

IMPROVING THE SPATIAL EQUITY OF THE
LOW-INCOME HOUSING TAX CREDIT
PROGRAM:
Meeting Affordable Housing Needs While
Promoting Opportunity

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INTRODUCTION

For the hundreds of affordable housing developers nationwide who regularly use the federal Low-income Housing Tax Credit (LIHTC) program, the U.S. Supreme Court’s 2015 *Texas Dept. of Housing and Community Affairs v. Inclusive Communities Project, Inc.* decision (576 U.S. 2015) was as surprising as it was welcome. On the welcoming side, the Court ruled that regardless of their purpose or intent, government housing programs resulting in a “disparate impact”—that is, having the effect of worsening racial segregation—constituted a violation of the Fair Housing Act. The surprising part of the Supreme Court’s decision was that it was based in the use of the LIHTC program, which as far as most planners and developers are concerned, has mostly been used to open up opportunities rather than limit them.

As it turns out, the Supreme Court got it right and the LIHTC community got it wrong. Since the first LIHTC units were completed in 1988, roughly 20 percent of projects developed using the 9% LIHTC program and 15 percent of projects developed using the 4% LIHTC program have been in census tracts in which African-Americans constitute 50 percent or more of the population. As Richard Rothstein writes in *The Color of Law* (2017), the related issues of

disparate racial impact and poverty impactation have plagued U.S. housing policy all the way back to Congress’ passage of the Public Housing Act of 1937. By devolving the affordable housing approval process to the states, where issues of poverty impactation and segregation could be addressed at the project level, the LIHTC program was supposed to end all that.

By conventional measures, the LIHTC program is widely regarded as a success, having generated roughly 2.5 million affordable housing units since 1988 (Urban Institute 2018a; 2018b). But what of its other goals, including deconcentrating poverty, promoting residential integration, and encouraging socio-economic mobility? How well has it fared in these areas?

As with most housing policy issues in the United States, the answers to these questions vary by location. To identify those places—including states, metropolitan areas, and large cities—where the LIHTC program is best meeting the four-way goals of providing needed affordable housing *and* reducing racial segregation *and* deconcentrating poverty *and* promoting individual opportunity, this working paper takes a detailed look at the spatial distribution of LIHTC projects and units produced between 1988 and 2016. It makes extensive use of HUD’s Low-Income Housing Tax Credit Database, which keeps detailed track of the size,

characteristics, development details, targeting level, and street and city location of every LIHTC project developed since 1988. As listed in the LIHTC Database, projects are separated into three programmatic groups according to whether they made use of the 9% annual credits, which are awarded competitively based on criteria determined by each state; or the 4% annual credits, which are typically awarded on a first-come-first-served basis; and/or on some hybrid combination of the two.ⁱ

For each tax credit type, we identify the share of LIHTC projects and affordable units located in high-need census tracts (tracts in which half of all renters had a median household income in 2016 of less than \$35,000 and paid more than 30% of their annual incomes for rent); in Black-plurality tracts (census tracts in which Black residents comprised 40% or more of the population in 2016); and in high-poverty tracts (census tracts in which the 2016 poverty rate was more than twice that of the metropolitan area or state). These shares are presented as a series of state and metropolitan area maps, as well as state, metro area, and city rankings. This format should enable readers to identify those places where the LIHTC program is achieving high levels of need targeting, as well as places where LIHTC projects are over-concentrated in minority and high-poverty neighborhoods.

Discussions of the negative and disparate impacts of U.S. housing programs have been broadened in recent days to also include the possibility of positively expanding opportunities. Instead of avoiding locating LIHTC projects in poor or segregated neighborhoods, the new argument goes, program implementers should proactively steer

LIHTC projects to neighborhoods known to offer upward social and economic mobility. This new opportunity-enhancement focus is based on the

work of Harvard economist Raj Chetty and his colleagues (Chetty, Hendren, Kline and Saez 2014; Chetty and Hendren 2016; Chetty, Grusky, Hell, Hendren, Manduca & Narang 2017), who, using individual income tax data, traced the economic achievement trajectories of young people who grew into adulthood in the 1980s, 1990s, and 2000s, based partly on where they lived in as children. This work allowed Chetty and his colleagues to identify particular census tracts—also known as opportunity neighborhoods—that consistently served as springboards to success for children from poor and minority families. This paper reports on the first effort that we know of to compare the locations of LIHTC projects to these opportunity neighborhoods.

