Abstract

Income mixing is strongly endorsed as a principle in housing and community development because it is expected to provide social diversity, help low-income people get access to higher-quality goods and services, and achieve social and economic integration. Yet mixing may also pose challenges, and homogeneity may have benefits that should not be abandoned. This paper suggests that the potential benefits of income mixing can be maximized by attending to geographic scale more carefully than has occurred in the past. It reviews policies across multiple scales and proposes research to understand how income mixing works at various scales.

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Income Mixing across Scales

Rationale, Trends, Policies, Practice, and Research for More Inclusive Neighborhoods and Metropolitan Areas

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Introduction

Income mixing has become a popular policy and planning tool, inspired in part by concerns over rising economic segregation and concentrated poverty. Income homogeneity is assumed to be a problem for low-income adults and children because it weakens the prevalence of role models conducive to upward mobility, reduces social capital and undermines social organization, and deprives low-income areas of investments in public and private services. Income segregation may also have negative externalities for broader geographic areas if it impedes economic growth, impairs housing market function, or reduces civic cohesion and participation.

Income mixing can operate and be measured across multiple scales: developments, neighborhoods, districts, cities, and even among metropolitan areas. To date, mixed-income research and policy attention has focused primarily on micro-level income-mixing at the level of the housing development or neighborhood. Income-mixing at larger geographic scales may have different relative costs and benefits than income-mixing within neighborhoods and developments. For example, the effect of income homogeneity on interpersonal contact and social capital, which operate through micro-level face-to-face interaction, may not be as important at larger geographic scales as it is within neighborhoods. Thinking about the contingent effects of income mixing at multiple scales can help us identify whether there is an optimal level of income mixing for a particular outcome that maximizes benefits while avoiding undue costs.

The first section of this report reviews the existing literature and theory on the effects of income mixing at the neighborhood scale and then discusses possible effects at larger geographic scales. The second section reviews the level and changes in income separation at the neighborhood scale over time and introduces new ways to compare income mixing in metro areas at higher geographic levels. The third section shows that despite the narrowness in measurement, policy and practices to mix incomes have advanced at all geographic scales. Yet these policies are usually not coordinated across multiple scales, meaning that practitioners and policymakers may miss opportunities or even work at cross-purposes when we add up the impacts across scales. The final section of the report offers conclusions about research needed to advance understanding of the effects of income homogeneity and income mixing and the effects of policies to increase mixing across scales.

What Problems Does Income Mixing Address?

“Mixed-income” has become a popular buzz word in policy and planning circles. Despite a lack of clarity about the impact and even the meaning of mixed income, practitioners and policymakers are already...
intervening in a variety of ways to reduce income segregation. When applied to places, “mixed income” has been used to describe developments and neighborhoods that contain a combination of subsidized and market rate housing, rental and owner-occupied housing, and different configurations of low-, moderate-, and/or high-income households. When applied to policies, the term has been used to describe the provision of subsidized housing within middle class and affluent buildings and neighborhoods, as well as incentives for higher-income residents to relocate to once-disinvested areas. The overarching goal of mixed-income policy is to increase income diversity, but the means and ends of these policies vary greatly in practice, as does the scale at which income mixing operates. The specific type of mix, and the methods used to obtain it, matter not only for residents’ well-being but also for public perception and political feasibility.

Policymakers could benefit from greater clarity about where, when, and how to create mixed-income communities. In particular, it is helpful to begin by considering the problems income mixing is meant to address. We see two main sets of concerns. First, living in high-poverty developments and neighborhoods may have harmful outcomes for low-income people. Second, income-based sorting among jurisdictions may create broader social, economic, and environmental harms. Strategies to build mixed-income communities aim at both of these concerns but operate at different scales: mixed-income developments and neighborhoods address problems of concentrated poverty, whereas regional fair-share programs, dispersal programs, and inclusionary housing policies attempt to reduce income inequality among jurisdictions. Considering both scales at once should help advance thinking about how policy interventions at one level can reinforce or contradict those at another. It also sheds light on opportunities for new learning and policymaking to affect a spatial level between neighborhoods and jurisdictions, which we call the district.

The Problem at the Micro Scale: Developments and Neighborhoods
The “neighborhood effects” literature is much longer than needs to be reviewed in full here. Most careful observers now confirm the conventional wisdom that living in an impoverished development or neighborhood has a large number of ill effects, especially for children who grow up there. The effects are especially pronounced when successive generations inhabit the same limited set of high-poverty neighborhoods (Sharkey 2013).

At least three main mechanisms have been proposed for the transmission of these negative effects: interpersonal contact, social organization, and disinvestment. Concentrated poverty undermines residents through at least three mechanisms having to do with interpersonal contact. First, inspired in part by William Julius Wilson’s canonical account of social isolation in concentrated poverty communities (1987), researchers have hypothesized that income segregation reduces the access of lower-income residents to the resources contained within the information networks of higher-income residents (Joseph et al. 2007; Jencks & Mayer 1990; Ellen & Turner 1997). Residents of high poverty neighborhoods report lacking access to social networks that promote social mobility (Briggs 1998; Elliott et al. 1996; Rankin and Quane 2000; Campbell and Lee 1992). Second, high-poverty neighborhoods expose young people to role models who are disproportionately poor (Joseph et al. 2007; Wilson 1987; Brower 2009). If children and youth emulate those in their social environment, then such role models may reinforce negative behaviors that harm their life chances. Third, low-income people who live in high-poverty neighborhoods may
have lower levels of social trust, which undermines social organization (Allport 1954; Gaertner et al. 1996).

Social organization itself has been theorized as a second mechanism that impairs outcomes for residents in high-poverty neighborhoods. Social organization has been operationalized as the prevalence and strength of social networks, organizational participation, and the collective supervision and social control of local problems (Sampson and Groves 1989, p. 777). High poverty neighborhoods tend to have lower levels of informal social control. Residents of these neighborhoods may be less likely to intervene when conflicts occur in public, monitor the streets and neighborhood youth or trust that their neighbors will do the same. Such behaviors have been linked to higher rates of crime and public disorder (Elliott et al. 1996; Sampson and Raudenbush 1999; Sampson, Morenoff, and Earls 1999).

Concentrated poverty also impairs outcomes for low-income people due to a series of political and economic mechanisms that lead to disinvestment in high-poverty neighborhoods. This mechanism starts at the level of individual housing units: dwellings in apartment buildings that are exclusively subsidized dis-satisfy their tenants more than those in mixed-income developments (Popkin et al. 2004; Chaskin and Joseph 2010; Brophy and Smith 1997; Buron and Khadduri 2005; Calavita and Grimes 1988; Doerr and Siegal 1990; Joseph, Chaskin, and Webber 2008; Mulroy 1991; Popkin et al. 2000; Rosenbaum, Stroh, and Flynn 1998; Ryan et al. 1974; Schwartz and Tajbakhsh 2001; Smith 2002). In mixed-income developments, by contrast, higher-income residents demand higher quality housing construction and amenities, with positive externalities for lower income residents (Duke 2009; see also Kleit 2001; Briggs 1997).

High-poverty neighborhoods also may simply not rate as high priorities for public-sector investments and maintenance, leading to lower-quality schools, streets, sidewalks, and other important infrastructure; higher crime rates; as well as slower response times for police and firefighters (Curley 2005). Lacking market power, furthermore, high-poverty neighborhoods do not always look like good places for private-sector firms to turn a profit or attract skilled workers. This has led to a concern over the spatial mismatch between residents of poor neighborhoods and job opportunities (see Quigley and Raphael 2008; Briggs et al. 2010 for a discussion of the spatial mismatch literature). In fact, high-poverty neighborhoods sometimes attract the kinds of businesses and public-sector investments—incinerators, liquor stores, and freeways, for example—that would provoke rebellion in other neighborhoods (Houston et al. 2004). The lack of high-quality public and private investment undermines residents’ health and well-being on a number of dimensions by harming mental health, increasing the risk of victimization from crime and disease from environmental toxins, and reducing access to health-promoting amenities like safe recreation areas and healthy food options (Krivo and Peterson 1996; Evans and Kantrowitz 2002; Wen, Browning, and Cagney 2003; Larson, Story, and Nelson 2009).

**The Metro Scale: Broader Negative Effects of Spatial Income Sorting**

The structure, functions, and financing of local government in US metropolitan areas contribute another important spatial layer to income sorting. Local governments have at least some ability to allocate and redistribute goods and services and implement policy. If there is a broad range of household incomes, local governments may make decisions about municipal services, infrastructure investments, land-use regulations, and tax rates and expenditures in ways that support low-income people at levels they
would not otherwise be able to enjoy. In some cases jurisdictional boundaries correspond to school district boundaries as well, which influence the distribution of students and resources among schools within the district.

As middle- and upper-income households accumulate the income and wealth necessary to move to higher-quality housing and neighborhoods, they often choose cities and school districts where residents have similar income levels, similar willingness to pay for public services, and similar preferences for taxation. This process—sometimes called “Tiebout sorting” after the author of a seminal article (Tiebout 1956)—creates an intermediate level of spatial income inequality that is related, but not identical to neighborhood-level income inequality. Stable Tiebout sorting can come about only in the presence of restrictive land-use regulations or strong local organization that limit entry into jurisdictions by consumers with less ability to pay for the public services allowed there (Hamilton 1975, Levine 2006). Consistent with Tiebout’s and Hamilton’s ideas, metropolitan areas with large numbers of small local governments tend to have a high incidence of exclusionary regulations when their state laws do not preclude municipal use of such controls (Pendall, Puentes and Martin 2006).

At the extreme, this sorting process can lead to what Robert Reich (1991) has called the “secession of the successful.” Citing income inequality that was already sharp at the time and has only increased since then, Reich warned, “The most skilled and insightful Americans, who are already positioned to thrive in the world market, are now able to slip the bonds of national allegiance, and by so doing disengage themselves from their less favored fellows. The stark political challenge in the decades ahead will be to reaffirm that, even though America is no longer a separate and distinct economy, it is still a society whose members have abiding obligations to one another.” The creation of enclaves of the super-rich has proceeded apace since then as the incomes and wealth of the richest 5 percent of households have decoupled from stagnant median incomes and falling incomes at the low end (Dwyer 2010). The broad and long-term impacts of these enclaves have not been explored; our closing section recommends much more attention to this important trend.

In response to these macro-level trends, scholars and policymakers have developed agendas for “regional equity,” driven by the conclusion that spatial income sorting has too many negative effects to ignore (Pastor et al. 2009, Bollens 2003). The negative outcomes are obvious for people living not just in low-income neighborhoods but in entire jurisdictions dominated by low-income neighborhoods: weak tax bases, struggling schools, high crime rates, and sometimes even municipal bankruptcy (see, for example, Orfield 1997, Dreier et al. 2004, Goldsmith and Blakely 2010).

Proponents of regional equity go further still, however, contending that high levels of inequality across space are more broadly harmful from both a practical standpoint and an equity standpoint, reinforcing high levels of racial segregation, impeding economic growth, harming environmental quality, and even reducing civic engagement and participation (Oliver 1999, Dreier et al. 2004). These broader arguments about regional and statewide public welfare have motivated the best-known campaigns to promote inclusionary housing, those in Massachusetts, New Jersey, Montgomery County, and California. (We discuss these fair share and anti-NIMBY programs at length below.) In all these cases, concerns about corollaries of income sorting—including traffic congestion, availability of labor for growing suburban jobs,
and the negative effects of strict land-use regulations on housing markets—all contributed importantly to the adoption and implementation of the policies.

**Caveats: Homogeneity Has Benefits, and Mixing ( Alone) Isn't Always Helpful or Positive**

Spatial sorting persists despite researchers’ agreement that concentrated poverty is harmful and a growing consensus among advocates and planners that class sorting into municipalities can be inequitable and inefficient. This is in part because spatial sorting delivers important benefits, mainly but not only to upper-income households. Furthermore, income mixing does not always deliver positive outcomes and can even conceivably have negative effects.

**Why We Sort: Consumer Sovereignty and the Benefits of Homogeneity**

Income sorting is nearly universal, at least to some degree, and has been the subject of urban economics theory for decades. For example, researchers have long been interested in the tendency for most low-income Americans to live in central cities and older suburbs while upper-income Americans live farther away from downtown. Early explanations (e.g., Alonso 1964, Muth 1969) understood income sorting as the outcome of income-based differences in the marginal benefit to households of locations close to or far from the central business district (CBD). Empirical tests of this hypothesis found no such systematic income-based differences, however (Wheaton 1977), and international examples showed the opposite pattern: high-income families often live in the central city in Latin America, Asia, and Europe (see for example Brueckner et al. 1999). Differential ability and willingness to pay for amenities, public services, and high-quality durable housing are all likely to play a stronger role in residential sorting than income-based differences in preferences for the amount of land or housing consumed (Brueckner et al. 1999, Glaeser et al. 2008). Schools are especially important in residential sorting, not only among school districts but also among the attendance areas for individual schools within school districts (Davidoff and Lee 2008; Hayes and Taylor 1996).

Public policy is therefore deeply implicated in spatial sorting, but it interacts in important ways with household preferences. Since housing and neighborhoods are produced in a decentralized, market-based process in the United States, spatial sorting necessarily reflects at least some level of consumer demand for separation. Part of the separation happens purely on the basis of income, though within-race income separation appears to be attenuated by racial segregation. Racial segregation results in income mixing among Hispanics and blacks and allows greater income mixing even of whites than would occur in the absence of racial segregation. Some income-based separation also occurs on the basis of life cycle and household structure differences that correlate with income (Gans 1962). For example, single college graduates may prefer neighborhood and housing characteristics that differ from those sought by thirtysomething parents with two kids, and older households with mobility impairments may have yet another set of preferences. Households have become more diverse over time in the US in many ways, and part of the diversity of neighborhoods reflects this diversity of need and preference. In fact, under certain conditions homogeneous enclaves can generate positive benefits for residents without large social costs (Marcuse 2005).
The most persistent arguments in favor of spatial sorting are those coming from the public choice school of urban politics, researchers and theorists who follow Tiebout (1956) in their support for fragmented or decentralized metropolitan governance. From this viewpoint, decentralized government offers more choice to residents and fosters political participation (Ostrom, Bish, and Ostrom 1988, Schneider 1989, Barber 1984). Heightened participation and homogeneity also create disciplinary incentives for government: if residents and businesses become dissatisfied with what they receive for their taxes, they may very well move (Peterson 1981). They may also choose to stay but resist taxation or amenity provision, exercising their voice rather than their exit option (Hirshman 1971). Tiebout sorting may even have allowed the emergence of progressive coalitions in some cities that have built broad support for redistribution (Clavel 1986, De Leon 1993). In the process, these cities (including, for example, small cities like Berkeley, Burlington, and Santa Monica but also—at least for a time—Boston and San Francisco) have become places that attract and retain middle- and upper-income people and businesses whose support for diversity extends to their willingness to pay higher taxes to provide services for low-income households.

Evaluating the impacts of local government structure on social, economic, and environmental outcomes is notoriously difficult, however, because of the complexity of local government structure and variation in the rules among states and over time (Kim and Jurey 2013). The size and number of local governments, and the extent to which development occurs in municipalities (as opposed to unincorporated areas in townships or counties), varies greatly among metropolitan areas because of variance among state laws on incorporation, annexation, and local government structure and functions (Advisory Commission on Intergovernmental Relations 1993; US Census Bureau 2012). Special districts and school districts, which often cut across municipal and county boundaries, further complicate the analysis of the income profile of local governments; the specific package of taxes and service characteristics available to residents of a city may depend on their address, potentially causing systematic differences in property values, rents, and therefore resident incomes among sub- or multi-city areas (Jonas 1991; Foster 1999; Clapp, Nanda, and Ross 2008).

The debate about forms of local government and regionalism persist because sorting offers important benefits that, at least for some people, outweigh its costs. While they sometimes recognize that some communities need more public services than their tax bases can support, adherents to the public choice school favor redistribution from higher levels of government instead of income mixing or consolidated government (Tiebout 1956).

**Questioning the Benefits of Mixing**

While homogeneity does offer some benefits, mixing does not always offer the benefits its proponents expect. This is true at various levels. Efforts to improve the social mobility of low-income people by accommodating them in developments alongside higher-income people, for example, rarely result in the development of cross-class social ties that are one hypothesized mechanism to promote social mobility (Joseph et al. 2007; Rosenbaum et al. 1991, 1998; Brophy and Smith 1997; Kleit 2005; Buron et al. 2002; Tach 2009; Graves 2010). The “role model” hypothesis (Joseph et al. 2007; Wilson 1987; Brower 2009), too, has been questioned. Harding (2007), for example, found using nationally representative data that lower-income youth are exposed to more models of behavior on average than higher income youth, re-
sulting in a wider array of competing and conflicting cultural models and weaker congruence between youths’ stated ideals and their actual behavior. And although social ties are often a necessary precondition for strong neighborhood social control, they are not a sufficient condition because even if social ties are strong they may only be weakly related to action (Sampson et al. 1999; Pattillo-McCoy 1999; Wilson and Taub 2006).

Some observers even suggest that income mixing might not just fail to deliver the hoped-for benefits but actually harm low-income people. Some of the most heated debates about income mixing today revolve around potential negative impacts for incumbent low-income people when their long-poor neighborhoods attract new middle- and upper-income residents. In New York, Washington DC, San Francisco, Chicago, and many other big cities, upper-income households and young singles are transforming the character and complexion of well-situated neighborhoods whose low property values make them ripe for redevelopment (Smith 1996, Newman and Wyly 2006, Betancur 2002; Hyra 2008). Reductions in urban crime, changes in household structure and demographics, and perhaps changes in attitudes about living in the city have all made older working class and even poor neighborhoods more attractive, and now the pioneering households—attracting public and private investment in their wake—may help tip many neighborhoods from affordable and low-income areas to expensive ones.

Recent research underscores, however, that low-income renters move often even when their neighborhoods are not gentrifying (Coulton, Theodos, and Turner 2012). Under many circumstances, low-income households move into and out of gentrifying neighborhoods with the same frequency as they do other neighborhoods (Freeman and Braconi 2004, Ellen and O’Regan 2011), whether gentrification is measured by rising property values or household incomes. Central cities in the US have lost so much population in the past 40 years that most of them can accommodate population growth without direct displacement of low-income households. And evidently, at least up until recently, low-income incumbents have been willing to put up with higher housing costs in these neighborhoods. Whether this is because they are willing to pay for better services (Vigdor 2010) or because they cannot afford to move is still unknown.

