The socioeconomic context of racial diversity and integration in U.S. suburbs, 1990-2010*

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Abstract

The majority of Blacks, Latinxs, Asians, and whites now live in suburbs in the United States. Concurrently, the majority of the nation's poor also live in suburbs. These trends suggest that the diversification of suburbs has immense consequences for the geography of racial (in)equality. Using Census data, we ask whether racial residential diversification and integration disproportionately occur in advantaged or disadvantaged suburban contexts. We conceptualize diversity as the racial and ethnic composition of a place; a suburb is highly diverse if it contains multiple racialized groups represented in equal proportions. We conceptualize integration as the spatial arrangements of racialized groups—a place is integrated when different racialized groups live near each other. We find that suburbs with higher levels of racial diversity are more disadvantaged than more racially homogeneous places. At the same time, integrated suburbs are substantially more advantaged than the average suburb independent of levels of diversity. This work contributes to a nascent critical research agenda on racial processes in U.S. suburbs by providing insight into the socioeconomic conditions and potential outcomes of racial diversification and integration.

Keywords: suburbs; race and ethnicity; racial inequality; residential integration; diversity

In the twentieth century, suburbanization transformed the spatial structure of American society (Jackson 1987). Fleeing the central city, whites suburbanized largely as a racial project to create racially homogeneous communities that enabled resource hoarding (Kruse 2005; Trounstein 2018). Despite this history, people of color have also been suburbanizing rapidly over the past 40 years, and now the majority of Blacks, Latinxs, Asians, Native Americans, and whites live in the suburbs (Frey 2018; Keeler 2016). This has resulted in the emergence of racially diverse suburbs in which millions of Americans live (Lacy 2016; Rastogi 2019).

In addition to being racially diverse, thousands of American suburbs are also racially integrated, where people of different racialized groups live near one another. Critically, diverse, integrated communities are almost exclusively a suburban phenomenon (Bader and Warkentien 2016; Rastogi 2019). This represents a divergence from dominant patterns of entrenched racial segregation (Massey 2015). Though community diversity on its own creates the possibility for more equitable resource distribution among racialized groups, it does not guarantee it, as segregation of diverse environments may still create resource and opportunity disparities. For instance, segregation within diverse central cities contributes to disparities in opportunities for skill accumulation through school segregation (Orfield, Siegel-Hawley, and Kucsera 2011) and results in spatial mismatch between locations of work and residence for people of color (Fernandez and Su 2004). In communities where multiple racialized groups live near each other in the same neighborhoods, residential integration disrupts the common mechanisms of racial inequality creation that depend on the spatial separation of whites from people of color. This suggests that the diversification and integration of suburbia could result in greater racial equality within places.

These great spatial transformations are pivotal to understanding the U.S. geography of racial inequality in the twenty-first century. However, despite the importance of these trends, we lack a basic understanding of the types of communities that diversify or integrate. Critically, no prior work has assessed the socioeconomic contexts in which diversification and integration occur. Though suburbs are often stereotyped as advantaged, resource-rich communities, they exist along a wide socioeconomic spectrum. For instance, suburbs in greater Los Angeles have median household incomes that range from \$31,000 to more than \$250,000 (American Community Survey 2008-2012 5-year estimates). We do not know whether diversification and integration occur primarily in suburbs that are disadvantaged, advantaged, or across all types of suburbs equally. Understanding how these phenomena relate to community socioeconomic resources is critical to our empirical understanding of contemporary suburbia and our theoretical understanding of the structural conditions under which diversification and integration happen.

In this paper, we examine the socioeconomic context of racial diversification and integration in suburbia. Informed by place stratification, community desirability, and spatial assimilation theories, we investigate whether diversification and integration are happening in advantaged or disadvantaged contexts – or are unrelated to socioeconomic context – for 1990-2010. Specifically, we ask two questions:

1. Across all suburbs, is community-level diversity associated with socioeconomic advantage?
2. Among diverse suburbs, is community-level integration associated with socioeconomic advantage?

Using 1990, 2000, and 2010 Census and 2008-2012 American Community Survey data, we assess the socioeconomic contexts of suburban communities (defined as census places) across levels of diversity and integration. To define diversity, we use the Entropy index, which

calculates how evenly a place's population distributes across different racial and ethnic groups (Blacks, Latinxs, Asians, whites, and others). The most diverse places will have equal representation of each of the five racial and ethnic groups, while the least diverse places will comprise only one group. To define integration, we use the widely established Theil Index (H), which measures how evenly diversity spreads within the boundaries of a place. Using H, the most integrated places will have a completely even spatial distribution, suggesting that residents' local environments resemble the diversity of the overall community. We have three key findings: First, diversity shows a negative association with socioeconomic advantage. Second, among diverse suburbs, integrated communities are on average more socioeconomically advantaged than less-integrated communities. Third, the association for integration persists despite controlling for diversity, suggesting that the spatial patterning of diversity matters independent of the level of diversity per se.

The socioeconomic context of community diversification and integration has key implications for racial inequality. A community's socioeconomic resources affect the local services it can provide and influences its regional economic and political power. Thus, the question of what types of communities diversify and integrate with regard to socioeconomic context is also a question about power and inequality. If diversity and/or integration occur primarily in socioeconomically disadvantaged communities, then this suggests that familiar patterns of racial inequality are transferring to the suburbs (i.e., people of color do not/cannot access more advantaged areas). If they occur in advantaged suburbs, then this suggests that people of color are able to access highly resourced communities historically only accessible to whites, suggesting potential decreases in place-based racial inequality.

This work contributes to a nascent critical research agenda on racial processes by providing insight into the socioeconomic conditions and potential outcomes of racial diversity and integration in U.S. suburbs. As we demonstrate, though diversity occurs disproportionately in disadvantaged communities, Americans experiencing racial residential integration are more likely to be in advantaged communities. In these communities, people of different racialized groups live in the same neighborhoods, attend the same schools, and all have access to the resources and amenities available in advantaged suburban communities. Racial integration represents a radically different resource landscape than those of segregated central cities in which people of color are often isolated in low resource areas. At the same time, it is also possible that in integrated contexts new mechanisms of racial inequality creation that can function in a context of spatial proximity may emerge. Our work suggests that the study of racial integration, in addition to assessing the ways in which traditional forms of inequality creation are thwarted, must include as a key focus an assessment of how racial inequality within integrated communities is maintained through new mechanisms.

Defining terms: Suburbs, Diversity, and Integration

This study rests on key concepts which have been defined in several ways in the sociological and demographic literatures. In this section, we provide the definitions of suburbs, diversity, and integration that we use in our analyses.

Suburbs: Suburbs generally refer to the space within a metropolitan area that is not the central city (Lacy 2016). The Census considers central cities to be the largest census place by population within a metropolitan area and nonmetropolitan areas to be rural. Given our focus on suburbs, we exclude both central cities and rural areas from this analysis.

