. Not only are integrated suburbs generally more advantaged than other suburban environments, but they also show smaller racial disparities in income.

Figure 3.5 reports the smoothed conditional means of within-suburb disparities in median household income by levels of integration. Strikingly, levels of integration show steep slopes for comparisons including Blacks. In the most integrated suburbs, Blacks are at near parity with whites. While the disparities are still substantial between Black and Asians (roughly +$10k in the most integrated suburbs), the decline is substantial from +$30k in highly segregated settings (integration = 0.5). For Latinxs compared to Asians the slope is more moderate, while white-Latinx disparities are relatively independent of integration.

Figure 3.5 Smoothed Conditional Means for Within-suburb Disparities in Group-specific Median Household Incomes ($1,000s) by Integration (Census 2000, Census 2010, ACS 2012 5-year Estimates)

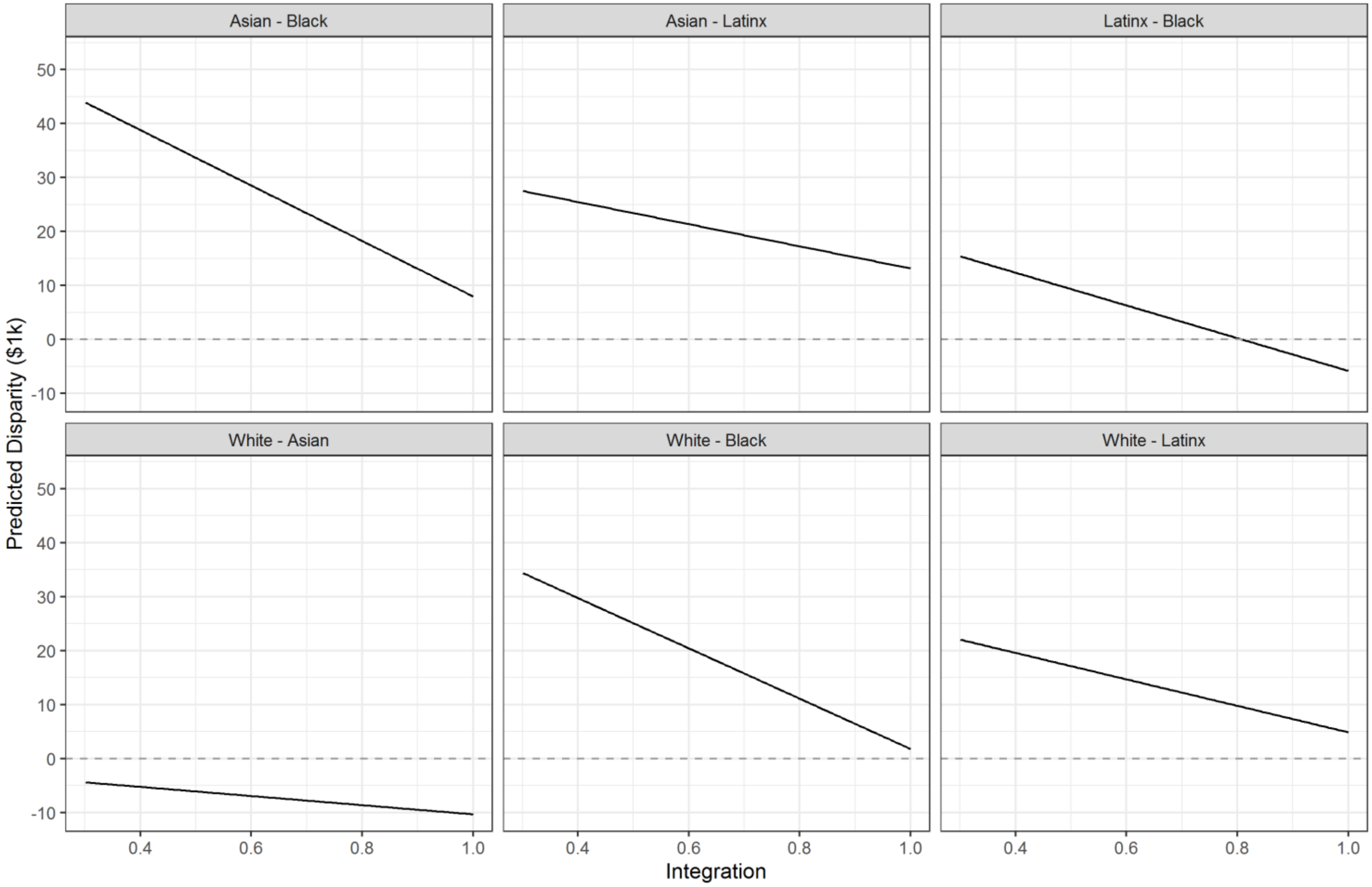


Note. Ns refer to suburb-years by racial and ethnic group. I calculate disparities as the median household income of the first group minus the second group (e.g., "Asian – Black" can be read as "Asian minus Black median household income"). I calculate integration as the reversed H score (Eq. 3). I inflate Census 2000 dollar values to 2012 to match the ACS.

Multivariable analyses generally confirm this bivariate descriptive evidence, supporting hypotheses regarding integration and advantage. Figure 3.6 graphs the results of multivariable regression with robust standard errors and metro area fixed effects (see Appendix Table C.2 for all parameter estimates). Disparities between lower-earning Blacks and Latinxs compared to higher-earning whites and Asians are all smaller in the most integrated suburbs. For the white-Black and white-Latinx disparities, the most integrated suburbs show near-equality in median household income, while micro-segregated suburbs show substantial disparities (> $10k). For Asian-Black and Asian-Latinx disparities, the associations are similar where the suburbs with higher levels of integration show smaller disparities than micro-segregated suburbs. Lastly, the white-Asian disparity is the one disparity that is larger in highly integrated suburbs; however, the disparity across the spectrum of integration is more moderate compared to other disparity-types.

Consistent with hypotheses on racial context, suburban advantage, and suburban homogeneity, these results collectively suggest that suburbs with higher levels of integration are typically more economically homogeneous than suburbs characterized by within-place micro-segregation. The contexts that create racial residential integration may also generate environments for racialized groups with similar incomes, potentially providing a geography for place-based racial equality.

Figure 6. Predicted Values for within-suburb Disparities in Group-specific Median Household Incomes ($1,000s) by Integration, generated by linear regression (n = 49,489 suburb-disparity-years, Census 2000, Census 2010, ACS 2012 5-year Estimates)



Note: This model includes estimates for integration as well as controls for overall median household income, educational attainment, rental units, incorporated status, land area, population, and metro area fixed effects. I calculate disparities as the median household income of the first group minus the second group (e.g., “Asian – Black” can be read as “Asian median household income minus Black median household income”). I calculate diversity as the entropy index (Eq. 1) and integration as the reversed H score (Eq. 3). I inflate Census 2000-dollar values to 2012 to match the ACS. I calculate the intercept using the San Francisco metro area.