Given the size and importance of the LIHTC program, one might think analyses of its spatial impacts to be common. In fact, they are not. Much of the work in this area has been done by McClure, who, in a series of studies (McClure 2006; McClure 2008; McClure and Johnson 2015; McClure 2019) found that as the LIHTC program has become more popular with investors, project sponsors have been able to refocus their efforts into less-distressed and lower-poverty neighborhoods. This positive trend notwithstanding, McClure finds that overall, LIHTC projects are still located in high-poverty tracts in greater proportions than are private market rentals. Oakley (2008), in a study of four metropolitan areas, attributes this result to incentives for LIHTC project sponsors to locate their projects in Qualified Census Tracts (QCTs) and Difficult-to-Develop Areas (DDAs), both of which tend to have higher poverty levels.ⁱⁱ Taking a broader national perspective, Ellen, Horn and O'Regan (2016) found no evidence of increased poverty concentration as a result of LIHTC construction activity. In terms of racial concentrations, Dawkins (2013) found that LIHTC developments tend to be clustered

in census tracts with predominantly African-American populations. Using HUD's nationally assisted housing database (which records the census tract locations of households receiving federal housing assistance), Rohe and Freeman (2001) found that the percentage of African-Americans in a neighborhood was a relatively strong predictor of whether a LIHTC project would be built in that neighborhood. Examining the channels through which the LIHTC program might affect patterns of racial segregation rather than the spatial incidence of LIHTC projects, Horn and O'Regan (2011) came to a different conclusion, finding that LIHTC projects do not contribute to increased racial segregation.

This work builds on these prior studies to investigate the spatial relationships between LIHTC project locations, poverty, racial segregation, and economic opportunity at the level of individual states, metropolitan areas, and large cities. Part I briefly reviews the history of the LIHTC program, explains how the program works, and compares the criteria each state uses to allocate LIHTC project funding. Part II explores the spatial distribution of LIHTC projects and units by state, metropolitan area, and city according to the four siting criteria—needs targeting, disparate racial impact, poverty impact, and inter-generational economic mobility—introduced above. Part III identifies those places that are best balancing needs targeting with expanded economic opportunity while also promoting racial integration and poverty reduction. Part IV identifies ways state housing financing agencies—the state agencies that administer the LIHTC program can amend their project selection criteria to further reduce racial segregation and promote greater economic opportunity.

As noted above, this exploration spans three levels of geography: states, metro areas, and large cities. Of the three, states matter the most since the yearly allocation of tax credits is based on a state's population, and it is state housing finance agencies (SHFAs) that administer the LIHTC program. Municipalities also matter since LIHTC proceeds are rarely sufficient to cover the full cost of developing a project, making local subsidy contributions critical. Cities that provide available development sites and/or supplementary subsidies typically have greater sway over LIHTC project siting decisions and design parameters than cities that take a more laissez-faire approach. Metro areas matter least in terms of where individual LIHTC projects are sited, except for the fact that income and rent levels—the two factors that most affect the financial feasibility of a given project—are principally determined in metropolitan-scale labor and housing markets.

I. HOW AND WHY THE LOW-INCOME HOUSING TAX CREDIT PROGRAM WORKS AS IT DOES

A Brief History of the LIHTC Program

Created as part of the Tax Reform Act of 1986, the Low-Income Housing Tax Credit (LIHTC) program represented a fundamentally new approach to building affordable rental housing. Prior approaches, most notably public housing, took a mostly supply-side approach in which government agencies undertake the planning, funding, construction, and management of rental housing projects. In the twelve years between the 1937 creation of the Public Housing program and the passage of the 1949 Housing Act, most public housing projects were scattered-site, low-rise, and included a mix of very-low and low-income residents. After 1949, low-rise public housing projects gave way to high-rise towers intended to house the poorest of the poor. The combination of white flight to racially-restricted suburbs and urban renewal, which disproportionately occurred in African-American neighborhoods, produced a situation where public housing projects grew ever more racially segregated. Congress' requirement that public housing construction costs be at least 15% less than comparable market-rate projects meant that most public housing projects were poorly-built. Never popular with Congress, by the mid-1960s, public housing was facing a myriad of maintenance, management, and funding problems. Public housing occupancy levels and rental revenues fell sharply, exacerbating management and maintenance problems.

Frustrated with its inability to fix public housing, and after experimenting with another supply-side rental housing program which also failed—the Section 236 program—Congress changed

direction altogether, switching from a supply-side production approach to demand-side housing allowances (e.g. Section 8). By giving eligible low-income households housing allowances (converted to vouchers in 1993) and encouraging them to find apartment units in the private market, HUD could achieve a housing policy hat-trick, simultaneously reducing subsidy costs, giving households more housing choices, and hopefully, by encouraging voucher-holders to look for apartments in more integrated neighborhoods, begin to make a dent in the incidence of extreme racial segregation. To encourage the construction of market-rate rentals affordable to moderate-income households, the original Section 8 program also included a modest new construction funding program, but it failed to generate developer interest.

As a result, the supply of affordable housing fell further and further behind demand. This was especially true in fast-growing metropolitan areas in California and the South. Nor could poor renters rely on market-based “filtering” to provide needed affordable housing. Then, as now, building vast amounts of new market-rate housing might indeed cause apartment rents to fall, but the declines would either take too long or be too modest to meet the affordable housing needs of growing populations. Market-rate apartment construction was itself on the decline thanks to the strong homeownership preferences of Baby Boomers (those born between 1945 and 1964) and Gen-Xers (those born between 1965 and 1984). Investors were especially averse to building new apartments in urban neighborhoods, many of which were still struggling to recover from the urban riots of the mid-1960s. Faced with these structural problems, how best might government policy-makers promote the construction of good-quality and affordable rental housing?