Even if gentrification does not lead to displacement, the mix of incomes in cities and neighborhoods might produce other negative effects for low-income people. Researchers have found that having a lower income than one’s reference group increases stress and depression and undermines physical health (Parducci 1995; Eibner 2000; Deaton 2001; Long, Lynch, Machiran, Thomas, & Malinow 1982). If one’s neighbors constitute a meaningful reference group, the experience of relative deprivation compared to one’s neighbors could undermine psychological well-being for lower-income residents. Researchers have found partial support for the relative income hypothesis when applied to community context, finding that being comparatively affluent in one’s state, PUMA, or county is positively related to happiness and psychological well-being (Luttmer 2005; Blanchflower and Oswald 2004; Firebaugh and Schroeder 2009), but living in a census tract where one’s neighbors are comparatively poorer reduces psychological well-being; thus, as Firebaugh and Schroeder (2009) conclude, “it appears that individuals are happier when they live among the poor, as long as the poor do not live too close” (p. 805).
Living “too close” may also undermine overall social cohesion—or create the kind of toxic cohesion that arises within a group when it comes into conflict with another group. “Group threat” theory posits that close contact with other groups may lead to increased competition and reduced trust (Blumer 1958; Blalock 1967), while “group contact” theory argues that close proximity may yield greater understanding, tolerance, and trust, particularly among those of equal status (Allport 1954; Gaertner et al. 1996; Pettigrew and Tropp 2000; Gans 1961; Duke 2009). Evidence has been found to support both of these theories in the context of racial “out groups” (Quillian 1995, 1996; Bobo 1999; Taylor 1998). Experimental settings have offered a possible reconciliation: greater tolerance and trust result when out-group contact is meaningful—such as by working together toward a shared goal—rather than superficial (Aronson et al. 1978; Cook 1990; Slavin and Cooper 1999). Whether such theories and results apply to economic out groups in addition to racial out groups, or extend beyond the laboratory, has not been investigated systematically. It does, however, suggest that propinquity alone is a poor predictor of meaningful social relations (Briggs 1997, 2007); benefits to mixing are most likely to occur when diversity is organized into collaborative structures, such as school organizations or civic associations, that work consciously to bridge differences.

Even if income mixing does not create overt conflict, it might undermine neighborhood social control and organization through the erosion of social ties due to resident turnover, racial heterogeneity, and mistrust (Shaw and McKay 1942; Sampson and Groves 1989). Indeed, researchers have found that property crime rates are higher in neighborhoods with greater income inequality (Hipp 2007). And although social control is typically considered a positive community attribute that enhances safety and reduces crime, it may also result in the increased surveillance, alienation, and harassment of lower-income residents (Pattillo 2007; Graves 2010; Tach 2011; McCormick, Joseph, and Chaskin 2012), particularly in circumstances when race and income differences overlap. In light of these potential negative and disruptive effects of income mixing, Vale (2006) argues that greater social control can be achieved in entirely low-income communities through careful physical design, tenant leadership, and tenant selection; income-mixing is not required.

The Missing Middle? Districts as a Neglected Scale for Income Mixing Policy and Research

The review above shows that current theory on the costs and benefits of income mixing has been focused at the micro and the macro scales but not between. At the neighborhood and development level, advocates for income mixing hope it will bring stability, positive role models, and new investment to low-income neighborhoods and long-term opportunity for low-income people in gentrifying or upper-income areas. At the level of metropolitan areas, advocates for regional equity hope that mixed-income cities will deliver greater net social, economic, fiscal, and environmental benefits for everyone, especially redounding to the benefit of lower income people. The caveats and concerns about income mixing and the benefits of homogeneity, however, suggest that an intermediate level, which we call the district, may offer an important additional scale for intervention and measurement in efforts to create more equitable metropolitan areas. Concern with this intermediate spatial scale of income sorting has parallels with earlier work on the dimensions of racial segregation (Massey and Denton 1988; Massey, White, and Phua 1996).
What is a district, and how does it differ from a neighborhood? According to some definitions, “neighborhoods” are predominantly residential areas with some level of internal coherence (Tatian et al. 2012). Individual definitions of “neighbors,” research on residential preferences and tolerances for the characteristics of neighbors (Farley et al. 1978, 1993), and research on “neighbor networks” (Grannis 2009) all suggest that neighborhoods stop at busy streets, large open spaces, rivers, industrial areas, and other interruptions in the walkable street grid. Districts, as we see them, are one level beyond the neighborhood. Their constituent neighborhoods—which may be either similar to one another or quite different—share important civic and commercial spaces and transportation facilities: elementary schools, small shopping districts, medium-sized parks, bus stops, and so on. Income mixing can arise within districts even when their constituent neighborhoods or developments are internally homogeneous. For the purposes of this report, we outline the conceptual notion of the district and highlight its potential utility to mixed-income theory and policy; there is a clear need for a research agenda that defines empirically the appropriate size and boundaries of districts, which we discuss in greater detail in the conclusion.

Income-mixing at the district level may influence the type, quality, and diversity of institutions involved in the provision of goods and services for routine daily activities. Because income mixing is not typically measured at the district scale, its incidence and impacts have not been systematically studied to the extent that development- and neighborhood-scale mixing have. Theoretically, however, district-scale income mixing can benefit low-income people—even if their developments or neighborhoods are homogeneous—by raising the quality of public and private goods and services to which they have access, from public safety to shopping to education and transportation facilities.

Mixed-income districts may also attract amenities and increase interaction among people from a range of incomes, especially at areas called social seams: points in the community where groups are sewn together through shared use of institutions and resources (Jacobs 1961, Nyden et al. 1998). These common resources may include, for example, grocery and retail shops, schools, parks, community colleges, non-profit organizations, recreation centers, child care centers, libraries, or other institutions.

The presence of higher-income residents within a district could generate market demand and political pressure for higher quality goods and services. Higher income residents have strong voices and an ability to pay for higher-quality amenities, to which the public and private sector may respond, creating positive externalities for lower-income residents who might benefit from these higher-quality institutions and amenities. In addition, district-level actors, such as civic associations, small business owners, and realtors, can organize on behalf of the district. Recent studies of low-income residents’ residential mobility decisions in the face of neighborhood upgrading (i.e., increases in income) affirm the correlation among increased incomes and amenities (Ellen and O’Regan 2011). They also suggest that as neighborhood incomes increase, established tenants are more likely to stay than those in neighborhoods with more stable incomes. The authors presume that this reflects the value placed by low-income tenants on the amenities, safety, or other characteristics of the upgraded neighborhood.

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1 Such engagement is not always benign; often it entails conflict. We return below to the importance of policy for brokering and resolving conflict in the process of increasing income mixing.
Income diversity within a district may also lead to conflict and contention over the types of goods and services provided, however, and the mere presence of such amenities and institutions does not necessarily translate into equal utilization if lower-income residents are deliberately or inadvertently excluded from them (Chapple and Jacobus 2009). Freeman (2006) found evidence for both of these outcomes in his analysis of low-income residents’ views of their gentrifying neighborhoods in New York City. Many of the residents Freeman interviewed appreciated the new retail investment that accompanied the influx of affluent residents to their neighborhood, particularly new supermarkets and drug stores. However, residents were also quick to point out that not all businesses catered to their tastes or price points, and some residents even reported resentment of new businesses that they felt priced out of. Some goods and services attracted by higher-income residents may offer new conveniences for all, but certain types of businesses signal subtle (and even not so subtle) forms of exclusion as well.

Because proximity and contact are less intense in larger districts than in smaller neighborhoods, some interpersonal tensions that may arise from extremely close contact within neighborhoods, developments, or even within buildings may be mitigated by income-mixing at the district level. In other words, the net benefits of this “close but not too close” type of income-mixing may exceed those of “right next door” income mixing in neighborhoods. For example, weak ties may be forged in the social seams within a district—such through connections at a school or childcare center—while some of the interpersonal tensions related to neighbors’ lifestyles and behaviors may be mitigated (Chapple 2001; Small 2009). Of course, some of the purported benefits of close proximity may be mitigated at the district level as well and the benefits are contingent on residents’ ability to access (in both the physical and social sense) resources in different neighborhoods.

These questions are ripe areas for empirical research, leading us to suggest deeper assessment of income mixing. Here we simply point out that the issue of the appropriate scale of optimal income-mixing still has a missing middle—a level that could become an important meeting point for policies aimed at the neighborhood and metropolitan scales.

**Trends in Income Mixing and the Concentration of the Rich**

In this section, we review literature about income homogeneity and mixing: how serious it is in relationship to racial segregation and how it has changed over recent decades. The section also provides new results about income mixing with reference to indices at a variety of scales, from neighborhood (tract) to district (adjacent tracts) to jurisdictions.

**Recent Research about Levels of Income Segregation and Mixing**

Despite the concern about concentrated poverty and income segregation, many neighborhoods have residents with a wide array of incomes. In 2000, about 20% of census tracts—or about one tract in five—were mixed-income, with a substantial representation of families with both very low incomes (< 50% area median income) and high incomes (> 200% area median income) (Tach 2010). This makes mixed-income neighborhoods more common than high-poverty neighborhoods; they are also about as common as mixed-race neighborhoods, which Ingrid Ellen (2000) found constituted about one-fifth of census tracts in 1990.
Even so, many observers are concerned because the number of mixed-income neighborhoods has declined while income segregation has increased since the 1970s by virtually all indicators (Jargowsky 1996, 2003; Mayer 2001; Massey and Fischer 2003; Wheeler and La Jeunesse 2006; Watson 2009; Reardon and Bischoff 2011). Income segregation grew sharply during the 1980s and more modestly during the 1990s and 2000s (Jargowsky 2003; Massey and Fischer 2003; Yang and Jargowsky 2006; Reardon and Bischoff 2011). The growth in income segregation was distributed unevenly among groups, however, increasing more among black and Hispanic families than it did among white families (Jargowsky 1996; Massey and Fischer 2003; Watson 2009; Yang and Jargowsky 2006; Reardon and Bischoff 2012). At the neighborhood level, this has translated into a declining number of middle- and mixed-income neighborhoods and a growing number of homogeneously poor and affluent neighborhoods (Reardon and Bischoff 2011b; Tach 2010; Galster et al. 2007, 2009; Brophy et al. 2008).

Concentrated poverty has increased over the past four decades. In metropolitan areas, the percent of residents in “high-poverty” neighborhoods (census tracts with over 30 percent poor residents) increased from 6.4 percent to 9.1 percent between 1970 and 1990 (Pendall et al. 2011). In the 1990s, the percentage of residents living in high-poverty neighborhoods declined to about 7.2 percent (Jargowsky 2003; Kingsley and Pettit 2003). Since 2000, however, the percent and number of people living in high-poverty neighborhoods increased again. By the second half of the decade, nearly 12 percent of metropolitan-area residents—nearly 30 million people in all—lived in high-poverty neighborhoods. Among these, 9.2 million lived in tracts with “extreme poverty” rates of 40 percent or more (Pendall et al. 2011). Trends in exposure to high poverty neighborhoods reflect not only patterns of residential mobility into and out of high poverty neighborhoods, but also the changing incomes of neighbors among non-movers (Briggs and Keys 2009).

Although policy and academic discourse has made much of the growing concentration of poverty and its ills, the rich are considerably more segregated from the non-rich than the poor are from the non-poor (Reardon and Bischoff 2011; Massey 1996). Concern over concentrated poverty is certainly warranted, given that the segregation of poverty has increased since 1970—growing rapidly in the 1970s, declining in the 1990s, and increasing again slightly during the 2000s (Jargowsky 1997, 2003; Kneebone et al. 2011; Pendall et al. 2011). The segregation of affluence is considerably more extensive and grew much more over this time period than the segregation of poverty (Reardon and Bischoff 2011). And while the concentration of poverty declined during the 1990s, the concentration of affluence grew substantially.

The spatial structure of income segregation is also significant from a policy perspective: income segregation (and its growth) are primarily due to the large-scale segregation of the affluent, with the rich increasingly clustered in specific metropolitan areas and specific jurisdictions within those metropolitan areas (Fischer et al. 2004; Reardon and Bischoff 2011; Dwyer 2010). Beyond reducing the odds of cross-class contact, the segregation of the affluent may reduce their support for investments in public goods that benefit cities or support regional integration; it also may reduce the chances that less-affluent resi-

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2 The exact timing and magnitude of the increase in income segregation varies across measures of segregation and across metropolitan areas (Jargowsky 1996, 2003; Mayer 2001; Massey and Fischer 2003; Wheeler and La Jeunesse 2006; Watson 2009; Reardon and Bischoff 2011).
Students will benefit from the positive spillovers of public goods in affluent areas, like schools. Little of the rise in income segregation was due to growth in smaller-scale income sorting of the rich and poor into different neighborhoods within the same jurisdiction. As a result, poverty deconcentration during the 1990s brought the poor in closer proximity to middle-income and near-poor households without displacing large numbers of poor residents (Freeman 2005; Vigdor 2002; McKinnish et al. 2010; Ellen and O’Regan 2011). However, it did not bring the affluent into greater contact with either middle-income or poor households (Dwyer 2012).

Although measures of income segregation reflect the large scale distribution of households across neighborhoods at a point in time, they reveal little about the stability of particular neighborhoods over time. This is an important consideration if one is concerned with stable income mixing. Analyses that track mixed-income neighborhoods over time have found that they are less economically stable than more economically homogenous neighborhoods, experiencing larger changes in average income, proportion poor, and proportion affluent (Tach 2010; Krupka 2008). Closer analysis of economic change in mixed-income neighborhoods reveals that the instability results both from forces of economic improvement and decline. As a result, less than half of mixed-income neighborhoods remain stably mixed over the course of a decade, and only 18% remained stably mixed from 1970 to 2000, whereas over half of high poverty neighborhoods remained that way (Tach 2010). Trends in the stability of mixed-income neighborhoods reflect growing income inequality in the US and differ in important ways from the growing prevalence and stability of racially diverse neighborhoods (Ellen 2001). A key policy challenge, then, is to not just create mixed-income neighborhoods but to sustain them. We discuss the ways in which policy has been able to do this in more detail below.

**Economic Forces and Enabling Policies**

The rise in income segregation since the 1970s resulted from a combination of broad economic and social forces and enabling policy environments. Since the 1970s, income inequality in the United States has grown, with the upper tail of the income distribution pulling away from the rest (Piketty and Saez 2003; Autor et al. 2006). More unequal places also tend to be more segregated (Mayer 2001; Watson 2009), with some estimates suggesting that rising income inequality was responsible for 40-80% of the growth in income segregation between 1970 and 2000 (Reardon and Bischoff 2011).

Wilson’s account attributes the growth in poverty concentration to the macroeconomic forces of deindustrialization, which reduced the economic fortunes of low-skilled workers, combined with policies that promoted middle class suburbanization and development, reduced aid to cities, and further concentrated housing for the poor in disadvantaged urban areas. The deconcentration of poverty during the 1990s has been attributed to a modest reversal of these trends, with a strong economy that boosted incomes among disadvantaged populations as well as housing policies that promoted scattered-site and mixed-income development (Ellen and O’Regan 2011; Dwyer 2012). These trends were somewhat offset by growing concentrations of poverty in some inner-ring suburbs, however (Kingsley et al. 2003; Knee-bone and Berube 2013).

Likewise, the growth in large-scale income segregation of the rich was fueled by urban decline and infrastructure investment outside of cities, which promoted the development of suburban (and later exur-
Land use regulations adopted in these developing areas restricted residence to middle class and affluent households by making housing more costly and by segregating different housing types (Nelson et al. 2004a). Residential zoning regulations promoted segregation by dictating that single-, multi-family, and apartment complexes be separated and raised the price of housing by setting minimum standards for house size, lot size, and density (Pendall 2000a). The costs of housing construction were further increased by impact fees that required new developments to pay the costs of providing public services and by growth controls that instituted building permit caps and construction moratoria. These regulations restricted the construction of higher-density, rental, and lower-cost housing that would be accessible to lower-income households, thereby contributing to rising income segregation (Pendall 2000b).

Policy efforts have focused primarily on deconcentrating the poor through housing and income supports. These efforts have been more successful at integrating the poor with the near-poor than at integrating the rich with anyone else, and they have been more successful at creating mixed-income neighborhoods than at sustaining them. If one is concerned with potential negative externalities resulting from the primary driver of rising income segregation—the concentration of affluence—policy efforts must attend to the fact that, in many metropolitan areas, this segregation occurs mainly across large-scale jurisdictions rather than specific neighborhoods within jurisdictions, and must adopt income integration practices that span these large-scale jurisdictional boundaries.

**New Measurement of Income Inequality in Tracts, Districts, and Jurisdictions**

Past income mixing studies have relied on census tracts to stand in for neighborhoods. Tracts are US Census administrative reporting zones that contain about 4,000 people (though the populations vary widely around this target). In densely populated urban areas, this population-based definition yields tracts that are relatively small geographically, while census tracts in less populated suburban and rural areas are much larger geographically. Tracts are common units of analysis because of the large amount of readily available data on them, but they have been criticized for being either too large or too small (depending on population density) to adequately proxy neighborhoods and for having boundaries that do not reflect residents’ lived experiences, daily routines, and resources available to them (see, for example, Grannis 2009). In this section, therefore, we explore two measures to bring other scales into the picture and relate them with one another.

To understand inter-jurisdictional inequality in metropolitan areas and its relationship to tract-level sorting, our first measure identifies metropolitan areas where jurisdiction-scale inequality is particularly pronounced, called the **jurisdiction-tract Gini ratio**. Here, jurisdictions are defined as incorporated local governments primarily responsible for budgetary resources—in some states, these are minor civil divisions (MCDs) and in others they are incorporated places. We situate jurisdictions within broader metropolitan areas to understand the extent of large-scale spatial sorting by income. This ratio allows one to distinguish metropolitan areas where income inequality is concentrated primarily among jurisdictions (i.e., at a large spatial scale) from those whose income inequality is concentrated primarily among neighborhoods (census tracts) within jurisdictions (i.e., at a small spatial scale).
We then demonstrate the utility of focusing on income mixing at the intermediate spatial scale of the district. Our second measure, the ordinal entropy index, has been used in past research (Tach 2010; Galster and Booza 2007) to explore income mixing within census tracts, but we take it to a geographic scale one step above the census tract in the Washington and Baltimore metropolitan areas to see whether income mixing is more pronounced in districts than in tracts. Unlike the Gini index used above, which measures the inequality, or concentration, of income in certain areas, the entropy index measures the diversity, or equal spread, of income.

**The Jurisdiction-Tract Gini Ratio: Measuring the Spatial Scale of Income Inequality**

Just as it is used to study inequality among individuals within certain geographic units, the Gini coefficient can be used to study inequality among neighborhoods or among jurisdictions in a given geographic area. We construct Gini coefficients of inequality in average household income among census tracts within each Core Based Statistical Area (CBSA) in the US (which includes both metropolitan and micropolitan areas), which measure how unequal average incomes are among tracts. We also construct Gini coefficients of inequality in per-household income across the jurisdictions within CBSAs, which measure how unequal average incomes are among jurisdictions. We use these among-tract Gini coefficients (that measure inequality among neighborhoods) and among-jurisdiction Gini coefficients (that measure inequality among jurisdictions) to construct a jurisdiction-tract Gini ratio, which is the ratio of income inequality among jurisdictions to income inequality among tracts.