In line with a burgeoning literature on places (e.g., Fowler, Lee, and Matthews 2016; Hall, Tach, and Lee 2016; Tach et al. 2019), census places serve as our spatial unit of analysis,

and thus a suburb is a metropolitan census place that is not the central city.¹ Here, “places” are suburban cities, towns, or villages that are socially and/or politically recognized by name. For example, Berkeley, CA is a suburban city of San Francisco.

In contrast to the conventional census tract, this approach allows us to analyze suburbs as communities that residents in a metropolitan area understand as a community (Bader and Krysan 2015; Krysan and Bader 2007). Suburban places often circumscribe place-based resources, like school attendance zones, recreational spaces, healthcare, and business districts. Politically incorporated suburbs have governing bodies (e.g., mayors, city councils) to enact policies and ordinances within the suburb’s boundaries. Furthermore, and most importantly for this analysis, because places are identified by name (unlike census tracts), residents recognize the reputations of places, which may include their racial and economic compositions. For example, Monterey Park, CA is a highly racially integrated, middle-class Asian-Latinx suburb of Los Angeles. Many individuals move to Monterey Park specifically to live in a middle-class, diverse, majority people-of-color suburb (Cheng 2013).

Racial Residential Diversity: Like suburbs, residential diversity has been defined several ways. Following others (e.g, Fowler et al. 2016; Tach et al. 2019), we define racial diversity as an even racial and ethnic composition among multiple racialized groups within a place. We specifically analyze Blacks, Latinxs, Asians, whites, and “others”. A suburb is more diverse when all groups are equally represented (i.e., each group is 20% of the population) and is less diverse when representation is uneven or fewer groups are represented. For example, Suisun, CA is highly diverse (20% Black, 20% Asian, 24% Latinx, 29% white, 7% other), while Aynor, SC displays relatively low diversity (16% Black, 81% white, 3% other) (Census 2010).

Racial Residential Integration: Prior research typically treats racial diversity as the inverse of segregation; however, we depart from prior studies by proposing that integration is the inverse of segregation. Segregation refers to the spatial separation of racialized groups, while integration occurs when people of different races and ethnicities live near each other. Therefore, integration may also be conceptualized as micro-scale diversity. For example, if every block within a suburb is diverse, then the suburb is also integrated. Alternatively, a diverse suburb is racially segregated if blocks are racially homogeneous, for example, through processes like gentrification or white decline. In this way, diversity may exist along a spectrum of segregation and integration.

Differentiating integration from diversity is important because these processes likely represent different sets of social relations that play out in domains of social life beyond housing. For example, qualitative case studies in residentially integrated suburbs suggest that residents have multiethnic friend groups and that important institutions like schools and churches are also integrated (Cheng 2013; Douds 2020; Lung-Amam 2017). In contrast, diverse, segregated spaces display familiar patterns of racial-spatial separation. For example, Queens, NY is both highly diverse and moderately segregated, and residents readily identify segregated spaces (i.e., the “Asian neighborhood” or the “Latin American neighborhood”) (Douds 2020).

Suburban Racial Diversity and Integration

While white flight in the mid-twentieth century drove suburbanization and enabled racial segregation and resource hoarding (Kruse 2005), as of 2010 the majority of Blacks, Latinxs,

¹ We exclude unplaced metropolitan spaces. Unplaced spaces fall outside of incorporated municipalities or census-designated areas. These areas are usually undeveloped or developing and therefore are not socially recognized areas that metropolitan residents can identify by name.

Asians, and Native Americans lived in suburbs (Frey 2018; Jackson 1987; Keeler 2016). The large-scale suburbanization of people of color in the last 40 years has resulted in the diversification of thousands of American suburbs. Figure 1 plots the rise of diverse suburban communities from 1980-2010. Despite massive suburban growth over the period, the number of monoracial suburbs declined, while the number of diverse suburbs across all levels of diversity increased: Monoracial suburbs, where one group composes at least 90 percent of the population, declined from being 73% to 45% of all suburbs, while moderately/highly diverse suburbs grew from 5% to 25% (Figure 1a). In 2010, the majority (58%) of suburban residents lived in moderately or highly diverse suburbs, up from 15% in 1980. Likewise, whereas the majority of suburban residents lived in monoracial suburbs in 1980 (54%), a small minority (15%) lives in them now (Figure 1b).

[Figure 1 about here]

With the widespread emergence of suburban diversity, thousands of racially diverse suburbs are now integrated as well. While racially diverse central cities have simultaneously been the most segregated spaces (Holloway, Wright, and Ellis 2012), the emergence of racially diverse and integrated communities occurs almost exclusively in suburbs (Bader and Warkentien 2016; Rastogi 2019). Though these communities are concentrated in southwestern and coastal metropolitan areas, they exist in every region of the nation (Rastogi 2019; Zhang and Logan 2016). Whereas integration was once thought to be a temporary state in the midst of community racial transitions (e.g., from processes like white flight or gentrification), as of 2010, 31 million Americans lived in suburbs that had been stably integrated for at least a decade (Rastogi 2019).

Residential integration provides new contexts to understand racial inequality in place beyond diversity alone. Given current demographic trends (Lichter 2013), the large-scale diversification of the U.S. may seem inevitable, and integration within diverse suburbs could be a critical divergence from entrenched processes of segregation. Where segregation creates concentrated disadvantage in communities of color (Massey and Denton 1993), suburban integration may allow people of color to live in more advantaged contexts previously accessible only to whites as diversity spreads throughout the nation. Alternatively, diversity without integration may produce patterns of segregation on a micro-level, within-place scale, where whites still monopolize resources like higher quality amenities or membership in civic associations (Tach 2014).

Socioeconomic Selectivity in Suburbia

Suburban contexts differ from central cities in that they are more economically homogenous. Whites suburbanized in the twentieth century to gain political autonomy from central cities as populations of color grew and used suburban governments to exclude people of color through economic selectivity to preserve white notions of property values and public goods (Pendall 2000; Trounstein 2018). Economically selective practices that lead to homogeneous environments are ubiquitous in American suburbia.

Around central cities, suburban governments compete with one another and the central city for the most “desirable” residents and businesses – those that will contribute the most through tax revenue and investments (Logan and Molotch 2007). Within this competitive environment, “successful” suburbs are those that manage to attract high income residents and exclude those with fewer resources. To accomplish this, suburban governments engage in exclusionary zoning, which can include limiting allowable property types to single family homes and setting minimum lot and building sizes (Frug 2006; Hirt 2014; Pendall 2000). These policies are effective, as evidenced by greater wealth in communities with more land use regulations as

well as higher income segregation in metropolitan areas with more exclusionary zoning (Rothwell and Massey 2010). Non-governmental stakeholders such as developers also engage in exclusionary practices through strategies such as limiting the types of homes built in new developments (i.e., constructing homes that are unaffordable to those in poverty). The result of these selective strategies is economic homogeneity within individual suburbs.