The answer to this question came from an unexpected place: the federal tax code. When the Reagan Administration sat down with Congress in 1986 to negotiate a tax reform deal, their deliberations centered on eliminating most tax deductions (and some tax credits) in exchange for lowering rates. Among the deductions proposed for elimination was accelerated depreciation, which disproportionately favored the real estate industry. Concerned that eliminating accelerated depreciation would choke off production of affordable as well as market-rate apartments the National Low-Income Housing Coalition Executive Director Barry Zigas, proposed converting the accelerated depreciation deduction into a tax credit, but limiting its use to investments in low-income housing, especially projects built by non-profit developers and community development corporations. This would increase the flow of funds to affordable housing as well as help professionalize the non-profit community.

Zigas' tax credit proposal made it into the final legislative version where it became two programs: a 9% annual credit (for ten years) available to investors in affordable rental housing projects having no other federal subsidies; and a less generous 4% annual credit (also for ten years) for investors in projects with other federal subsidies. Based in the then-popular rhetoric of devolution and public-private-partnerships, both programs would be administered at the federal level by the IRS, and at the state level by state housing finance agencies. The 9% credits would be limited to \$1.25 per state resident and be allocated competitively. The 4% credits would be allocated on a first-come-first served basis and be subject to state tax-exempt bond issuance caps. Over time, the 9% LIHTC program has also come to be known as the 70% credit program

(based on the present value of ten years of 9% credits), while the 4% credit program has also come to be known as the 30% credit program.

The LIHTC program's logic was clear from the start. To apply for credits, project sponsors would have to set aside a minimum of 20% of a proposed project's units for households making 50% (or less) of area median income; or 40% of a project's units for households making 60% or less of area median income. To attract project sponsors, the program would allow them to include their development fees (in amounts up to 15% of construction costs) in the tax credit basis. Once a sponsor had been allocated tax credits, they could turn around and sell (or syndicate) them to individual investors or corporations seeking to reduce their federal tax burden.ⁱⁱⁱ As that rare program that benefited both community-based non-profits and private investors and did not require a federal bureaucracy to handle its administration, the LIHTC program was embraced by both sides of the political aisle.

Even so, because of its newness and complexity, the LIHTC program got off to a slow start, with only a few states able to allocate all of their available tax credits. As project sponsors gained experience applying for tax credits and as tax credit investors began to appreciate their financial value, the market for tax credits took off, and by the mid-1990s, most states were allocating all their available credits. Over time, because of inflation and growing investor demand, the initial \$1.25 per capita tax credit limit was periodically raised to its current value of \$2.35.

Now more than 30 years old, the LIHTC program has proved to be the little engine that could. Based on project data published in HUD's Low-Income Housing Database, Table 1 summarizes the volume of LIHTC projects and units

constructed between 1988 and 2016 by state and sub-program. Nationwide, roughly 2.4 million rental housing units in 35,000 projects were constructed using LIHTC funding between 1988 and 2016. Of these totals, 52% of projects and 41% of units were built using the 9% LIHTC, 31% of projects and 43% of units were built using the 4% credits, and 16% of projects and 15% of units were built using a combination of the two credit programs. Not all units in LIHTC projects are reserved for low-income households. Nationwide, 92% of units in projects built using the 9% credits and 4% credits were identified as low-income units. By contrast, just 75% of the rental units built using hybrid funding have been available to low-income households.

Given that LIHTC funding is awarded to states on a per capita basis, it is not surprising that larger states like California, Texas, Florida, and New York have also funded the most LIHTC projects and units. California has funded the greatest number of both 9% and 4% LIHTC units. New York State is second on the list of 4% LIHTC unit production, but only fourth in terms of producing 9% units. Texas is third in terms of building 9% LIHTC units, but fifth in terms of producing 4% units.

As a rule, LIHTC funding goes further in states with less expensive cost structures. Developers in Virginia, a lower construction cost state, for example, produced 48,360 units between 1988 and 2006 using the 9% credits. Measured on a per capita basis, this corresponds to .24 units annually per 100,000 residents. By contrast, developers in high-cost California annually produced just .13 units per 100,000 residents. The other factor that accounts for variations in per capita production is sponsor and governmental capacity. Smaller and more rural states like Delaware, Kentucky, Iowa and North Dakota have both fewer affordable housing

needs and fewer potential non-profit and for-profit project sponsors with the expertise needed to secure LIHTC funding.

The other output measure that varies widely by state is average project size. With more than 100 units, the average 9% LIHTC project in Florida or Texas is more than twice as large as the average 9% LIHTC project in Michigan or Massachusetts. These differences reflect several factors including the availability of larger development sites, the potential for cost-economies of scale in construction, and the preference of state housing officials (who write the rules allocating 9% LIHTC funding) among a larger number of projects. Because the competition for 4% LIHTC projects is generally less intense than the competition for 9% projects, there is slightly more variation in average project size among 4% projects than among 9% projects.