**Scenario A: High Jurisdiction-Tract Gini Ratio**

To understand the intuition behind this measure, consider a hypothetical metropolitan area with two jurisdictions, each containing four neighborhoods. The blue neighborhoods have average household incomes of $100 each, while the white neighborhoods have average household incomes of $0 each. In Scenario A, this hypothetical metropolitan area is characterized by a high level of inequality among jurisdictions, but a high level of equality among tracts within those jurisdictions. Jurisdiction 1 has an average household income of $100 and Jurisdiction 2 has an average household income of $0, yielding a Gini coefficient of 1, or maximum inequality where all the income is concentrated in one jurisdiction. But within each jurisdiction, the Gini coefficient is 0, or maximum equality where incomes are the same among all neighborhoods. In this case, the jurisdiction-tract Gini ratio would be maximized because inequality among jurisdictions is high relative to income inequality among tracts.

**Scenario B: Low Jurisdiction-Tract Gini Ratio**
In Scenario B, the hypothetical metropolitan area is characterized by a high level of inequality within each of the two jurisdictions. In both jurisdictions, one neighborhood has an average household income of $100 and the other three neighborhoods have average households incomes of $0, yielding Gini coefficients among tracts of 1, or maximum inequality. Despite this high level of inequality among neighborhoods within a jurisdiction, the jurisdictions themselves are very equal: both have mean household incomes of $25, yielding a Gini coefficient of 0 or complete equality of income. In this scenario, the jurisdiction-tract Gini ratio would be minimized because inequality among jurisdictions is low relative to income inequality among tracts.

As these hypothetical examples suggest, the jurisdiction-tract Gini ratio can be used to identify areas where income inequality occurs on a large geographic scale—among jurisdictions—and areas where income inequality occurs on a smaller geographic scale—within jurisdictions. In the former case, income segregation results because the rich and poor are sorting into different jurisdictions, suggesting that efforts to reduce income segregation will require movement of rich and poor into different jurisdictions (or redistributive policies to that effect). In the latter case, income segregation results because the rich and poor are sorting into the same jurisdictions but different neighborhoods within those jurisdictions, suggesting that efforts to reduce income segregation will require the movement of rich and poor into different neighborhoods but not necessarily across jurisdictional boundaries.

We calculated the jurisdiction-tract Gini ratios for the 50 largest metropolitan areas in 1990, 2000, and 2005-2009, shown in tables 1 through 3. Starting with the most recent 2005-2009 results, we rank the metropolitan areas from highest to lowest on their Gini ratios. With one of the highest ratios, at 1.223 in 2005-2009, the Louisville-Jefferson County CBSA has more income inequality among different jurisdictions than it does among different neighborhoods. (Louisville is also an interesting case because it merged with Jefferson County in the early 2000s.)

The spatial patterning of income inequality in the Louisville metro area, as seen in figure 1, shows that there is one jurisdiction in particular (located in Oldham County) with a very high average household income of over $100,000, while the rest of the jurisdictions have moderate household incomes in the $50,000 range. Within each jurisdiction, however, household incomes tend to be relatively homogeneous (with the exception of the city of Louisville, which has a disproportionate share of low-income households relative to the rest of the MSA). Outside Louisville and Oldham County, the rest of the jurisdictions in the MSA have median household incomes in the $50-$60,000 range.
On the other hand, with one of the lowest ratios, at 0.456, the New Orleans CBSA has considerably more inequality among its neighborhoods than it does among its jurisdictions.
This spatial patterning of income inequality reflects a “mosaic” pattern with census tracts of high and low average incomes in close proximity to each other within the parishes of Orleans, Jefferson, St. John, and St. Bernard. This is shown in figure 2. The parishes themselves have very similar mean incomes, in the $50-$60,000 range, but these averages conceal a great amount of heterogeneity (or inequality) in incomes within the parishes.

One potential contribution of the jurisdiction-tract Gini ratio is that it can be used to identify geographic areas, like the Louisville metropolitan area, where there is a great deal of inequality among jurisdictions, but not among neighborhoods (resulting in a very high Gini ratio), pointing to the need for policy strategies to reduce income inequality among jurisdictions rather than inequality among neighborhoods—this is the case for Louisville. It can also be used to identify geographic areas where most income inequality is among neighborhoods rather than among jurisdictions (resulting in a very low Gini ratio), pointing to the need for policy strategies to reduce income inequality at the neighborhood scale within jurisdictions; this is the case for parishes in the New Orleans metropolitan area.

The Gini ratio can also track changes over time. Tables 2 and 3 show the Gini ratios for the 50 largest CBSAs based on tract data from the 2000 and 1990 decennial Censuses, and figure 3 shows a scatterplot...
of Gini ratios in 1990 and 2005-09 for the 50 largest CBSAs. Overall, Gini ratios declined slightly between 1990 and 2000, driven by small increases in inequality among neighborhoods and small decreases in inequality among jurisdictions, and then held steady between 2000 and 2005-09. There was also a great deal of stability among the rank order of metropolitan areas over time. Seattle, Louisville, and Indianapolis, for example, maintained high Gini ratios in each decade, while New Orleans, Las Vegas, and Virginia Beach maintained low Gini ratios in each decade.

Figure 3. Jurisdiction-Tract Gini Ratios for 50 Largest CBSAs in 1990 and 2005-2009

The Gini ratio can also be used to identify metropolitan areas that have experienced changes in their Gini ratios over time. For example, the largest increase in the Gini ratio occurred for the Oklahoma City metropolitan area. This occurred because the counties, and their constituent tracts, surrounding Oklahoma City became considerably more affluent over this time period. There was a modest amount of heterogeneity in low-to-moderate incomes in the surrounding counties in 1990, reflected in the 1990-among-tract Gini of 0.237. The average incomes in these tracts increased in the ensuing decades, while the incomes in neighborhoods within Oklahoma City itself did not rise. This resulted little change in the within-jurisdiction Ginis (which increased slightly to 0.256 in 2005–2009—an increase of 8%), but growing inequality among jurisdictions, with the among-jurisdiction Gini rising 21%, from 0.237 to 0.287 in 2005-2009, particularly between Oklahoma City and its surrounding suburbs. This resulted in a growth in the Gini ratio from 1 to 1.123, a growth of 12%.

In contrast, the largest decrease in the jurisdiction-tract Gini ratio occurred for the San Jose-Sunnyvale metropolitan area, which saw its Gini ratio fall from 1.325 in 1990 to 1.076 in 2005-2009. This decline of 19% was driven by a slight increase in inequality among neighborhoods (from 0.188 to 0.207) and a comparatively large decrease in inequality among jurisdictions (from 0.245 to 0.223, a decline of about 10%). This decline was primarily driven by large increases in household income in San Jose over the time period, which reduced inequality between San Jose and other wealthier surrounding areas.
In sum, the Gini ratio can be used for several purposes relevant for policy:

- Identifying areas with exceptionally high inequality among jurisdictions relative to neighborhoods. These areas are places where efforts to increase income mixing and reduce income segregation will require redistributing the balance of rich and poor across jurisdictional bounds. This calls for a distinct set of large scale, regional housing policies (or other economic development policies).

- Identifying areas with exceptionally high inequality among neighborhoods relative to jurisdictions. These areas are places where efforts to increase income mixing and reduce income segregation will require redistributing the balance of rich and poor within jurisdictional boundaries. This calls for a more neighborhood-based set of policies to incorporate low-income households in high income neighborhoods and vice versa (or other local economic development policies, like job creation) that can be accomplished within certain jurisdictions in the metro area.

- Identifying areas with balanced levels of inequality among and within jurisdictions, particularly when Gini coefficients among neighborhoods and jurisdictions are both low. These areas might serve as case studies for best practices to interrogate what combination of housing and labor market policies has produced a balanced mix of rich and poor across neighborhoods and across jurisdictions. It is also possible for a Gini ratio to be balanced (i.e., near 1) because Gini ratios among neighborhoods and tracts are both high. In these cases, policy efforts would have the dual challenges of regional and local redistribution of the rich and poor.

- The Gini ratio could also be used to track the progress over time of particular policy interventions aimed at reducing inter-jurisdictional or within-jurisdictional inequality.

- On a broader scale, the Gini ratio can be used to identify the historical and contemporary demographic, economic, land use, and governance features of metropolitan areas that produce low or high income segregation at large geographic scales.
Income Mixing at Medium Geographic Scales: Within Districts

The census produces pre-tabulated income information at the census tract and metropolitan level, and these geographic units are utilized often. However, as described above, people often make choices about whether to move to a particular neighborhood based on the quality of surrounding neighborhoods and the services they offer. If a family cannot afford to live in neighborhood A, they may instead choose to move to neighborhood B if it is very close or adjacent to neighborhood A. In this case, the family is hoping to get some of the benefits of living in neighborhood A, such as good schools or transit access, while actually living in neighborhood B.

As we noted above, the boundaries of districts are difficult to define and there is little precedent in existing literature. We outline a research plan to fully explore various ways to define districts at the end of this report, but to illustrate the potential benefits of measuring geographic units at this scale, we create measures of “districts” as the half-mile radius around the centroid of each census tract within a given CBSA. We selected the half-mile radius based on the convention in land-use planning that neighborhoods ought to have a radius of about a quarter mile, placing all residents within a five- to 10-minute walk of an elementary school (Perry 1929) or a transit stop (Calthorpe 1989). By extending this radius from a quarter-mile to a half-mile, we select census tracts that might share the “social seams” (Nyden 1998) located between neighborhoods. We use the population of households within the half-mile radius to construct measures of district-level income mixing for each tract. Each tract has its own district-level measure of income mixing because there are seldom situations in which two tracts share all the same neighbors.3

We measure income mixing using the ordinal entropy index (Reardon et al. 2006; Galster and Booza 2007):

$$E_i = -\sum_{m=1}^{M} \left[ c\pi_{im} \log z(c\pi_{im}) + (1 - c\pi_{im}) \log z(1 - c\pi_{im}) \right] / (M - 1),$$

where $\pi_{im}$ is the cumulative proportion of individuals in income groups 1 (lowest) through $m$ (highest) in district i. The minimum value is 0, which occurs when the income distribution is as homogenous as possible (when all residents in the district fall in a single income group). To demonstrate this, we have created four scenarios represented by figures 4 through 7. It is important to note that two areas could have the same average income but two very different entropy scores based on the amount of income dispersion. Conversely, two areas could have very different average incomes but the same amount of income dispersion, as is the case in Scenario One (with all households in the lowest income bracket) and Scenario Two (with all households in the highest income bracket) shown below. In both cases, the entropy index would be 0, despite very different average incomes.

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3 It is theoretically possible for this to occur in boundary situations when tracts are very large. This measurement convention, where each tract has its own district-level measure, means that, unlike tracts, districts are not mutually exclusive geographies.
At the other extreme, the maximum value of the entropy index is 1, which occurs when the income distribution is as bimodal as possible (when the lowest and highest income groups each contain 50% of the district). This income distribution is displayed in Scenario Three.4

4 The entropy index is distinct from the Gini measure of inequality, which is maximized when a single entity holds all the wealth and everyone else has none; this case would have a low entropy score since there is little income mixing.
Figure 6. Scenario Three: Equal Distribution of Households within the Highest and Lowest Income Brackets

When households are spread evenly across all income brackets, the entropy index is about 0.86. This income distribution, shown in Scenario Four below, represents a truly income diverse area, with equal representations from all parts of the income distribution. This is reflected in an entropy index value that is high, but not quite as high as in the ‘bipolar’ Scenario Three above.

Figure 7. Scenario Four: Equal Distribution of Households across All Income Brackets
Comparing district entropy indices to tract entropy indices provides information about areas in metros where income mixing is low within tracts but higher within districts, indicating areas with homogenous neighborhoods but diverse districts. Conversely, it can also identify areas where mixing is high within districts and tracts, indicating areas where mixing is prevalent at both small and medium geographic scales. Finally, it can identify areas where there is little mixing at either the tract or district level.

We illustrate the utility of this approach using the Baltimore and Washington DC CBSAs, using income data from the 2007-2011 American Community Survey. Within tracts in the dense central city area of Baltimore, two clusters of somewhat homogenous tracts are surrounded by a ring of more diverse tracts (figure 8). Many diverse or bimodal tracts are located farther from the CBD. When measured at the district level (figure 9), the pattern becomes more pronounced: the central city contains a well-defined cluster of more diverse tracts, with a large group of diverse districts radiating from the center into the northwestern part of the metro area. Along Chesapeake Bay and on the western outskirts of the CBSA, the districts are more homogeneous.

The most diverse tracts in Washington, DC (figure 10), too, are concentrated in the central city area. Washington contrasts with Baltimore, however, in that it also has a ring of diverse tracts on the outskirts of the CBSA. Tracts are more homogenous in between. Again, a few homogenous tracts are ringed by more diverse tracts. Diverse districts again concentrate in the central city, with a ring of more homogenous tracts surrounding them. Outside the central city, the most diverse districts are clustered on the western outskirts of the CBSA on the Virginia side.

Anticipating the discussion about districts in the next section of this paper, we zero in on two suburban developments in the Baltimore and Washington CBSA whose designers aimed to create diversity through land-use planning. Clarence Stein and James Rouse planned Greenbelt and Columbia, respectively, as mosaics of small residential areas, each one internally homogeneous but differing from nearby neighborhoods. Each of these developments used social seams (schools, shopping centers, and civic buildings) and open space as elements to allow for encounters between people of different income levels (and in Rouse’s case, different races). Columbia, in Howard County south of Baltimore, stands out from other new suburbs south of Baltimore for having three diverse tracts and five other tracts in the middle of diverse districts (see figures 8 and 9). Greenbelt does not attain as high a level of income diversity at either the tract or the district level according to these statistics (see figures 10 and 11).
Figure 8. Tract entropy index, Baltimore CBSA, 2007-11
Figure 9. District entropy index, Baltimore CBSA, 2007-11
Figure 10. Tract entropy index, Washington, DC CBSA, 2007-11
Figure 11. District entropy index, Washington CBSA, 2007-11

Washington D.C. CBSA | Ordinal Entropy Index by District (2007 to 2011)

- Low diversity (0.55 or less)
- Moderate diversity (0.55 - 0.70)
- High diversity (0.70 or more)

Greenbelt, MD

City of Washington D.C.
Residential density has a significant impact on these statistics when measured at the district level. Figure 12 shows that the half-mile radius used to identify districts creates much larger population bases in central-city locations—where housing is built at highest densities and tracts are accordingly smaller—than in suburbs and exurbs. Interestingly, the President’s census tract is at the center of one of the metropolitan area’s most income-diverse districts; within a half-mile of the center of the tract, there are over 12,000 households who earned less than $30,000 on average between 2007 and 2011 and over 9,000 who earned over $200,000, plus even more who earned between $75,000 and $125,000. Central-city districts are more diverse than suburban ones, at least as we have defined them, because even if each central-city neighborhood were as homogeneous as a suburban neighborhood (which is rarely the case), central-city neighborhoods could have a larger number of “differently homogeneous” neighborhoods in their districts than suburban neighborhoods could.

Figure 12. Income diversity in central districts is partly a product of density, Washington, DC

Implications
In summary, our review has shown that while concentrated poverty is a serious and growing problem, income homogeneity per se is not a problem of the same magnitude. To the extent that it has been growing, it is a consequence of rising incomes at the top of the income distribution rather than increasing isolation at the bottom of the distribution. Moreover, low-income neighborhoods are still located
mainly in the central city and not in the suburbs, meaning that they are built at higher densities and therefore closer to middle- and even upper-income neighborhoods than suburban and exurban neighborhoods are. Meanwhile, wide swaths of suburbia are dominated by low-density, homogeneous tracts. Some of these are affluent areas not only at the neighborhood scale but are surrounded by huge contiguous areas of similarly affluent neighborhoods spanning multiple jurisdictions. Indeed, Washington, DC—one of our two case-study areas—was recently identified as the metropolitan area with the largest number of people living in contiguous zip codes in which educational levels and incomes are close to the top of the national distribution (Morello and Mellnik 2013).

Concentrated poverty is a problem that should be named directly and addressed in full, not just with development- or neighborhood-level “income mixing” strategies that fail to account for the broader urban context. Some approaches may be appropriate in dense high-poverty enclaves surrounded by mixed-income neighborhoods—especially when the regional housing market is strong—that would not work well in low-income neighborhoods within extensive low-income districts. For example, market demand in areas surrounding high-poverty enclaves may be strong enough that simply constructing high-quality market rate units will attract higher income residents, while high-poverty neighborhoods in lower-income areas may require additional incentives (e.g., tax abatements) or broader economic development plans to attract more affluent residents.

Exactly how to address income homogeneity in mostly wealthy areas—whether enclaves or broader geographic areas—is at least as big a challenge as improving conditions for people living in high-poverty neighborhoods. There is a distinct lack of consensus that the “secession of the successful” (Reich 1991) is even a problem. Ironically, many of the counties in the Washington and Baltimore areas with such broad and homogeneous areas of affluence have adopted policies of inclusionary zoning, which encourages income mixing and is a sign that some residents do consider homogeneously rich neighborhoods problematic. These counties also, however, have open-space protection measures that create expanses with large minimum lot sizes, which in turn attract developers of homes for the wealthy and well-educated households who can afford to live there. The regional economy ultimately creates this pressure by producing large numbers of jobs for people employed as defense contractors, lawyers, lobbyists, and other components of the upper echelon of work for the national government.

Finally, these issues of income mixing require examining the overlay of race. The homogeneously low-income parts of both Baltimore and Washington, central-city and suburban alike, are predominantly black. Both regions are divided by race at the metropolitan scale, not just in central cities versus suburbs, and this racial division creates and reinforces income sorting at geographic scales well beyond the neighborhood or the district. For example, in Washington, a north-south dividing line extends deep into the suburbs. Prince George’s County, Maryland, east of the District, is a majority-black county whose income rose even as it transitioned from being mostly white (Lacy 2009). While Prince George’s income distinguishes it from other black suburbs, it is closer to that of the District of Columbia than of neighboring Montgomery County: Prince George’s median was $73,447 in 2007-11, compared with $61,835 for the District and $95,660 for Montgomery County. Income sorting in suburban America happens not only at the scale of individual neighborhoods but at the metropolitan scale, perhaps more so in areas like Washington and Atlanta that are dominated by county-level governments and school districts. Many
actors in the process that creates suburbia—from parents, to homebuilders, to office park developers, to infrastructure builders—respond to the presumed “quality” of whiter suburban school districts by directing more wealth and investment to those districts. Meanwhile, even wealthy black areas like Prince George’s County struggle for investment. These observations of Washington and Baltimore suggest a need for continued attention to the role of race in income mixing at all scales.

Policy Strategies to Promote Income Mixing
In this section, we review the effectiveness of housing policies at creating sustainable income mixing at different geographic scales—developments, neighborhoods, districts, and jurisdictions. The policy levers best suited for promoting income mix differ depending on whether the goal is to create a new community, attract more affluent residents to existing lower-income areas, bring low-income households into more affluent areas, or to preserve existing income mixing in the face of gentrification or neighborhood decline. The effects of income mixing on individual- and community-level outcomes is highly contingent on other, non-income, factors, which means that mixed-income policy requires a tailored, rather than a formulaic one-size-fits-all, approach.