However, despite these selective strategies, not all suburbs are advantaged. Suburbs vary in both their enactment of selective strategies and their ability to enact these strategies successfully, resulting in a fragmented metropolitan landscape, ranging from highly disadvantaged to advantaged. For example, in the highly diverse Washington, DC metro area, the median house value of suburbs ranges from \$24,000 to greater than \$1 million (median: \$351,000; ACS 2008-12 5-year estimates). Moreover, the majority (55%) of the nation's poor live in suburbs (Kneebone and Berube 2013). Though stereotypes of suburbs suggest that they are homogeneously advantaged, within-suburb homogeneity does not necessarily associate with advantage or disadvantage.

Suburban diversification provides new spaces to understand the socioeconomic context of racial diversity and integration. While racial diversity in central cities often exists alongside economic heterogeneity (e.g., white wealth v. disadvantaged people of color), racial diversity in suburbs is relatively independent of economic diversity (Tach et al. 2019), suggesting that racialized groups may be on equal footing when they live together in suburbs. However, it remains to be seen if racial diversity and integration within suburbs occurs within advantaged or disadvantaged contexts.

Theorizing the Socioeconomic Contexts of Suburban Diversity and Integration

The focus of our inquiry is to understand: 1. If racial diversity occurs in particular suburban socioeconomic contexts and 2. If, among diverse suburbs, racial integration occurs in particular socioeconomic contexts. By integration, we refer to the spatial distribution of diversity, where integration, not diversity, is the opposite of segregation. While diverse suburbs tend to be more integrated than central cities, they exist across the spectrum of integration and segregation (Rastogi 2019).

As communities diversify, we may see within-place segregation, such as the emergence of ethnic enclaves or the separation of advantaged whites from people of color due to inequitable placement of affordable housing, multifamily housing, or single-family housing. In qualitative case studies of urban diverse, segregated neighborhoods, Tach (2014) and Mayorga-Gallo (2014) found that racialized groups did not share overlapping activity spaces and micro-segregation occurred, resulting in high social distance between groups despite living in the same neighborhood. For instance, white residents monopolized power in local neighborhood associations.

Alternatively, racialized groups may live near each other in highly integrated contexts, providing the basis for cross-racial exposure in communities and civic institutions. In a diverse, integrated suburb of Houston, Douds (2020) finds that residents of all racialized groups attend the same schools and frequent the same parks and shopping malls, and many attend racially diverse churches. The conditions under which racial integration emerges may differ markedly from those that create diverse environments that are simultaneously segregated. Whether diverse places integrate has great implications for residents' experiences and the potential for resources to be distributed equitably across racialized groups.

We draw on three theories – place stratification, community desirability, and spatial assimilation – to understand how diversification and integration may relate to suburban

socioeconomic context. However, these theories do not offer tools to differentiate the socioeconomic contexts of diverse-segregation or diverse-integration. The processes that create segregation or integration within diverse suburbs may occur differently across socioeconomic contexts. Thus, we make hypotheses based on each of the theories while recognizing that distinct patterns not predicted by the theories may exist for diversity and integration; our empirical analyses will determine whether this is the case

[Table 1 about here]

Place Stratification Theory

Place stratification theory suggests that whites will use a variety of discriminatory mechanisms to limit people of color's access to advantaged, resource-rich communities in order to hoard community resources to themselves (Charles 2003; Massey and Denton 1993). The theory posits that though people of color and whites similarly desire to translate their socioeconomic resources into neighborhood quality, institutional discrimination like real estate steering, discriminatory lending, or exclusionary zoning will prevent people of color from reaching their desired locational attainment (Pager and Shepherd 2008; Pendall 2000; Turner et al. 2013). As a result of these processes, even when people of color possess the socioeconomic means necessary to access an advantaged community, they may be unable to do so.

Place stratification theory is primarily concerned with access to advantaged communities, assuming that predominantly white communities are more advantaged and that people of color want to access them.² The limited number of "high quality" communities in a region may make whites especially apt to engage in such exclusionary strategies to protect them, and advantaged whites may be more able to successfully engage in exclusionary strategies because of their greater resources. Thus, place stratification theory suggests that racist strategies will be more likely in socioeconomically advantaged communities.

According to place stratification theory, diversification will be less likely to occur in socioeconomically advantaged suburbs than disadvantaged suburbs, suggesting a negative association between community socioeconomic advantage and diversity:

Hypothesis 1: Diversity and Disadvantage. Given discrimination against people of color, racial and ethnic residential diversity in suburbs will be negatively correlated with community socioeconomic advantage.

Place stratification theory also suggests that, among diverse suburbs, there will be a negative association between socioeconomic advantage and integration, as the theory suggests that whites in advantaged communities will be more likely or able to engage in exclusionary strategies. Even if an advantaged community becomes diverse, whites may still accomplish spatial separation through zoning, gated communities, or other within-place mechanisms. Thus, we hypothesize:

Hypothesis 2: Integration and Disadvantage. Among diverse suburbs, racial residential integration will be negatively associated with community socioeconomic advantage.

² These assumptions may not always hold, as many majority people-of-color suburbs are advantaged, and the residents of these communities do not want to live in whiter suburbs. For example, see Lacy (2007) and Cheng (2013).

Community Desirability Theory

In contrast to place stratification theory, recent qualitative work on diverse, integrated suburbs suggests that diversification and integration may be more likely in socioeconomically advantaged suburbs. Studying a highly diverse, integrated suburban county of Houston, Texas, Douds (2020) explicitly links the selectivity of the community to its integration in what we refer to here as the community desirability theory. They argue that highly selective suburban communities are desirable because of their high-quality housing and amenities. These highly desirable communities attract people from all racialized groups, and the desirability of the community incentivizes whites to stay rather than flee. For example, high-performing public schools make this suburb attractive across the metropolitan area, encouraging both whites and people of color to move there. Further, whites who lived there prior to diversification receive the benefits of increasing property values and high-quality amenities, encouraging them to stay. The resulting community is both highly selected – only people with substantial socioeconomic resources can access it – and integrated.

A broader assessment of research on integrated communities is also revealing: all recent qualitative, scholarship focused on diverse, integrated communities features socioeconomically affluent communities in diverse metro areas like greater Los Angeles and San Francisco (Cheng 2013; Lung-Amam 2017). Though their primary focus is not on why integration occurs, these analyses complement Douds' findings in that they feature residentially integrated communities in which there is relative socioeconomic parity among racialized groups. If advantaged communities disproportionately attract people of color and incentivize whites to stay amid diversification, then racial integration will be more likely in these contexts than less selective and therefore less advantaged communities. Though community desirability theory is specifically about integration, the theory may also suggest that diversification is more likely in advantaged suburbs because diversity is a pre-requisite for integration. Thus, based on community desirability theory we hypothesize that both diversity and integration will be positively associated with suburban socioeconomic advantage:

Hypothesis 3: Suburban Desirability and Diversity. Racial and ethnic residential diversity in suburbs will be positively associated with community socioeconomic advantage.

