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The Contribution of Manufactured Housing to Affordable Housing in the United States: Assessing Variation Among Manufactured Housing Tenures and Community Types

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ABSTRACT

Manufactured housing (MH) is a central component of affordable housing in the United States. Yet the MH tenure ranges from manufactured homes on privately owned property to rental units, to owned homes placed on rented lots in mobile home parks. Despite the widespread use of MH, no current research has analyzed the high level of internal variation within MH or documented how this variation impacts housing affordability between MH tenures. Moreover, little is known about the degree of segregation of manufactured homes, which are often clustered in mobile home parks and informal subdivisions. This study represents a first-time national analysis of demographic, spatial, and affordability characteristics with regard to variation between MH tenures, using data from the American Housing Survey. By disaggregating various MH tenures and clustered community arrangements, we detail the demographic and geographic characteristics of MH households by housing tenure, analyze how housing costs differ across MH tenures, and demonstrate that MH is highly segregated from the conventional housing stock in a way that impacts housing affordability. These findings offer policy prescriptions for MH policy specifically and may contribute to broader affordable housing policy in the United States.

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Manufactured homes, more often called mobile homes or trailers, house approximately 18 million residents (U.S. Census Bureau, 2010) and provide the largest source of unsubsidized affordable housing in the United States (CFED, 2011). Unlike conventional homes, which are built on site, manufactured homes are homes built on a chassis in a factory and then transported and installed on a site.¹ Factory production lowers the cost of manufactured housing units and contributes to their widespread use as a form of low-income housing, although it may also contribute to common perceptions that manufactured homes are substandard and impermanent structures (Apgar, Calder, Collins, & Duda, 2002; Beamish, Goss, Atiles, & Kim, 2001). Nonetheless, today manufactured homes make up a substantial portion of U.S. housing. The Joint Center for Housing Studies estimated that two thirds of all affordable units added to the U.S. housing stock in the 1990s were manufactured homes (Apgar et al., 2002).

Manufactured housing (MH) is widely overlooked in both academic scholarship and housing policy (Sullivan, 2018). Moreover, the few studies that document the widespread use of MH as affordable housing treat it as a monolith, comparing owned MH with owned or rented conventional housing (Boehm, 1995; Boehm & Schlottman, 2008; Owens, 1996). These studies are

important in that they provide a baseline analysis of MH, but several features necessitate a more nuanced understanding of this housing form. MH is not only widespread and central to the U.S. affordable housing stock, but it is also a highly diverse and adaptable housing form. Four key features of MH contribute to the high level of variation within MH tenures.

First, MH plays a crucial role in both urban and rural affordable housing stocks. As the analysis below demonstrates, about half of MH units (54%) are located in nonmetropolitan areas, yet 46% (2.98 million MH units) are found in metropolitan parts of the country.² Thus, MH represents a substantial, although understudied, supply of affordable housing for metropolitan residents as well as for those in nonmetropolitan areas.³

Second, manufactured homes are both rented and owner occupied. As the analysis below shows, there are over 1.7 million MH renter households and more than 5.3 MH homeowners in the United States. However, the different links between owned and rented MH and factors such as location and affordability have yet to be systematically studied.

Third, owner-occupied MH is also differentiated by the tenure of land itself. Some manufactured homes are located on property owned by homeowners, whereas others are located on property owned by landlords in mobile home park (MHP) tenures. Popular images perpetuate a notion that manufactured homes are primarily located in MHPs (Sullivan, 2018). As the analysis illustrates, however, more than half of MH households live on property they also own, whereas only about two out of five live on rented land within MHPs. This variation in ownership structures may have important implications for the housing affordability and tenure security of low-income households, warranting more nuanced comparison between MH tenures.

Fourth, mobile homes play an important but understudied role in expanding homeownership for low-income and minority households in so-called informal subdivisions (ISs) across the country (described in greater detail below; also see Durst, 2018). Informal housing in the United States has received a wave of scholarly interest in recent years (Durst & Wegmann, 2017; Herbert, 2018; Mukhija & Mason, 2015; Wegmann & Mawhorter, 2017), as have ISs specifically (Larson, 2002; Way, 2010), including in metropolitan areas (Durst, 2018; Sullivan & Olmedo, 2015; Ward & Peters, 2007). The widespread use of MH as a source of owner-occupied housing in ISs makes these communities an important although potentially distinct dimension of MH specifically, and of affordable housing more generally.

Recent housing scholarship has called for increased attention to “the vast diversity of housing tenures in the United States” (Wegmann, Schafran, & Pfeiffer, 2016, p. 194). Despite the widespread use of MH as affordable housing in the United States, no current research has analyzed the high level of internal variation within MH tenures or documented how this variation impacts housing affordability between various MH tenures. Moreover, little is known about the clustering of manufactured homes in MHPs and ISs across the country. Disaggregating various MH tenures should uncover the degree to which MH is segregated within these communities. Recent research on homeownership (McCabe, 2016) has identified housing tenure segregation (residential separation between homeowners and renters) as a notable dependent and independent variable in analysis of housing policy. Research has demonstrated that low-income renter households are concentrated in low-income neighborhoods, and examined the implications for renter households (De Luca, Garboden, & Rosenblatt, 2013). Yet no study has examined the implications of clustering for the low-income households living in MH.

This study represents a first-time national analysis of demographic, spatial, and affordability characteristics with regard to variation between MH tenures. We begin by using data from the 2013 wave of the American Housing Survey (AHS), a nationally representative survey of housing units in the United States, to distinguish between three MH tenure types: MH owners (those who own both the dwelling and the land); MH renters (those who rent both the dwelling and the land); and MH owner/renters (those who own the dwelling but rent the land). We then use the AHS data to identify MH in two distinct community types: MHPs and ISs. Our analysis focuses on the following research questions:

- (1) What MH tenures are associated with higher levels of affordability?
- (2) How prevalent is the clustering of MH units into two major MH community types—ISs and MHPs—and how are these communities distributed across the country?
- (3) How do the demographic/socioeconomic characteristics of residents, the physical characteristics of housing units, and the characteristics of neighborhoods differ between ISs and MHPs?
- (4) Does housing affordability differ between ISs and MHPs?

In the following section, we identify key gaps in existing research on MH. We then describe the data and methods used in our analysis, before discussing the key findings. Our results provide a nuanced account of the affordability of MH by tenure, set the stage for future research on MH in both metro and nonmetropolitan areas, and demonstrate that MH is highly segregated from the conventional housing stock in a way that impacts housing affordability. These findings offer policy prescriptions for MH policy specifically and may contribute to broader affordable housing policy in the United States.

Literature Review

National analyses of MH have been undertaken primarily as industry reports (Consumers Union, 2001a, 2001b) or policy papers (Apgar et al., 2002; Carter, Williamson, DeArmond, & Sheldon, 2004; CFPB, 2014; Vermeer & Louie, 1997). These studies are essential in establishing the key sociodemographic characteristics of MH households and charting the growth of MH as a form of low-income housing in the United States. Taken together, these studies establish that MH is unique in three primary areas: the demographic characteristics of MH households, the spatial characteristics of MH locations, and the levels of affordability provided by the MH stock.