Minding the Gap

To appreciate why LIHTC projects are located where they are requires understanding the program's subsidy logic. Table 2 presents a series of five hypothetical examples of how much investor funding the 9% and 4% credits could potentially generate depending on the credit type, location, and low-income household occupancy level. The LIHTC project is the same in each example: it consists of a 40-unit apartment building in which it costs \$150,000 to develop each unit (exclusive of land costs), or \$6 million in all. The first three examples explore the use of the 9% credits; the last two examples make use of the 4% credits. In the first scenario, all 40 rental units are reserved for low-income households and the project is located in a difficult-to-develop/high-cost census tract. Use of the 9% credits generates an annual tax credit of \$702,000. If syndicated to an investor who applies a 10%

Table 1: Low-income Housing Units Produced under the Federal Low-Income Housing Tax Credit Program by State, 1988-2016

9% LIHTC Project Totals (sorted by Low-income (LI) units)						4% LIHTC Project Totals (sorted by LI units)					Hybrid LIHTC Project Totals (sorted by LI units)				
State	Number of LIHTC Projects	Total LIHTC Units	Total Low income Units	Average # of LI Units per Project	LI Units per Year per thousand Residents	State	Number of LIHTC Projects	Total LIHTC Units	Total Low income Units	Average # of LI Units per Project	State	Number of LIHTC Projects	Total LIHTC Units	Total Low income Units	Average # of LI Units per Project
TOTAL	18,356	963,504	890,645	49		TOTAL	11,033	1,018,128	915,947	83	TOTAL	5,768	375,339	282,658	49
California	2,077	128,946	123,953	60	0.13	California	1,710	190,186	174,344	102	Illinois	395	37,105	35,613	90
Texas	659	76,301	68,802	104	0.12	New York	1,372	152,638	122,430	89	Ohio	690	33,787	32,124	47
Florida	609	74,339	72,672	119	0.16	Florida	507	95,677	91,044	180	Tennessee	401	31,371	31,500	79
New York	1,565	66,893	58,318	37	0.11	Washington	582	72,581	71,101	122	Michigan	344	22,957	21,238	62
Virginia	704	48,360	47,524	68	0.24	Texas	306	47,279	46,370	152	Nevada	205	21,376	21,097	103
N. Carolina	1,940	47,273	47,259	24	0.21	Virginia	296	42,138	38,683	131	Texas	130	16,201	15,054	116
Washington	912	46,095	45,098	49	0.27	Ohio	417	39,809	37,396	90	Missouri	200	12,128	11,852	59
Wisconsin	625	26,233	16,554	26	0.11	Michigan	410	29,467	24,314	59	Alabama	123	6,869	6,869	56
Michigan	478	25,076	24,230	51	0.09	Pennsylvania	805	24,380	23,328	29	Pennsylvania	220	6,832	6,718	31
Alaska	530	24,980	24,335	46	0.20	Minnesota	235	24,741	21,466	91	Massachusetts	71	7,838	6,663	94
S. Carolina	524	23,549	23,168	44	0.21	Missouri	192	17,956	16,979	88	Mississippi	123	6,488	6,432	52
Ohio	521	23,530	22,508	43	0.07	Colorado	202	20,103	16,884	84	Florida	51	7,094	6,229	122
Illinois	330	22,206	19,010	58	0.05	N. Carolina	354	16,968	16,422	46	Oklahoma	123	6,624	6,140	50
Oregon	447	19,822	19,475	44	0.20	Distr. Columbia	118	17,275	15,707	133	Minnesota	102	6,200	5,860	57
Arkansas	269	19,309	18,008	67	0.13	Maryland	119	17,055	15,311	129	California	88	5,924	5,803	66
Massachusetts	320	17,993	14,723	46	0.08	Illinois	185	14,247	13,908	75	Iowa	122	6,219	5,784	47
Mississippi	371	17,905	17,467	47	0.22	Oregon	147	14,460	12,954	88	Arkansas	96	4,553	4,521	47
Colorado	294	17,146	16,307	55	0.14	Mississippi	267	13,359	12,813	48	Louisiana	465	25,713	4,365	9
Maryland	210	16,476	15,903	76	0.11	Massachusetts	114	14,660	11,427	100	S Carolina	81	4,159	4,157	51
Pennsylvania	434	16,027	15,349	35	0.04	Kentucky	304	11,692	11,162	37	Kentucky	91	3,838	3,575	39
Minnesota	406	15,775	13,967	34	0.10	Arizona	205	10,514	10,063	49	N. Dakota	108	3,435	3,335	31
Louisiana	251	15,105	3,986	16	0.03	Arkansas	84	10,147	9,004	107	Indiana	40	2,873	2,861	72
Missouri	405	14,715	13,776	34	0.09	N. Mexico	90	8,477	8,368	93	Montana	91	3,034	2,789	31
Tennessee	353	13,865	13,854	39	0.09	Tennessee	153	7,797	7,713	50	Maryland	35	2,729	2,669	76
Idaho	293	12,476	11,991	41	0.15	Alaska	109	8,036	7,615	70	Wisconsin	103	6,074	2,442	24
Arizona	228	10,303	9,861	43	0.13	S Carolina	103	7,094	7,013	68	Arizona	34	2,221	2,188	64
Iowa	163	9,659	9,347	57	0.05	Wisconsin	272	13,038	6,929	25	W Virginia	61	2,310	2,151	35
Oklahoma	153	9,647	8,798	58	0.09	Oklahoma	162	5,910	5,699	35	N. Carolina	37	1,874	1,904	51
Kentucky	242	8,886	7,946	33	0.07	Connecticut	44	5,829	5,394	123	S. Dakota	36	1,597	1,592	44
Connecticut	152	8,111	6,684	44	0.07	Utah	62	5,864	5,389	87	Virginia	23	1,657	1,494	65
Indiana	152	7,227	6,494	43	0.18	Maine	159	5,348	4,953	31	Georgia	76	6,366	1,451	19
Utah	142	6,691	5,773	41	0.09	Nevada	40	4,849	4,792	120	Nebraska	30	1,384	1,352	45
Georgia	60	6,625	6,241	104	0.03	Louisiana	168	8,701	4,249	25	Rhode Island	20	1,331	1,331	67
Kansas	156	5,646	4,910	31	0.07	Iowa	59	4,650	3,750	64	Kansas	27	1,562	1,329	49
W Virginia	145	5,638	4,884	34	0.10	Hawaii	25	3,649	3,639	146	Washington	27	1,159	1,145	42
Rhode Island	70	5,274	5,135	73	0.17	Vermont	131	3,876	3,119	24	Colorado	15	1,332	1,129	75
Nebraska	191	4,977	4,804	25	0.10	Rhode Island	49	2,966	2,797	57	Utah	29	1,211	1,127	39
N. Mexico	75	4,920	4,488	60	0.09	W Virginia	66	2,980	2,707	41	Maine	35	1,154	1,126	32