Hypothesis 4: Suburban Desirability and Integration: Among diverse suburbs, racial and ethnic residential integration in suburbs will be positively associated with community socioeconomic advantage.

Spatial Assimilation Theory

Spatial assimilation theory is also relevant to diversity and integration, as it suggests that segregation results from socioeconomic differences between whites and people of color and cultural differences between native-born whites and immigrants. The theory posits that with upward mobility and acculturation, people of color will move to whiter communities. This theory assumes that racial residential segregation results from group differences in socioeconomic resources and that white-majority neighborhoods are desirable to all racialized groups.

If governments and residents of suburban communities allow the entry of people of color, then people of color will sort into suburbs based on their socioeconomic resources like whites: Advantaged people of color will select into more advantaged suburbs, and simultaneously,

lower-income people of color will sort into suburbs that reflect their socioeconomic status. If the socioeconomic distribution of people of color alone determines their movement into diverse suburbs (e.g., racism does not affect their access to some communities as place stratification suggests), then diversification and integration may occur across all types of suburban socioeconomic contexts.

However, we do not hypothesize the direction of the association because if spatial assimilation is correct then the association of community advantage with diversity and integration would be determined by the socioeconomic composition of people of color in suburbs and their distribution across suburbs. Given that people of color on average have fewer socioeconomic resources than whites nationally, this could suggest that diversification and integration occur in less advantaged communities. But if people of color with more socioeconomic resources live in suburbs, then diversity and integration will occur in more advantaged communities. However, prior research is limited on the socioeconomic composition of people of color in suburbs and how this composition determines the way that people of color sort across suburbs. We do not have enough information to form directional hypotheses based on spatial assimilation theory. We denote this uncertainty with question marks in Table 1.

Data and Methods

Metropolitan suburban census places serve as the unit of analysis. The Census defines places as cities, boroughs, towns, and villages and other communities recognizable by name (US Census Bureau 2015). We define suburban places as those within a metropolitan area that are not the central city. We specifically use census places because they compose socially recognized communities that metropolitan residents recognize by name and are the best geographic unit available to capture suburban communities (Bader and Krysan 2015; Krysan and Bader 2007). Furthermore, recent research demonstrates the importance of places to residential sorting. For example, suburban places increasingly contribute to metropolitan racial and ethnic diversity (Fowler et al. 2016), and recent declines in segregation are primarily attributable to declines in within-place segregation (Lichter, Parisi, and Taquino 2015).

Racial and ethnic composition variables come from Censuses in 1990, 2000, and 2010, and we focus on Latinxs, and non-Latinx Blacks, Asians and Pacific Islanders (grouped into one “Asian” category), whites, and others. Native Americans, Alaska Natives, Others, and non-Latinx multiracial individuals compose our “other” category. We draw the remaining variables from Census 1990, Census 2000, and the American Community Survey’s 2008-2012 5-year estimates. Our analysis includes the following five socioeconomic community socioeconomic characteristics: median household income, poverty, median home value, educational attainment, and occupation.

Dependent Variable

We explore the socioeconomic contexts of diverse and integrated suburban communities. To do this, we construct a composite score of economic advantage using principal components analysis (PCA). Contextual measures of socioeconomic disadvantage are common in the neighborhood literature (e.g., Sampson 2012; Sharkey and Elwert 2011), but we focus conceptually on advantage here as most of the theories we draw on specifically make claims about advantaged communities. We include the following five characteristics in our measure of advantage at the suburb level: median household income, percent not in poverty, median home value, percent aged 25 and older with a bachelor’s degree or higher, and percent employed in

professional or managerial occupations. We log median household income and median home value to reduce the statistical leverage of extremely high values. We conduct PCA for each decade separately, and we use the first principal component as our composite score of advantage. This first principal component explains 76% of the variance in the five suburban characteristics in 1990, 77% in 2000, and 74% in 2010.

Appendix Table A1 reports how the constituent variables map onto our composite score of advantage by quintile of the composite score. Suburbs at the lower end of the composite score on average have lower values of median household income, residents not living in poverty, median home values, educational attainment, and professional/managerial occupations. Conversely, at the higher end of the composite score, suburbs display greater economic advantage: higher incomes, home values, educational attainment, professional occupations with fewer residents living in poverty.

Measuring Diversity (focal independent variable)

We calculate the level of diversity using the entropy index, the most widely used measure of diversity in the racial settlement literature. Entropy measures how evenly a place's population is distributed among multiple racial and ethnic groups. A place is maximally diverse when each racial group (in this study, Blacks, Latinxs, Asians, whites, and others) is evenly represented, or 20% of the population. Therefore, a place is more diverse the more multiethnic it is, and a place is less diverse when groups are unevenly represented or fewer groups are represented. We specifically use entropy because we are concerned with the contexts in which multiethnic diversity and integration occur.

The entropy index is defined as:

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

where π_r is the suburb's share of race or ethnic group r . We scale E by dividing E by $\log(r)$ so that E ranges between 0 and 1. $E = 0$ indicates no diversity where one group composes 100% of the population, and $E = 1$ indicates complete diversity where each group composes 20% of the suburb's population.

For descriptive analyses – but not our regression analysis – we divide suburbs into monoracial (i.e., > 90% one group) and diverse. We divide diverse places into low diversity, moderate diversity, and high diversity places using the entropy index. We consider places to be highly diverse if they score within the top decile of all places in the sample ($E \geq 0.578$). For example, Columbia, Maryland ($E = 0.79$) is a highly diverse suburb of Baltimore, that is 25% Black, 11% Asian, 52 % white, 8% Latinx, and 4% other. On average, whites compose 48% of the population in these highly diverse suburbs, Latinxs 22%, Blacks 17%, Asians 8%, and racial others 4%. Appendix Table A2 reports the average racial composition of suburbs across diversity levels.

We consider places moderately diverse if their diversity score falls between the top quartile and top decile in the sample ($0.427 \leq E < 0.578$). On average, whites compose 63% of the place population, Latinxs 15%, Blacks, 16%, Asians 3%, and racial others 3%. Bloomington, Minnesota ($E = .52$) is a moderately diverse suburban city outside of Minneapolis that is 7% Black, 6% Asian, 77 % white, 7% Latinx, and 3% other race. Lastly, a place displays low

diversity if it scores in the bottom three quartiles of entropy but is not monoracial ($E < 0.427$). On average, whites compose 78% of low diversity suburbs, Latinxs 9%, Blacks 8%, Asians 2%, and racial others 3%. Council Bluffs, Iowa ($E = .32$) is a low diversity suburb of Omaha, Nebraska that is 2% Black, 1% Asian, 87% white, 9% Latinx, and 2% other race.