Demographics of MH Households

MH is demonstrated to house a large low-income population (Apgar et al., 2002; Beamish et al., 2001; Boehm & Schlottman, 2008). The median income for MH households is only half that of households in conventional homes (CFPB, 2014). Additionally, older households, households with only a high school degree, and households with relatively low net worth are all disproportionately represented among MH households (CFPB, 2014). Elderly households are especially prevalent in MH, where 32% of households are headed by a retiree (compared with 24% for conventional homes; CFPB, 2014). These households are also more financially insecure; the median net worth of MH households is about one quarter of the net worth of households in conventional homes (CFPB, 2014). Although existing studies clearly demonstrate that MH households are primarily low-income residents who utilize MH to access affordable housing and low-cost homeownership (Beamish et al., 2001), little research analyzes how various MH tenures contribute to these goals.

Spatial Characteristics of MH

Common perceptions depict MH as a primarily rural housing type (Soloman & MacTavish, 2017). In part, this is attributable to the fact that MH accounts for about 6% of all occupied housing units nationwide, but approximately 14% of housing units in nonmetropolitan counties (CFPB, 2014). However, existing studies also demonstrate that MH is found across metropolitan parts of the country (Boehm & Schlottmann, 2008). Importantly, however, these studies do not examine how specific MH tenures (MH owners, MH renters, and MH owners/renters) are distributed across metropolitan or nonmetropolitan regions or how these tenures contribute to the affordable housing stock in these areas.

Affordability of MH

Despite its important role in providing affordable housing in the United States, there is a relative dearth of research on MH within housing and urban scholarship (Sullivan, 2018). The most in-depth studies available are important in filling this gap, showing that MH as a whole offers deep levels of affordability (Beamish et al., 2001; Boehm & Schlottman, 2008). A new manufactured home costs less than half per square foot what a new site-built home costs (U.S. Census Bureau, 2017), and throughout the 1990s MH was responsible for 66% of the new affordable housing produced in the United States (Apgar et al., 2002). However, the affordability of MH is likely dependent on a variety of factors that have yet to be studied. For example, whether the manufactured home is owned, rented, or located on leased land in a divided MH owner/renter arrangement is a central determinant of housing costs, since land makes up a major portion of total housing costs, and different MH tenures are associated with different land tenures. Additionally, little is known about how affordability differs across the predominant MH community types where these different MH tenures are common: MHPs and ISs.

The Clustering of MH: MHPs and ISs

The image of the trailer park dominates public perceptions of MH. Certainly, MHPs, more colloquially called trailer parks, contain a sizable portion of the nation's MH.⁴ According to estimates by the U.S. Census Bureau (2017), approximately one third of new U.S. mobile homes are placed in MHPs. The communities that we collectively term MHPs for the purposes of this analysis vary significantly in community age and size, in the type and quality of MH units they contain, and in the maintenance and amenities offered by the community. Despite this variation in community attributes, a common housing tenure distinguishes these communities, whether they are termed trailer parks, MH communities, or (most common in the academic literature) mobile home parks (Beamish et al., 2001; Dawkins & Koebel, 2009; Kusenbach, 2009, 2017; Sullivan, 2018; Wallis, 1991). MHPs are land-lease communities, where residents rent lots from park owners (whether they then own or rent their home). MHPs are developed and owned by private landlords. MHP residents purchase homes on site in MHPs or from MH retailers, most often using chattel loans that resemble personal property loans rather than formal mortgages (Sullivan, 2018). MHP residents then lease the land from the landlord, often on a month-to-month basis. Homes in MHPs may also be rented, but the distinction between the home rent and the lot rent remains. MHP residents are subject to frequent lot rent increases and additional park fees (CFED, 2011; Consumers Union, 2001b). This form of "divided asset ownership" (Hirsch & Rufolo, 1999) or "halfway homeownership" (Sullivan, 2014) means that MHPs are characterized by high levels of housing insecurity, since residents' investment in their homes depends upon landlords' decisions to continue to operate and maintain the parks where their homes are placed (CFED 2011; Consumers Union, 2001b). MHPs are also spatially distinct. In metropolitan areas, local laws and zoning codes often require that mobile homes be located exclusively within MHPs and segregated from single-family housing (Dawkins & Koebel, 2009). This often means MHPs are isolated into commercial and industrial zones and kept separate from conventional housing. These organizational and spatial characteristics make MHP housing unique and may have important implications for the affordability of MH located in MHPs.

However, as we will describe below, a large proportion of MH is not located in MHPs, but rather on land owned by the MH homeowner. A substantial number of these manufactured homes are located in what we call informal subdivisions (Durst, 2018; Durst & Wegmann, 2017), communities that are thus far less recognized by scholars as a distinct neighborhood type worthy of systematic study. ISs are, as the name suggests, residential subdivisions that are developed with austere levels of infrastructure and services (often lacking paved roads, sidewalks, streetlights, sewer service, and sometimes even piped water and electricity) and under minimal regulatory control—often guided by subdivision regulation but not by zoning or building codes (Durst, 2016, 2018; Durst & Ward,



Figure 1. The physical footprint of informal subdivisions and mobile home parks.

2016; Larson, 2002; Ward & Peters, 2007). Residents in ISs most often use developer financing to purchase tracts of land and begin incremental building on these lots (Durst & Ward, 2016; Stroud, 1995). Land developers often employ exploitative sales tactics and high interest rates, and sometimes make false promises regarding the provision of infrastructure (Olmedo & Ward, 2016; Stroud & Spikowski, 1999; Ward, 1999). Many residents rely on self-help, building the home themselves over many years—but in the interim period, many live in older, dilapidated manufactured homes (Durst, 2016). Relatively little is known about the extent of these communities across the country or their contribution to the affordable housing stock. However, an analysis of unincorporated communities in metropolitan and micropolitan areas across the country suggests that as many as 35% of manufactured homes may be located in ISs and that they play a key role in expanding affordable housing options for minorities and the poor (Durst, 2018).

The four images in Figure 1 highlight the variation among MHP communities and distinguish the land-use patterns found in MHPs and ISs. These images show: (a) an older MHP of single-section mobile homes in Austin, Texas; (b) a high-amenity MHP of double-section mobile homes outside Lansing, Michigan; (c) an IS in Hidalgo County, Texas, that is a mix of mobile homes and site-built dwellings, including one unfinished home (just cinderblock walls); and (d) an IS north of Denver, Colorado. These photos highlight the variation in housing conditions within MHP and IS community types and also demonstrate how these communities can often be distinguished by analyzing their physical footprint. Here we used county property records to confirm that a and b are MHPs, since all of the housing units shown are located on a single parcel, whereas c and d are ISs, since each housing unit is located on an individually owned lot.

Data

This study relies on data from the 2013 wave of the AHS.⁵ The AHS is a nationally representative survey of housing units (i.e., the AHS follows housing units, not households, over time) conducted biennially in odd-numbered years. The AHS includes a range of variables measuring the type, quality, and age of housing units and the socioeconomic and demographic characteristics of households. Most importantly for this study, the AHS includes detailed data on the tenure status of households residing in MH as well as the characteristics of housing in the neighborhood.