Table 1: Low-income Housing Units Produced under the Federal Low-Income Housing Tax Credit Program by State, 1988-2016 (continued)

9% LIHTC Project Totals (sorted by Low-income (LI) units)						4% LIHTC Project Totals (sorted by LI units)					Hybrid LIHTC Project Totals (sorted by LI units)				
State	Number of LIHTC Projects	Total LIHTC Units	Total Low income Units	Average # of LI Units per Project	LI Units per Year per thousand Residents	State	Number of LIHTC Projects	Total LIHTC Units	Total Low income Units	Average # of LI Units per Project	State	Number of LIHTC Projects	Total LIHTC Units	Total Low income Units	Average # of LI Units per Project
S. Dakota	123	4,699	4,650	38	0.22	Indiana	66	2,922	2,645	40	New York	12	1,077	917	76
Distr. Columbia	37	4,486	4,419	119	0.28	Nebraska	41	3,028	2,376	58	Idaho	27	881	869	32
Nevada	49	4,387	4,189	85	0.07	N. Hampshire	47	2,723	2,317	49	Vermont	30	1,005	846	28
Hawaii	62	4,094	4,079	66	0.12	Kansas	55	2,495	2,223	40	N. Hampshire	26	919	842	32
Vermont	132	3,718	2,988	23	0.18	Georgia	32	3,003	2,026	63	Oregon	11	864	819	74
N. Hampshire	101	3,589	3,082	31	0.09	Idaho	38	2,200	1,909	50	N. Jersey	572	45,383	630	1
Maine	99	3,518	3,321	34	0.09	Montana	46	1,077	1,273	28	Wyoming	18	730	599	33
Wyoming	60	2,775	2,773	46	0.20	Alabama	15	1,070	906	60	N. Mexico	6	580	544	91
N. Jersey	34	2,142	1,915	56	0.01	Wyoming	22	827	825	38	Distr. Columbia	93	5,957	422	5
Montana	80	2,039	1,951	24	0.08	S. Dakota	21	705	703	33	Hawaii	4	305	305	76
Alabama	55	1,988	1,735	32	0.10	N. Jersey	6	782	608	101	Delaware	8	348	305	38
N. Dakota	57	1,607	1,559	27	0.09	N. Dakota	15	451	451	30	Connecticut	7	377	295	42
Delaware	11	463	382	35	0.02	Delaware	6	449	449	75	Alaska	6	334	256	43

annual discount rate, the ten-year value of the credits is \$4.3 million, an amount that is just over 70% of the initial development cost.

Everything in Scenario 2 is the same as in Scenario 1 except that the project is not located in a difficult-to-develop/high-cost census tract. This reduces the annual credit by 30% from \$702,000 to \$540,000, which over ten years, adds up to a 17% decline in the amount of potential syndication proceeds and a nearly \$1 million increase in the additional subsidy funds that must be raised. Scenario 3 is identical to Scenario 2 but includes only half the number of affordable units. This one change reduces the syndication potential by another 28% and \$1.7 million. Scenario 4 substitutes using the 4% credits for the 9% credits but is otherwise similar to Scenario 2 (9% credits, 100% affordable units, not located in a difficult-to-

develop tract). Compared to Scenario 2, Scenario 4 reduces the amount of potential syndication proceeds by 44% resulting is a project for which the project sponsors must raise another \$1.8 million in gap funding. Scenario 5 also makes use of the 4% credits (like Scenario 4) but reduces the share of affordable units from 100% to 50%. These changes result in an annual tax credit amount of \$120,000, which when discounted over ten years, covers just 12% of project development costs.