Measuring Integration (focal independent variable)

We examine the spatial distribution of diversity (i.e., integration v. segregation) by calculating the widely established Theil's Index (H) for diverse suburbs (i.e., non-monoracial suburbs). We limit the sample to diverse suburbs because diversity is a prerequisite for integration; by our definition, racially isolated places cannot be integrated. H is an entropy-based measure that calculates how evenly the overall diversity of a place is spread within its boundaries and is defined as:

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

where E is place-level entropy (Eq. 1), E_i is the entropy of nested blocks, t_i is the total population count in block i , and T is the total population count of each place. H thus compares the diversity of a place to the diversity of each constituent subunit, in this instance, census blocks. We use blocks as the smaller unit of geography to assess integration at a micro level because blocks perfectly nest into places whereas census tracts do not. A place is maximally integrated when each block mirrors the overall diversity of the place and maximally segregated when each block contains only one group (i.e., no diversity). H ranges from 0 (maximum integration) to 1 (maximum segregation). Notably, H is formally independent of diversity, allowing integration or segregation to occur across varying levels of diversity (i.e., low, moderate, and high diversity places may all demonstrate integration or segregation).

For interpretability, we calculate our index of integration by reversing H so that 0 indicates maximum segregation and 1 indicates maximum integration:

$$Integration = 1 - H \quad (3)$$

For descriptive analyses – but not regression analyses – we split diverse places into low integration and high integration categories. A place displays high integration when $Integration \geq 0.80$, where 0 indicates maximum integration and 1 indicates maximum segregation. All other diverse places display low integration. The threshold for the top quartile of $Integration$ (i.e., highly integrated) among diverse places was 0.83. However, based on an assessment of integration scores from recent case studies of integrated communities (Cheng 2013; Douds 2020) and through observation and interviews of residents of multiethnic places in the greater DC and San Francisco, we believe that an $Integration \geq 0.80$ is sufficiently conservative to capture integrated, cross-racial social interaction within communities.

Controls

We control for several variables that may influence economic advantage and diversity or integration. First, we include a variable for whether a suburb is incorporated or unincorporated.

Historically, incorporated suburbs used their legal powers (e.g., mayors, city councils) to enact policies that exclude people of color (e.g., low density zoning), enable white resource hoarding, and contribute to segregation (Rothwell and Massey 2009). Thus, if diversification and integration disproportionately occur in unincorporated suburbs (Cheng 2013; Rastogi 2019), these suburbs may be more disadvantaged than incorporated suburbs. We control for the percent of housing built after 1970 as a measure of housing built after the passage of the Fair Housing Act. New housing represents communities built after antidiscrimination legislation, allowing entry by people of color, and also may be associated with advantage via better quality housing. We control for the place population and place land area because larger places may allow for greater spatial differentiation in both diversity and economic status. We log these variables to reduce the statistical leverage of outliers. In addition, we control for the percent of the place population that is foreign born. We also include metropolitan fixed effects to control for metropolitan and regional level factors that may influence diversity, integration, and socioeconomic context.

Lastly, socioeconomic contexts likely cluster across suburbs, because nearby places are typically more alike relative to places farther away (Tobler 1970). This clustering potentially biases inferences (i.e., standard errors, confidence intervals, and p-values) because regression analysis assumes observations are independent even when they are correlated in space. To address spatial autocorrelation, we create a spatial lag variable that captures the average composite score of advantage among neighboring places to parameterize spatial autocorrelation (see Anselin 1988, 1990). We identify at least three nearest places in the sample places using straight-line distances between the central latitude-longitude coordinates of the places. We coerce symmetry (i.e., if place i is neighbors with j , then j must also be neighbors with i), so many places have greater than three nearest neighbors. For the corresponding spatial cluster, we calculate the average composite score of advantage.

Diversity analysis

Sample: For our first research question, we examine how levels of diversity within suburbs predict socioeconomic advantage. We start with all suburban census places (i.e., metropolitan census places that are not the central city) that existed in Census 2010 with complete ACS 2012 5-year estimates and had at least 100 residents ($n = 13,851$). Of these suburbs, 11,858 were designated or incorporated in Census 2000, and 10,794 were designated or incorporated in Census 1990, resulting in 36,503 place-year observations. This sample represents 127 million individuals and 41% of the American population in 2010.

While longitudinal studies of census tracts generally use standardized boundaries, we define places by their contemporaneous boundaries because these boundaries are socially meaningful and reflect the municipal boundaries at the time.³ That is, changes in place boundaries are socially relevant and affect how residents experience local governments, schools, and the racial and economic climate of place. Further, historically, many municipalities have annexed land precisely to maintain certain racial and ethnic compositions (i.e., white majorities

³ We use contemporaneous place boundaries because they are substantively meaningful. Other studies have conducted sensitivity analyses regarding boundary changes in places. Hall, Tach, and Lee (2016) find that between 1980 and 2010, average levels of racial diversity remain similar among places that ceded land, remained geographically stable, and annexed land. Tach and colleagues (2019) conclude that major boundary shifts are infrequent and do not influence general patterns of racial or socioeconomic diversity within places.

for white political domination) (Kruse 2005). Nevertheless, in regression analyses, we account for land area and population sizes that may shift with changing boundaries.

Multivariable regression: Because the composite score for socioeconomic advantage is normally distributed (by design from PCA), we conduct a linear regression. Further, we use generalized estimating equations, as they are robust to an imbalanced design (i.e., different numbers of suburbs in each decade), and we cluster the variance at the place level to account for repeated observations. In exploratory analyses, we found a curvilinear relationship between diversity and the composite score of advantage, resulting in the following model for the diversity analysis:

$$Y_p = \beta_{0m} + \beta_1 \text{Diversity}_p + \beta_2 \text{Diversity}_p^2 + \beta_3 \text{Diversity}_p^3 + \beta_4 \text{year} + \delta' X_p + \gamma' Q_p + e \quad (4)$$

Y_p represents the composite score of advantage for place p ; β_{0m} is a vector of MSA-specific intercepts; *Diversity* refers to the entropy score for place p ; *year* refers to a vector of dummy variables for census year (reference: 1990); 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.

Integration Analysis

Sample: Our second research question explores the relationship between racial residential integration and suburban socioeconomic context. Where the diversity analysis uses the sample of all suburbs, we limit the integration analysis to diverse suburbs. Diversity is a prerequisite to integration—monoracial places cannot become racially integrated because they are racially isolated. Because H is independent of racial and ethnic composition, we exclude monoracial places and investigate only diverse suburbs (i.e., suburbs that are at most 90% one group). Removing monoracial suburbs leaves 7,733 diverse suburbs in 2010, 5,307 suburbs in 2000, and 3,553 suburbs in 1990, resulting in 16,594 place-year observations.