3.4 Discussion and Conclusion

The explosion of racial diversity across the nation outside of the central city is reshaping the U.S. geography of race and ethnicity. Historically, suburbanization was a racial project bound up with rigid racial segregation and white resource hoarding. However, the local social relations of twenty-first century, suburban diversity and integration may provide openings for greater racial equality within places.

In this study, I analyze how racial inequality in median household income takes shape in suburbs according to their racial context in 2000 and 2010. I argue that micro-segregation and micro-integration are states under racial diversity that differentially shape populations' of color access to material and symbolic resources. Findings suggest that micro-integrated, diverse suburbs are composed of households with relatively high median household incomes across all racial and ethnic groups. Simultaneously, these suburbs show smaller racial disparities in income between lower-earning Black and Latinx populations compared to higher-earning white and Asian populations. In contrast, micro-segregation repeats familiar patterns of metropolitan segregation in local contexts: micro-segregated suburbs are associated with lower median household incomes for Blacks and Latinxs, and disparities are larger for these populations compared to whites and Asians at higher levels of segregation. As racial and ethnic diversity grows across the nation, the processes of micro-segregation and integration in suburbs will critically influence how populations experience racial inequity.

Results of this analysis support several conclusions. First, analyzing racial diversity is not a substitute for analyzing residential integration in suburbs. When it comes to median household income, diversity and integration display opposite associations, suggesting different processes. Supporting theories of suburban integration and advantage (Douds 2020), integration specifically occurs in predominantly middle-class suburbs as measured by median household income. Racialized populations that display large disparities nationally show relatively small gaps in income in these suburbs. Once some whites in policy-influential positions lower racial barriers to entry by people of color, people of color that have similar incomes to whites may move into the community, fostering integration. In comparison, consistent with the spatial patterning of race and income inequality in central cities (Douds 2020; Mayorga-Gallo 2014; Tach 2014), substantial within-suburb racial inequalities exist in micro-segregated, diverse suburbs. When suburbs diversify without ceding the power advantages of whiteness, their diversity shows a pattern of micro-segregation. They contain spatially separated racialized groups, further maintaining patterns of racial inequality and social distance between whites and people of color.

Second, this analysis highlights the importance of suburbs for understanding diversity and integration. Prior research typically looks to central cities as the primary arena of racial diversity (Lumley-Sapanski and Fowler 2017; Maly 2000; Nyden et al. 1997; Tach 2014); however, these studies do not address the nuances of the historical racial landscapes of suburbs. Where racial diversity and economic heterogeneity exist under one municipal regime in a central city, residential integration occurs within more economically homogeneous contexts in suburbs, the sites in which residential integration primarily occurs. Future research may look towards the political economy of suburbs to understand how the changing demography of the nation interfaces with the local politics of racial exclusion or inclusion as suburbs grow increasingly diverse.

Growing residential integration in economically advantaged, homogeneous suburbs likely influences the structure of American racial inequality. Where both macro- and micro-segregation perpetuate familiar forms of white domination, integration disrupts the spatial mechanisms of segregation and may reflect the prior disruption of such patterns historically fundamental to the American racial hierarchy. In a nation where affluent Blacks live in higher poverty census tracts than poor whites (Logan 2011), suburban integration provides a new geography of greater within-place equality among economically unequal racialized groups. In integrated suburbs, people of color access the same material resources and civic institutions as whites (e.g., governments, recreational areas, health food stores). Furthermore, suburban integration potentially allows people of color to live closer to middle-class employment, reducing spatial mismatch and simultaneously reducing daily stressors. Lastly, racial integration now will likely operate intergenerationally as integrated public education socializes young people to be in a multiethnic society with multiethnic friendships, not necessarily centered on whiteness.

This analysis reveals that, the dichotomy of advantaged white communities and disadvantaged people-of-color communities does not exist on a large scale in suburbs. Whites have moderately higher median household incomes in micro-integrated, diverse suburbs than those in predominantly white suburbs, suggesting that predominantly white suburbs may not be more “desirable” than integrated environments. For example, predominantly white suburbs may be further from the city core or employment opportunities, while suburbs that are diversifying and integrating may have more amenities closer to the city.

Moreover, Blacks have higher incomes in predominantly Black suburbs than their counterparts in micro-segregated, diverse suburbs, suggesting that relative racial isolation for Blacks in suburbs does not always associate with disadvantage. This result highlights that many Black people actively choose to live in predominantly Black suburbs—that is, Black suburbanization in these contexts does not arise from constrained choice sets or displacement. For example, in affluent Black suburbs in the DC area, Black residents report that they did not want to live in whiter suburbs after considering moving to those suburbs (Lacy 2007).

While recent research explores integration in suburbs (Cheng 2013; Lung-Amam 2017; Rastogi and Douds 2020), one notable limitation of this study is the lack of theory regarding the processes that create diversity and distance in suburbs. This study does not offer evidence regarding the processes that govern within-place segregation in suburbs. However, these processes may be political in nature for example at the local level of zoning boards. Racial inclusion and micro-segregation may occur with the inequitable siting of affordable, moderately priced units within a suburb. While exclusionary zoning is critical to both economic and racial segregation (Pendall 2000; Rothwell and Massey 2009, 2010), research has yet to investigate how inclusionary zoning may contribute to micro-segregation or -integration. Future research may examine how policy allows segregation to endure or decline as suburbs diversify.

This article contributes to a growing research agenda focused on the potential causes and outcomes of increasing racial and ethnic diversity and integration across the nation within the context of suburbs. Emplacing suburban racial and ethnic diversity and integration will offer new insights into racial processes ranging from electoral politics and governance to the ways that white domination in American society adapts to new contexts. Understanding residential integration now is crucial to understanding the future of American racial stratification for decades to come.

Conclusion

The contemporary U.S. racial geography is reshaping the social and political fabric of American society. As a young Marylander in the 1990s, the political map instilled in me a sense that Virginia was for Republicans and Maryland was for Democrats. Maryland was the North and Virginia was the South. Going back to the Civil War, this border was a salient racial-political divide. However, since 2008, we have seen the political center of Virginia move north to the highly diverse and integrated suburbs of DC. As of 2018, Virginia state politics are completely controlled by democrats. As of 2020, Virginia abolished the white supremacist holiday that commemorated confederate generals Robert E. Lee and Stonewall Jackson. There are intersectional implications—Virginia ratified the Equal Rights Amendment this year and a now majority people-of-color county unseated an openly anti-trans, white, male Republican by electing a white, trans-woman Democrat to state congress. This political shift is not unique to Virginia. With changing racial demographics, a once purple state is now among the bluest in the nation (i.e., California) and we are witnessing the purple-ization of states once thought to be conservative strongholds (e.g., Arizona, Texas, Georgia).