We use three variables in the AHS to identify MH and to distinguish different MH tenure arrangements: MH owners, MH renters, and MH owner/renters. We first identified MH units in the AHS using the variable TYPE. We then disaggregated MH tenures based on whether the household owned or rented either the dwelling itself (TENURE) or the land on which it sits (OWNLOT). This led to four MH tenure types, three of which are used in this study: MH owners own both the dwelling and the land (in total, there were 990 survey responses in this category); MH owner/renters own the dwelling but rent the land (761 responses); and MH renters rent both the dwelling and the land (393 responses). Cases in which the land was owned but the dwelling was rented were exceedingly rare (32 cases, or approximately 1% of mobile homes captured by the 2013 wave of the AHS), so this category is excluded from the analysis that follows. Disaggregating the various types of MH tenures in this manner allows us to examine whether the affordability of MH differs according to MH tenure status. This is one of the core analytical contributions of this article. In the first set of analyses that follow, we use sampling weights (WEIGHT) provided by the AHS to produce national estimates.

We also examine the clustering of mobile homes to distinguish between MHPs and ISs. To our knowledge, this is the first effort to distinguish between these two communities using data from the AHS. We used the variable NHDBLDMH, which identifies whether the housing unit in question was located within one half block of another manufactured home, to identify MH units located in one of two community types—MHPs and ISs. We classified MH units as being located in an IS if they were located on land owned by the household and were located within one half block of another manufactured home. We classified manufactured homes as being in an MHP if they were located on rented land (regardless of whether the dwelling unit was owned or rented) and were located within one half block of another manufactured home. Any housing units that were not located in close proximity to another manufactured home were considered scattered sites and were excluded from the analysis that follows. We weighted estimates of the characteristics of ISs and MHPs using an alternative sampling weight (SPLTWGT2) to account for the fact that the question regarding proximity to a mobile home (NHDBLDMH) was asked of only approximately half of households.

One important limitation of this method of classification is that it will tend to overestimate the number of dwellings located in MHPs and underestimate (possibly substantially) the number of homes in ISs. This is true for two primary reasons. First, our classification of MHPs includes all MH owner/renters (i.e., those who own the home but rent the land) and MH renters (those who rent both the land and dwelling) that are located within one half block of another mobile home. Some, and perhaps many, of these MH owner/renters and MH renters may, in fact, be located in ISs on separate parcels that are leased from the owner of the lot. If this is the case, it will artificially inflate our estimates of the number of housing units located in MHPs and deflate our estimates of the number of housing units in ISs. Second, although MH units are commonplace in ISs, site-built dwellings are as well (Durst, 2016, 2018). For example, in a study of ISs in Texas, Durst (2016) illustrated that in newer ISs the share of dwellings that are mobile homes is close to 50%, whereas in older ISs less than a quarter of dwellings are mobile homes. This transition away from mobile homes parallels the construction and expansion of site-built homes, often through self-help (Durst & Ward, 2016). Taken together, these two factors suggest that our analysis captures the phenomenon of MH clustering but likely overestimates the number of housing units located in MHPs and underestimates the number in ISs.

Below we examine the affordability of various mobile home tenures—mobile home owners, mobile home owner/renters, and mobile home renters—in comparison with conventional homeownership and conventional rental tenures. We use total monthly housing costs, which entail the sum of all real-estate-related costs and the cost of utilities and services, as a baseline comparison of housing costs across housing types and tenures. However, to account for the fact that the characteristics of both housing units and the households that reside in them may differ across tenure categories, we also measure housing costs per square foot and cost-to-income ratios.⁶

Lastly, to account for the fact that housing costs differ widely by market condition, we measure housing costs relative to the local fair market rent (FMR)⁷ using a cost-to-FMR ratio.

We then turn to a detailed analysis of the two primary communities in which mobile homes are clustered: MHPs and ISs. We estimate the number of mobile homes in each type of community, their geographic distribution across metropolitan and nonmetropolitan areas and across the four regions in the country, the demographic and socioeconomic characteristics of residents in these communities, and key characteristics of the housing units themselves and of the neighborhoods in which they are located. We conclude with an analysis of four measures of affordability and how they differ across the types of communities studied here.

Findings

The Affordability of Manufactured Home Tenures

We begin by discussing estimates of housing costs and housing affordability for each of five tenures: conventional owners and conventional renters, mobile home owners, mobile home renters, and mobile home owner/renters. Figure 2 plots simple regression analyses of four measures of housing costs and affordability for each tenure type without additional controls: total monthly housing costs, monthly housing costs per square foot, monthly housing costs as a share of household income, and monthly housing costs relative to the local FMR. The results suggest that total housing costs for mobile home residents are substantially lower than for conventional owners and renters, but that not all mobile home tenures are equally affordable. Conventional owners pay an average of approximately \$1,300 per month, compared with approximately \$1,000 for conventional renters, \$700 for mobile home renters, \$670 for mobile home owner/renters, and \$530 for mobile home owners. Ownership of a mobile home and the land on which it sits is thus the lowest cost tenure option of those studied here.

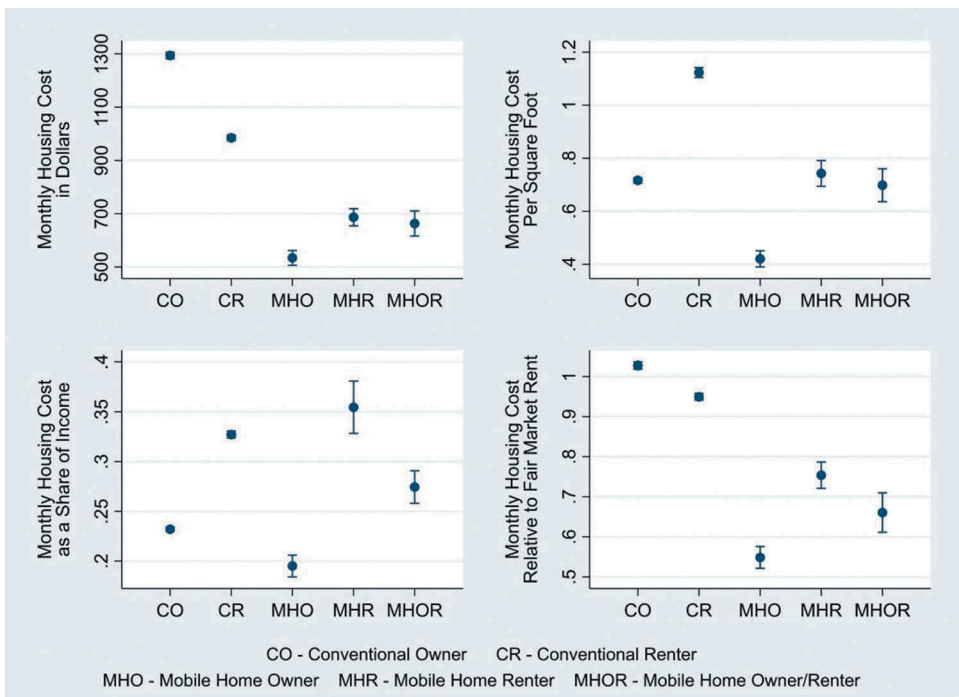


Figure 2. Housing cost and affordability by tenure.