Mixed-Income Developments
Mixed-income developments can range from very small (10 or 20 dwellings) to very large (hundreds of units). They almost always include multifamily units in one or more buildings; they often feature townhouses and duplexes, and some even have detached homes. Depending on the site plan and the mixing of affordable and market-rate units, residents of such developments can live in very close proximity to one another, experience a common property management, and share private amenities and spaces. Some, but not all, mixed-income developments include market-rate units. Even when they do, their market-rate rental units may be occupied by tenants with Housing Choice Vouchers or residents with incomes only marginally higher than their neighbors receiving shallow subsidies. Consequently, a mixed-income development may not always be occupied by households with a very wide mix of incomes; it may be a mix of low and middle incomes rather than a mix of low, middle, and high or low and high incomes. Sometimes it can even end up as an entirely low-income development (see National Initiative on Mixed Income Communities 2013 for a more comprehensive description of mixed-income developments).

Mixed-income developments and neighborhoods put residents of different incomes in close physical proximity to one another, creating opportunities for interpersonal observation and interaction. In the process, they provide the basis for the micro- and small-group processes—peer effects, social cohesion, and social capital development, for example—described above. They also make it more likely that low-income people will enjoy the public services and amenities usually available to non-poor neighborhoods and developments. Levy, McDade, and Dumlao (2013) provide an extensive review of the mixed-income literature and factors for success at the level of developments and neighborhoods.

Numerous subsidies and tax incentives exist for the construction of housing developments that contain a mix of market rate and subsidized units, which typically (though not always) creates a mix of resident incomes. The federal HOPE VI program, one of the more visible and controversial policies to create
mixed-income developments, was enacted during the 1990s to demolish distressed public housing projects and replace them with mixed-income, mixed-finance developments. (It has now transitioned into HUD’s Choice Neighborhoods program.) Local housing authorities, developers, and other stakeholders partnered to finance, construct, and manage the developments with HOPE VI grants used to leverage additional financing. The resulting developments vary widely in the relative proportions of subsidized and market rate units, the depth of the subsidies provided, and the mix of rental and home ownership units. Figure 13 below offers a sampling of unit and income mix in five HOPE VI communities.

![Figure 13. Unit and Income Mix in 5 HOPE VI Developments as of 2002-03](source: Polikoff 2009; Adapted from HUD 2003)

Although HOPE VI developments are considered “mixed income,” and they are indeed more mixed than incomes in distressed public housing were (Cisneros and Engdahl 2009; HUD 2003), this figure highlights the great deal of variation in household income mixes as of 2002-03. For example, Mission Main in Boston includes over 80% public housing units with a median income of $12,190, and the remainder is market rate units with a median income of $63,488; this represents a high concentration of poverty and a small fraction of comparatively affluent residents. In contrast, Centennial Place in Atlanta has just over one third of its units reserved for public housing residents whose median income was $10,477 in 2002-03, another 20% of its units reserved for moderate income households (median income of $26,118), and the remainder for market rate residents (income of $35,565); this represents a more shallow income mix with each income group and housing type more equally represented in the development.

**What is the “Right” Income Mix?**

These differences in income mix have implications for residents and surrounding neighborhoods. An example of a HOPE VI development in Boston illustrates this point. The 330-unit Orchard Gardens development in Boston, MA (figure 14), like the Mission Main Boston development described above, contains over 80% subsidized units and fewer than 20% market rate units (see figure 13). This income mix was

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5 One controversial aspect of HOPE VI was the displacement of residents at some sites through a reduction in the number of on-site subsidized units available. In these cases, residents who relocated with a HCV also experienced a net decline in neighborhood poverty rates relative to the poverty rate they experienced in public housing; residents who relocated to other public housing, however, experienced little change in neighborhood conditions (Kingsley et al. 2003; Goetz 2010; Popkin et al. 2002).
adopted in most Boston HOPE VI developments in order to preserve as much affordable housing as possible in the high-cost housing market. As a result, these developments experienced less displacement of public housing residents than many other HOPE VI developments around the country.

Residents of Orchard Gardens nearly universally appreciated the higher quality construction and amenities that resulted from redevelopment, and they reported feeling less stigma and more pride in their community as a result (Tach 2009; see also Bartz et al. 2012; Popkin et al. 2004; Chaskin and Joseph 2010; Brophy and Smith 1997; Buron and Khadduri 2005 for similar findings in other developments). Because the high fraction of subsidized units allowed many long-term residents who lived in the project before redevelopment to return, these residents described social networks with other public housing residents that remained intact in the new development (see Tach 2009 for a more detailed description). In the new HOPE VI development, these longer-term residents reported using their neighborhood networks for in-kind support, to keep an eye on their homes while they were away, and to notify each other if criminal activity was going to take place.

In contrast, the (slightly) higher income newcomers who moved into the market rate units in the new development were a relatively small group, scattered around the development intermixed with subsidized renters (Tach 2009). These residents did not know one another, did not participate in formal or informal neighborhood activities, and had very little contact with their neighbors, whether subsidized or market rate. As a result, they did not feel comfortable in the development, did not have neighborhood networks to draw upon, and expressed little interest in developing such networks, preferring to isolate themselves in their homes and restricting their children’s contact with neighbors and neighborhood institutions. Because of their small presence in the neighborhood, market rate residents lacked sufficient numbers, confidence, or desire to organize and represent their interests in the development. Their moderate incomes made it difficult to find high quality housing on the expensive private housing market.
in Boston, so they described sacrificing neighborhood quality in order to have a higher quality housing unit.

Orchard Gardens differs in interesting ways from other HOPE VI developments that created more market rate units and had a wider income mix (e.g. Joseph and Chaskin 2010; Chaskin et al. 2012). In developments with more market rate units, higher income residents made more demands on property managers and neighborhood and city officials than did the market rate residents of Orchard Gardens. However, there was also greater displacement of original public housing residents in these developments, more widespread destruction of existing social networks from the old housing project, and more open conflict between market rate and public housing residents. Consequently, former public housing residents had more difficulty preserving their power and voice than did the assisted tenants of Orchard Gardens.

The Orchard Gardens case illustrates several tradeoffs inherent in the decision about the “right” income mix in planned mixed-income developments. In both cases, many of the purported benefits associated with increased proximity to higher-income residents have not materialized; there is little evidence of cross-class contact or interaction, benefits from role modeling, or improvements in economic or educational outcomes (Joseph et al. 2007; Chaskin and Joseph 2010; Buron et al. 2002; Tach 2009; Graves 2010; Fraser et al. 2013). But there are also important differences resulting from the deceptively simple logic that the more units reserved for market rate residents in the development, the more the development changes—for better and for worse. For example, more market rate residents may mean more demand for high quality amenities on or nearby the development with positive externalities for all; but it also may mean the destruction of neighborhood networks that provide social and instrumental support. As a result, the “right” income mix depends on the particular outcome(s) one wishes to prioritize.

Non-income Factors for Success

Analysis of completed mixed-income development shows that non-income features matter a great deal for the functioning of mixed-income developments and neighborhoods. In particular, the degree of physical integration of subsidized housing units into the surrounding area, quality and distinguishability of units, management policies, and tenure length and housing type may moderate the effects of income-mixing (Briggs 1997, 2005; Brophy and Smith 1997; Schubert and Thresher 1996; Graves 2010; Schwartz and Tajbakhsh 1997). Property managers play very important roles in fostering or restricting resident satisfaction and interaction (see, for example, Graves 2010; Brophy and Smith 1997; Fraser et al. 2013; Vale 2006). In many instances, the ideal of inclusive, cross-class interaction in these communities has been undermined by the enforcement of social order. For example, management actions in some HOPE VI developments have dissuaded resident interaction. Social gatherings in public spaces have been prohibited as “loitering,” housekeeping checks have been applied to subsidized but not market rate tenants, and rules requiring quietness and orderliness have restricted bike-riding or music in common spaces. Managers reported instituting these rules and policies to appease market rate residents, and subsidized residents feel constrained by these rules and policies (see Tach 2013 for a review).

Tach (2009) observed similar dynamics in Orchard Gardens, where management enacted policies for what were deemed safety purposes that prohibited residents from sitting on their front stoops; resi-
ents were encouraged instead to socialize in their back yards or inside. The police were called routinely by management if groups of residents congregated on front stoops or in the streets. Lower-income residents reported feeling constrained by, and resentful of, these policies while market rate residents did not. (Ethnographies of larger mixed-income neighborhoods have also identified policies and ordinances enacted that restrict activities in public spaces for reasons of safety and quality of life, which disproportionately constrained lower-income residents. See, for example, Pattillo 2007.)

Given the potentially important role of management policies in promoting formal and informal social interaction and social control, there is a need to develop “best practices” for property managers in mixed-income developments. While some challenges are common to all managers regardless of income mix, those in mixed-income developments face the difficult task of accommodating the needs of all types of residents, even when those needs conflict, and they must balance accommodating subsidized residents while being responsive to the fact that these developments must continue to attract market rate residents to remain financially viable.

In all, about $6.7 billion in federal spending was devoted to HOPE VI between 2003 and 2010, with 262 grants awarded for redevelopment of projects operated by 133 public housing agencies and another 287 for demolition only. Some of the later HOPE VI sites are still under construction. The program’s replacement, Choice Neighborhoods, aims to expand beyond distressed public housing developments to intervene at the neighborhood and district level to improve services and build institutional and organizational capacity in addition to constructing mixed-income housing. We discuss this new policy and some of the early results in greater detail in the section below on income mixing within districts.

Other Project-Based Development Subsidies
Other project-based development funding in the form of subsidies to for- and non-profit housing developers give incentives to incorporate subsidized housing units in market rate developments and neighborhoods. The project-based Section 8 new construction/substantial rehabilitation (NC/SR) program allowed housing authorities to use a fraction of their vouchers to subsidize developments rather than individuals. This program was discontinued during the Reagan administration and no longer funds new developments, but existing developments continue to receive operating subsidies. The primary policy challenge for existing Section 8 developments is preservation; many developments converted to market-rate occupancy after their contracts expired, and those with renewed contracts periodically have the opportunity to do so creating ongoing preservation challenges for these subsidized units. The federal government has pursued both Mark to Market and Mark Up to Market mortgage refinancing and rent-adjustment strategies to preserve existing Section 8 contracts (for more details, see Schwartz 2010; Smith 1999; Finkel et al. 2006; Achtenberg 2002, 2006).

The newer, and much larger, Low Income Housing Tax Credit (LIHTC) program also offers financing incentives for developers who construct affordable housing, either as a 100% subsidized building or as a mix of market rate and subsidized units. The LIHTC program is the single largest subsidy for low-income rental housing, funding the development of over 1.6 million units. Rental developments are eligible if at least 20% of units are affordable to households earning up to 50% of AMI, or if at least 40% of units are affordable to households earning up to 60% of AMI; developers also receive larger incentives to develop
in “qualified census tracts” where a majority of households have incomes less than 60% of median family income or poverty rates of at least 25%. Despite the minimum thresholds for affordability set at 20% or 40% of units, the vast majority of LIHTC developments (80%) are 100% subsidized, and only 3% of LIHTC developments as of 2008 had 50% or more of their units allocated to market rate renters. As a result, the LIHTC program has created little income-mixing at the development level (but has at times been effective at the neighborhood level, as discussed in greater detail in the following section), with the exception of HOPE VI developments that have received LIHTC funding (for more details, see Schwartz 2010; Climaco et al. 2009; Buron et al. 2000).

Some municipalities have implemented Inclusionary Zoning (IZ) policies that either promote or require subsidized housing within new housing development. Other variations of IZ policies allow developers to construct subsidized housing units off site or to pay in lieu fees instead of constructing subsidized units, so not all municipalities with IZ policies on the books have incentivized or produced mixed-income developments (Pendall 2008). For example, IZ policies in the San Francisco Bay area have resulted in affordable housing production that constitutes 2.3% of all housing produced since 1980; Bay Area policies apply broadly across many structure types, but also allow many options for developers to construct developments off site, pay in lieu fees or donate land rather than construct subsidized units in their developments (Schuetz et al. 2007). This reduces the income-mixing potential of the policy at the scale of the development but may result in higher overall numbers of affordable housing units or deeper affordability levels than would occur if all the units had been built on site. Because of the vast heterogeneity in IZ adoption and format across localities, and the fact that places that are more amenable to mixed-income development are likely to adopt IZ policies to promote it, it is difficult to assess the causal impact of IZ policies on creating mixed-income developments (Pendall 2008). It clearly has the potential to do so, but requires the political will as well as a strong housing market.

Some cities have no formal inclusionary zoning requirements but do have rent control policies that promote income diversity within apartment buildings and developments by preserving affordable rent ceilings for residents in the face of rising housing prices. Other areas have specialized affordable housing incentives that are similar to inclusionary zoning, such as Chapter 40B in Massachusetts, which (as discussed in greater detail in the section below on interjurisdictional income mixing) provides more flexible zoning regulations for housing developments that make at least 20-25% of their units affordable to low income households. In local communities with limited affordable housing, developers may bypass more restrictive local zoning regulations for these more flexible regulations with the inclusion of affordable housing in their plans; Chapter 40B has been credited with a substantial amount of affordable housing construction in the metropolitan Boston area through the provision of these mixed-income developments (Koshgarian et al. 2010).

Concerns over expiring Section 8 and tax credit properties also highlight the challenges of sustaining income mix over the long term on a voluntary basis; explicit incentives are required. The extent to which these programs and regulations have produced mixed-income developments and the type of mix they produce are quite sensitive to the incentive structure of the program. For example, the incentive structure of LIHTC favors the construction of mostly subsidized buildings, while IZ and Chapter 40B policies offer no strong incentives to construct more than the minimum number of subsidized units required.
Mixed-Income Neighborhoods
A host of policy efforts have targeted income mixing within housing developments, but this is neither necessary nor sufficient for creating a mixed-income neighborhood. Most developments top out at several hundred units, while most metropolitan neighborhoods (at least when defined as census tracts) typically contain several thousand, and a mixed-income development may be located in an otherwise homogeneous neighborhood context.

As a result, policymakers and practitioners have been concerned about whether the development-level policies described above have succeeded in integrating poor residents in non-poor neighborhoods or whether they perpetuate poverty concentration by locating in areas that are already predominantly poor. By and large, developments created through the Section 8 NC/SR and LIHTC project-based programs are sited in areas with lower average poverty rates than public housing developments, and slightly lower poverty rates than those with housing vouchers. However, they also tend to attract less disadvantaged tenants and to be located in areas that already contain surpluses of affordable housing, making their net impact on income diversity at the neighborhood scale small (McClure 2010, 2012). There is some limited evidence that certain HOPE VI redevelopment projects have raised property values and lowered poverty rates in the areas surrounding the developments (HUD 2003). And while research on the neighborhood-level impacts of IZ regulations are limited, in some places researchers have found that the adoption of IZ has reduced overall housing production and raised prices (McFarlane 2009; Glaeser and Gyourko 2002; Glaeser and Ward 2009), which may limit housing affordability and have the unintended consequence of reducing income mixing. In sum, the evidence thus far does not support the idea that policies to promote mixed-income developments translate into the creation of mixed-income neighborhoods.

A mixed-income development is not a necessary component of a mixed-income neighborhood, however; other policies—including economic development policies to raise incomes—can promote income mixing at the neighborhood scale even if particular housing developments in the neighborhood are homogeneous with respect to income. More broadly, land use policies that encourage a mix of single and multifamily housing and permit moderate density can also encourage income mixing at the neighborhood scale. Because these policies are implemented on a municipal level and likely have jurisdiction-wide impacts, we review evidence of their effects on income segregation in more detail below.

Other federal policies provide block grant funds that allow cities to invest in subsidized housing and neighborhood revitalization, which may indirectly promote neighborhood income diversity. The Community Development Block Grant (CDBG) program was designed to promote stable urban communities and expand opportunity for low- to moderate-income households (Connerly and Liou 1998). Although the program funds may be used for a wider range of activities related to service provision and economic development, about a quarter of CDBG funds have historically been allocated to housing rehabilitation, with a smaller portion of funds used for new construction (Walker et al. 1994), and researchers have found that CDBG funds have indeed increased property values in the targeted communities (Walker et al. 2002).
Similarly, the **HOME Investment Partnership program** is a federal block grant program that focuses on affordable housing, with about half of the funds being devoted to the development of subsidized rental housing and another quarter devoted to homebuyer assistance (HUD 2009), and the latter allowed homebuyers to move to lower poverty neighborhoods than those in which they resided previously (Turnham et al. 2004). Although CDBG and HOME target low-income communities, they rarely provide deep enough subsidies to house the very low income families serviced by the public housing and voucher programs, and there is little evidence available on the impact of the CDBG and HOME programs on neighborhood income mix.

### Using Place-Based Housing Subsidies to Sustain Neighborhood Income Mix

The district of the South End in Boston illustrates the importance of different types of place-based housing subsidies in securing a stable income mix in the face of rising property values. Located close to downtown Boston and the central business district, the South End was initially built to attract upper class families, with large English-style town homes surrounding oval parks. Following the depression of 1873 and the development of the posh Back Bay neighborhood, the South End lost its appeal to the wealthy. Property values dropped, and speculators bought up the homes, turning many of them into rooming houses. The South End became a destination for new immigrants and it was an economically poor, but culturally vibrant, community. The area eventually gained a negative reputation as a skid row and the quality of the housing stock declined, driven by absentee slum landlords and impoverished tenants (see Small 2004; King 1981; Keyes 1969; Mollenkopf 1983; and Lukas 1985 for detailed historical accounts of the South End).

By the time urban renewal came to Boston in the 1950s, the South End was a prime target. The renewal program aimed to redevelop the area so that it would attract higher income residents, widening the city’s tax base and promoting private investment. When planning began, social service organizations, low income residents, and housing advocates mobilized to demand that more affordable housing be constructed. Many of these efforts were ultimately successful, resulting in the construction of a range of affordable housing options in the district.

As figure 15 shows, the South End is a large area, more akin to a “district,” which comprises about ten distinct neighborhoods with well-institutionalized names, boundaries, and identities. The map shows the block groups contained within the South End and their median household incomes from the 2005-2009 American Community Survey, reveals the great deal of income diversity that occurs within the distinct neighborhoods of the South End, with some neighborhoods having very low median household incomes under $20,000, and others with very high median household incomes of over $100,000.
The variation in income mix in the neighborhoods of the South End is directly related to the presence and type of subsidized housing (Tach 2010). Starting in the 1980s, the South End experienced widespread gentrification and skyrocketing real estate prices that have continued until the present, only slightly stymied by the recession. Despite the increasing presence of affluent residents and rising property values overall, certain neighborhoods have maintained an economically diverse resident population through the integration of scattered site affordable units and non-profit owned affordable developments that were constructed during urban renewal, with project-based Section 8 subsidies, and LIHTC, CDBG, and HOME funds. (Most of these developments have faced, or will face, expiration of their affordability requirements. This prompts debate periodically in the neighborhood over the preservation of the affordable units; to date, virtually all affordable units either have been renewed or have continued under a different program.) Other neighborhoods remained homogenously low-income due to the siting of large public housing projects, and some neighborhoods that lacked any subsidized housing have become completely affluent.