Regardless of our current political climate, I am optimistic for a future where the changing racial demography of the nation makes white supremacy feel less dominating. I think my dissertation describes communities where this may be true. I find that tens of millions of people live together as neighbors in racially integrated suburbs. Many of these communities are multiethnic creating a system of race relations that no longer centers whiteness, numerically and politically. In contrast to the long history of racial segregation in schools, young people of different races and ethnicities attend the same schools in integrated suburbs, potentially enhancing the educational opportunities for youth of color. Lastly, as measured by median income, these suburbs are largely middle-class, deviating from the stereotype of disadvantaged communities of color.

Racially integrated suburbs indicate a new spatial pattern that diverges from overt racial animus and the design of segregation. People of color move through these predominantly middle-class suburbs with relative ease and joy (e.g., Cheng 2013), a phenomenon that sociologists rarely document. The existence of these communities suggests that contemporary, regional racial formations can move past the twentieth-century racial logics of macro-segregation. I think the time is right to emplace multiethnic race relations within suburbs.

I began this dissertation as a descriptive project because previous studies and current theories neglect how the suburbanization of people of color shape local communities and metropolitan dynamics. Given that my findings contradict folk concepts of suburbs (i.e., advantaged, all-white communities or disadvantaged, diverse suburbs), I contribute to a knowledge base upon which scholars can ask informed questions and generate hypotheses in ways that include middle-class people of color. For example, what does it mean for the "Back to the City Movement" that a large slice of advantaged people of color do not want to live in central cities? Moving beyond the central city, what does cross-racial interaction look like in predominantly middle-class, suburban contexts? Most importantly, how does suburbanization contribute to the wellbeing of people of color? It is my hope that my dissertation gives us a firmer foundation for empirically and theoretically grounded debates on race and place among scholars, activists, and policy makers.

Appendix

Appendix A: Chapter 1

Table A.1. Sensitivity Analyses, Logistic Regression Predicting Integration, Odds Ratios (95% CI).

	Absolute cutoff 70% (n = 2,099)	Stable Integration by H ≤ 0.15	Military hub (≥10%)
Place characteristics			
Racial and ethnic composition (25% criterion)			
Asian	3.56 (2.82, 4.47)	3.46 (2.57, 4.66)	3.36 (2.67, 4.22)
Black	0.20 (0.12, 0.36)	0.19 (0.08, 0.46)	0.20 (0.12, 0.34)
Latinx	0.43 (0.24, 0.78)	0.58 (0.24, 1.42)	0.39 (0.22, 0.68)
White	1.28 (0.68, 2.42)	1.01 (0.41, 2.46)	1.26 (0.72, 2.21)
BLW interaction	3.45 (2.02, 5.88)	3.22 (1.25, 8.29)	3.43 (2.10, 5.59)
Institutional hub			
Military	2.19 (1.48, 3.25)	2.64 (1.44, 4.84)	10.80 (4.86, 24.03)
University	1.68 (1.05, 2.69)	1.52 (0.82, 2.80)	1.75 (1.13, 2.72)
Public-sector	1.94 (1.40, 2.68)	1.88 (1.17, 3.01)	1.61 (1.15, 2.24)
Unincorporated status	2.67 (2.07, 3.44)	2.35 (1.79, 3.09)	2.77 (2.14, 3.57)
Foreign-born (%)	0.99 (0.84, 1.17)	1.07 (0.90, 1.28)	1.00 (0.85, 1.17)
Rental units (%)	1.02 (0.96, 1.08)	1.01 (0.93, 1.09)	0.98 (0.92, 1.04)
New housing (%)	1.25 (1.18, 1.32)	1.27 (1.18, 1.36)	1.25 (1.18, 1.32)
Adjacent to integrated place	2.42 (1.88, 3.11)	2.84 (2.04, 3.96)	2.52 (2.04, 3.10)
Land Area	0.52 (0.45, 0.60)	0.52 (0.45, 0.60)	0.51 (0.44, 0.58)
Population	1.40 (1.23, 1.60)	1.29 (1.13, 1.47)	1.44 (1.27, 1.63)
Metropolitan characteristics			
Size (ref: Large)			
Medium	1.13 (0.75, 1.68)	1.23 (0.81, 1.88)	1.13 (0.74, 1.71)
Small	0.85 (0.52, 1.38)	0.97 (0.55, 1.72)	0.87 (0.52, 1.45)
Fragmentation (%)	1.17 (1.05, 1.31)	1.16 (1.01, 1.33)	1.16 (1.03, 1.30)
Diversity (%)	1.07 (0.92, 1.23)	1.02 (0.85, 1.22)	1.05 (0.91, 1.23)
Coastal/border	1.40 (0.90, 2.18)	1.29 (0.76, 2.17)	1.59 (1.00, 2.54)

Note. This table reports sensitivity analyses for key decision criteria for the sample. The first model reports results for a more diverse sample defined as suburbs that were at maximum 70% one racial or ethnic group in both Censuses 2000 and 2010. The second model reports results for a more conservative definition of stable integration where H ≤ 0.15 in both Censuses 2000 and 2010 (n integrated = 842). Lastly, the third model requires that 10% of a suburb's labor force must be employed by the Armed Forces to be considered a military hub. The BLW interaction specifically refers to the parameter estimate for places with substantial presence of Blacks, Latinxs, and whites together. Percentage variables were scaled to units of 10 percentage-points for easier interpretation of coefficient sizes.

Table A.2 Additional Results, Logistic Regression Predicting the Odds of Stable Integration between Census 2000 and Census 2010, Odds Ratios (95% CI).