Alternative measures of housing costs and affordability provide a more nuanced portrait of differences between the tenure types. Measured relative to the size of the dwelling, mobile home owners also have the lowest housing costs, with an average monthly housing cost of approximately \$0.40 per square foot, compared with approximately \$0.70 for conventional owners, mobile home renters, and mobile home owner/renters. The least affordable tenure option on a square footage basis is conventional renting, where the average household pays approximately \$1.10 per month per square foot. Mobile home owners also allocate a lower proportion of their income toward housing (approximately 20%) than do conventional owners (23%), mobile home owner/renters (27%), conventional renters (33%), and mobile home renters (35%). This last statistic is striking, as it illustrates that living in a rented mobile home on leased land is not affordable for the average household. Lastly, our analysis of housing costs relative to the FMR suggests that mobile home owners have housing costs that are approximately 55% of the local FMR—this tenure option is therefore more affordable than the mobile home owner/renter tenure (with a 65% cost-to-FMR ratio) and mobile home renter tenure (75% cost-to-FMR ratio) and substantially more affordable than the conventional renter (95%) and conventional owner (103%) tenures.

The Clustering of MH: Evidence Regarding the Prevalence of ISs and MHPs

Given that mobile home tenures appear to be accompanied by wide variation in housing costs and affordability, it is a salient policy question to consider whether the two major types of communities in which mobile homes are commonplace—ISs and MHPs—also differ in affordability as well as in the characteristics of residents who live in them, the quality of housing, and the broader condition of the neighborhood. We now turn to that analysis.

We begin by providing estimates of the number and share of housing units located in each type of community, disaggregated by metropolitan and nonmetropolitan regions. Our analysis suggests two broad conclusions: (a) MH in the United States is highly segregated from other types of housing; (b) the distribution of MHPs and ISs varies markedly across urban and rural geographies.

We estimate that of the nearly 7 million occupied mobile homes in the country, approximately 69% are located within one half block of another manufactured home, compared with only 4% of conventional owners and conventional renters. This substantial degree of clustering points either to the self-sorting of mobile home residents into MHPs or ISs, perhaps for lifestyle or affordability reasons, or to land-use regulation and housing policies that lead to the concentration of MH in specific areas (Dawkins & Koebel, 2009). Our analysis suggests that 30% of the occupied manufactured homes in the country (or nearly 2.1 million in total) are located in an IS whereas approximately 39% (or 2.7 million) are located in an MHP. These two types of community are therefore home to more than two thirds of the occupied mobile homes in the country.

Our analysis indicates that ISs and MHPs are distributed unevenly across the geography of the country. As illustrated in [Table 1](#), the vast majority of ISs are located in the South. This is not driven solely by the fact that the South contains a disproportionate number of housing units as a whole: for example, although 37% of the nation's occupied housing units are located in the South, a remarkable 75% of mobile homes in ISs are located there, compared with only 15% in the West, 6% in the Midwest, and 4% in the Northeast. This is likely driven by the widespread development of ISs in states such as Florida prior to the adoption of stricter land-use regulation in unincorporated areas, and the ongoing proliferation of ISs in Texas. Notably, MHPs are more evenly distributed across the country's four regions: approximately 43% of the mobile homes in MHPs are located in the South, 24% in the West, 21% in the Midwest, and 10% in the Northeast. The distribution of MHPs therefore more closely parallels the distribution of all housing units across the country, where 37%, 22%, 22%, and 18% are located in the South, West, Midwest, and Northeast, respectively.

ISs and MHPs are also distributed unevenly across the range of urban and rural contexts. Our analysis, shown in [Table 1](#), suggests that 58% of housing units in ISs are located in rural parts of

Table 1. The characteristics of informal subdivisions, mobile home parks, and conventional tenures.

	Informal subdivision	Mobile home park	Conventional		Difference between informal subdivision and	
			Owner	Renter	Mobile home park	Conventional renter
Geographic characteristics						
MSA: Central city (%)	1.74	12.42	23.45	45.49	- 10.68 +++	- 43.75 +++
MSA: Urban (%)	8.23	31.25	36.99	33.17	- 23.02 +++	- 24.94 +++
MSA: Rural (%)	26.67	18.49	16.57	5.9	8.18 +++	20.77 +++
Non-MSA: Urban (%)	5.09	11.86	7.02	8.99	- 6.77 +++	- 3.90 +++
Non-MSA: Rural (%)	58.27	25.98	15.97	6.45	32.29 +++	51.82 +++
Northeast (%)	3.86	10.34	18.6	19.6	- 6.48 +++	- 15.74 +++
Midwest (%)	6.27	21.49	24.36	19.81	- 15.22 +++	- 13.54 +++
South (%)	75.4	43.35	36.57	34.03	32.05 +++	41.37 +++
West (%)	14.47	24.82	20.47	26.57	- 10.35 +++	- 12.10 +++
Household characteristics						
Household income (\$)	42,704	35,688	91,342	50,056	7,016.26 **	- 7,351.46 **
In poverty (%)	19.52	31.04	8.67	15.43	- 11.52 +++	4.09 +
No high school degree (%)	30.13	28.02	16.47	12.79	2.11	17.34 +++
High school diploma or two-year degree (%)	60.42	64.17	52.89	57.94	- 3.75	2.48
College degree (%)	9.45	7.80	37.68	25.60	1.65	- 16.15 +++
Non-Hispanic White (%)	74.02	74.45	77.42	51.62	- 0.43	22.40 +++
Latino (%)	12.37	17.38	9.00	19.53	- 5.01	- 7.16 ++
African American (%)	12.08	5.70	8.53	22.43	6.38	- 10.35 +++
Age	55.12	49.86	54.84	42.66	5.27 ***	12.46***
Housing unit characteristics						
Respondent rating of housing unit quality (1 = worst; 10 = best)	8.18	7.56	8.60	7.75	0.61 ***	0.43 ***
No. of bedrooms	2.77	2.48	3.19	2.10	0.29 ***	0.66 ***
No. of bathrooms	1.73	1.55	1.86	1.31	0.18 ***	0.42 ***
Size of unit (square feet)	1,551	1,178	2,222	1,209	372.83 **	341.84 **
Double-wide mobile home (%)	53.28	26.99	N/A	N/A	26.29 +++	
Age of dwelling (years)	25.26	28.64	43.57	47.09	- 3.38 **	- 21.83 ***
Unit connected to public sewer (%)	36.44	77.60	76.74	95.72	- 41.16 +++	- 59.28 +++
Household reported sewage system breakdown (%)	0.36	2.45	1.14	1.61	- 2.09 +	- 1.25
Unit connected to public/private water supply (%)	72.57	85.75	85.03	97.71	- 13.18 +++	- 25.14 +++
Household reported water is safe to drink (%)	95.03	84.90	94.24	88.54	10.13 +++	6.49 ++
Went without running water (%)	2.60	9.34	1.80	3.54	- 6.74 +++	- 0.94
Neighborhood characteristics						
Respondent rating of neighborhood quality (1 = worst; 10 = best)	7.85	7.41	8.37	7.78	0.44 *	0.07
Abandoned or vandalized buildings within one half block (%)	9.00	9.87	5.14	8.87	- 0.87	0.13
Bodies of water within one half block (%)	19.92	27.79	19.96	16.23	- 7.87 +	3.69
Waterfront property (%)	3.03	3.27	3.05	1.74	- 0.24	1.29
Open spaces (parks, woods, farms, or ranches) within one half block (%)	61.62	50.87	42.57	38.67	10.75 +	22.95 +++

(Continued)

Table 1. (Continued).