Multivariable regression analysis: We use the same model specifications as the diversity analysis apart from additional terms to capture integration. In exploratory analyses, we find a curvilinear relationship and include quadratic and cubic terms for *Integration*, resulting in the following regression equation:

$$Y_p = \beta_{0m} + \beta_1 \text{Diversity}_p + \beta_2 \text{Diversity}_p^2 + \beta_3 \text{Diversity}_p^3 + \beta_4 \text{year} + \beta_5 \text{Integration}_p + \beta_6 \text{Integration}_p^2 + \beta_7 \text{Integration}_p^3 + \delta' X_p + \gamma' Q_p + e \quad (5)$$

where *Integration_p* refers to the measure of place-level residential integration (Eq. 3).⁴ Standard errors are clustered at the place level. In exploratory analysis, we did not find a significant interaction between *Integration* and census year and thus we report the more parsimonious model (results from the interaction model available upon request).

⁴ In exploratory analyses, we interacted H with E to see if the effect of integration varies with diversity. The interaction was not significant, and we determined through model fit statistics that the more parsimonious model without the interaction terms fit the data better.

Results

Our research questions ask whether the socioeconomic context of communities is associated with the emergence of racial diversity and integration across suburbia. This section contains two central findings: (1) Supporting place stratification theory, the relative socioeconomic advantage of suburbs declines with increasing multiethnic diversity; (2) Supporting the community desirability hypothesis, among diverse suburbs, highly integrated places tend to be advantaged relative to non-integrated diverse suburbs.

Socioeconomic Characteristics of Suburbs by Diversity

We first report descriptive results of socioeconomic advantage across levels of both diversity and integration with no controls. Table 2 presents characteristics of communities by both diversity and integration levels. As see in the table, both high and low diversity suburbs have higher than average scores on the composite score of advantage, while moderately diverse suburbs have a lower than average score (score = -0.23).

[Table 2 about here]

Figure 2 graphs the composite score of advantage against levels of diversity with a smoothed line of means for each census year. This figure generally supports community desirability theory where the most diverse suburbs display the highest levels of advantage; however, the relationship is curvilinear: The most racially isolated contexts tend to be the least advantaged, but low diversity ($0.10 \leq \text{diversity} \leq 0.30$) places show levels of advantage similar to high diversity places ($\text{diversity} > 0.8$). The curve dips in the middle diversity range ($0.30 \leq \text{diversity} \leq 0.60$). Notably, highly diverse places on average show a score above 0, suggesting that they are more advantaged than the average of all suburbs.

[Figure 2 about here]

However, our multivariable analysis does not support this descriptive evidence and supports hypotheses generated by place stratification theory: after controlling for several characteristics,⁵ socioeconomic advantage declines dramatically with increasing multiethnic diversity. Figure 3 graphs the coefficients and 95% confidence intervals for the linear regression predicting the composite score of advantage, and Figure 4 graphs the predicted curve. Low diversity places ($\text{diversity} < 0.25$) on average score more than 1 standard deviation above high diversity places ($\text{diversity} > 0.75$). These results suggest that diversification is more likely to occur in more disadvantaged suburbs. Whiter, low diversity, advantaged suburbs still exclude people of color.⁶ Furthermore, this regression controls for metropolitan fixed effects, suggesting that this relationship is independent of regional variation in advantage.

[Figures 3 and 4 about here]

⁵ During model building, we found that metropolitan area fixed effects and controls for population size and land area contributed most to the different shapes of the curves between multivariable (Figure 4) and descriptive (Figure 2) analyses. These exploratory analyses suggest that the relationship between suburban diversity and socioeconomic advantage varies substantially across metropolitan areas and across suburbs of different sizes.

⁶ In exploratory models, we also interacted *year* with the *diversity* terms and found that the negative association of diversity with socioeconomic advantage has decreased modestly over time. However, because temporal change is not a main focus of our analysis, we do not report this interaction in the main results. Full results available upon request.

Socioeconomic Characteristics of Suburbs by Integration

Next, we turn to our research question regarding how residential integration may be associated with advantage within diverse communities. While diversity is negatively associated with advantage, integration may disproportionately occur in advantaged or disadvantaged contexts. We limit these analyses to diverse suburbs because diversity is a prerequisite for integration.

Returning to descriptive Table 2, consistent with community desirability theory, low integration places are socioeconomically disadvantaged relative to the average suburb (score = -0.72), and high integration places feature substantial socioeconomic advantage (score = 0.84). These results support our integration and desirability hypothesis, where highly advantaged contexts may sustain integration.

Figure 5 graphs the composite score of advantage, along with a line of smoothed conditional means, against *Integration*. In contrast to diversity, advantage increases with increasing integration as hypothesized by community desirability theory. Notably, the score of advantage peaks in the most integrated contexts ($Integration \geq 0.8$) and does so above 0. Given that we calculate the score using the entire sample of suburbs and zero is the mean, this finding suggests that integrated places are more advantaged on average than the overall sample.

[Figure 5 about here]

Further supporting community desirability theory, multivariable analysis controlling for key place-based characteristics including metropolitan fixed effects confirms results provided by Figure 5: Integrated places tend to be highly advantaged. Figure 6 graphs the predicted score of advantage against *Integration*. (See Figure 7 for parameter estimates, and Appendix Table A3 for all estimates including control variables). The most integrated suburbs demonstrate substantially higher advantage scores than the entire sample of suburbs. The most integrated places score roughly more than 1 standard deviation higher in the composite score of advantage compared to suburbs at moderate to low levels of integration ($Integration \leq 0.75$). Despite diversification occurring in more disadvantaged suburbs overall, after conditioning on diversity, suburbs that integrate are more likely to have higher homeownership rates and median house values and populaces with higher educational attainment, higher incomes, and lower poverty rates.

[Figures 6 and 7 about here]

Discussion and Conclusion

Motivated by the explosion of racially diverse and integrated suburban communities over the past four decades, we explored the association of community socioeconomic advantage with diversity and integration from 1990-2010. This analysis provides new insight into the contexts of suburban diversification and integration in the twenty-first century.

First, we found that diversity has a strong negative association with community-level socioeconomic advantage: for all decades, diverse communities are on average less advantaged than the average suburb. This finding is consistent with our hypothesis derived from place stratification theory, which contends that racism limits people of color's access to the most advantaged suburban communities. As people of color suburbanize, advantaged suburbs with more resources may be more able to successfully implement discriminatory strategies than less advantaged suburbs, resulting in greater diversity at the lower end of the socioeconomic spectrum. This indicates a continuation of twentieth century spatial logics in which people of color are disproportionately excluded from the most resourced communities. Alternatively, the greater concentration of diversity in less advantaged suburbs may reflect the socioeconomic composition of people of color who are suburbanizing; that is, racial inequalities in income and

wealth could be driving this negative association on purely economic grounds, as suggested by spatial assimilation theory. We cannot parse these two explanations; more research is required on how people of color sort into suburbs. Regardless of the mechanism, however, suburban diversity is predominantly experienced in communities with fewer socioeconomic resources than the average suburb.