	Model 1	Model 2	Model 3
Place characteristics			
Composition (25% criterion)			
Asian	3.49 (2.80, 4.34)	2.66 (1.85, 3.81)	2.66 (1.86, 3.82)
Black	0.20 (0.12, 0.34)	0.17 (0.11, 0.28)	0.18 (0.11, 0.31)
Latinx	0.42 (0.24, 0.75)	0.43 (0.24, 0.75)	0.42 (0.24, 0.73)
White	1.28 (0.73, 2.24)	1.13 (0.66, 1.95)	1.18 (0.68, 2.05)
BLW interaction	3.51 (2.13, 5.78)	3.27 (2.00, 5.36)	2.87 (1.61, 5.12)
BAW interaction		1.54 (0.94, 2.50)	1.26 (0.75, 2.10)
BLAW interaction			1.36 (0.74, 2.53)
Institutional hub			
Military	2.24 (1.53, 3.28)	2.24 (1.51, 3.30)	2.23 (1.51, 3.29)
University	1.74 (1.10, 2.76)	1.74 (1.09, 2.76)	1.75 (1.10, 2.78)
Public sector	1.97 (1.44, 2.70)	1.95 (1.41, 2.68)	1.93 (1.40, 2.67)
Unincorporated status	2.62 (2.04, 3.36)	2.58 (2.02, 3.28)	2.61 (2.03, 3.34)
Foreign-born (%)	1.00 (0.85, 1.17)	0.99 (0.85, 1.17)	1.00 (0.85, 1.17)
Rental units (%)	1.02 (0.96, 1.08)	1.02 (0.96, 1.08)	1.02 (0.96, 1.08)
New housing (%)	1.25 (1.19, 1.32)	1.25 (1.18, 1.32)	1.25 (1.18, 1.32)
Spatial lag	2.53 (2.07, 3.11)	2.53 (2.06, 3.10)	2.52 (2.06, 3.09)
Land Area	0.53 (0.47, 0.61)	0.53 (0.47, 0.61)	0.53 (0.46, 0.61)
Population	1.36 (1.20, 1.54)	1.37 (1.21, 1.54)	1.37 (1.21, 1.55)
Metropolitan characteristics			
Size (ref: Large)			
Medium	1.13 (0.75, 1.70)	1.14 (0.76, 1.71)	1.13 (0.75, 1.70)
Small	0.86 (0.52, 1.42)	0.86 (0.52, 1.42)	0.85 (0.51, 1.40)
Fragmentation (%)	1.16 (1.04, 1.29)	1.16 (1.04, 1.29)	1.16 (1.04, 1.29)
Diversity (%)	1.06 (0.92, 1.22)	1.07 (0.93, 1.24)	1.07 (0.92, 1.24)
Coastal/border	1.43 (0.91, 2.26)	1.45 (0.92, 2.29)	1.47 (0.94, 2.30)

Note. Model 1 includes a Black-Latinx-white (BLW) interaction term; Model 2 additionally includes a Black-Asian-white (BAW) interaction term; and Model 3 also includes a Black-Latinx-Asian-white (BLAW) interaction term. Beyond the main effects, these terms explicitly parameterize multiethnic places composing substantial presence of Blacks, Latinxs, and whites; Blacks, Asians, and whites; or all four groups together, respectively, using the 25% criterion. Percentage variables were scaled to units of 10 percentage-points for easier interpretation of effect sizes. For example, a 10 percentage-point increase in foreign-born residents associates with an odds ratio of 0.99 in Model 2.

Appendix B: Chapter 2

Table B.1 Beta regression predicting school-level racial and ethnic diversity, odds ratios (95% CI), with more conservative inclusion criteria for place percent white and single-group dominance.

	Place percent white ≥ 20% (n = 8,398)	Any group ≤ 75% (n = 8,628)
Percentage variables[a]		
Place diversity	1.39 (1.35, 1.43)	1.43 (1.38, 1.47)
H	0.79 (0.77, 0.82)	0.79 (0.76, 0.81)
H*diversity	0.93 (0.91, 0.95)	0.92 (0.91, 0.94)
Income inequality	0.98 (0.94, 1.04)	0.99 (0.93, 1.04)
Homeownership	1.02 (1.00, 1.04)	1.02 (1.01, 1.04)
65 or older	1.22 (1.15, 1.29)	1.25 (1.18, 1.33)
Private school enrollment	1.00 (0.96, 1.03)	0.99 (0.95, 1.03)
Median house value[b]	1.07 (1.05, 1.10)	1.09 (1.06, 1.11)
Charter	0.75 (0.68, 0.83)	0.76 (0.68, 0.84)
Magnet	0.94 (0.84, 1.07)	0.94 (0.83, 1.06)
Urbanicity (ref: Suburb)		
Urban fringe	1.10 (1.02, 1.17)	1.11 (1.03, 1.19)
Rural-suburban interface	1.09 (1.02, 1.17)	1.10 (1.02, 1.17)
Spatially lagged place diversity	1.16 (0.94, 1.43)	1.08 (0.87, 1.33)
Log land area	1.06 (1.03, 1.10)	1.06 (1.03, 1.10)
Log population	0.96 (0.93, 0.99)	0.95 (0.92, 0.98)
Metropolitan fixed effects	*	*

a. Percent variables were scaled to 10 percentage-point units for ease of interpretation. For example, a 10% increase in public-sector employment associates with an odds ratio of 0.98.

b. Median house value was scaled to units of $100,000.

Table B.2 Logistic regression predicting school-level percent white, odds ratios (95% CI), with more conservative inclusion criteria for place percent white and single-group dominance.

	Place percent white ≥ 20% (n = 8,398)	Any group ≤ 75% (n = 8,628)
Percent variables[a]		
Place white share	1.62 (1.58, 1.66)	1.64 (1.60, 1.68)
H	0.91 (0.87, 0.95)	0.91 (0.87, 0.95)
H^2	1.04 (1.03, 1.05)	1.04 (1.03, 1.06)
Income inequality	1.03 (0.97, 1.10)	1.03 (0.96, 1.10)
Homeownership	1.04 (1.02, 1.06)	1.04 (1.02, 1.06)
65 or older	0.83 (0.78, 0.89)	0.82 (0.77, 0.87)
Private school enrollment	0.83 (0.78, 0.88)	0.85 (0.81, 0.90)
Median house value[b]	1.08 (1.05, 1.10)	1.08 (1.05, 1.10)
Charter school	1.23 (1.08, 1.41)	1.25 (1.09, 1.43)
Magnet school	0.86 (0.75, 0.98)	0.87 (0.76, 0.99)
Urbanicity (ref: Suburb)		
Urban fringe	1.46 (1.27, 1.67)	1.46 (1.27, 1.67)
Rural-suburban Interfac	1.47 (1.30, 1.67)	1.47 (1.29, 1.67)
Spatially lagged percent white	1.28 (1.08, 1.50)	1.29 (1.10, 1.52)
Log land area	1.03 (0.99, 1.07)	1.03 (0.99, 1.08)
Log population	1.00 (0.95, 1.05)	1.00 (0.95, 1.05)
Metropolitan fixed effects	*	*

a. Percent variables were scaled to 10 percentage-point units for ease of interpretation. For example, a 10% increase in homeownership associates with an odds ratio of 1.04.

b. Median house value was scaled to units of $100,000.