	Informal subdivision	Mobile home park	Conventional		Difference between informal subdivision and	
			Owner	Renter	Mobile home park	Conventional renter
Businesses/institutions (stores, restaurants, schools or hospitals) within one half block (%)	9.53	25.40	19.16	47.96	- 15.87 +++	- 38.43 +++
Minor road repairs needed (%)	36.24	34.76	28.16	34.55	1.48	1.69
Major road repairs needed (%)	10.83	8.98	5.09	6.83	1.85	4.00
No roads present (%)	1.55	2.30	2.32	1.35	- 0.75	0.20
Housing costs						
Monthly housing cost (\$)	486.24	660.61	1,309.86	993.28	- 174.37 ***	- 507.03 ***
Cost per square foot (\$)	0.41	0.69	0.71	1.09	- 0.28 ***	- 0.68 ***
Housing cost as a share of income (%)	18.94	30.33	23.14	32.68	- 11.40 ***	- 13.74 ***
Housing cost as a share of the fair market rent(%)	50.62	68.27	104.16	95.55	- 17.66 ***	- 44.93 ***
Fair market rent (\$)	957.23	982.33	1,241.97	1,043.83	- 25.11	- 86.61 ***

Note. MSA = metropolitan statistical area.

Difference in means test: * $p < .05$, ** $p < .01$, *** $p < .001$; Chi-square test: + $p < .05$, ++ $p < .01$, +++ $p < .001$.

nonmetropolitan areas, whereas 26% are located in rural parts of metropolitan areas. Less than 2% and approximately 8% are located in central cities or urban parts of metropolitan areas, respectively, and only 5% are located in urban parts of nonmetropolitan areas. This suggests that ISs are primarily a rural phenomenon. MHPs exist in significant numbers within central cities and urbanized areas: 12% of the housing units in MHPs are located within a central city, 31% are located in an urban part of a metropolitan area, and 18% are located in a rural part of an MSA, whereas 12% and 26% are located in urban or rural parts of nonmetropolitan areas, respectively. This uneven distribution of ISs and MHPs across the geography of the country may be accompanied by differences in the characteristics of residents, the nature and quality of housing and neighborhood conditions, and the level of affordability that mobile homes provide. We now turn to these analyses.

Household Characteristics

We examined selected socioeconomic and demographic characteristics of households in ISs and MHPs as well as for conventional renters and conventional owners. These results are presented in Table 1. We also conducted comparisons of means tests and chi-square tests to examine whether the characteristics of residents in ISs differed from those of residents in MHPs or those of conventional renters. The significance of these tests is shown in the last two columns of Table 1. The socioeconomic profile of these communities illustrates that households in ISs, and especially in MHPs, are more economically disadvantaged than the average renter or owner household in the United States. For example, our findings suggest that household incomes in ISs (\$42,704) are higher on average than in MHPs (\$35,688), although they are still markedly lower than those of conventional owners (\$91,342) and conventional renters (\$50,056). Similarly, as illustrated in Table 1, households residing in MHPs are more likely to be living in poverty (31%), compared with 20% of households in ISs and 15% and 9% of conventional renters and conventional owners, respectively. Educational attainment by heads of household in MHPs and ISs is statistically indistinguishable; however, residents in both of these communities are substantially less likely to have a college

degree and substantially more likely to have not graduated from college than are conventional owners and conventional renters.

The demographic profile of these communities also provides some interesting insights. The average head of household in ISs is 55 years of age, on par with the age of conventional owners and substantially higher than the age of MHP household heads (50) and conventional renters (43).⁸ Notably, non-Hispanic Whites represent approximately three quarters of heads of household in ISs, MHPs, and the conventional owner tenure, but only half of heads of household in the conventional renter tenure. Latinos and African Americans, on the other hand, both make up approximately 12% of heads of household in ISs, marginally more than their share among conventional owners (approximately 9%).⁹ This reaffirms findings from prior research (Durst, 2018; Durst & Ward, 2016; Durst & Wegmann, 2017) suggesting that ISs provide an important means of access to homeownership opportunities for racial and ethnic minorities. Interestingly, 17% of heads of household in MHPs are Latino, whereas only 6% of heads of household in MHPs are African American.

Housing Unit and Neighborhood Characteristics

We examined housing and neighborhood conditions in ISs and MHPs compared with conventional ownership and renting. In general, our analysis suggests that residents in ISs are relatively content with their housing units and that, compared with other tenure arrangements, housing units in ISs—at least across the country—offer a number of benefits and relatively few disadvantages. As illustrated in [Table 1](#), when asked to rate their housing unit on a scale of 1 (worst) to 10 (best), the average respondent in ISs reported a value of 8.18. This is lower than the rating of conventional owners (8.6) but, notably, is statistically significantly higher than that of conventional renters (7.75) and residents in MHPs (7.56). Moreover, houses in ISs are larger than those in MHPs and those occupied by traditional renters, as measured by the total square footage (1,551 square feet vs. approximately 1,200 square feet), the number of bathrooms, and the number of bedrooms. Houses in ISs also tend to be newer, are more likely to be double-wide mobile homes, and are more likely to have central air.

Other measures of the quality of housing units suggest that, across the nation, ISs provide a number of benefits and relatively few disadvantages compared with MHPs and conventional rental tenures. Although only 36% of houses in ISs are connected to public sewers—far less than the 77% of housing units in MHPs and 96% of conventional renters—residents in ISs are less likely to report sewage system breakdowns (.4% of respondents) than are residents in MHPs (2.45%) or conventional renters (1.6%). Similarly, only 73% of housing units in ISs were connected to a public or private water supply (the vast majority of the rest relied on private wells), compared with 86% of housing units in MHPs and 98% of conventional renters. However, 95% of residents in ISs reported that their water was safe to drink, compared with 85% of respondents in MHPs and 89% of conventional renters, whereas only 2.6% of residents in ISs reported that they had once gone without running water, compared with 3.5% of conventional renters and a troubling 9% of residents in MHPs.

ISs across the country do not appear on average to have major neighborhood problems that might contribute to the lower cost of housing. In fact, respondents in ISs rated their neighborhood quality at 7.85, on average, on a scale of 1 to 10, as indicated in [Table 1](#); this is slightly lower than the score for conventional owners (8.37), comparable with that of conventional renters (7.78), and statistically significantly higher than that of MHP residents (7.41). ISs were no more likely to have roads in need of major or minor repair than were MHPs or neighborhoods occupied by conventional renters. Housing units in ISs were also no more likely to be located near abandoned or vandalized buildings or to be located on waterfront property than were units in MHPs or homes of conventional renters, although they are more likely to be located near open space and less likely to be located near businesses—two factors that could be viewed by some respondents as positive amenities. Notably, the 2013 wave of the AHS did not collect data on sidewalks or streetlights for

the cases used in this analysis, and therefore we cannot examine whether these conditions differ across neighborhood types.