These scenarios illustrate the three core realities underlying most LIHTC allocation and construction decisions. The first is the near-universal superiority of 100% affordable projects over mixed-income projects when trying to maximize investor syndication proceeds and minimize the need for additional subsidies. As a matter of practice, this means that most if not all LIHTC project residents will be poor. The second is the much greater

syndication value of the 9% credits, which are allocated competitively, when compared to the 4% credits, which are allocated as long as funds are available. This means that the sponsors of potential 9% LIHTC projects will have to pay close attention to the criteria their state housing finance agency uses to rank competing projects. A third core reality concerns the 30% additional subsidy value associated with being located in a Qualified Census Tract (QCT) or Difficult-to-Develop Area (DDA), many of which are coterminous with high-poverty or minority-majority neighborhoods.

A Closer Look at State QAP Ranking Criteria

The designers of the LIHTC program were mindful of additional concerns beyond just maximizing the construction of affordable units. To ensure that state housing finance agencies were mindful of the same concerns, Congress required them to annually prepare and publish a document known as a Qualified Allocation Plan, or QAP. QAPs set out the procedures and criteria by which the 9% credits will be awarded, and typically include three types of allocation provisions. The first are geographical or target group *set asides*, which stipulate the shares of each state's annual allocation reserved for particular geographic areas (such as urban vs. rural counties) or particular need groups (such as families, veterans, or the homeless).^{iv} A second set of QAP allocation provisions consists of *thresholds*. These are minimum requirements that all projects must meet in order to be considered competitive. A third set of provisions consist of evaluation points. Each project is evaluated using a point system designed to identify projects that best meet each state's housing policy goals. Points are commonly given for certain types of design features, preferred locations, targeting to

Table 2 : Example Calculations of 9% and 4% Low Income Housing Tax Credit Amounts

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	
Project Parameters	Annual Credit Rate	9%	9%	9%	4%	4%
	Rental Units	40	40	40	40	40
	per Unit Development Cost	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
	Share of Affordable Units	100%	100%	50%	100%	50%
	Difficult-to-Develop Census Tract	Yes	No	No	No	No
	Investor's Discount Rate	10%	10%	10%	10%	10%
LIHTC Calculations	Total Development Cost	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000
	Tax Credit Basis	\$6,000,000	\$6,000,000	\$3,000,000	\$6,000,000	\$3,000,000
	Difficult-to-Development Credit Premium	30%	0%	0%	0%	0%
	Annual Tax Credit Amount	\$702,000	\$540,000	\$270,000	\$240,000	\$120,000
	<i>change compared to Scenario 1</i>		-\$162,000	-\$432,000	-\$462,000	-\$582,000
	10 Year Net Present Value of Tax Credits	\$4,313,486	\$3,318,066	\$1,659,033	\$1,474,696	\$737,348
	<i>change compared to Scenario 1</i>		-\$995,420	-\$2,654,453	-\$2,838,790	-\$3,576,138
	Tax Credit NPV as a Share of Basis	72%	55%	28%	25%	12%
	<i>change compared to Scenario 1</i>		-17%	-44%	-47%	-60%
	Remaining Gap to be Filled	\$1,686,514	\$2,681,934	\$4,340,967	\$4,525,304	\$5,262,652

particular need groups, leverage (i.e., the ability to attract additional subsidies), so-called “ready-to-go” criteria, and support for particular community planning or revitalization goals. The IRS requires state QAPs to include at least six scoring categories (site characteristics, location characteristics, financial characteristics, development characteristics, targeting characteristics, and applicant/development team characteristics) but does not stipulate particular selection criteria, how many points are to be awarded in each category or how they are to be awarded.^v

Compiled from the texts of each state’s 2016 QAPs, Table 3 organizes state QAP allocation point totals into eight categories:^{vi}

- Income targeting and permanent affordability: This category reflects the share of project units reserved for low- and very-low income households as well as the extent to which the project will remain

affordable for more than the federally-required 15-year period.

- Project design features, including energy conservation, safety, and community compatibility: This category reflects the degree to which the project conforms to best-practice design and construction guidelines with respect to energy and resource conservation, universal design, materials quality and durability, and integration with the surrounding neighborhood.
- Availability of units reserved for special needs populations and large families: This category reflects the share of affordable units reserved for tenants with physical and/or mental disabilities, veterans, formerly homeless tenants, and others facing social or economic challenges. It also reflects the share of affordable units reserved for households with children

and/or households needing more than two bedrooms.

- Nearby availability of neighborhood services: This category reflects the project's physical accessibility to employment opportunities and to nearby retail, educational, and social services. Many states give extra points for walkability.
- Degree to which the project is financially "ready to go" and leverages other financial resources: This category reflects the degree to which a project has all of its development entitlements and financing and is thus "ready-to-go" once an award is made. Many states give points for financial leverage—that is the degree to which the tax credits activate other funding sources.
- Sponsor experience and qualifications: This category reflects the degree to which the project sponsor has successfully completed prior LIHTC projects, is a local developer, has a strong balance sheet, or is minority or women-owned.
- Extent to which the project preserves historic structures and/or existing affordable housing: This category reflects the degree to which a project conserves historic building structures and/or funds preserving existing affordable housing supplies, including previously-funded LIHTC projects.
- Extent to which the project furthers local community development efforts, racial integration, and/or individual economic opportunities: This category reflects the degree to which the project promotes improved social or economic opportunities, either by virtue of its location or the presence of supportive services. Many

states give extra points if a project is in a locally-designated redevelopment area or opportunity zone. Some states look at poverty impact and the presence of nearby job opportunities. In order not to run afoul of the Fair Housing Act, none explicitly consider racial composition.