Appendix C: Chapter 3

Table C.1 Coefficient estimates and 95% confidence intervals for Gamma Regression Predicting Group-Specific Median Household Income by Suburban Place Type (Census 2000, Census 2010, ACS 2012 5-year Estimates; n = 49,489 suburb-race-years)

	Risk Ratio	95% CI
Race (ref: White)		
Asian	1.077	(1.045, 1.11)
Black	0.707	(0.692, 0.721)
Latinx	0.813	(0.797, 0.828)
2010 (ref: 2000)	0.925	(0.92, 0.929)
Race * 2010		
Asian	1.056	(1.035, 1.078)
Black	1.018	(1.001, 1.035)
Latinx	0.994	(0.979, 1.008)
Place Type (ref: Diverse, Micro-segregated)		
Diverse, Integrated	1.022	(1.009, 1.034)
Predominantly White	0.980	(0.969, 0.992)
Predominantly Black	0.964	(0.89, 1.044)
Predominantly Latinx	1.041	(0.985, 1.101)
Race * Place Type		
Race * Integrated		
Asian	0.991	(0.961, 1.023)
Black	1.216	(1.187, 1.246)
Latinx	1.062	(1.04, 1.085)
Race * Predominantly White		
Asian	1.080	(1.042, 1.119)
Black	1.160	(1.129, 1.191)
Latinx	1.129	(1.102, 1.156)
Race * Predominantly Black		
Asian	0.932	(0.774, 1.123)
Black	1.114	(1.01, 1.229)
Latinx	1.167	(1.022, 1.333)
Race * Predominantly Latinx		
Asian	1.088	(0.966, 1.226)
Black	1.248	(1.097, 1.421)
Latinx	0.871	(0.814, 0.932)
Renter-occupied Units (%)	0.915	(0.912, 0.919)
Renter-occupied Units^2	1.005	(1.004, 1.006)

Race * Renter-occupied Units		
Asian	0.985	(0.976, 0.993)
Black	0.949	(0.942, 0.956)
Latinx	0.976	(0.969, 0.982)
Race * Renter-occupied Units^2		
Asian	1.002	(0.999, 1.005)
Black	1.012	(1.01, 1.014)
Latinx	1.007	(1.005, 1.009)
Bachelor's or Higher (%)	1.122	(1.119, 1.126)
Race * Bachelor's or Higher		
Asian	0.967	(0.958, 0.975)
Black	0.964	(0.956, 0.972)
Latinx	0.976	(0.969, 0.982)
Incorporated	0.993	(0.984, 1.003)
Spatial Lag	1.002	(1.002, 1.002)
Race * Spatial Lag		
Asian	0.999	(0.999, 1)
Black	1.001	(1.001, 1.002)
Latinx	0.999	(0.998, 0.999)
Log Land Area	1.023	(1.018, 1.028)
Log Population	0.996	(0.991, 1.001)
Metro Area Fixed Effects	*	*

Table C.2 Coefficient estimates and 95% confidence intervals for Linear Regression Predicting within-suburb Racial Disparities in Median Household Income (Census 2000, Census 2010, ACS 2012 5-year Estimates)

	Coefficient	95% CI
Disparity Type (ref: White - Black)		
Asian - Black	6.453	(4.530, 8.376)
Asian - Latinx	6.345	(4.034, 8.656)
Latinx - Black	-10.462	(-11.690, -9.235)
White - Asian	-17.705	(-19.727, -15.684)
White - Latinx	-0.164	(-1.676, 1.348)
2010 (ref: 2000)	1.185	(0.480, 1.891)
Entropy	0.350	(-0.033, 0.732)
Entropy * Disparity Type		
Asian - Black	-1.674	(-2.233, -1.115)
Asian - Latinx	-0.981	(-1.671, -0.291)
Latinx - Black	-1.461	(-1.834, -1.088)
White - Asian	1.120	(0.542, 1.698)
White - Latinx	0.882	(0.460, 1.303)
Integration	-4.663	(-5.232, -4.095)
Integration * Disparity Type		
Asian - Black	-0.476	(-1.734, 0.783)
Asian - Latinx	2.611	(1.156, 4.066)
Latinx - Black	1.631	(0.937, 2.325)
White - Asian	3.817	(2.523, 5.110)
White - Latinx	2.211	(1.458, 2.965)
Renter-occupied Units (%)	3.430	(2.773, 4.087)
Renter-occupied Units * Disparity Type		
Asian - Black	-1.242	(-2.262, -0.222)
Asian - Latinx	-0.650	(-1.942, 0.642)
Latinx - Black	-1.807	(-2.554, -1.060)
White - Asian	-0.644	(-1.686, 0.398)
White - Latinx	-0.169	(-0.980, 0.643)
Renter-occupied Units^2 (%)	-0.746	(-0.885, -0.606)
Renter-occupied Units^2 * Disparity Type		
Asian - Black	0.186	(-0.044, 0.415)
Asian - Latinx	0.048	(-0.234, 0.330)
Latinx - Black	0.553	(0.397, 0.709)
White - Asian	0.389	(0.147, 0.631)
White - Latinx	0.096	(-0.080, 0.271)

Bachelor's or Higher (%)	2.485	(1.819,	3.150)
Bachelor's * Disparity Type			
Asian - Black	-1.141	(-2.030,	-0.252)
Asian - Latinx	-2.873	(-4.069,	-1.677)
Latinx - Black	-2.097	(-2.758,	-1.436)
White - Asian	-1.989	(-2.965,	-1.014)
White - Latinx	-1.829	(-2.628,	-1.030)
Log Land Area	0.106	(-0.478,	0.691)
Log Population	0.409	(-0.184,	1.002)
Overall Median Household Income	1.621	(0.903,	2.340)
Median Household Income * Disparity Type			
Asian - Black	-0.339	(-1.123,	0.445)
Asian - Latinx	1.066	(-0.088,	2.219)
Latinx - Black	-1.438	(-2.097,	-0.780)
White - Asian	-0.425	(-1.296,	0.446)
White - Latinx	1.276	(0.463,	2.089)
Incorporated	1.828	(0.399,	3.257)
Median Household Income * Disparity Type			
Asian - Black	1.061	(-1.100,	3.223)
Asian - Latinx	-0.359	(-2.972,	2.255)
Latinx - Black	-0.641	(-2.021,	0.738)
White - Asian	-3.201	(-5.496,	-0.905)
White - Latinx	-1.815	(-3.498,	-0.132)
Metro Area Fixed Effects	*	*	

Note. I scaled diversity, integration, and other percentage variables to units of 10 percentage points and median household income is scaled to units of $10,000. Diversity is defined as the entropy index scaled between 0 and 1 (Eq. 1) and integration is the reversed H index (Eq. 3). These regressions include robust standard errors. I inflate Census 2000-dollar values to 2012 to match the ACS.

References

Allport, GW. 1954. *The Nature of Prejudice*. Garden City, NJ: Doubleday.

Bader, Michael D. M. 2016. *Diversity in the D.C. Area: Findings from the 2016 D.C. Area Survey*. 14. Washington, DC.

Bader, Michael D. M. and Maria Krysan. 2015. "Community Attraction and Avoidance in Chicago: What's Race Got to Do with It?" *The ANNALS of the American Academy of Political and Social Science* 660(1):261–81.

Bader, Michael D. M. and Siri Warkentien. 2016. "The Fragmented Evolution of Racial Integration since the Civil Rights Movement." *Sociological Science* 3:135–66.

Billingham, Chase M. and Matthew O. Hunt. 2016. "School Racial Composition and Parental Choice: New Evidence on the Preferences of White Parents in the United States." *Sociology of Education* 89(2):99–117.

Bischoff, Kendra. 2008. "School District Fragmentation and Racial Residential Segregation." *Urban Affairs Review* 44(2):182–217.