Housing Costs and Affordability

The above analysis of housing and neighborhood quality is especially notable given the extreme levels of affordability that come with residing in an IS or MHP, particularly compared with conventional homeownership and conventional rental tenures. In [Table 1](#), we present estimates of the four measures of housing costs discussed earlier: the monthly housing cost in dollars, the cost in dollars per square foot, housing costs as a percentage of household income, and housing costs as a percentage of the FMR. These estimates suggest that ISs are the lowest cost housing option, regardless of how housing cost or affordability is measured. Respondents in ISs report lower total monthly housing costs, lower costs per square foot, lower cost-to-income ratios, and lower cost-to-FMR ratios.

To examine whether the lower cost and greater affordability of ISs persist after controlling for housing unit, neighborhood, housing market, and geographic factors, we conducted a regression analysis that examines the relationship between the various measures of affordability discussed above while controlling for the variables presented in [Table 1](#). The full results of these regressions are presented in [Table 2](#) to allow the reader to examine the relationship among all control variables. Here, however, we primarily discuss the results of the marginal effects plots, presented in [Figure 3](#), which examine differences in estimated housing costs and affordability for the various neighborhood types.

The results suggest that ISs consistently provide a greater degree of affordability compared with either MHPs or conventional ownership or renting. For example, as shown in the top left plot in [Figure 3](#), households in ISs pay an estimated \$600 per month after controlling for the household, housing unit, and neighborhood characteristics discussed above, substantially less than the approximately \$800 paid by residents in MHPs or the \$900 and \$1,000 paid by conventional owners and conventional renters, respectively. The affordability of ISs persists after measuring costs relative to the size of the dwelling, as illustrated in the top right plot in [Figure 3](#). For example, residents in ISs pay approximately \$0.50 per square foot per month, significantly less than MHP residents (\$0.65), conventional owners (\$0.83 per square foot), and conventional renters (\$0.89).

Moreover, as shown in the bottom left of [Figure 3](#), IS households have cost-to-income ratios of 17%; these are substantively and statistically significantly lower than the housing cost burdens of MHP residents (24%), conventional owners (25%), and conventional renters (28%). Lastly, as shown in the bottom right plot of [Figure 3](#), IS residents have housing costs that are approximately 70% of the FMR, substantially lower than those of MHP residents (90%), conventional owners (100%) and conventional renters (105%). These results suggest that ISs provide deep levels of affordability, regardless of how that affordability is measured and even when controlling for household, housing unit, neighborhood, and geographic characteristics.

We then sought to further document the relative affordability of the various tenure types by examining whether and how the actual monthly housing costs reported by the AHS for each of the tenure categories differed from the monthly housing cost that one would expect given the characteristics of the housing units themselves or those of the neighborhoods and geographic areas in which they are located. To do so, we estimated a modified version of the models in [Table 2](#) in which we used monthly housing costs as the dependent variable and the housing unit, neighborhood, and geographic characteristics shown in [Table 1](#) as the independent variables (i.e., we removed the controls for tenure types as well as those for household characteristics). After estimating the model, we estimated predicted housing costs based on these housing unit, neighborhood, and geographic characteristics for each tenure type. These are presented in [Table 3](#), alongside the actual housing costs from [Table 1](#).

Table 2. Regressions of housing cost and affordability.

	Monthly housing cost (\$)	Cost per square foot (\$)	Housing cost as a share of	
			Income (%)	Fair market rent (%)
Informal subdivision	– 0.53*** (0.05)	– 0.39*** (0.04)	– 0.12*** (0.01)	– 0.35*** (0.04)
Mobile home park	– 0.23*** (0.04)	– 0.23*** (0.04)	– 0.05*** (0.01)	– 0.16*** (0.04)
Conventional owner	– 0.09*** (0.01)	– 0.05* (0.02)	– 0.03*** (0.00)	– 0.05*** (0.01)
Household income (natural log)	0.18*** (0.01)	0.15*** (0.01)	– 0.15*** (0.00)	0.18*** (0.01)
Household in poverty	0.07*** (0.02)	0.07** (0.02)	0.08*** (0.01)	0.18*** (0.02)
Without high school degree	– 0.10*** (0.01)	– 0.07*** (0.02)	– 0.02*** (0.00)	– 0.05*** (0.01)
With college degree	0.11*** (0.01)	0.11*** (0.01)	0.01*** (0.00)	0.13*** (0.01)
Hispanic or Latino	0.00 (0.01)	– 0.01 (0.02)	0.01 (0.00)	– 0.02+ (0.01)
African American	– 0.02 (0.01)	– 0.02 (0.02)	0.00 (0.00)	– 0.02* (0.01)
Age of head of household	– 0.01*** (0.00)	– 0.00*** (0.00)	– 0.00*** (0.00)	– 0.00*** (0.00)
Respondent rating of housing unit	– 0.01+ (0.00)	0.00 (0.01)	– 0.00* (0.00)	0.00 (0.00)
Number of bedrooms	– 0.06*** (0.01)	– 0.13*** (0.01)	– 0.01*** (0.00)	– 0.07*** (0.01)
Number of bathrooms	0.16*** (0.01)	0.15*** (0.01)	0.03*** (0.00)	0.20*** (0.01)
Size of unit (square feet, natural log)	0.11*** (0.01)	– 0.83*** (0.05)	0.02*** (0.00)	0.12*** (0.01)
Double-wide mobile home	0.03 (0.06)	0.11* (0.05)	0.02+ (0.01)	– 0.01 (0.05)
Age of dwelling (years)	– 0.00*** (0.00)	0.00 (0.00)	– 0.00*** (0.00)	– 0.00*** (0.00)
Unit connected to public sewer	0.02 (0.02)	– 0.01 (0.01)	0.00 (0.00)	0.02 (0.02)
Household reported sewage system breakdown	– 0.01 (0.03)	– 0.02 (0.05)	– 0.01 (0.01)	– 0.01 (0.04)
Unit connected to public/private water supply	0.02 (0.02)	0.02 (0.01)	0.00 (0.00)	– 0.01 (0.02)
Household reported water is safe to drink	0.01 (0.02)	0.05** (0.02)	0.00 (0.00)	0.00 (0.02)
Went without running water	0.02 (0.03)	0.07+ (0.03)	0.00 (0.01)	0.02 (0.03)
Respondent rating of neighborhood	0.01*** (0.00)	0.02*** (0.00)	0.00** (0.00)	0.01*** (0.00)
Abandoned or vandalized buildings within one half block	– 0.05** (0.02)	– 0.03+ (0.02)	– 0.01* (0.00)	– 0.06*** (0.01)
Bodies of water within one half block	0.05*** (0.01)	0.03* (0.01)	0.01*** (0.00)	0.06*** (0.01)
Waterfront property	0.11*** (0.03)	0.09** (0.03)	0.03*** (0.01)	0.15** (0.05)
Open spaces within one half block	– 0.01 (0.01)	– 0.01 (0.01)	0.00 (0.00)	0.01 (0.01)
Businesses/institutions within one half block	0.00 (0.01)	0.06*** (0.01)	0.00 (0.00)	0.03** (0.01)
Minor road repairs needed	– 0.04*** (0.01)	– 0.04*** (0.01)	– 0.01* (0.00)	– 0.04*** (0.01)

(Continued)

Table 2. (Continued).