Three neighborhoods in the South End illustrate the importance of permanent housing subsidies for preserving stable income mix in the face of rising property values. First, the income distribution of the Cathedral neighborhood reflects the presence of a large public housing development, with a median household income of $14,719 in 2005-2009, and over 60% of the households earning less than $20,000 per year (table 4).
Table 4. Income Profiles of 3 South End Neighborhoods

<table>
<thead>
<tr>
<th></th>
<th>Cathedral</th>
<th>Union Park</th>
<th>Chester Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Households</td>
<td>537</td>
<td>858</td>
<td>1,203</td>
</tr>
<tr>
<td>Median Household Income</td>
<td>$14,719</td>
<td>$108,333</td>
<td>$59,646</td>
</tr>
<tr>
<td>Income Distribution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $20,000</td>
<td>60.5</td>
<td>16.5</td>
<td>32.6</td>
</tr>
<tr>
<td>$20,000 to $39,999</td>
<td>12.7</td>
<td>7.0</td>
<td>7.9</td>
</tr>
<tr>
<td>$40,000 to $59,999</td>
<td>9.9</td>
<td>8.6</td>
<td>10.1</td>
</tr>
<tr>
<td>$60,000 to $99,999</td>
<td>4.1</td>
<td>17.3</td>
<td>9.7</td>
</tr>
<tr>
<td>$100,000 to $199,999</td>
<td>10.3</td>
<td>21.0</td>
<td>31.0</td>
</tr>
<tr>
<td>$200,000 or More</td>
<td>2.6</td>
<td>29.6</td>
<td>8.8</td>
</tr>
</tbody>
</table>

Source: ACS 2005-2009 5-Year Estimates

Because of the housing project, there was little growth in income over time for Cathedral, despite large changes in surrounding neighborhoods. It was once similar to other neighborhoods surrounding it, but many of those neighborhoods have experienced pronounced gentrification and appreciation of property values over time. Since then, Cathedral has been plagued by the same problems as many high-rise public housing developments, including problems with gangs and criminal activity. These problems, combined with the majority non-White population and the stark physical distinctness of the public housing high rises (figure 16), has caused Cathedral to be stigmatized in the South End, with neighboring residents attributing a host of ills (correctly or incorrectly) to the neighborhood and deliberately avoiding the area (Tach 2010).

Figure 16. Aerial image of the Cathedral Neighborhood, dominated by the physically distinct Cathedral Housing Project
A second neighborhood within the South End represents the opposite extreme of what can happen in the face of gentrification and rising property values. The Union Park neighborhood, located immediately adjacent to Cathedral, contained a very affluent population in 2005-2009, with almost a third of households having incomes over $200,000 and half having incomes over $100,000. The Union Park neighborhood, comprised of the grand Victorian homes characteristic of much of the South End, suffered some of the same disrepair during the late 1800s and early 1900s, when the homes were subdivided into rooming houses (figure 17). Largely untouched by the development projects of urban renewal, Union Park homes started to be bought and rehabilitated, converted from one room apartments or rooming houses back to their original grandeur as high end condos and single family homes during the 1960s and 70s as major commercial enterprises, such as Copley Place and the Prudential Center, were constructed not far away and the area became convenient for professionals working there. These trends continued throughout the latter part of the 1900s and into the 2000s, and because little subsidized housing was constructed there, the neighborhood became ever more homogenously affluent over time (Tach 2010).

A third neighborhood, Chester Square, illustrates how housing subsidy programs can provide a middle ground between the extremes of Cathedral, which changed hardly at all due to the large public housing development, and Union Park, which became completely affluent due to the absence of housing subsidies to preserve affordability. Chester Square, a neighborhood located in the southern part of the South End, followed a similar trajectory to Union Park in the early part of the 1900s. The urban architecture was also grand old English style homes centered on oval parks, and it was largely unrazed during urban renewal (figure 18).

Unlike Union Park, as gentrification began to occur in the wake of urban renewal, non-profit organizations mobilized in Chester Square to create affordable housing for residents. For example, South End Cooperative Housing owns and operates a 75-unit building of subsidized units in Chester Square; Langham Court was developed as a mixed-income building with the cooperation of a neighborhood organization and the Community Builders, and now operates as an 84-unit development with 34 of the units reserved for low-income residents. In addition, the Pine Street Inn contains 31 subsidized units, Project
HOME contains several dozen more, and Concord Street Elder Housing contains 40 subsidized units for low-income seniors. These developments were constructed and financed through a combination of state and local funds at first, and more recently developments have received CDBG, HOME, and LIHTC funding (Tach 2010).

Due in large part to the efforts to create and maintain low-income units in this neighborhood, the income distribution of Chester Square is very diverse; a third of the residents earn less than $20,000 per year, while almost 40% earn over $100,000 per year.

**Figure 18. Aerial Image of Chester Square and its Scattered-Site Subsidized Developments**

**Person-Based Subsidies and Neighborhood Income Mix**

The Section 8 tenant-based assistance program, now the Housing Choice Voucher program, offers the potential to promote income diversity at the neighborhood scale by allowing subsidized tenants to rent housing in the private rental market. Despite its potential to integrate low-income tenants into non-poor areas, and although voucher holders live in neighborhoods with lower average poverty rates than their public housing counterparts, most still live in moderate-poverty neighborhoods and very few have located in low-poverty or “opportunity” neighborhoods (McClure 2012). As a result, the mixed-income potential of individual rental vouchers has largely been unrealized, and has increased exposure to income diversity by only a small amount over project-based developments (ibid).

Researchers and policymakers examining the HCV program have identified both supply and demand side factors that may prevent greater income integration. On the supply side, there is a dearth of available qualified HCV housing units located in low-poverty areas because there are few housing units that meet the fair market rent requirements and low landlord take-up of the program in areas with tight housing markets and higher rents (Pendall 2000b, Galvez 2010). On the demand side, voucher holders’ neighborhood trajectories are diverse, constrained searches for housing during involuntary moves with time-restricted vouchers often left them with few feasible options and they end up staying within communities that are familiar and located near higher poverty neighborhoods (Briggs et al. 2010).

Efforts to overcome such barriers have included more intensive mobility counseling, relaxing FMR standards for housing units, and restrictions on locations in which vouchers can be used to “opportuni-
“affluence” areas with low poverty rates (McClure 2010; Galster et al. 2003; Goering et al. 1995; Orr et al. 2003). While some of these interventions have had some limited success, it is clear that one of the biggest challenges of the voucher program is not just moving to, but staying in, lower-poverty neighborhoods, as multiple moves and neighborhood decline tend to push voucher holders into higher poverty neighborhoods over time (Comey et al. 2008).

Taken together, the evidence reviewed above suggests that policy strategies to promote income mix at the neighborhood scale have had some modest ability to integrate the poor with near-poor or moderate-income households, but these efforts prove difficult to sustain over time because of the forces of residential mobility and neighborhood change. Few project-based or voucher-based efforts have succeeded in integrating lower-income residents into affluent neighborhoods, but Chester Square in the South End offers an example of how such project-based subsidies can be used when there are motivated neighborhood actors who mobilize to preserve affordability in the face of rising property values.

Few policies at the neighborhood scale have adopted the explicit goal of moving more affluent residents into closer proximity with the poor. Such efforts to promote income mix between the affluent and non-affluent require larger-scale policy approaches that account for the fact that the affluent tend to segregate across jurisdictional boundaries, suggesting the need for policies that promote income mixing at geographic scales larger than the neighborhood.

**Mixed-Income Districts and Communities**

Above the level of neighborhoods but (generally) below that of the city, the district and community occupy a less well defined scale for housing policy making. Like the scales of development and neighborhood, district-level examples of and policies for income mixing differ depending on whether the goal is to build them from scratch, attract higher-income households to predominantly low-income districts, safeguard affordability in gentrifying districts, or introduce opportunities for low-income households in established upper-income districts.

**Mixed-Income Districts Built “From Scratch”: Greenbelt and Columbia**

Districts have been a key unit of intervention for city planners and designers since the early 1900s. In *Garden Cities of To-Morrow* (1898), Ebenezer Howard’s landmark treatise on the physical and institutional arrangement of an urban form to replace the industrial city, metropolitan regions would develop out of networks of small cities. The residential areas of each of these cities would be densely developed and always within a few blocks of workplaces, parks, and public buildings. In his effort to chart a third path between capitalism and communism, Howard embraced cooperatives and community ownership of land as mechanisms to reduce poverty and increase social cohesion.

Two planned communities, both in Maryland, provide concrete examples at the district level that suggest ways in which policy can create and sustain income mixing beyond individual developments and neighborhoods. Inspired by Howard, Clarence Stein designed Greenbelt, MD, as one of the New Deal-era Resettlement Administration’s three planned towns (Arnold 1971, Parsons 1990). (The other two completed developments are Greendale, WI and Greenhills, OH.) Spurred by the growth of Washington, DC, Greenbelt grew rapidly from its construction in 1937 to robust occupancy during World War II. The
The heart of Greenbelt has a mix of apartments, townhouses, and single-family dwellings connected by pedestrian paths to the town center, where a community center and a food coop persist as thriving social seams (figure 19). Recent housing sale prices in “old Greenbelt” have ranged from the low $100s for the townhomes to the mid-$300s for larger single-family houses (figure 20). The central part of Greenbelt is about evenly split between homeowners and renters.

Figure 19. Central Greenbelt, Maryland. Apartments, elementary school, and shopping area at the center; attached dwellings (owner-occupied and rented townhouses) in the near foreground; single-family houses to the west.
While residents might perceive Greenbelt as a collection of neighborhoods supported by a town center, all of them live in a single large census tract bounded by Interstate 95 and the Baltimore-Washington Parkway (figure 21). In effect, the tract is itself a district with several neighborhoods and a social seam at its center. Part of “old Greenbelt,” however, also lies just north of the tract boundary, drawn into another tract to satisfy Census criteria for tract size. The Greenbelt residents in that area share a tract that encompasses a sprawling expanse in which neighborhoods are separated from one another by US Department of Agriculture research fields; clearly they share more with the other residents of Greenbelt than with the distant neighborhoods at the northern extreme of their tract. But the two Greenbelt tracts are divided by a dense growth of woods and relatively busy Crescent Street, which provides the main entry to Greenbelt from the west. The parts of old Greenbelt north of Crescent Street are thus separate enough to be distinct neighborhoods from those closer to the community center, but close enough to the community center to make shopping at the coop and stopping at the post office routine.
In the early 1960s, Baltimore shopping-center developer James Rouse bought over 15,000 acres of land in Howard County for the development of Columbia, Maryland as a new city roughly midway between Baltimore and Washington. By 2010, Columbia’s population had reached about 100,000 residents. Rouse strove to achieve racial and economic integration in part by integrating garden apartment sites into mainly single-family neighborhoods anchored by elementary school sites (figure 22). Blocks and neighborhoods were planned to be somewhat homogeneous but aggregated into “villages” to give the community the “small town feel” in which people got “to know each other, people going to the supermarket and recognizing each other, knowing the person that bagged the groceries and meeting your rabbi or minister at the supermarket... That was his ideal” (Forsyth 2008, 120-21, quoting Robert Tennenbaum, a member of Rouse’s advisory team). The mix of unit types translates into a mix of rental and owner-occupied housing, and (like in Greenbelt) some of the attached units are owner-occupied, meaning a wide range of housing prices and rents in the central part of Columbia (figure 23). Some recently sold condominiums went for as little as $58,000, and one of the community’s earliest single-family homes—a five-bedroom, 3,800 square foot house with backyard access to Wilde Lake—sold for $650,000.
Figure 22. Central Columbia, Maryland, showing apartments close to the center of Wilde Lake village and single-family neighborhoods beyond, all planned around elementary schools.

Columbia’s planners also created social seams in the siting of shopping centers, a community college campus, a park with multiple baseball (later soccer) fields, and other open space, all identified on the map in figure 24. Like in Greenbelt, the census tracts of Columbia embrace more than one neighborhood—with two elementary schools, a middle school, the Mall in Columbia, Wilde Lake Village Green
Shopping Center, and significant amounts of open space all within its central census tract (figures 24 and 25).

*Figure 24. Community-level map of central Columbia, MD, 2013; area included in figure 4 is indicated with the inset box*

*Figure 25. Columbia, MD: Aerial view with census tract boundaries*
In the tract embracing Old Greenbelt, the estimated poverty rate in 2007-11 (average) was 15.8 percent (with a margin of error of 12.8 percentage points), higher than the average for the State of Maryland. When we examine the tract and district ordinal entropy indices, we find that both show moderate income diversity. Income diversity is slightly higher at the district level (0.64) than at the tract level (0.62).

In central Columbia, the tract poverty rate was only 7.0 percent, lower than Maryland’s statewide average but above the median neighborhood poverty rate in Howard County. Only four of Howard County’s 55 tracts had poverty rates above 10 percent, the highest being 16 percent in another Columbia tract between the Columbia Pike (US 29, at the right side of figure 25) and I-95. Looking at the entropy indices at both the district and tract level, we see that central Columbia shows more income diversity than Old Greenbelt. Income mixing is relatively high at both levels, with the tract (0.71) showing slightly more diversity than the district (0.69).

What makes these developments work as mixed-income communities? They have a mix of housing types, just as in most mixed-income neighborhoods, but their larger scale allows more homogeneity within neighborhoods than would be possible if the aim were to build income diversity at a very fine grained level of geography. This strategy may have helped maintain the desirability of the higher-priced neighborhoods to households looking for owner-occupied homes. Buyers often prefer to buy houses surrounded by other houses of equal or greater value, concerned about a host of factors including the resale value of their home (a major investment). They cannot always tell a house’s sale price just by looking at it, but they can tell the difference between the value of a detached house versus that of a townhouse or a condominium. The greater homogeneity within residential neighborhoods may also have reduced upward pressure on the prices and rents of lower-cost housing compared with what may have occurred if the attached units were more finely integrated into single-family blocks.

A second critical factor in the stability of income mixing in both cases may be the availability of civic space and shopping. Both developments have village centers featuring places to shop conveniently and to interact with neighbors. These centers allow access both on foot and by car, making it easy for residents at the fringes of the villages to stop into the center on their way home from work or on the weekend. But parking doesn’t so dominate the landscape that the shopping areas become regional destinations and pedestrians feel separated from it by seas of asphalt. Both districts also have large amounts of open space. Walking paths, parks, and lakes provide options for walking dogs and enjoying holidays with other members of the community. The open space also likely enhances property values.

The strength of local and regional housing markets also probably contributes to stable diversity in these two communities. The suburban areas between Washington and Baltimore occupied by Greenbelt and Columbia have had consistently strong demand for housing. This is especially true of Howard County, whose housing market is dominated by Columbia. Prince George’s County, however, is a majority African American suburban area—64 percent of its residents are black/African American—that many whites and Asians avoid when deciding where to live. Its job growth has also not kept up with that in Montgomery County or in the Northern Virginia suburbs of Washington. About two-thirds of the nearly 125,000 children in the Prince George’s County schools are African American and almost a quarter are Hispanic. In 2010, Old Greenbelt—where African Americans were not allowed to live when the Resettlement Administration built the community—was about 55 percent white (alone), 26 percent black or
African American (alone), and 19 percent other, including mixed race, according to the Decennial Census. Greenbelt also is a “naturally occurring retirement community” (Hunt and Gunter-Hunt 1986) in which one-fifth of residents are over 60; most of the older residents are white, whereas those under 50 are evenly split between white, black and other self-classifications.

What do these cases tell us about policies to build diversity in new and existing districts? While it is straightforward to discern their lessons about which district features build and reinforce income mixing, it is more difficult to draw lessons about how to ensure that those features are provided in the first place because local-government policy had little influence on the developments. The landowners of Greenbelt and Columbia led the effort to build mixed-income communities. Prince George’s County did not have authority over the federally sponsored Greenbelt. Rouse did all the planning for Columbia and then presented his plan to Howard County with a request for a rezoning of the entire community area as a planned community district (Forsyth 2008, 133). The County approved the new town zone with surprisingly little controversy. Further review occurred when the company submitted proposed subdivision plats and site plans for residential neighborhoods and commercial areas. The other key precondition for development—a large-scale investment in infrastructure—also was covered by the property owners. The federal government paid up-front costs for roads, water, sewer, and schools in Greenbelt, and Rouse’s team arranged private financing for Columbia’s infrastructure, creating a large homeowner association that collects levies for community services. The financing challenges Greenbelt and Columbia both faced would be even more serious today, considering rising land costs, higher standards for community services, and higher regulatory barriers to housing.

Another gap in the lessons from Greenbelt and Columbia is the incompleteness of their designers’ vision for transportation, which may reduce their accessibility and increase costs for their low-income residents. Far from established job centers, both communities are well connected to highway networks but more distant from fixed-route transit. Their internal circulation networks separate pedestrian activity from streets, especially the high-speed streets that connected villages to highways, and even the smaller shopping centers featured large surface parking lots.

Despite these gaps, it is possible to draw some lessons from Greenbelt and Columbia about policies that encourage development of new mixed-income districts:

- **Local planning and land regulation** must at least accommodate the development of mixed-income districts. Comprehensive plans can clarify that the city or county seeks the mix of uses, civic space, facilities, and open space necessary to attract households of many income levels. Zoning ordinances and maps can set standards for residential development that allow a range of housing types in close proximity to one another. Some zoning ordinances establish not just maximum but minimum residential density so as to ensure that areas set aside for multifamily housing or townhouses do not shift to single-family homes when markets or politics swing against attached housing. Plans can also be implemented through planned-unit development (PUD) provisions (Burchell and Hughes 1973) that permit property owners more flexibility than allowed by conventional zoning in the precise arrangement of uses and public facilities.
• **Infrastructure capacity** needs to be sufficient to accommodate growth or else provisions need to be in place so that roads, sewers, water, stormwater facilities, and schools can expand as development occurs. In the 50 years since planning for Columbia began, citizens have grown more demanding about infrastructure and less willing to pay for it. When Columbia was built, too, federal assistance for highway, water, and sewer infrastructure construction was much stronger than it is today. Most states have responded by making development “pay its own way” through special assessment districts or development impact fees, raising the cost of housing either via property taxes or amortized costs of fees (Altshuler and Gómez-Ibáñez 1993).