Bischoff, Kendra and Laura Tach. 2018. "The Racial Composition of Neighborhoods and Local Schools: The Role of Diversity, Inequality, and School Choice." *City & Community* 17(3):675–701.

Boustan, Leah Platt. 2010. "Was Postwar Suburbanization 'White Flight'? Evidence from the Black Migration." *Quarterly Journal of Economics* 125(1):417–43.

Brody, Leslie. 2019. "More Than a Quarter of New York City Students Attend Private or Charter Schools." *The Wall Street Journal*, August 25.

Broughman, Stephen P., Nancy L. Swaim, and Cassie A. Hryczaniuk. 2011. *Characteristics of Private Schools in the United States: Results From the 2009-10 Private School Universe Survey (NCES2011-339)*. Washington, DC.

Charles, Camille Z. 2003. "The Dynamics of Racial Residential Segregation." *Annual Review of Sociology* 29(1):167–207.

Charles, Camille Z. 2006. *Won't You Be My Neighbor: Race, Class, and Residence in Los Angeles*. New York, NY: Russell Sage Foundation.

Chen, Chen-Su, Jennifer Sable, Lindsey Mitchell, and Fei Liu. 2012. *Documentation to the NCES Common Core of Data Public Elementary/Secondary School Universe Survey: School Year 2009–10*. Washington, DC.

Cheng, Wendy. 2013. *The Changs next Door to the Díazes: Remapping Race in Suburban California*.

Clotfelter, Charles T. 2004. "Private Schools, Segregation, and the Southern States." *Peabody Journal of Education* 79(2):74–97.

Crowder, Kyle, Jeremy Pais, and Scott J. South. 2012. "Neighborhood Diversity, Metropolitan

Constraints, and Household Migration." *American Sociological Review* 77(3):325–53.

Crowder, Kyle, Scott J. South, and Erick Chavez. 2006. "Wealth, Race, and Inter-Neighborhood Migration." *American Sociological Review* 71(1):72–94.

Diprete, Thomas A. and Whitman T. Soule. 1986. "The Organization of Career Lines: Equal Employment Opportunity and Status Advancement in a Federal Bureaucracy." *American Sociological Review* 51(3):295–309.

Douds, Kiara Wyndham. 2020. *The Diversity Contract: Constructing Racial Harmony in a Diverse American Suburb.*

Economic Research Service. 2015. "Rural-Urban Continuum Codes." *USDA Economic Research Service*. Retrieved April 6, 2019 (https://www.ers.usda.gov/data-products/rural-urban-continuum-codes/).

Einstein, Katherine Levine. 2019. "The Privileged Few: How Exclusionary Zoning Amplifies the Advantaged and Blocks New Housing—and What We Can Do About It." *Urban Affairs Review.*

Farley, Reynolds and William H. Frey. 1994. "Changes in the Segregation of Whites from Blacks During the 1980s: Small Steps Toward a More Integrated Society." *American Sociological Review* 59(1):23–45.

Farrell, Chad R. and Barrett A. Lee. 2011. "Racial Diversity and Change in Metropolitan Neighborhoods." *Social Science Research* 40(4):1108–23.

Fernandez, Roberto M. and Celina Su. 2004. "Space in the Study of Labor Markets." *Annual Review of Sociology* 30(1):545–69.

Fiel, Jeremy E. 2013. "Decomposing School Resegregation: Social Closure, Racial Imbalance, and Racial Isolation." *American Sociological Review* 78(5):828–48.

Fiel, Jeremy E. and Yongjun Zhang. 2019. "With All Deliberate Speed: The Reversal of Court-Ordered School Desegregation, 1970–2013." *American Journal of Sociology* 124(6):1685–1719.

Flippen, Chenoa A. 2004. "Unequal Returns to Housing Investments? A Study of Real Housing Appreciation among Black, White, and Hispanic Households." *Social Forces* 82(4):1523–51.

Fowler, Christopher S., Barrett A. Lee, and Stephen A. Matthews. 2016. "The Contributions of Places to Metropolitan Ethnoracial Diversity and Segregation: Decomposing Change Across Space and Time." *Demography* 53(6):1955–77.

Frey, William H. 2018. *Diversity Explosion: How New Racial Demographics Are Remaking America.* Washington, DC: Brookings Institution Press.

Gieryn, Thomas F. 2000. "A Space for Place in Sociology." *Annual Review of Sociology* 26(1):463–96.

Hall, Matthew, Kyle Crowder, and Amy Spring. 2015. "Neighborhood Foreclosures, Racial/Ethnic Transitions, and Residential Segregation." *American Sociological Review* 80(3):526–49.

Hall, Matthew, Laura Tach, and Barrett A. Lee. 2016. "Trajectories of Ethnoracial Diversity in American Communities, 1980–2010." *Population and Development Review* 42(2):271–97.

Hanlon, Bernadette. 2009. "A Typology of Inner-Ring Suburbs: Class, Race, and Ethnicity in U.S.

Suburbia." *City and Community* 8(3):221–46.

Holloway, Steven R., Richard Wright, and Mark Ellis. 2012. "The Racially Fragmented City? Neighborhood Racial Segregation and Diversity Jointly Considered." *Professional Geographer* 64(1):63–82.

Humes, Karen R., Nicholas a. Jones, and Roberto R. Ramirez. 2011. *Overview of Race and Hispanic Origin: 2010*.

Hunter, Marcus Anthony and Zandria F. Robinson. 2016. "The Sociology of Urban Black America." *Annual Review of Sociology* 42(1):385–405.

Hyra, Derek S. 2012. "Conceptualizing the New Urban Renewal: Comparing the Past to the Present." *Urban Affairs Review* 48(4):498–527.

Jackson, Kenneth T. 1987. *Crabgrass Frontier: The Suburbanization of the United States*. Oxford: Oxford University Press.

Jargowsky, Paul A. 2014. "Segregation, Neighborhoods, and Schools." Pp. 97–136 in *Choosing Homes, Choosing Schools: Residential Segregation and the Search for a Good School*, edited by A. Lareau and K. Goyette. New York, NY: Russell Sage Foundation.

Jayakumar, Uma. 2008. "Can Higher Education Meet the Needs of an Increasingly Diverse and Global Society? Campus Diversity and Cross-Cultural Workforce Competencies." *Harvard Educational Review* 78(4):615–51.

Keeler, Kasey. 2016. "Putting People Where They Belong: American Indian Housing Policy in the Mid-Twentieth Century." *Native American and Indigenous Studies* 3(2):70.

Khalid, Asma. 2019. "How White Liberals Became Woke, Radically Changing Their Outlook On Race." *NPR*. Retrieved (https://www.npr.org/2019/10/01/763383478/how-white-liberals-became-woke-radically-changing-their-outlook-on-race).