	Monthly housing cost (\$)	Cost per square foot (\$)	Housing cost as a share of	
			Income (%)	Fair market rent (%)
Major road repairs needed	– 0.03 (0.02)	– 0.04+ (0.02)	0.00 (0.00)	– 0.03+ (0.02)
No roads present	0.01 (0.03)	– 0.01 (0.02)	– 0.01 (0.01)	0.02 (0.04)
Fair market rent (natural log)	0.70*** (0.02)	0.94*** (0.04)	0.15*** (0.01)	– 0.28*** (0.03)
MSA: Urban	0.01 (0.01)	– 0.07*** (0.02)	0.00 (0.00)	– 0.01 (0.01)
MSA: Rural	– 0.05** (0.02)	– 0.08*** (0.02)	– 0.01** (0.00)	– 0.08*** (0.02)
Non-MSA: Urban	– 0.07*** (0.02)	0.00 (0.02)	– 0.01 (0.00)	– 0.09*** (0.02)
Non-MSA: Rural	– 0.10*** (0.02)	0.01 (0.02)	– 0.01** (0.00)	– 0.12*** (0.02)
Midwest	– 0.06*** (0.01)	– 0.06*** (0.02)	– 0.01*** (0.00)	– 0.07*** (0.02)
South	– 0.19*** (0.01)	– 0.20*** (0.02)	– 0.04*** (0.00)	– 0.19*** (0.01)
West	– 0.14*** (0.01)	– 0.22*** (0.02)	– 0.03*** (0.00)	– 0.15*** (0.01)
Intercept	– 0.41* (0.19)	– 0.94*** (0.25)	0.77*** (0.05)	0.33+ (0.20)
N	31,056	31,062	29,497	31,062
R ²	0.447	0.324	0.463	0.242

Note. MSA = metropolitan statistical area. Standard errors are given in parentheses.

+ $p < .1$. * $p < .05$. ** $p < .01$. *** $p < .001$.

The results of this analysis suggest that both ISs and MHPs provide housing that is substantially more affordable than would be predicted based on the characteristics of the housing unit itself or of the neighborhood or geographic area in which they are located. For example, the average household in ISs pays \$486 per month, substantially lower than the \$804 predicted by the regression model. Thus, the actual cost of housing for households in ISs is only 58% of what one would expect given their housing unit, neighborhood, and geographic characteristics. Similarly, the average household in MHPs pays \$660 per month for housing, or only 71% of the predicted housing cost of \$913. Conventional owners and conventional renters, on the other hand, have actual housing costs that largely mirror their predicted housing cost. These findings provide further evidence that mobile homes—but especially ISs—provide deep levels of affordability.

Discussion and Conclusion

The primary goal of this study is to document how housing tenure impacts affordability across different MH tenure groups and different communities where MH is clustered. Our regression analyses of four measures of housing costs and affordability for conventional owners, conventional renters, and the three MH tenure types (MH owner, MH renter, and MH owner/renter) reveal that MH provides high levels of affordability compared with that experienced by both conventional owners and conventional renters, but that not all MH tenures are equally affordable. Indeed, housing costs differ significantly across MH tenures. Across a number of the affordability measures used here, MH owner/renters bear significantly higher costs than MH owners do, although both tenures are significantly more affordable than conventional ownership and renter tenures. However, MH renters face much higher housing costs, on par with

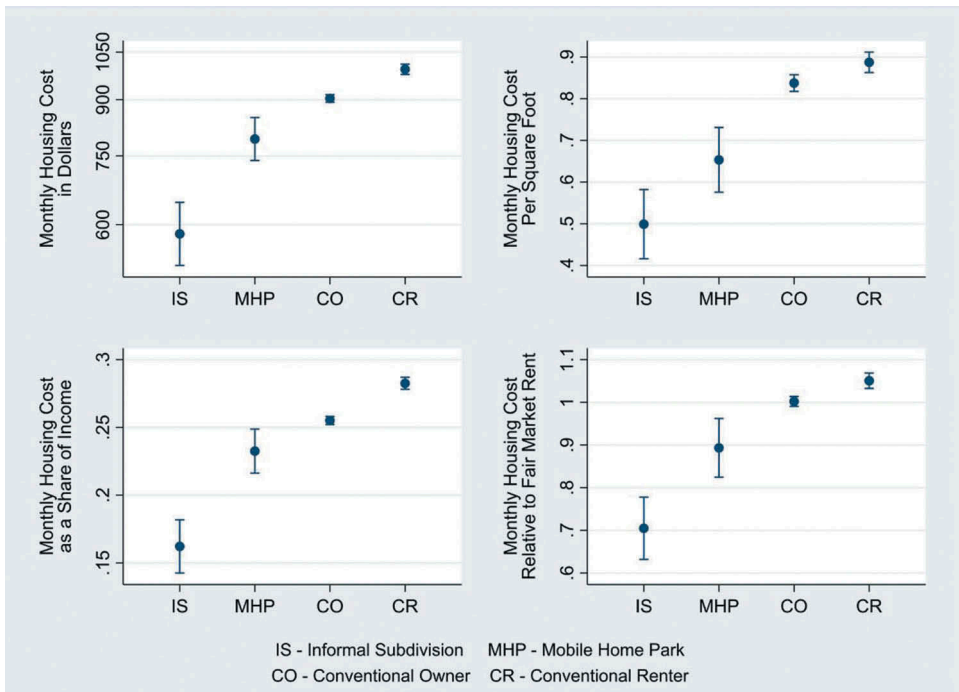


Figure 3. Housing cost and affordability: A comparison of informal subdivisions, mobile home parks, and conventional tenures.

Table 3. Predicted and actual housing costs (\$).

	Informal subdivision	Mobile home park	Conventional	
			Owner	Renter
Predicted housing costs	804.98	913.03	1,299.83	950.71
Actual housing costs	486.24	660.61	1,309.86	993.28
Ratio of actual to estimated housing cost	0.58	0.71	1.01	1.04

those of conventional renters. In short, owning an MH unit as well as the land where the unit is located leads to the highest levels of affordability, whereas renting the dwelling and/or the land on which it sits comes with additional costs that reduce the deep affordability of manufactured homes. During a widespread U.S. affordable housing crisis, housing scholars and practitioners should take note of these findings and recognize that not all forms of MH are equally affordable.