- Different states attach different priorities to each category. California, the number one producer of 9% LIHTC units, awards 39% of its QAP points to projects based on their low-income targeting and permanent affordability provisions, but only 2% of its points based on whether a project is located in a community revitalization or high-opportunity area.^{vii} By contrast, Texas, the number two producer, awards 29% of its QAP points based on income targeting and 7% based on community revitalization and opportunity promotion. New York, the fourth largest 9% producer state, awards only 12% of its QAP points based on income targeting, and 15% based on community revitalization and opportunity potential. Averaged across the 38 states that list their QAP point distributions, income targeting and permanent affordability account for 16% of QAP points while community revitalization and opportunity potential account for 8%. In addition to income targeting, the other major category to which states regularly assign more QAP points is the "ready-to-go" criteria, which includes funding completeness, program leverage, cost-efficiency, and having all relevant entitlements.

With their focus on insuring project success, QAPs can be inspiring documents to read, making it easy to overstate their importance in shaping project siting decisions. In practice, the range of factors affecting where a project sponsor chooses to locate a future LIHTC

Table 3: 2016 State QAP Setasides and Point Totals by Major Category

State	Setasides (in addition to the mandatory 10% setaside for non-profits)	Total (or Maximum attainable) Competitive QAP Points	QAP Point Shares by Major Category							
			Income Targeting & Permanent Affordability	Project Design and Quality (including energy conservation, unit mix, supportive facilities, security & universal design)	Family & Special Needs Targeting	Location & Proximity to Neighborhood Services	Leverage, Cost-efficiency, Funding Completeness and Ready-to-go	Sponsor Experience & Qualifications	Preservation of Existing Affordable & Historic Properties	Location Opportunity or Community Revitalization
Alabama		94	0%	9%	6%	11%	7%	21%	5%	2%
Alaska		221	5%	13%	9%	9%	13%	0%	5%	13%
Arizona		204.5	17%	26%	12%	9%	7%	5%	3%	0%
Arkansas		Arkansas does not publish its point scoring system								
California	Many, by project type and geography	132	39%	4%	8%	11%	15%	14%	8%	2%
Colorado			XXX		XX				X	X
Connecticut		104	32%	6%	7%	11%	12%	11%	10%	13%
Delaware	Preservation & rehabilitation	121	8%	21%	11%	12%	21%	5%	12%	10%
Florida	Based on county size categories	Florida does not publish its point scoring system								
Georgia	35% for rural areas	No unambiguous point total since points are not exclusive to categories								
Hawaii		119	14%	3%	3%	5%	8%	6%	1%	2%
Idaho	Rural areas & special needs	100	21%	8%	5%	9%	15%	15%	1%	13%
Illinois	Geographic setasides	108	10%	9%	7%	6%	11%	11%	7%	9%
Indiana	Geography & city size	195	14%	13%	0%	3%	7%	3%	5%	7%
Iowa	Preservation, rural & senior	308	6%	6%	1%	8%	7%	3%	0%	1%
Kansas		310	11%	0%	16%	6%	0%	3%	10%	10%
Kentucky	Urban & rural	Kentucky's allocation is mostly through setasides and thresholds; and does not publish its point scoring system								
Louisiana		133	5%	4%	10%	8%	0%	0%	8%	12%
Maine	Preservation & homelessness	73	0%	0%	8%	19%	40%	8%	7%	14%
Maryland		199	8%	6%	9%	0%	11%	37%	0%	8%
Massachusetts	Preservation & HOPE VI	182	3%	18%	4%	7%	11%	17%	0%	7%
Michigan	Rural, elderly & distressed areas	Michigan's allocation is mostly through setasides and thresholds; does not publish its point scoring system								
Minnesota (2020)	Minneapolis vs. rest of state	205	23%	2%	16%	4%	19%	0%	15%	11%
Mississippi	Rural counties	145	3%	7%	12%	7%	0%	23%	17%	14%
Missouri	Basis boost priorities	Missouri does not publish its point scoring system								
Montana	Small rural projects	1330	24%	8%	8%	8%	0%	25%	3%	1%
Nebraska	50% for non-metro areas	Nebraska's allocation is determined via thresholds and through staff review; does not publish its point scoring system								
Nevada	10% for USDA rural projects	157	5%	14%	19%	3%	17%	0%	11%	1%
New Hampshire	25% for age-restricted projects	126	4%	0%	12%	0%	28%	8%	4%	8%
New Jersey		65	31%	9%	0%	18%	5%	0%	9%	3%
New Mexico		249	40%	7%	12%	1%	6%	4%	8%	2%
New York City		100	7%	8%	5%	0%	41%	8%	5%	7%
New York State		100	12%	5%	10%	0%	18%	14%	3%	15%