Second, in stark contrast to our diversity findings, we find the opposite relationship between socioeconomic advantage and integration. The different patterns for diversity and integration highlight that, though related, diversity and integration are distinct phenomenon that are driven by different structural conditions. Though we see that diversity on average occurs in less advantaged suburbs, among diverse suburbs, integrated suburbs are more socioeconomically advantaged than segregated suburbs. Importantly, this association is independent of diversity.

Why do we see these opposite associations of advantage with diversity and integration? While disadvantaged suburbs are less selective and therefore local government officials and residents may be less able to effectively stop diversification, we find that integrated suburbs tend to be more advantaged. Our findings support the community desirability hypothesis, which states that suburban selectivity may be critical to the process of integration (Douds 2020). Highly selective suburbs are more “desirable,” and this desirability may facilitate integration. People from all racialized group are attracted to the desirable community, and the desirable nature of the community provides an incentive for all groups – and particularly whites – to stay as the community integrates. This role of selectivity may help explain why racial integration occurs almost exclusively in suburbs, which are by design more selective than central cities or rural areas.

Though community desirability identifies selectivity as one factor that may be necessary for integration, there are other factors that are required for a suburb to integrate. One such factor may be the surrounding labor market. Rastogi (2019) finds that suburbs with significant presence of military, public sector, and public university employment – all middle-class employment generators that feature high levels of workforce racial integration – are more likely to be integrated. Future research should continue to examine the factors that predict integration of suburban communities with a particular focus on what processes produce diversification with segregation and diversification with integration.

The fact that Americans predominantly experience racial residential integration in advantaged suburban communities has important implications for racial inequality. In these communities, people of color gain access to community resources and amenities traditionally hoarded by whites. When they purchase a home, for instance, they experience the same equity increases as their white neighbors, allowing wealth accumulation. Further, their children attend the same schools as white children, providing them with often exceptional educational opportunities (Douds 2020; Lewis-McCoy 2014; Musto 2019). These processes may reduce racial inequality in place, either in the present or among the next generation.

Our work here contributes to a critical research agenda focused on understanding the structural conditions that facilitate community racial diversity and integration. Though we theorize mechanisms here that could explain why diversity occurs disproportionately in disadvantaged suburbs while, among diverse suburbs, integration occurs disproportionately in advantaged suburbs, these mechanisms are not empirically established. More analyses and new types of data will be required to assess these mechanisms. For instance, though our integration findings are in line with community desirability theory, qualitative assessment of a range of

suburban contexts is needed to establish whether the mechanisms theorized – desirability, selection – are driving the patterns we identify.

Though integration represents a stark divergence from the twentieth century racial spatial landscape, the ability of integration in suburbia to create racial equity in an array of outcomes, including material resources, social interactions, and civic life, is still an open empirical question. People of color in advantaged, integrated communities can access many of the same place-based resources as whites, but this does not mean that racial equity has been achieved. For instance, studies of multiracial central city neighborhoods find that whites control local politics and homeowner's associations (Mayorga-Gallo 2014; Tach 2014). While these findings are from central cities, they suggest that white control may still be maintained in integrated communities through political domination. Does spatial proximity allow for equitable resource distribution, or do new mechanisms of racial inequality, such as resource hoarding within-place, emerge? Answering this question will be critical to understanding the spatial dynamics of racial inequality in the twenty-first century.

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Tables

Table 1: Hypothesized associations of diversity and integration with socioeconomic advantage for three theories

Theory	Diversity	Integration
Place stratification	-	-
Community desirability	+	+
Spatial assimilation	?	?

Table 2. Community Characteristics by Suburban Community Type, 1990-2010

	Diversity			Integration		
Place Characteristic	Full Sample	Low	Moderate	High	Low	High
<i>Composite score components</i>						
Median HH income ¹ , M/(SD)	\$59,909 (28,867)	\$62,336 (32,348)	\$56,691 (27,859)	\$60,779 (24,818)	\$50,086 (22,005)	\$71,269 (32,501)
% not in poverty, M/(SD)	88.46 (9.68)	87.88 (10.12)	85.10 (10.04)	85.66 (9.35)	83.65 (10.24)	89.58 (8.74)
Median home value ¹ , M/(SD)	\$183,895 (159,702)	\$206,669 (184,655)	\$193,541 (172,239)	\$233,076 (163,300)	\$153,777 (131,349)	\$268,732 (199,306)
% Bachelor's degree, M/(SD)	21.878084 (16.69)	23.826779 (17.90)	21.985882 (16.80)	24.579212 (16.18)	18.100417 (13.80)	29.260564 (18.64)
% professional/managerial, M/(SD)	29.560506 (14.17)	31.281493 (15.02)	29.780218 (14.28)	31.448869 (13.56)	26.499443 (12.17)	35.628135 (15.30)
<i>Composite score</i>						
Composite score of advantage, M/(SD)	0.00 (1.94)	0.15 (2.09)	-0.23 (1.96)	0.12 (1.82)	-0.72 (1.73)	0.84 (1.96)
<i>Covariates</i>						
% white, M/(SD)	80.76 (23.67)	78.10 (21.11)	62.71 (18.66)	48.25 (16.39)	66.51 (22.26)	66.13 (23.05)
% post-1970 housing	48.20 (25.01)	53.23 (25.25)	53.67 (24.39)	54.95 (25.89)	48.71 (21.96)	59.39 (27.14)
% Foreign born, M/(SD)	6.30 (9.22)	6.64 (8.40)	9.66 (10.15)	18.61 (11.90)	7.61 (9.31)	13.32 (11.70)
Population, M/(SD)	8,824.18 (20,804.74)	8,761.99 (14,761.16)	12,756.44 (23,511.90)	28,241.37 (46,227.66)	12,201.95 (30,100.60)	16,898.09 (26,437.47)
Land area (km^2), M/(SD)	15.16 (36.50)	18.12 (36.19)	20.57 (42.17)	28.43 (55.95)	20.35 (45.38)	22.20 (41.13)
Incorporated (%)	70.1	66.2	66.5	61.5	76.5	52.9
N	36503	7356	5531	3681	8731	7837

¹Values inflated to 2009 dollars.

Data sources: 1990, 2000, 2010 Censuses and 2008-2012 American Community Survey. Sample is all suburbs with populations of at least 100 with complete data on all variables.

Figures

Figure 1: Growth in diverse suburbs by count of suburbs (a) and the population that live in these suburbs (b)

(a)

(b)

Note. We define monoracial suburbs as suburbs that were $\geq 90\%$ one racial or ethnic group. Among diverse places, we define levels of diversity using the entropy index (Eq. 1, methods section). Entropy measures how evenly a place's population distributes across multiple racial and ethnic groups, in this case, Blacks, Asians, Latinxs, whites, and others. We consider a place to be highly diverse if it scored in the top decile of 2010 entropy ($E \geq 0.637$), moderately diverse if it scored between the top quartile and the top decile ($0.637 > E \geq 0.492$), and lowly diverse if it scored below the top quartile ($E < 0.492$)

Figure 2: Smoothed Means of Socioeconomic Composite Place Score and Place Entropy with Fitted Line (n = 36,503 suburb-years, Censuses 1990-2010, ACS 2012 5-year estimates)

Note. We define diversity using the entropy index (Eq. 1, methods section).