Our analysis also highlights important characteristics of clustering of MH. Most notably, MH in this country is highly segregated from other types of housing, and the distribution of MHPs and ISs varies markedly across urban and rural geographies. For example, we estimate that only 4% of conventional housing units are located within one half block of a manufactured home, whereas approximately 69% of MH units are similarly situated—in either an IS (30%) or an MHP (40%). Whereas many of these MHPs appear to be concentrated in metropolitan areas, ISs appear to be disproportionately a nonmetropolitan phenomenon.

By examining select socioeconomic and demographic characteristics of the populations within these two predominant MH community arrangements, we found that households living in ISs and MHPs have lower incomes and lower educational attainment and are more likely to be living in poverty than both conventional owners and conventional renters. Non-Hispanic Whites represent approximately three quarters of heads of household in ISs, MHPs, and the

conventional owner tenure, but only half of heads of household in the conventional renter tenure, whereas non-Hispanic Whites comprise the majority of residents in MH; notably, Latinos make up approximately 12% of heads of household in ISs and 17% of heads of household in MHPs—more than their share among conventional owners (approximately 9%). This indicates that for Latinos MH and MHPs specifically provide an important vehicle for affordable housing and homeownership.

Moreover, whereas both ISs and MHPs offer sites of low-income homeownership through MH, they provide markedly different levels of affordability. Residents in MHPs have higher total housing costs than residents in ISs do; they pay substantially more of their income toward housing, and they also have substantially higher housing costs relative to the local FMR. Meanwhile, households in ISs have the lowest housing costs of all of the tenure types studied here. Existing scholarship of *colonias* and ISs highlights the myriad challenges these communities face (especially regarding poor infrastructure; Larson, 2002; Stroud & Spikowski, 1999; Ward, 1999), and more work is needed to ensure that existing ISs have adequate water and wastewater services, paved roads, and sidewalks. Our analysis, however, highlights that ISs also serve as one of the most affordable housing options in this country and an important means of low-income homeownership. This level of affordability is notable for the IS arrangement especially, given that IS residents self-rated their housing unit satisfaction on par with conventional owners and statistically significantly higher than conventional renters and residents of MHPs. Similar measures of housing unit and neighborhood quality indicate that ISs provide a number of benefits and relatively few disadvantages compared with MHPs and conventional rental tenures, at least at the national level.

These findings are particularly important for local housing policies. For example, in an analysis of the barriers to placing MH in metropolitan areas, Dawkins and Koebel (2009) recommend flexible regulations, not only those that allow the placement of manufactured homes in single-family zones but also those that promote the establishment of MHPs, which, they argue, “can help create a bundled supply of land for developing manufactured housing” (Dawkins & Koebel, 2009, p. 85). Our results, however, suggest that MHPs are not, in fact, the most affordable MH community arrangement, and offer lower levels of housing and neighborhood satisfaction than ISs do. Instead, our findings point toward the development of ISs as a more effective strategy for promoting affordable forms of MH tenure. Thus, in addition to removing regulatory barriers to the placement of MH in MHPs, local and state policies should encourage their development in single-family districts. Steps should be taken to ensure that new ISs are equipped with adequate levels of infrastructure and services, which undoubtedly are accompanied by higher land costs (see Durst, 2018). These higher land costs would potentially reduce the placement of MH on scattered sites (Dawkins & Koebel, 2009) and would almost certainly reduce the affordability of ownership in ISs, although by how much is unclear. Nevertheless, given the wide disparity we document between measures of affordability in ISs and MHPs, there is considerable opportunity to promote affordable homeownership by promoting the development of new ISs.

The lowest hanging fruit, however, is policy that directly addresses the challenges faced by residents in MHPs. Our results suggest that ownership of both the land and the dwelling contributes to lower housing costs and higher resident satisfaction in ISs than in MHPs, where residents do not own the land. Additionally, the lack of land ownership underlies the classification of MH in MHPs as personal property rather than real property. This classification comes with less favorable financing, fewer consumer protections, lower appraised values, and less home appreciation (NCLC, 2014). Our analysis of the differences in affordability and housing quality between ISs and MHPs is significant in light of current efforts, primarily spearheaded by housing nonprofit groups such as Resident Owned Communities USA, that work to promote land ownership in MHPs by converting landlord-owned MHP properties to resident-owned communities. Conversion of MHP land to resident-owned communities could yield some of the benefits found in ISs, substantially contributing to housing affordability while promoting housing security for low-income MH households. Such efforts should be actively encouraged and further evaluated.

In conclusion, our analysis suggests that not all MH tenures are equally affordable, nor are they evenly distributed across metropolitan and nonmetropolitan parts of the country. Local, state, and federal policy should aim to ensure a diversity of tenure options for low-income households, but should prioritize tenures, such as ownership of the dwelling and the land, that are accompanied by the greatest degree of affordability and housing quality.

Notes

1. Manufactured homes are defined as homes built after 1976 when the U.S. Department of Housing and Urban Development (HUD) instituted the HUD Manufactured Home Construction and Safety Standards code to improve the safety, quality, and durability of manufactured housing. Mobile homes are homes built prior to 1976.
2. In the American Housing Survey data and in this analysis, metropolitan areas include central cities as well as urban and rural parts of metropolitan statistical areas (MSAs; i.e., urban and rural areas that are still located within a census-defined MSA). Nonmetropolitan areas include both urban and rural areas that are located outside an MSA.
3. HUD defines housing affordability in terms of percentage of income, using 30% of income as the maximum threshold for housing costs. Households paying over 30% of monthly income on housing costs are considered housing cost burdened by HUD standards (<https://www.huduser.gov/portal/pdredge/pdr-edge-featd-article-081417.html>).
4. In this article we follow architectural historians and scholars of the mobile home in using the categorical term mobile home park (MHP) to refer to the range of MH land-lease communities (trailer parks, MHPs, MH communities, etc.), which may vary significantly from each other in terms of age, type of homes, and property maintenance (Beamish et al., 2001; Dawkins & Koebel, 2009; Kusenbach, 2009, 2017; Solomon & MacTavish, 2017; Wallis, 1991).
5. We rely on the 2013 wave instead of the more recent 2015 wave because a number of variables of interest, such as proximity to other mobile homes, are not available in the 2015 public-use file.
6. To do so, we divide monthly housing costs by one twelfth of the reported annual household income.
7. FMRs are calculated by HUD for metropolitan areas and nonmetropolitan counties and are used to determine federal assistance for subsidized rental housing. We use them here as a means of measuring the affordability of tenure types relative to alternative affordable housing options.
8. As noted above, existing research has found MH to be an important source of housing for retirees, who comprise 32% of MH household heads compared with 24% of household heads in conventional housing (CFPB, 2014). Our findings disaggregate MH households in ISs and MHPs from this larger MH population. Contrary to some popular perceptions of MHP residents as elderly, we find that MHP heads of household are younger than their counterparts in conventional housing, and IS heads of household are similar in age. This implies that the prevalence of elderly households in MHPs is more likely to be a regional phenomenon (in the South and Sunbelt states, perhaps) than a national characteristic of MHP or IS households.
9. In keeping with AHS data, we define a Latino as a person who is Mexican, Mexican American, Chicano, Puerto Rican, Cuban, Cuban American, or some other Spanish, Hispanic or Latino group.

Disclosure Statement

No potential conflict of interest was reported by the authors.

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