• **Transit-oriented development (TOD)** principles provide opportunities to ensure that a broad range of residents can live affordably and conveniently in communities built “from scratch” as well as amid established neighborhoods. Metropolitan Portland (OR), for example, developed its 2040 development plan based on the expansion of its light-rail system. Established auto-dependent neighborhoods and business areas would become more densely developed and mixed by income and land use, and new neighborhoods of varying densities, housing unit types, and land use mixes would grow in previously undeveloped areas. In Denver, the Regional Transportation District (RTD) has been building a 122-mile expansion of fixed rail and bus rapid transit with 57 new stations, 11 of which opened earlier in 2013 along the West line connecting downtown Denver through Lakewood to Golden. The City and County of Denver and the City of Lakewood have developed area plans for many of the existing stations, and public agencies throughout the region have begun work on corridor plans that identify complementary land uses for stations sharing the same transit line (Pendall et al. 2012, 2013a). Most of the stations are in already-developed areas, and several are adjacent to subsidized housing developments already slated for reconstruction as higher-density, mixed-income neighborhoods. With property values rapidly on the rise, government and philanthropy have developed at least two major approaches to secure affordability in new and established multifamily housing near the stations. First, the Colorado Housing Finance Agency and a half-dozen cities agreed about 10 years ago to set aside up to half their private activity bond cap to finance low-income multifamily development in TODs. Second, philanthropy has invested in the Urban Land Conservancy (ULC) to secure sites near stations for housing and public facilities (in particular, a charter school).

• **Supportive policies at broader geographic levels** also help balance development supply and demand. Policies that sharply restrict growth below market demand can drive up housing and land costs, making it difficult to build and sustain new housing for low- and moderate-income households. Policies that accommodate much more growth than the market demands, conversely, can encourage households and businesses to choose locations other than the mixed-income district, thereby imperiling the needed uptake of land for repayment of up-front infrastructure costs.

California and Oregon have important examples of how planning, regulation, infrastructure finance, and broader land-use policy can work together to foster income mixing. In California, a combination of pressures and constraints—property tax limitations imposed by Proposition 13, continuous population growth, limited infrastructure capacity, and regulatory complexity—have given rise to the use of “specific plans” that combine planning, regulation, and infrastructure finance for areas with multiple property
owners (Curtin and Barclay 2010). Property owners benefit from specific plans because they reduce subsequent requirements for environmental review for projects consistent with the plans and provide assurances about infrastructure finance. In exchange for these benefits, local governments can impose greater demands on property owners so that, for example, a mix of housing types is built and even that attached housing be built in early phases of the development to avoid changes to plans and implementing regulations in response to early residents’ opposition to income mixing.

Oregon’s state growth management system links long-term planning and monitoring of land supply for housing and business use with infrastructure policy (Nelson and Moore 1993, Nelson 1999). State law requires cities and counties to plan for a 20-year development horizon, identifying land beyond that needed for 20 years of growth as being beyond an urban growth boundary (UGB). Local governments and regional special districts prepare and adopt long-term capital facilities plans to provide certainty for major infrastructure investments.

**Income Mixing in Already-Developed Districts and Communities**

What about income mixing in already developed areas? This, too, depends on the goal. Some circumstances call for attracting upper-income households to struggling districts, while others demand the introduction of new opportunities for low-income people to live in upper-income districts. Even when income-mixing is established, it is not always stable, making it necessary to develop mechanisms to maintain income mixing over the longer run.

The federal *Choice Neighborhoods Program (Choice)* offers interesting examples of all three of these goals in its first round of implementation grants. As described in the Urban Institute’s recently released interim report for its study of early Choice implementation efforts (Pendall et al. 2013b), two of the neighborhoods—San Francisco’s Eastern Bayview and Seattle’s Yesler—are poised for rapid increases in property values in the next two decades because of their locations and their very strong regional housing markets. Most of the Yesler neighborhood is occupied by the Yesler Terrace public housing development, a low-rise project with 561 units. Seattle seeks to transform Yesler over the next 25 years into a mid-rise district with up to 6,000 housing units, more than replacing the very low income units on or near the current development footprint. The development’s location near the CBD and Seattle University, accessible via a recently opened streetcar and other prospective amenity improvements, will make it a natural destination for homeseekers. Eastern Bayview, home to two public housing projects (Alice Griffith, which Choice will help rebuild) and Hunter’s View (whose replacement is being developed now under the HOPE SF program), also has several other HUD-assisted properties and large numbers of voucher users. Like Yesler, however, the neighborhood also has capacity to add substantial amounts of new housing, most of which will be located on Candlestick Point, and its single-family homes—though among the least expensive in San Francisco—still cost enough to require incomes well above the median. In both districts, the policy necessary for income mixing involves securing affordability amid property value increase, which they do with a mix of subsidies and captured land value: either from the land they own (the Yesler Terrace site will be leased or sold to market-rate developers) or from permission to develop (inclusionary zoning fees in San Francisco).
New Orleans’s Choice Neighborhood, Iberville-Tremé, is another district containing multiple neighborhoods. The metropolitan housing market is not as strong as those in Seattle and San Francisco, but the 1.7-square mile Iberville-Tremé area sits on high ground adjacent to the French Quarter, making it a prime location for the development that does occur as New Orleans continues to recover from Hurricane Katrina. About two-fifths of the district’s housing stock was vacant in 2010, and much of the land was vacant or underused, offering significant potential for income mixing via new development rather than displacement of established residents. The Choice transformation plan has a more even balance in its planned income ranges than any of the other four first-round implementation plans, with about equal numbers of very low income, low-income, and market-rate units. Mixed-income housing will be built both on the footprint of the historic Iberville public housing project, which is separated from the rest of the district by Interstate 10, and scattered through the rest of the district in small to medium-sized new development. (The Iberville-Tremé boundary also encompasses the HOPE VI-financed redevelopment of the Lafitte public housing development.)

Woodlawn, in Chicago, is another early Choice implementation site whose size qualifies it as a district: two square miles, nearly 12,000 housing units, and a population of nearly 24,000. Like much of Chicago’s south side, Woodlawn is predominantly black and very poor. Significant investments have occurred there in the past 50 years to provide housing and economic opportunities specifically for low-income people. This focus on providing housing and commercial development mainly for the incumbent population and other low-income people has not reduced and may have exacerbated its concentrated, racially segregated poverty. Violent crime is high in the neighborhood, and tensions between residents of subsidized and market-rate housing further undermine cohesion. On the other hand, the University of Chicago has planned over $2 billion in investments at the northern edge of the neighborhood, which may help turn the neighborhood around or even lead, eventually, to gentrification. The plan for Woodlawn will raze and replace the Grove Parc apartment complex, mixing low- and very low-income housing on the footprint of the development and building moderate-income housing elsewhere in the neighborhood. While the plan does not seek to build much market-rate or moderate-income housing, the grantees hope the redesign will result in greater integration between the residents of the rebuilt Grove Parc and those in surrounding blocks. The plan for Woodlawn, then, partly seeks to attract low- to moderate-income residents to the district and partly aims at better mixing of established very low-income and low-income residents.

All four of these implementation plans also include a mix of actions to encourage long-term income mixing. In the two strongest housing markets, the reconstruction of assisted housing with long-term affordability provisions will make a place for very low income people, and local programs for workforce housing and shallow subsidies will round out the income mix. In New Orleans, too, the reconstruction of the Iberville and Lafitte projects should reinforce long-term affordability. And in all four sites, investments in infrastructure and encouragement for non-residential development and civic spaces are meant to make the neighborhoods more attractive for everyone. In all four cases, public decisions and invest-

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6 A fifth implementation site from the first round, Boston’s Quincy Corridor, is not discussed here because of space constraints.
ments are sowing the seeds for future income mixing, but as the neighborhoods, districts, cities, and regions change, the districts will need ongoing management to preserve income mixing.

**Income Mixing among Jurisdictions**

As policymakers seek to encourage income mixing at the scales of developments, neighborhoods, and districts, they may be stymied by larger residential mobility patterns in which many middle- and upper-income households choose to live in homogeneously well-off cities, towns, and exurban enclaves. Their motivations for doing so can include both a host of factors pushing them away from low-income cities (e.g., high property taxes, low school quality, high rates of crime, avoidance of predominantly African American or Latino populations) and factors attracting them to upper-income cities (e.g., newer housing, income homogeneity, convenience for drivers) (South and Crowder 1997, Boustan and Shertzer 2012). The dearth of housing for low-income people in these upper-income communities, too, can proceed from a range of often interconnected factors, including exclusionary zoning practices, inadequate infrastructure to accommodate higher-density development, discrimination, and developers’ decision-making about the mix of units and amenities that will attract residents to growing suburbs and exurbs (Danielson 1976, Rothwell 2011). These forces result in the interjurisdictional income inequality trends (i.e., inter-jurisdiction Gini indices) we reviewed earlier in this review.

In general, rising household income inequality contributes to rising jurisdictional inequality. A review of the 50 largest metro areas in our analysis shows that all but one of the 28 metros where interjurisdictional income inequality grew between 1990 and 2010 also had rising income inequality. (The sole exception is Nashville.) But there are buffers that reduce the income segregation among the jurisdictions within metropolitan areas. Indeed, the two metropolitan areas with the fastest increases in their interhousehold Gini indices between 1990 and 2010—San Francisco and Miami—had decreases in the Gini indices among their jurisdictions. Both of these cities grew fast and at relatively high population densities (Fulton et al., 2002), with immigrants accounting for a large share of their new residents. Additionally, both the Bay Area and South Florida have a combination of strong land-use regulations and geographic constraints that may reduce the ability of middle- and upper-income households to avoid cities with large numbers of low-income residents (Pendall, Puentes and Martin 2006); California’s general plan housing element law also encourages the development and preservation of low-income housing in upper-income jurisdictions, as described below (Calavita, Mallach, and Grimes 1997).

It might seem that the most straightforward way to increase income mixing would be to reduce the number of jurisdictions in a metropolitan area; Honolulu and Anchorage, each of which has only one local government, have by definition no interjurisdictional income inequality. If this were so, then the logical policy strategy to increase income mixing in jurisdictions would be to encourage or require consolidation of local governments and to shift annexation and incorporation laws so that annexation is simpler and incorporation more difficult. The review of the top 50 metro areas in 2010, however, shows no significant relationship between the number of jurisdictions and the interjurisdictional Gini index. And the one metro area with an appreciable consolidation since 2000—Louisville, where the city

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7 That is, established cities would find it easy to grow while property owners or residents in small settlements would have a difficult time establishing new small cities.
and county consolidated (Kelly 2012)—had an increase, not a decrease, in its index. Considering the very significant political capital necessary to carry out consolidation or change state laws on incorporation and annexation, then, more evidence is needed about how and when consolidation can produce income mixing if consolidation is proposed as a way to achieve it.

Most of the policies currently in use to encourage income mixing among jurisdictions fall into one of five categories. They can require jurisdictions to plan, zone, and develop programs to encourage the construction of a “fair share” of housing for low-income people. They can limit the ability of jurisdictions to deny permits for multifamily and affordable housing. They can encourage or even require development of low-income housing alongside market-rate units. They can create incentives or reduce disincentives for middle- and upper-income cities to accommodate low-income housing growth. Finally, they can improve amenities and public services in low-income jurisdictions so that upper-income households are less likely to flee.

**Fair Share Programs**

California and New Jersey both have programs requiring local governments to plan and zone for affordable housing (Calavita, Mallach, and Grimes 1997, Basolo and Scally 2008). (California’s statute also accounts for market-rate housing needs.) Local governments in both states adopt housing elements in their comprehensive plans that demonstrate how their land-use policies and local housing programs will help move them toward meeting state-determined affordable housing needs. State agencies review these elements and certify their compliance with state law. California’s housing element review appears not to have resulted in an increase in total housing production, but local governments with state-approved housing elements did have faster growth in multifamily housing in the 1990s than those without approval (Lewis 2005). New Jersey’s statute is stronger than California’s because of its strong connection with the *Mount Laurel* rulings and the “builder’s remedy” described below. Oregon’s state growth management law and associated rules for its implementation in metropolitan Portland do not allocate housing among jurisdictions in the same way as California and New Jersey statutes do (Pendall, Fulton, and Martin 2002). Even so, these rules—which (a) establish goals for housing at all income levels and (b) establish strong rules requiring Portland-area municipalities to zone for multifamily housing—probably enhance the mix of incomes among jurisdictions in the core of metropolitan Portland.

**Limits on Local Rights to Deny Affordable Housing**

Another set of state laws acts less to encourage local governments to plan, zone, and develop programs to encourage affordable housing and more to stay out of the way of builders who want to provide it. The prime example of these laws is Massachusetts’ Chapter 40B, sometimes called the “anti-snob zoning” rule (Cowan 2006). In towns where fewer than 10 percent of units have long-term affordability restrictions, applicants to build affordable housing can submit a challenge to a state housing appeals board if a local board denies their proposed project. Connecticut, Rhode Island, and Illinois have similar laws. New Jersey and California both have similar provisions, but local governments are protected from challenges by developers when their general plans’ housing chapters comply with state fair-share laws. Of course, all these states have in common the ability of local governments to exert strong regulatory control over development in the first place. Pennsylvania’s case law limits the ability of municipalities to practice exclusionary zoning; in Texas and Alabama, county governments lack the power to zone at all
Incentives for Builders to Provide Mixed-Income Housing
Inclusionary zoning and density bonus programs, described in the section above on development-level income mixing, are governed by state laws. California’s density bonus law is probably the most aggressive in the country, requiring local governments to provide a density bonus of 35 percent plus other regulatory concessions (e.g., parking, height, lot coverage) if a builder proposes a project in which at least 20 percent of units will be affordable. (See Ryan and Enderle 2012.) While concessions to developers appear to be generally acceptable, affordable housing mandates are becoming less so. State courts in Colorado and California have recently overturned inclusionary zoning for rental housing based on arguments that it amounts to rent control (prohibited in both states), for example, and the Oregon legislature preempted any local use of inclusionary zoning in 1999 (Pendall 2008). Many other states do not permit inclusionary zoning.

Measures to Blunt the Fiscal Motivations for Exclusionary Zoning
As discussed in an earlier section, fiscal concerns about “free riders” motivate much exclusionary zoning (Levine 2006). States seldom change their fiscal rules to help overcome fiscally motivated exclusionary zoning; fiscal reform is more often prompted by legal action on the inequality of educational opportunity. In California, for example, the landmark *Serrano v. Priest* case (20 Cal.3d 25 (1977)) revolutionized school finance, ultimately resulting in the allocation of resources to school districts on a per-capita basis. Even so, California’s fiscal regime still rewards jurisdictions for excluding low-income people by allocating sales-tax revenues to jurisdictions based on the point of sale rather than redistributing sales taxes based on population or need.

At least a few cases of state fiscal changes have occurred, however, with encouragement of local inclusion at least partly in mind. Minnesota’s state legislature, for example, created in the 1960s a tax-base sharing system for the Twin Cities metropolitan area that redistributes a portion of the new industrial and commercial tax base to communities based on a formula partly accounting for low-income households’ needs for public services (Orfield 1997). And in 2004, Massachusetts adopted Chapter 40R, in which towns receive revenues from the state if they zone for and approve affordable housing. Towns receive between $10,000 and $600,000 to create zoning overlay districts for higher-density housing with at least 20 percent affordable units (Verrilli and Raitt 2009). Chapter 40R sweetens the deal by allocating $3,000 per unit when building permits are issued. The locations of the overlay districts must be near transit or commercial centers, in areas with existing infrastructure, or otherwise “highly suitable” for “smart growth.” Jurisdictions can count the units expected in their overlay zones toward the 10 percent threshold for exemption from the Chapter 40B override system. By 2009, 27 districts had been approved, with 1,100 units already built or under construction (Verrilli and Raitt 2009). A companion law, Chapter 40S, was enacted in 2005 making communities eligible to receive partial state reimbursement for any extraordinary increase in the cost of public education associated with development in 40R districts.
Keeping Low-Income and Mixed-Income Jurisdictions Healthy and Desirable

Just as cities can invest in low- or mixed-income districts to make them more desirable for households and businesses that might otherwise “opt out,” states can invest in their cities in ways that improve local amenities and public services. States and regions can take a myriad of actions that could have these enriching effects—more than space permits here—but one interesting set of policies has to do with controlling sprawl. Nelson et al. (2004b) find that central cities of metropolitan areas with strong “urban containment” policies experienced more development of single-family housing, multifamily housing, offices, and commercial additions after adopting anti-sprawl policies than those accommodating more growth at the fringe. It is unclear, however, whether this tendency for central cities in contained metro areas to capture more development translated into greater income mixing even among jurisdictions, not to mention within central cities and suburbs.

Containment policies are often opposed for their expected impact on housing affordability; if they reduce land availability and densities on land where development is permitted cannot increase, then the housing supply can be restricted. But containment can be accompanied by measures facilitating development in areas slated for growth (e.g., infrastructure investment and favorable zoning and permitting processes). Even if housing prices rise, however, this is an indication of the city’s desirability, a sign that income mixing at the jurisdictional level has taken root. It does not, however, guarantee income mixing in districts or neighborhoods and might even exacerbate processes of gentrification and displacement within and from central cities. If the benefits of income mixing warrant higher housing costs, then the logical policy approach would be to use subsidies, (de)regulatory approaches, and infrastructure investments that help consolidate and maintain the ability of low-income people to live there without overpaying and overcrowding. Over the long term, measures to preserve affordability for low-income people will be necessary to preserve income mixing, because rising housing costs will sooner or later reduce the probability that low-income people move into or stay in a city.

An additional risk, however, is that very high housing demand in the central city will produce a bipolar income distribution as middle-income households move to suburbs. This risk may be less pronounced in the next 20 years than it was in the 1970s and 1980s because of changing household structure. In 1975, about 51 percent of households had one or two members; in 2012, the share of one or two-person households had climbed to 61 percent. This growth helps sustain demand for housing in central cities, since small households are more likely than large ones to live in central cities (Clark and Dieleman 1996). Since small households have lower incomes than large ones, the resurgence of central cities based on small households might promise to exacerbate interjurisdictional inequality and reinforce central-city poverty instead of reducing it. But the median incomes of small households have also grown more rapidly in real terms since 1975 than those of three- and four-person households: 41 percent and 31 percent for one- and two-person households, respectively, compared with just 18 and 27 percent for three- and four-person households (US Census 2013). Rising middle-income households also are more likely to be first- or second-generation immigrants whose desire to leave the central city may not be as strong as was the case of white Baby Boomers in the 1970s (Myers and Gearin 2001). All this underscores the potential demand for middle-income housing in central cities that, if met, can both help maintain income mixing and reduce the pressure on scarce housing for low-income residents. Market-rate components of
transit-oriented and downtown development can at least theoretically serve these purposes of income mixing at the city level.

Mitigating the Impacts of Income Segregation

Even when policymakers try to increase income mixing among jurisdictions, cities will differ in their income composition. Additional policies can aim to mitigate some of the impacts of inequality even if they do not attempt to reverse it. These include, for example, state or federal revenue redistribution to local governments in low-income areas and targeted programs for community development, alleviating the impact of poverty in low-income cities and neighborhoods. Other policies might target schools by increasing resources, changing assignment rules, creating new opportunities for school choice, and allowing inter-district transfers. Such policies may not directly attract new middle-income people, but they could provide enough choices to satisfy some of the more upwardly mobile established low-income families and thereby reduce the probability that they leave for other cities.