Figure 3: Coefficients from OLS Regression of All Suburbs Model Predicting Place Composite Score of Advantage (n = 36,503 suburb-year observations, Censuses 1990-2010, ACS 2012 5-year estimates)

Note: For ease of interpretation, we scale multiethnic diversity (measured as the entropy index) to units of 10 percentage-points. This model includes metropolitan fixed effects, the spatially lagged variable for the composite score of advantage, log population, log land area, percent foreign-born, percent of housing built after 1970, and whether the suburb was politically incorporated. Standard errors are clustered at the place level. For all parameter estimates see Appendix Table A3.

Figure 4: Predicted Curve of Place Composite Score of Advantage by Diversity, Generated by Linear Regression (n = 36,503 suburb-year observations, Censuses 1990-2010, ACS 2012 5-year estimates)

Note. We measure multiethnic diversity as the entropy index (Eq. 1). This model includes the spatially lagged variable for the composite score of advantage, log population, log land area, percent foreign-born, percent of housing built after 1970, and whether the suburb was politically incorporated. We set all continuous covariates to their mean, incorporated status to unincorporated, and year to 1990. Standard errors are clustered at the place level. For all parameter estimates, see Appendix Table A3. This model also includes metropolitan fixed effects; here, we present the intercept for the greater DC area.

Figure 5: Smoothed Means of Socioeconomic Composite Place Score and Place Entropy with Line of Smoothed Conditional Means (n = 16,594 suburb-years, Censuses 1990-2010, ACS 2012 5-year estimates).

Figure 6: Predicted Values of Place Composite Score of Advantage by Integration (n = 16,594 suburb-years, Censuses 1990 – 2010, ACS 2012 5-year estimates)

Note: This model includes year, percent housing built after 1970, percent foreign born, log population, log land area, incorporated status, and a spatial lag. All continuous covariates are set to their mean and the reference year is 1990. For all parameter estimates, see Appendix Table A3. This model also includes metropolitan fixed effects; here, we present the intercept of the greater DC area.

Figure 7: Coefficients from OLS Regression of Diverse Suburbs Model Predicting Place Composite Score of Advantage (n = 16,594 suburb-years, Census 1990-2010, ACS 2012 5-year estimates)

Note: Integration (Eq. 3) and multiethnic diversity (Eq. 1) where scale to units of 10 percentage-points to for ease of interpretation. This model includes metropolitan fixed effects, the spatially lagged variable for the composite score of advantage, percent housing built after 1970, percent foreign born, log population, log land area, and incorporated status. Standard errors are clustered at the place level. For all parameter estimates, see Appendix Table A3.

Appendix

Table A1: Average Community Socioeconomic Characteristics across Composite Score Quintiles

Variables, mean/(SD)	Index of Socioeconomic Advantage (quintiles)				
	1	2	3	4	5
Median HH income (\$)	\$33,952 (7,634)	\$44,891 (7,008)	\$53,786 (8,289)	\$66,027 (11,292)	\$100,895 (34,773)
% not in poverty	75.74 (11.48)	86.80 (5.95)	90.57 (5.11)	93.30 (4.28)	95.88 (3.14)
Median home value (\$)	\$74,148 (33,299)	\$103,373 (38,107)	\$140,869 (51,759)	\$203,128 (80,059)	\$397,981 (22,2044)
% BA+	7.51 (4.63)	11.71 (5.32)	16.64 (6.38)	25.87 (8.47)	47.66619 (14.56)
% prof./managerial	16.56 (7.52)	21.47 (6.72)	26.20 (6.99)	33.88 (7.77)	49.69285 (11.08)

Table A2: Average Racial Composition of Suburb by Type, 1980-2010

Suburb Type										
Monoracial					Low Diversity		Moderate Diversity		High Diversity	
	Black	Latinx	Other	White	Low Integration	High Integration	Low Integration	High Integration	Low Integration	High Integration
% Black	94.2	0.2	0.1	0.9	10.8	4.6	22.4	8.4	23.4	13.5
% Latinx	1.2	95.8	2.5	1.6	8.7	10.5	13.0	18.2	22.0	22.3
% Asian	0.2	0.3	0.1	0.6	1.0	2.7	1.4	4.8	3.4	11.6
% Other	0.9	0.3	96.2	1.0	2.3	2.9	2.5	3.2	3.1	4.3
% White	3.5	3.3	1.1	95.8	77.2	79.3	60.7	65.3	48.2	48.3
N	205	357	99	19274	4179	3177	3108	2423	1444	2237

Table A3: Results from Linear Regression Predicting the Composite Score of Socioeconomic Advantage (Census 1990, 2000, and 2010; American Community Survey 2008-12 5-year estimates)

	All Suburbs - Entropy Regression (n = 36,503)	Diverse Suburbs - Entropy and Integration Regression (n = 16,594)
Intercept	-0.447 (-0.953, 0.059)	-0.593 (-1.255, 0.068)
2000 (ref: 1990)	0.033 (0.011, 0.055)	0.084 (0.048, 0.120)
2010 (ref: 1990)	0.066 (0.032, 0.101)	0.159 (0.11, 0.208)
Diversity	-0.170 (-0.191, -0.149)	-0.251 (-0.28, -0.223)
Diversity ²	-0.027 (-0.034, -0.020)	-0.024 (-0.036, -0.011)
Diversity ³	0.005 (0.003, 0.006)	0.010 (0.006, 0.015)
Integration		0.323 (0.291, 0.354)
Integration ²		0.076 (0.059, 0.093)
Integration ³		0.006 (0.003, 0.009)
Foreign-born (%)	-0.119 (-0.158, -0.080)	-0.153 (-0.192, -0.115)
Post-1970 Housing (%)	0.107 (0.095, 0.119)	0.072 (0.057, 0.087)
Unincorporated	-0.015 (-0.067, 0.037)	-0.144 (-0.209, -0.079)
Log population	0.145 (0.117, 0.173)	0.202 (0.166, 0.238)
Log land area	0.017 (-0.009, 0.043)	-0.007 (-0.04, 0.027)
Spatial lag	0.768 (0.747, 0.788)	0.639 (0.614, 0.663)
Metropolitan fixed effects	*	*

Note. Percent variables (i.e., diversity, integration, foreign-born, and post-1970 housing) are scaled to units of 10 percentage-points for easily interpretable effect sizes. “All Suburbs” regression examines the effect of diversity across all suburbs, while the “Diverse Suburbs” regression explores the effects of both diversity and integration among diverse suburbs (i.e., those that were at maximum 90% one racial or ethnic group). Standard errors are clustered at the place level.