Kneebone, Elizabeth and Natalie Holmes. 2015. *The Growing Distance Between People and Jobs in Metropolitan America*. Washington, DC.

Kruse, Kevin M. 2005. *White Flight: Atlanta and the Making of Modern Conservatism*. Princeton, NJ: Princeton University Press.

Krysan, Maria and Michael D. M. Bader. 2007. "Perceiving the Metropolis: Seeing the City through a Prism of Race." *Social Forces* 86(2):699–733.

Krysan, Maria and Kyle Crowder. 2017. *Cycle of Segregation*. Russell Sage Foundation.

Kucsera, John and Gary Orfield. 2014. *New York State's Extreme School Segregation: Inequality, Inaction and a Damaged Future*.

Lacy, Karyn R. 2007. *Blue-Chip Black: Race, Class, and Status in the New Black Middle Class*.

Lacy, Karyn R. 2016. "The New Sociology of Suburbs: A Research Agenda for Analysis of Emerging Trends." *Annual Review of Sociology* 42(1):369–84.

Lee, Barrett A. and Gregory Sharp. 2017. "Ethnoracial Diversity across the Rural-Urban Continuum." *The ANNALS of the American Academy of Political and Social Science* 672(1):26–45.

Lewis-McCoy, R. L'Heureux. 2014. *Inequality in the Promised Land: Race, Resources, and Suburban Schooling*. Stanford, CA: Stanford University Press.

Lichter, Daniel T. 2013. "Integration or Fragmentation? Racial Diversity and the American Future." *Demography* 50(2):359–91.

Lichter, Daniel T., Domenico Parisi, and Michael C. Taquino. 2012. "The Geography of Exclusion: Race, Segregation, and Concentrated Poverty." *Social Problems* 59(3):364–88.

Lichter, Daniel T., Domenico Parisi, and Michael C. Taquino. 2015a. "Spatial Assimilation in U.S. Cities and Communities? Emerging Patterns of Hispanic Segregation from Blacks and Whites" edited by B. A. Lee, G. Firebaugh, J. Iceland, and S. A. Matthews. *The ANNALS of the American Academy of Political and Social Science* 660(1):36–56.

Lichter, Daniel T., Domenico Parisi, and Michael C. Taquino. 2015b. "Toward a New Macro-Segregation? Decomposing Segregation within and between Metropolitan Cities and Suburbs." *American Sociological Review* 80(4):843–73.

Lichter, Daniel T., Domenico Parisi, and Michael C. Taquino. 2016. "Emerging Patterns of Hispanic Residential Segregation: Lessons from Rural and Small-Town America." *Rural Sociology* 81(4):483–518.

Light, Michael T. and Julia T. Thomas. 2019. "Segregation and Violence Reconsidered: Do Whites Benefit from Residential Segregation?" *American Sociological Review*.

Logan, John R. 2011. *Separate and Unequal: The Neighborhood Gap for Blacks, Hispanics and Asians in Metropolitan America*. New York.

Logan, John R., Elisabeta Minca, and Sinem Adar. 2012. "The Geography of Inequality: Why Separate Means Unequal in American Public Schools." *Sociology of Education* 85(3):287–301.

Logan, John R. and Brian J. Stults. 2011. *The Persistence of Segregation in the Metropolis: New Findings from the 2010 Census*.

Logan, John R. and Charles Zhang. 2010. "Global Neighborhoods: New Pathways to Diversity and Separation." *American Journal of Sociology* 115(4):1069–1109.

Lumley-Sapanski, Audrey and Christopher S. Fowler. 2017. "'Planning Dissonance' and the Bases for Stably Diverse Neighborhoods: The Case of South Seattle." *City and Community* 16(1):86–115.

Lung-Amam, Willow. 2017. *Trespassers?: Asian Americans and the Battle for Suburbia*. Univeristy of California Press.

Maly, Michael T. 2000. "The Neighborhood Diversity Index: A Complementary Measure of Racial Residential Settlement." *Journal of Urban Affairs* 22(1):37–47.

Manson, Steven, Jonathan Schroeder, David Van Riper, and Steven Ruggles. 2017. "IPUMS National Historical Geographic Information System: Version 12.0 [Database]."

Manville, Michael, Paavo Monkkonen, and Michael Lens. 2020. "It's Time to End Single-Family Zoning." *Journal of the American Planning Association* 86(1):106–12.

Massey, Douglas S. 2002. "Research Comments on 'Does Gentrification Harm the Poor?'"

Brookings-Wharton Papers on Urban Affairs (May):133–82.

Massey, Douglas S. 2005. "Racial Discrimination in Housing: A Moving Target." *Social Problems* 52(2):148–51.

Massey, Douglas S. 2015. "The Legacy of the 1968 Fair Housing Act." *Sociological Forum* 30(S1):571–88.

Massey, Douglas S. and Nancy A. Denton. 1985. "Spatial Assimilation as a Socioeconomic Outcome." *American Sociological Review* 50(1):94–106.

Massey, Douglas S. and Nancy A. Denton. 1993. *American Apartheid*. Cambridge, MA: Harvard University Press.

Mayorga-Gallo, Sarah. 2014. *Behind the White Picket Fence: Power and Privilege in a Multiethnic Neighborhood*. Chapel Hill, NC: University of North Carolina Press.

McCargo, Alanna and Sarah Strochak. 2018. *Mapping the Black Homeownership Gap*.

Meckler, Laura. 2019. "This Trail-Blazing Suburb Has Tried for 60 Years to Tackle Race. What If Trying Isn't Enough?" *The Washington Post*, October 11.

Mickelson, Roslyn Arlin and Martha Bottia. 2010. "Integrated Education and Mathematics Outcomes: A Synthesis of Social Science Research." *North Carolina Law Review* 88(3):993–1090.

Molotch, Harvey L. 1969. "Racial Change in a Stable Community." *American Journal of Sociology* 75(2):226–38.

Moskos, Charles C. and John S. Butler. 1996. *All That We Can Be: Black Leadership and Racial Integration the Army Way*. New York: Basic Books.

Moulton, Brent R. 1990. "A Reexamination of the Federal-Private Differential in the United States." *Journal of Labor Economics* 8(2):270–93.

Mouw, Ted. 2000. "Job Relocation and the Racial Gap in Unemployment in Detroit and Chicago, 1980 to 1990." *American Sociological Review* 65(5):730–53.

Mouw, Ted. 2002. "Are Black Workers Missing the Connection? The Effect of Spatial Distance and Employee Referrals on Interfirm Racial Segregation." *Demography* 39(3):507–28.

Musto, Michela. 2019. "Brilliant or Bad: The Gendered Social Construction of Exceptionalism in Early Adolescence." *American Sociological Review* 84(3):369–93.

Nelson, Robert K., LaDale Winling, Richard Marciano, and Nathan Connolly. 2016. "Mapping Inequality: Redlining in New Deal America." *American Panorama*. Retrieved January 30, 2020 (https://dsl.richmond.edu/panorama/redlining/).