Building Knowledge about Income Mixing Across Scales

Although income-mixing practice and policies have been in force at various scales for decades, we still have a lot to learn about what works to bring it about and what impacts it might have. Important questions also remain about the impacts of income homogeneity, especially those of upper-income enclaves. Based on our review, a number of issues should be given high priority. In this last section, we propose approaches to further research about three: income mixing at the district scale; the incidence and impacts of wealthy enclaves; and analysis of how federal and state income supports and benefit policies affect local income mixing.

Income Mixing in Districts

Proponents of income mixing expect it to solve a wide array of problems via a wide variety of mechanisms, including both the construction of place-based social ties and greater access to services and amenities for low-income people than they would have in homogeneous areas. Some of these processes occur at fairly intimate scales where face-to-face interactions help build social ties: within developments, along a block front or at the intersection of two residential streets, or in an uninterrupted network of low-volume pedestrian-friendly streets. Others occur at the wider scale of the city or school district, where low-income people who share cities with middle and upper income people enjoy the benefits of greater investment by both the public sector and the private sector in services and amenities.

An intermediate scale to consider is the district, an area larger than a single neighborhood but smaller than a city. While significant research has been conducted on the social consequences of income mixing at intimate scales (developments, block fronts, and micro-neighborhoods), we know less about the incidence, function, impact, and sustainability of groups of neighborhoods that may be somewhat internally homogeneous but that differ from one another. Suburbia, where the majority of Americans live, is dominated by such internally homogeneous neighborhoods. Households’ preferences, infrastructure investment patterns, engineering standards, local land-use regulations, decisions by financial institutions, and developer decision-making have led to the construction of these uniform neighborhoods that occupy the majority of developed land in most metropolitan areas. Some developments feature both small
groups of single-family houses and small to medium-sized apartment developments, resulting in greater homogeneity at the micro-neighborhood scale but more diversity at the district level. As shown in our review, this kind of mixed homogeneity has been a building block for communities planned to encourage diversity throughout the twentieth century.

Districts also often have commercial areas, community centers, and other gathering spaces: “social seams” (Nyden et al. 1998). These places provide opportunities for people living nearby to see one another regularly, to interact if they wish, and to meet intentionally when they want to. They thereby provide opportunities for face-to-face contact and the formation of social connection among people who may live in homogeneous neighborhoods that differ from one another. Even if interpersonal interactions at social seams produce few benefits, residents may benefit from proximity to the businesses and organizations located there.

This research project would seek to uncover in greater detail than has been attempted previously the origin, character, stability, and impact of mixed-income districts. It would have a series of phases, first exploratory and then explanatory.

1. What is a district, and what makes it a mixed-income district?

To answer this first question, two metropolitan areas would be selected to test methods for identifying districts using nationally available data. Researchers would use a variety of data sources to distinguish three ingredients of districts: neighborhoods, boundaries, and social seams. They would also draw on prior research on the spatial dimensions of racial segregation (e.g., Massey and Denton 1988).

- Many past studies have used census tracts to represent neighborhoods. Closer investigation and consideration, however, has shown that tracts do not align closely with the neighborhoods people experience. Tract boundaries are set to comprise an average of 4,000 people, and some have more than 10,000. Most people would be daunted to think they have thousands of neighbors. Also, population densities vary widely across metropolitan areas, meaning that most metropolitan areas have at least some—and often many—tracts where some clusters of residents live fairly far apart from other clusters within the same tract. Tracts also sometimes cross the boundaries of school attendance areas, jurisdictions, and school districts. Some observers therefore consider census block groups—whose population generally ranges from 600 to 3000 people—better representations of neighborhoods as residents experience them (Sperling 2012). Measuring income in block groups has become extremely imprecise, however, because of the American Community Survey’s low sample size. Even so, the decennial census still includes 100 percent count data on population, household structure, age, race, Hispanic origin, and tenure at the block group level; these data could be used in conjunction with microdata and small-area data from the American Community Survey to estimate income distributions and average household income at the block group level.8

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8 For example, households could be allocated to block groups within their census tracts using just three categories of incomes—low, medium, and high—but estimating each group based on the proxy decennial census data.
• **Boundaries** that hinder connections between block groups, including highways, rivers, and industrial areas, can be estimated using a combination of Census data and remotely sensed data. Physical boundaries can also be inferred based on termination points of residential streets and intersections between residential streets and highways or busy arterials and by large areas where census block geography indicates absent or very low density development. Boundaries would also be characterized according to their width and permeability. (For example, a steep cliff or an Interstate highway could be characterized as a more significant boundary than a six-lane suburban arterial street or a park running along a stream.) We will also consider the potential relevance of administratively-defined boundaries.

• **Social seams** also appear to be important components of successful mixed-income districts; it is not established, however, whether they are necessary components for thriving districts. Small-area data on commercial establishments (e.g., restaurants and grocery stores), government facilities (e.g., libraries and schools), and parks and playgrounds—all places that have the potential to function as social seams—are increasingly available. The Census’s Longitudinal Employer-Household Dynamics (LEHD) program provides data on employment by industry for geographies as small as blocks, and data on local land uses are increasingly available at low or no cost for users of standard GIS packages. The National Center for Charitable Statistics (NCCS), which provides data on registered tax-exempt organizations, is another potentially useful data source. (The identification of social seams and how they work is also an important research topic of its own. Large traffic generators are usually served with roads and highways that separate neighborhoods. But some of these major facilities—shopping malls, big-box stores, downtown entertainment complexes, high schools, and so on—also serve as social seams not only for their neighborhoods but for people in a wide radius. While unlikely to serve as mixing places for young children, such areas are very important zones for interaction among adolescents and young adults.)

Income mixing** within districts would be measured using a combination of the entropy index, the average income of the entire district, and the differences among the incomes of constituent block groups within the district. Districts would be sorted into types based on the uniformity of their block groups, their overall average income, and the income distribution of households within them. Tentatively, districts could be classified as homogeneous upper, middle, or lower income, fully mixed, or “mosaic,” (i.e., mixed at the district scale but homogeneous at the block group scale).

Measurement of **changes in districts over time** will be possible at least in part between 2000 and 2010 thanks to the existence of Census TIGER files for both years. LEHD data are sparser before 2010, however, especially for government employment. Estimation of the stability of districts over time is important. Considering the role of long-lasting investments and “hard” geographic features in shaping boundaries and constituting social seams, we hypothesize that districts will prove more stable through time than neighborhoods within them and that using fixed boundaries from 2010 will also provide reasonable estimates of district boundaries for 2000.

Identification of the **correspondence between district boundaries and other important boundaries** would also facilitate more complete characterization of districts; for example, a district separated by a munici-
pal boundary or an elementary-school attendance district line might be encoded according to such im-
portant defining geographies.

After testing methods for distinguishing districts, the method would be validated in those metropolitan
areas via close observation, interviews, focus groups, and surveys. The method would then be extended
to other large metropolitan areas and made public for use by other researchers, local planners, and the
broader public. Estimated district boundaries and statistical estimates of the characteristics of districts
over time could also be assembled and made available for policymakers and researchers.

2. What policies and decisions lead to the development and maintenance of mixed-income dis-
tricts, and to their erosion or destruction?

Our review suggests that, at least when measured at the census-tract level, income mixing has become
more rather than less pronounced between low- and middle-income households. Even so, many districts
are uniformly low-income. As well, some well-situated mixed-income districts have recently become
attractive to upper-income households, and other more poorly situated mixed districts have been hard
hit by the economic and housing crisis, reducing their households’ income.

To understand why districts have the income mixes that we observe and why these mixes changed in
the 2000s, researchers would use income mixing data gathered for 2000 and 2010 in answering the first
question. Two parallel research projects would be undertaken to provide lessons for policy and practice:

- A national study of all large metropolitan areas using national data to identify factors contrib-
  uting to district-scale levels of and changes in income distribution (e.g., housing characteristics,
  racial composition, housing market strength, land use policies, geography, infrastructure, and
  characteristics of boundaries and social seams). Special attention would be given to factors that
can be influenced by federal, state, and local policymakers.
- Case studies of metropolitan areas where certain district types and trajectories prevail. Qualita-
  tive research (interviews) and document analysis would reveal the answers to a series of ques-
tions in these case-study metro areas:
  - What practices and policies at the local, state and federal levels, in combination with lo-
    cal demographic, economic, and housing-market conditions, appear to contribute to the
dominant pattern of income mixing in the metropolitan area?
  - In a metropolitan area with mostly uniform districts, what can we learn from the emer-
geance or persistence of mixed-income districts? What are the diverse contributions of
housing-market, demographic, and economic trends and local policies/practices?
  - In a metropolitan area dominated by mixed-income districts but in which many mixed
districts are deteriorating, what warning signs can be distinguished from 2000 or earlier
of the pending deterioration? Are there important differences between deteriorating
and stable neighborhoods and in the nature of local practices and policies in either
maintaining or hastening deterioration?
  - In a metropolitan area with many mixed-income districts that are gentrifying, has this
gentrification process led to displacement or simply intensification of development?
Under what conditions are gentrifying districts “mosaic” districts, containing affluent neighborhoods side by side with middle- or low-income neighborhoods, and when are they even more mixed than this? What conditions and practices contribute to the persistence of low- and middle-income households even in the face of growth in the affluent population?

3. What are the impacts of mixed-income districts of various kinds for residents and metropolitan areas?

Much research on income mixing asks the impacts of income mixing on residents, especially low-income residents. Extending this research to districts will shed light on whether and when mixed-income districts of various kinds work better for their residents than homogeneous ones. This question will be answered with two strains of research. First, *residential satisfaction and well-being* will be measured using georeferenced American Housing Survey data, assuming researchers can obtain special sworn status to use georeferenced AHS data or otherwise collaborate with researchers at HUD or the US Census Bureau. If permission were given by HUD, exploration of neighborhood satisfaction and resident well-being could also be undertaken using other surveys of HUD-assisted households, including MTO and the Welfare to Work Voucher experiment; the Making Connections survey could also be exploited for these purposes. Second, *hedonic housing price analysis* will be conducted in a limited number of metropolitan areas using residential sales data purchased from commercial sources. For both satisfaction and house price, the significance and sign of measures relating to the district’s income distribution developed to answer the first research question will be used to predict the relevant outcome variables. Many other strains of research could be conducted on how living in mixed-income districts affects outcomes for residents of various ages, extending work done on neighborhood effects to a new level.

One novel line of research that would require new interviews, surveys, and in-person observation concerns how social seams affect attitudes and satisfaction. There is widespread growth of the construction of transit-oriented development, which promises to yield a proliferation of social seams. Downtowns and other mixed-use districts are also on the rise, while enclosed shopping malls are losing some of their appeal. Qualitative and quantitative (survey-based) exploration of whether, how, and for whom new and traditional gathering spaces help overcome class division and increase understanding would bring important new information to planning and community development approaches for income mixing that have traditionally relied mainly on residential neighborhoods.

Mixed-income districts of various kinds also have other potential “performance dimensions” that should be tested. The candidate list is quite large but includes, for example:

- Economic development and fiscal impacts
  - How does the character of income mixing affect the creation and success rate of small businesses in social seams?
  - What are the net fiscal impacts for local governments of mixed-income districts? Are the long-term fiscal costs of a city or metro area with more mixed-income districts lower, higher, or the same as a city/metro area composed of many homogeneous districts?
• Political and civic impacts
  o Do representatives of mixed-income districts on city councils and state legislatures campaign and vote differently than those of homogeneous districts?
  o Do residents of mixed-income districts register and vote more predictably than those in homogeneous districts?
• Crime and public safety
  o Are crime rates lower in mixed-income districts than in homogeneous districts? What are the correlations between changing income distributions and changes in crime, both violent and property-related?
• Schools
  o Is there a relationship between living in mixed-income districts and educational outcomes?
  o Is teacher satisfaction higher in school districts and schools where more students live in mixed-income districts?
• Transportation
  o Does income mixing at the district scale increase the viability of mass transit? If so, how?

Impacts and Implications of Wealthy Enclaves
A key finding of our review is that increased inequality among communities has been driven not by the isolation of very poor neighborhoods and cities from middle- and upper-income places but by the “secession of the successful” into homogeneously high-income neighborhoods and communities. The impact of these upper-income enclaves needs to be studied. The following research questions represent interesting starting points:

• What are rich enclaves like?
  o What features distinguish their social composition (e.g., residents’ race, age, family structure, occupation), built environments (residential density, street layout, open space), and spatial location and scale (e.g., are they located mainly in exurban areas? How large are they and what defines their boundaries)?
  o Are these characteristics shared by enclaves in most metro areas, or are there differences among metros?
• Where have they grown most rapidly?
  o Which metro areas have the largest number of rich enclaves, and what distinguishes them from others? Are they more fragmented into multiple jurisdictions than metros with fewer enclaves?
  o Where are enclaves located in regions with many of them, and how do they relate to the locations of other neighborhoods?
  o What were these enclaves like before they became exclusively rich enclaves?
• How does the presence of rich enclaves associate with other regional outcomes?
  o What are the housing-market implications of rich enclaves? Do they increase market segmentation and raise prices more generally? Or do they soak up demand for high-cost
housing and thereby reduce pressure on prices in lower-cost jurisdictions and neighborhoods?

- To what extent are enclaves an unavoidable outcome of growing income inequality?
- Is there a correlation between the presence of rich enclaves and levels of concentrated poverty?
- Do rich enclaves associate with different overall (metropolitan) levels of public investment, political participation, and neighborhood satisfaction? What about each of these within rich enclaves and among other neighborhoods?
- Do metro areas with more rich enclaves experience different levels of urban sprawl than those with fewer enclaves?
- Does the scale and pattern of rich enclaves make a difference in any correlations with other regional outcomes? For example, do outcomes in metro areas where rich enclaves are nested within mixed jurisdictions differ from those in metros where enclaves are separate, homogenous jurisdictions?

- What is the probable future of rich enclaves?
  - To the extent these enclaves are primarily the home of Baby Boomers (at the peak of their earning potential), will the extremity of their difference from other neighborhoods change once the boomers start retiring?
  - Since Gen-X is smaller than the Baby Boom and has different social characteristics, will the market for housing in rich enclaves decline?

- What policies are most effective for increasing income diversity in rich enclaves?
  - What barriers are posed by fiscal considerations, zoning, housing finance, and infrastructure, and how can they be addressed?
  - Are race-conscious strategies important for integrating rich enclaves, and if so, what do these consist of?

To answer these questions, we propose a four-part, mixed-methods research project.

After a preparatory literature review, the first part of the research would use historic data from the US Census at the block-group, census-tract, and jurisdiction level to identify the current incidence and the historic trajectory of rich enclaves in the 100 largest metropolitan areas. Metro-wide statistics will be generated to indicate the level and change in the concentration of the very rich (e.g., areas with average incomes at least N times the metropolitan average) between 1980 and 2010, identifying metro areas with high levels of concentration of the rich across scales ranging from neighborhood to jurisdiction to multiple counties. A typology of metropolitan areas will be developed based on the extent of income separation and the ways in which it varies across geographic scales. Since the formation of enclaves presupposes the presence of rich households, this part of the research would also track the relationship between overall income inequality at the metro level and enclave formation.

The second part of the research is explanatory, looking for factors that associate with the extent of high-income segregation at each scale. This part would begin with an explanation of factors associated with the dominance and growth of income segregation as measured by the metropolitan-level indicators (i.e., the unit of analysis will be the metropolitan area). Industrial structure, income distribution, race, topog-
raphy, regulatory regime, growth rate, and land development patterns will all be considered as potential contributing factors, with conceptual models developed to understand the way in which policy has contributed to income segregation. Since these analyses would be models of change over the decades between 1980 and 2010, they could be adapted to project future changes in the extent of the segregation of the rich and to simulate the potential impact of changes in the economy, public policy, or demographics.

This part would also include modeling of the genesis and evolution of rich enclaves below the metropolitan scale (tracts and multi-tract districts), developing multivariate models to identify the drivers and corollaries of enclave formation including built environment, location within the region, and social and economic characteristics of residents in the area. Models will be developed for both the entire set of 100 metropolitan areas to allow identification of the average impact of each factor and then for groups of metro areas with similar patterns of segregation of the rich to see whether some characteristics have markedly different impacts in some metros than in others. Like the metro-level work, this part would be well-suited to identify tracts, jurisdictions, or other parts of metro areas that are especially at risk of future enclave formation, allowing the development of policies to counteract income segregation if such is deemed an appropriate approach.

The third part of the research also is explanatory but shifts from explaining income segregation to understanding its impacts. This part would require its own process of conceptual development and could involve mixed methods. The goal would be to understand outcomes for enclaves and the people who live in them, impacts on nearby places, and impacts at the metropolitan scale of income segregation. Some of the impacts might include, for example:

- **Housing market impacts**: Data from the Census, HMDA, and proprietary sources can be used to understand how enclaves affect housing prices in surrounding areas and to model the impacts of the extent of enclave formation on regional housing markets.
- **Racial segregation impacts**: Data from the Census can be used to understand whether and how income segregation affects racial segregation over time.
- **Fiscal impacts**: Data from the Census of Governments, Census, and original data collection can be used to understand the distribution of fiscal health across jurisdictions in metropolitan areas with higher and lower levels of enclave formation, and to understand the relationship between metropolitan levels of segregation of the rich and overall public spending. Where regional data are available, the research could also explore whether bond issues are more likely to pass (or fail) in areas with high concentrations of the rich, including analysis of interaction between income and other factors. The study of fiscal impacts could also involve mixed-methods mini-case studies of jurisdictions classified as rich enclaves to understand the ways in which state law and local policies combine to affect their fiscal health.
- **Civic participation and social cohesion impacts**: Social surveys may be used to determine whether there are significant relationships between the dominance of rich enclaves and levels of civic participation and voting by various groups as well as social attitudes. Given enough budget, new
surveys could be designed to measure civic participation and social cohesion in metro areas with very high and very low levels of enclave formation.

The fourth part of the research involves in-depth mixed-methods case study of one or two metropolitan areas in each of the major metro types identified in the first part of the research. The purpose of this part of the research is to understand how federal, state, and local policies interact with demographic, built-environment, and natural-environment features to create or prevent the creation of upper-income enclaves. It is also intended to enrich the findings on impacts on the housing market, racial segregation, local fiscal structure, and civic participation with qualitative data.

**Federal and State Policy and Local Income Mixing**

Our review shows that metropolitan areas with higher levels of income inequality also have greater income inequality among places. The review also shows that income mixing among low- and middle-income families and enclave formation among the wealthy have both increased in the past 25 years. Yet income inequality does not explain the entire variation among metro areas in their levels of income separation among tracts and places. We propose further research that would begin with updated analysis of income separation (or mixing) as a multi-level phenomenon, “explaining” variation in place-based sorting based on metro levels of income inequality, then proceeding to understand district- and tract-level sorting based on inequality and separation at higher geographic levels as well as inter-household variation. This initial analysis would be followed by a series of investigations meant to reveal the role of federal and state in improving income mixing in established neighborhoods and newly growing areas. The focus on federal and state policy is justified because local policies have been the subject of significant research and experimentation, but the role of policy and practices at higher levels is more poorly understood. Local actions are also often dictated or circumscribed by state or federal rules and laws, making it necessary to identify ways in which local governments could be allowed or encouraged to create and sustain mixed-income communities.