Nyden, Philip, John Lukehart, Michael T. Maly, and William Peterman. 1998. "Neighborhood Racial and Ethnic Diversity in U.S. Cities." *Cityscape* 4(2):1–17.

Nyden, Philip, Michael T. Maly, and John Lukehart. 1997. "The Emergence of Stable Racially and Ethnically Diverse Urban Communities: A Case Study of Nine U.S. Cities." *Housing Policy Debate* 8(2):491–534.

Orfield, Gary, Genevieve Siegel-Hawley, and John Kucsera. 2011. *Divided We Fail: Segregation in the*

Southland's Schools. Los Angeles, CA.

Parisi, Domenico, Daniel T. Lichter, and Michael C. Taquino. 2011. "Multi-Scale Residential Segregation: Black Exceptionalism and America's Changing Color Line." *Social Forces* 89(3):829–52.

Parisi, Domenico, Daniel T. Lichter, and Michael C. Taquino. 2015. "The Buffering Hypothesis: Growing Diversity and Declining Black-White Segregation in America's Cities, Suburbs, and Small Towns?" *Sociological Science* 2:125–57.

Pendall, Rolf. 2000. "Local Land Use Regulation and the Chain of Exclusion." *Journal of the American Planning Association* 66(2):125–42.

Pettigrew, Thomas F. 1998. "Intergroup Contact Theory." *Annual Review of Psychology* 49(1):65–85.

Pettigrew, Thomas F. and Linda R. Tropp. 2006. "A Meta-Analytic Test of Intergroup Contact Theory." *Journal of Personality and Social Psychology* 90(5):751–83.

Quillian, Lincoln. 2014. "Does Segregation Create Winners and Losers? Residential Segregation and Inequality in Educational Attainment." *Social Problems* 61(3):402–26.

Quillian, Lincoln, John J. Lee, and Brandon Honoré. 2020. "Racial Discrimination in the U.S. Housing and Mortgage Lending Markets: A Quantitative Review of Trends, 1976–2016." *Race and Social Problems* 12(1):13–28.

Rastogi, Ankit. 2019. "The New Suburb: Multiethnic Racial Residential Integration in the United States." *SocArXiv*.

Rastogi, Ankit and Kiara Wyndham Douds. 2020. *The Socioeconomic Context of Racial Diversity and Integration in U.S. Suburbs, 1990-2010**.

Reardon, Sean F. and Glenn Firebaugh. 2002. "Measures of Multigroup Segregation." *Sociological Methodology* 32(1):33–67.

Reardon, Sean F. and Ann Owens. 2014. "60 Years After Brown: Trends and Consequences of School Segregation." *Annual Review of Sociology* 40(1):199–218.

Rosenbaum, J. E. 1995. "Changing the Geography of Opportunity by Expanding Residential Choice: Lessons from the Gautreaux Program." *Housing Policy Debate* 6:231–69.

Rothstein, Richard. 2017. *The Color of Law: A Forgotten History of How Our Government Segregated America*. New York, NY: Liveright.

Rothwell, Jonathan and Douglas S. Massey. 2009. "The Effect of Density Zoning on Racial Segregation in U.S. Urban Areas." *Urban Affairs Review* 44(6):779–806.

Rothwell, Jonathan T. and Douglas S. Massey. 2010. "Density Zoning and Class Segregation in U.S. Metropolitan Areas." *Social Science Quarterly* 91(5):1123–43.

Samila, Sampsa and Olav Sorenson. 2017. "Community and Capital in Entrepreneurship and Economic Growth." *American Sociological Review* 82(4):770–95.

Saporito, Salvatore and Annette Lareau. 1999. "School Selection as a Process: The Multiple Dimensions of Race in Framing Educational Choice." *Social Problems* 46(3):418–39.

Saporito, Salvatore and Deenesh Sohoni. 2006. "Coloring Outside the Lines: Racial Segregation in Public Schools and Their Attendance Boundaries." *Sociology of Education* 79(2):81–105.

Schneider, Mark and Jack Buckley. 2002. "What Do Parents Want from Schools? Evidence from the Internet." *Educational Evaluation and Policy Analysis* 24(2):133–44.

Shapiro, Thomas, Tatjana Meschede, and Sam Osoro. 2013. *The Roots of the Widening Racial Wealth Gap: Explaining the Black-White Economic Divide.* Waltham, MA.

Sharkey, Patrick. 2014. "Spatial Segmentation and the Black Middle Class." *American Journal of Sociology* 119(4):903–54.

Sin, Ray and Maria Krysan. 2015. "What Is Racial Residential Integration? A Research Synthesis, 1950-2013." *Sociology of Race and Ethnicity* 1(4):467–74.

Spitz, Gina A. 2015. "Segregated Integration in a Racially Diverse Milwaukee Neighborhood." *Journal of Ethnographic & Qualitative Research* 10:53–68.

Supreme Court of the United States. 1954. "Brown v. Board of Education." *U.S.*

Tach, Laura. 2014. "Diversity, Inequality, and Microsegregation: Dynamics of Inclusion and Exclusion in a Racially and Economically Diverse Community." *Cityscape* 16(3):13–45.

Tach, Laura, Barrett A. Lee, Michael Martin, and Lauren Hannscott. 2019. "Fragmentation or Diversification? Ethnoracial Change and the Social and Economic Heterogeneity of Places." *Demography* 2193–2227.

The College of William and Mary and the Minnesota Population Center. 2011. *School Attendance Boundary Information System (SABINS): Version 1.0*. Minneapolis, MN.

Thomas, Melvin and Richard Moye. 2015. "Race, Class, and Gender and the Impact of Racial Segregation on Black-White Income Inequality." *Sociology of Race and Ethnicity* 1(4):490–502.

Trounstine, Jessica. 2018. *Segregation by Design: Local Politics and Inequality in American Cities*. Cambridge: Cambridge University Press.

United States Court of Appeals for the Eigth Circuit. 1978. *U.S. v. City of Black Jack*.

US Census Bureau. 2015. "2010 Geographic Terms and Concepts - Census Divisions and Census Regions." *Geographic Terms and Concepts - Census Divisions and Census Regions*. Retrieved May 11, 2018 (https://www.census.gov/geo/reference/gtc/gtc_ct.html).

Wirt, John, Susan Choy, Allison Gruner, Jennifer Sable, Richard Tobin, Yupin Bae, Jim Sexton, Janis Strennett, Satoshi Watanabe, Nicholas Zill, and Jerry West. 2000. *The Condition of Education*. Washington, DC.

Zhang, Wenquan and John R. Logan. 2016. "Global Neighborhoods: Beyond the Multiethnic Metropolis." *Demography* 53(6):1933–53.

Ziegler, Andreas. 2011. *Generalized Estimating Equations*. Vol. 204. New York, NY: Springer New York.