1. The impacts of federal income and benefit programs on local income mixing

Census reports on local income and poverty levels fail to account for taxes and many transfers, meaning that we have an incomplete picture of income mixing. Income supports for low-income people, including housing vouchers, SNAP, and the Earned Income Tax Credit, among others, should allow them to live among middle-income families if they wish to. Other supports, including the tax deductibility of property taxes and mortgage interest, also may encourage the formation and maintenance of rich enclaves because they are used mainly by high-income households. Since use of these benefits and deductions varies across the United States, investigation of state and metropolitan differences in levels of income mixing and enclave formation could help reveal the role, if any, of these federal policies in reinforcing patterns of residential income mixing. Since both taxation and spending are under intense scrutiny, research would help policymakers and researchers understand the potential local effects of changes in federal tax and benefit structures.

2. The impacts of state policies on local income mixing
Systems of taxes and benefits also differ among states, potentially magnifying the impact of federal policy in some states and metropolitan areas on the composition of household incomes in tracts and jurisdictions. Many other state laws, policies, and practices also affect the composition of the local housing stock and the creation of housing submarkets. These include, for example, boundary-setting for local governments and school districts; funding decisions for infrastructure; affordable housing policy, including mechanisms for allocating low-income tax credits; and land-use statutes and case law. Our review suggests that this complex array of state policies may have important effects on income-based sorting and mixing at the level of jurisdictions and neighborhoods.

This research project would build on the Urban Institute’s suite of microsimulation tools to model the local income-mixing impacts of federal and state policies in two metropolitan areas, Houston and Los Angeles. Both areas have large Latino and immigrant populations and have grown rapidly in the past 20 years, giving rise to new forms of spatial income inequality. With high housing prices, Los Angeles is home to a disproportionate number of tax filers who take advantage of the mortgage interest deduction; Houston’s sprawling urban form and low prices reduce the appeal of the MID, but it has high local property taxes that are used for the construction of peripheral infrastructure, potentially increasing the value of the deductibility of property taxes. At the low-income end of the scale, California has a more generous benefit system than Texas does, potentially offering low-income people greater opportunities to live among middle income residents. But housing prices also affect income mixing in California, encouraging middle-income people to seek housing opportunities in low-income neighborhoods.
References


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Table 1: Among-Tract and Among-Jurisdiction Income Inequality for the 50 Largest CBSAs, 2005-2009

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  Long Island                  | NY-NJ-PA | 4,507 | 18,900,000  | 0.491            | 0.298            | 0.231            | 0.773            |
| Portland-Vancouver-Hillsboro  | OR-WA | 426  | 2,163,436   | 0.458            | 0.193            | 0.149            | 0.773            |
| Detroit-Warren-Livonia        | MI    | 1,292| 4,452,548   | 0.469            | 0.270            | 0.206            | 0.764            |
| Boston-Cambridge-Quincy       | MA-NH | 924  | 4,513,934   | 0.468            | 0.235            | 0.174            | 0.740            |
| Jacksonville                  | FL    | 201  | 1,294,684   | 0.457            | 0.212            | 0.157            | 0.738            |
| Birmingham-Hoover            | AL    | 226  | 1,112,213   | 0.479            | 0.261            | 0.192            | 0.736            |
| Memphis                       | TN-MS-AR | 285 | 1,287,231   | 0.483            | 0.303            | 0.222            | 0.735            |
| Atlanta-Sandy Springs-Marietta| GA    | 690  | 5,238,994   | 0.465            | 0.249            | 0.180            | 0.722            |
| Salt Lake City                | UT    | 205  | 1,090,416   | 0.442            | 0.213            | 0.149            | 0.703            |
| Philadelphia-Camden-Wilmington| MD | 1,473 | 5,910,593 | 0.475            | 0.276            | 0.188            | 0.682            |
| Dayton                        | OH    | 208  | 839,359     | 0.456            | 0.206            | 0.135            | 0.657            |
| Columbus                      | OH    | 385  | 1,758,531   | 0.462            | 0.268            | 0.170            | 0.634            |
| Richmond                      | VA    | 277  | 1,209,484   | 0.457            | 0.248            | 0.151            | 0.607            |
| Sacramento--Arden-Arcade--    | CA    | 403  | 2,076,579   | 0.455            | 0.200            | 0.119            | 0.591            |
| Providence-New Bedford-Fall River| RI-MA | 351  | 1,602,591   | 0.468            | 0.210            | 0.122            | 0.583            |
| Buffalo-Niagara Falls         | NY    | 304  | 1,128,813   | 0.467            | 0.240            | 0.123            | 0.510            |
| Baltimore-Towson              | MD    | 625  | 2,669,987   | 0.461            | 0.262            | 0.132            | 0.506            |
| Hartford-West Hartford-East Hartford | CT | 284  | 1,186,939   | 0.456            | 0.250            | 0.126            | 0.504            |
| Rochester                     | NY    | 256  | 1,033,026   | 0.456            | 0.252            | 0.124            | 0.492            |
| Virginia Beach-Norfolk-Newport News | VA-NC | 373  | 1,669,614   | 0.441            | 0.239            | 0.112            | 0.471            |
| New Orleans-Metairie-Kenner   | LA    | 388  | 1,153,788   | 0.484            | 0.274            | 0.126            | 0.459            |
| Las Vegas-Paradise            | NV    | 345  | 1,821,507   | 0.445            | 0.217            | 0.084            | 0.386            |

Notes: Largest 50 CBSAs in 2005-2009 ACS, ranked with jurisdiction-tract Gini ratios from lowest to highest.
Higher jurisdiction-tract Gini ratios reflect income distributions more unevenly distributed among jurisdictions relative to tracts. Lower jurisdiction-tract Gini ratios reflect income distributions more unequal within tracts rather than among jurisdictions.
Income measure is average household income.
The average household Gini coefficient for the US across the years 2005-2009 was 0.467.
Table 2: Among-Tract and Among-Jurisdiction Income Inequality for the 50 Largest CBSAs, 2000

<table>
<thead>
<tr>
<th>CBSA Name</th>
<th>State</th>
<th># Tracts</th>
<th># Jurisdictions</th>
<th>2000 Population</th>
<th>CBSA Household Gini</th>
<th>Among-Tract Gini</th>
<th>Among-Jurisdiction Gini</th>
<th>Jurisdiction- Tract Gini Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Jose-Sunnyvale-Santa Clara</td>
<td>CA</td>
<td>349</td>
<td>19</td>
<td>1,735,819</td>
<td>0.443</td>
<td>0.191</td>
<td>0.240</td>
<td>1.254</td>
</tr>
<tr>
<td>Louisville/Jefferson County</td>
<td>KY-IN</td>
<td>267</td>
<td>165</td>
<td>1,161,975</td>
<td>0.449</td>
<td>0.217</td>
<td>0.267</td>
<td>1.229</td>
</tr>
<tr>
<td>Seattle-Tacoma-Bellevue</td>
<td>WA</td>
<td>664</td>
<td>84</td>
<td>3,043,878</td>
<td>0.443</td>
<td>0.190</td>
<td>0.234</td>
<td>1.226</td>
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<tr>
<td>Denver-Aurora-Broomfield</td>
<td>CO</td>
<td>528</td>
<td>57</td>
<td>2,157,756</td>
<td>0.444</td>
<td>0.236</td>
<td>0.280</td>
<td>1.186</td>
</tr>
<tr>
<td>Miami-Fort Lauderdale-Pompano Beach</td>
<td>FL</td>
<td>892</td>
<td>99</td>
<td>5,007,564</td>
<td>0.487</td>
<td>0.276</td>
<td>0.326</td>
<td>1.180</td>
</tr>
<tr>
<td>San Antonio-New Braunfels</td>
<td>TX</td>
<td>339</td>
<td>66</td>
<td>1,711,703</td>
<td>0.449</td>
<td>0.231</td>
<td>0.253</td>
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</tr>
<tr>
<td>Indianapolis-Carmel</td>
<td>IN</td>
<td>315</td>
<td>86</td>
<td>1,525,104</td>
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<td>0.217</td>
<td>0.233</td>
<td>1.073</td>
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<tr>
<td>Salt Lake City</td>
<td>UT</td>
<td>205</td>
<td>31</td>
<td>968,858</td>
<td>0.428</td>
<td>0.210</td>
<td>0.222</td>
<td>1.056</td>
</tr>
<tr>
<td>San Francisco-Oakland-Fremont</td>
<td>CA</td>
<td>871</td>
<td>70</td>
<td>4,123,740</td>
<td>0.472</td>
<td>0.247</td>
<td>0.259</td>
<td>1.046</td>
</tr>
<tr>
<td>St. Louis</td>
<td>MO-IL</td>
<td>551</td>
<td>299</td>
<td>2,698,687</td>
<td>0.448</td>
<td>0.227</td>
<td>0.237</td>
<td>1.046</td>
</tr>
<tr>
<td>Phoenix-Mesa- Glendale</td>
<td>AZ</td>
<td>696</td>
<td>36</td>
<td>3,251,876</td>
<td>0.447</td>
<td>0.242</td>
<td>0.251</td>
<td>1.037</td>
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<tr>
<td>Nashville-Davidson--Murfreesboro--Franklin</td>
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<td>72</td>
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<td>0.451</td>
<td>0.229</td>
<td>0.229</td>
<td>1.003</td>
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<tr>
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<td>MN-WI</td>
<td>746</td>
<td>250</td>
<td>2,968,806</td>
<td>0.434</td>
<td>0.208</td>
<td>0.202</td>
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<td>OK</td>
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<td>0.968</td>
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<tr>
<td>DC-VA-MD</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washington-Arlington-Alexandria</td>
<td>WV</td>
<td>1,016</td>
<td>117</td>
<td>4,796,183</td>
<td>0.443</td>
<td>0.241</td>
<td>0.233</td>
<td>0.966</td>
</tr>
<tr>
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<td>CA</td>
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<td>123</td>
<td>12,400,000</td>
<td>0.487</td>
<td>0.272</td>
<td>0.259</td>
<td>0.955</td>
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<td>144</td>
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<td>0.262</td>
<td>0.249</td>
<td>0.949</td>
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<td>IL-IN-WI</td>
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<td>233</td>
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<td>0.263</td>
<td>0.236</td>
<td>0.899</td>
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<td>0.273</td>
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<td>0.882</td>
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<td>0.192</td>
<td>0.880</td>
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<td>0.198</td>
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<td>0.878</td>
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<td>0.253</td>
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<td>0.878</td>
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<td>0.857</td>
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<td>City</td>
<td>State(s)</td>
<td>Rank</td>
<td>Population</td>
<td>Income Gini Ratio</td>
<td>Income Gini Ratio</td>
<td>Income Gini Ratio</td>
<td>Income Gini Ratio</td>
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<td>0.250</td>
<td>0.212</td>
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<td>0.810</td>
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<td>NC-SC</td>
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<td>0.187</td>
<td>0.796</td>
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<td>4,452,557</td>
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<td>0.204</td>
<td>0.770</td>
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<td>0.758</td>
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<td>0.237</td>
<td>0.176</td>
<td>0.742</td>
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<tr>
<td>Atlanta-Sandy Springs-Marietta</td>
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<td>690</td>
<td>4,247,981</td>
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<td>0.232</td>
<td>0.165</td>
<td>0.713</td>
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<tr>
<td>Philadelphia-Camden-Wilmington</td>
<td>MD</td>
<td>1,473</td>
<td>5,687,147</td>
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<td>0.252</td>
<td>0.177</td>
<td>0.705</td>
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<td>0.194</td>
<td>0.133</td>
<td>0.684</td>
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<td>CA</td>
<td>403</td>
<td>1,796,857</td>
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<td>0.195</td>
<td>0.126</td>
<td>0.647</td>
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<tr>
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<td>FL</td>
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<td>1,122,750</td>
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<td>0.204</td>
<td>0.130</td>
<td>0.636</td>
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<tr>
<td>Providence-New Bedford-Fall River</td>
<td>RI-MA</td>
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<td>0.459</td>
<td>0.206</td>
<td>0.121</td>
<td>0.586</td>
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<tr>
<td>Buffalo-Niagara Falls</td>
<td>NY</td>
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<td>0.215</td>
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<td>0.573</td>
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<td>0.224</td>
<td>0.123</td>
<td>0.546</td>
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</tr>
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<td>Hartford-West Hartford-East Hartford</td>
<td>CT</td>
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<td>1,148,618</td>
<td>0.452</td>
<td>0.228</td>
<td>0.120</td>
<td>0.527</td>
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</tr>
<tr>
<td>Rochester</td>
<td>NY</td>
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<td>0.233</td>
<td>0.122</td>
<td>0.524</td>
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<td>0.125</td>
<td>0.513</td>
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</tr>
<tr>
<td>New Orleans-Metairie-Kenner</td>
<td>LA</td>
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<td>1,316,510</td>
<td>0.480</td>
<td>0.252</td>
<td>0.109</td>
<td>0.434</td>
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</tr>
<tr>
<td>Virginia Beach-Norfolk-Newport News</td>
<td>VA-NC</td>
<td>373</td>
<td>1,576,370</td>
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<td>0.225</td>
<td>0.088</td>
<td>0.393</td>
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<tr>
<td>Las Vegas-Paradise</td>
<td>NV</td>
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<td>0.209</td>
<td>0.062</td>
<td>0.299</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Largest 50 CBSAs in 2000, ranked with jurisdiction-tract Gini ratios from lowest to highest.
Higher jurisdiction-tract Gini ratios reflect income distributions more unevenly distributed among jurisdictions relative to tracts.
Lower jurisdiction-tract Gini ratios reflect income distributions more unequal within tracts rather than among jurisdictions.
Income measure is average household income.
1999 household income Gini coefficient for the US was 0.458.
Table 3: Among-Tract- and Among-Jurisdiction Income Inequality for the 50 Largest CBSAs, 1990

<table>
<thead>
<tr>
<th>CBSA Name</th>
<th>State</th>
<th># Tracts</th>
<th># Jurisdictions</th>
<th>1990 Population</th>
<th>CBSA Household Gini</th>
<th>Among-Tract Gini</th>
<th>Among-Jurisdiction Gini</th>
<th>Jurisdiction- Tract Gini Ratio</th>
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</thead>
<tbody>
<tr>
<td>Seattle-Tacoma-Bellevue</td>
<td>WA</td>
<td>664</td>
<td>70</td>
<td>2,559,163</td>
<td>0.413</td>
<td>0.175</td>
<td>0.248</td>
<td>1.418</td>
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<td>KY-IN</td>
<td>267</td>
<td>167</td>
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<td>0.224</td>
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<td>1.394</td>
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<td>CA</td>
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<td>19</td>
<td>1,534,273</td>
<td>0.396</td>
<td>0.185</td>
<td>0.245</td>
<td>1.325</td>
</tr>
<tr>
<td>Indianapolis-Carmel</td>
<td>IN</td>
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<td>85</td>
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<td>0.421</td>
<td>0.225</td>
<td>0.293</td>
<td>1.303</td>
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<tr>
<td>San Antonio-New Braunfels</td>
<td>TX</td>
<td>339</td>
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<td>0.453</td>
<td>0.243</td>
<td>0.307</td>
<td>1.265</td>
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<tr>
<td>Miami-Fort Lauderdale-Pompano</td>
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<td>0.464</td>
<td>0.270</td>
<td>0.340</td>
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<tr>
<td>Denver-Aurora-Broomfield</td>
<td>CO</td>
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<td>1,650,489</td>
<td>0.429</td>
<td>0.236</td>
<td>0.288</td>
<td>1.221</td>
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<tr>
<td>Tampa-St. Petersburg-Clearwater</td>
<td>FL</td>
<td>547</td>
<td>39</td>
<td>2,067,963</td>
<td>0.439</td>
<td>0.199</td>
<td>0.229</td>
<td>1.153</td>
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<tr>
<td>St. Louis</td>
<td>MO-IL</td>
<td>551</td>
<td>292</td>
<td>2,580,901</td>
<td>0.431</td>
<td>0.228</td>
<td>0.257</td>
<td>1.128</td>
</tr>
<tr>
<td>Phoenix-Mesa-Glendale</td>
<td>AZ</td>
<td>696</td>
<td>35</td>
<td>2,238,480</td>
<td>0.436</td>
<td>0.260</td>
<td>0.278</td>
<td>1.067</td>
</tr>
<tr>
<td>Riverside-San Bernardino-Ontario</td>
<td>CA</td>
<td>587</td>
<td>45</td>
<td>2,588,786</td>
<td>0.422</td>
<td>0.182</td>
<td>0.193</td>
<td>1.062</td>
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<td>871</td>
<td>69</td>
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<td>0.253</td>
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<td>0.439</td>
<td>0.227</td>
<td>0.237</td>
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<td>0.408</td>
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<td>143</td>
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<td>0.435</td>
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<td>OH-KY-IN</td>
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<td>Jurisdiction</td>
<td>Rank</td>
<td>Population</td>
<td>Gini Ratio</td>
<td>Tract Gini Ratio</td>
<td>Inequality Among Jurisdictions</td>
<td>Tract Income Inequality</td>
<td>Notes</td>
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<td>Long Island</td>
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<td>Portland-Vancouver-Hillsboro</td>
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<td>Boston-Cambridge-Quincy</td>
<td>MA-NH</td>
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<td>4,133,897</td>
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<td>0.420</td>
<td>0.254</td>
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<tr>
<td>Salt Lake City</td>
<td>UT</td>
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<td>0.210</td>
<td>0.155</td>
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<td>Charlotte-Gaston-Rock Hill</td>
<td>NC-SC</td>
<td>267</td>
<td>1,024,291</td>
<td>0.427</td>
<td>0.214</td>
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<td>Birmingham-Hoober</td>
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<td>0.239</td>
<td>0.169</td>
<td>0.706</td>
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<td>2,498,012</td>
<td>0.429</td>
<td>0.235</td>
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<tr>
<td>Jacksonville</td>
<td>FL</td>
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<td>RI-MA</td>
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<td>1,509,789</td>
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<td>0.231</td>
<td>0.126</td>
<td>0.545</td>
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<td>Sacramento--Arden-Arcade--</td>
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<td>Hartford-West Hartford-East Hartford</td>
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<td>0.208</td>
<td>0.103</td>
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<td>VA-NC</td>
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</table>

Notes: Largest 50 CBSAs in 1990, ranked with jurisdiction-tract Gini ratios from highest to lowest. Higher jurisdiction-tract Gini ratios reflect income distributions more unevenly distributed among jurisdictions relative to tracts. Lower jurisdiction-tract Gini ratios reflect income distributions more unequal within tracts rather than among jurisdictions. Income measure is average household income. 1989 household income Gini coefficient for the US was 0.431.