Table 3: 2016 State QAP Setasides and Point Totals by Major Category (continued)

State	Setasides (in addition to the mandatory 10% setaside for non-profits)	Total (or Maximum attainable) Competitive QAP Points	QAP Point Shares by Major Category							
			Income Targeting & Permanent Affordability	Project Design and Quality (including energy conservation, unit mix, supportive facilities, security & universal design)	Family & Special Needs Targeting	Location & Proximity to Neighborhood Services	Leverage, Cost-efficiency, Funding Completeness and Ready-to-go	Sponsor Experience & Qualifications	Preservation of Existing Affordable and Historic Properties	Location Opportunity or Community Revitalization
North Carolina	By region, rural & redevelopment		North Carolina uses a mixture of positive and negative points and tie-breaker criteria							
North Dakota	10% for Indian reservations	100	29%	10%	34%	0%	4%	0%	12%	5%
Ohio	Family housing & small counties	140	4%	1%	7%	7%	18%	7%	0%	19%
Oklahoma			Oklahoma provides guidance in a variety of categories but does not publish its point scoring system							
Oregon	Metro vs. non-metro; preservation	100	10%	0%	20%	0%	15%	15%	0%	0%
Pennsylvania	Urban vs. suburban & rural	145	14%	10%	7%	3%	21%	7%	8%	16%
Rhode Island		115	0%	5%	4%	10%	46%	4%	0%	27%
South Carolina	Additional points for setaside areas	161	14%	6%	6%	2%	0%	4%	1%	0%
South Dakota	Passive building design features	590	24%	6%	13%	3%	40%	7%	3%	5%
Tennessee	Many by project type and geography	100	12%	15%	0%	0%	0%	16%	1%	5%
Texas	Many by project type & geography	125	23%	12%	10%	6%	38%	0%	3%	7%
Utah			Utah provides guidance in a variety of categories but does not publish its point scoring system							
Vermont			Vermont organizes its allocation scoring system into three priority tiers							
Virginia	By geographic area	500	6%	21%	3%	4%	16%	22%	5%	8%
Washington (2020)	Metro and non-metro areas	220	47%	0%	25%	0%	10%	2%	5%	5%
West Virginia	Preservation vs. new supply	1000	20%	32%	5%	19%	16%	1%	2%	5%
Wisconsin	Preservation & rural areas		Wisconsin publishes its scoring categories but not point totals							
Wyoming	Small projects	485	59%	26%	0%	0%	0%	0%	0%	1%
Average QAP point share by category			16%	9%	9%	6%	14%	9%	5%	8%

project is extremely broad, and includes the availability, ease of acquisition; and cost of appropriate development sites; local construction costs; the level of competition from other sponsors for LIHTC allotments; the availability of other gap financing subsidies; local support for and opposition to affordable housing development; the capabilities of partners; as well as the sponsor's own mission and business plan. In states like California, Texas, Washington, and North Carolina where the competition for 9% tax credits is especially intense, a sponsor with a good-but-not-great project proposal may elect to apply for the lower-yielding 4% credits rather than the much more remunerative-but-more competitive 9% credits. Sponsors frequently take on smaller projects instead of larger ones in recognition of state housing finance agencies' preferences for spreading the tax credits around. In an effort to minimize their funding gaps, sponsors who would prefer to develop a mixed-income project end up developing projects in which all the units are affordable to low-income families. Likewise, sponsors who might prefer to develop projects in the suburbs where they can meet integration and economic opportunity goals, often end up sticking to inner city neighborhoods where there is greater demonstrated housing need, and where local residents and political officials are likely to be more supportive.

What all this means is that a state's LIHTC aspirations may or not be properly reflected in what is ultimately built. State housing officials may fully intend to use the LIHTC allocation process to reduce racial segregation and promote greater integration (to the extent permitted under the Fair Housing Act), but their final allocation decisions will necessarily reflect other important policy priorities as well as the siting and funding concerns of project sponsors.

Looking past individual projects, the cumulative effects of their decisions may actually be to concentrate poverty and or worsen racial segregation. The extent of this dissonance between intention and result is the subject of Part II.

II. SPATIAL PATTERNS OF LIHTC PROJECT & UNIT PRODUCTION

Targeting Those with the Greatest Housing Affordability Needs

As noted above, the foremost purpose of the LIHTC program has always been to maximize the production of good-quality affordable housing in locations where the private market alone cannot do the job. How well is this purpose being achieved? To find out, we counted the number of LIHTC projects and units located in census tracts in which half (or more) of renters had a 2016 median household income of less than \$35,000^{viii} and paid more than 30% of their annual incomes for rent. Thirty percent is the income percentage that federal housing programs use to determine whether a household has an excessive housing cost burden and is therefore potentially eligible for rental housing subsidies. Map 1 present the share of all affordable LIHTC units produced since 1988 that meet this need criteria by state. Map 2 presents the same information by metro area.

Nationally, just 32 percent of affordable LIHTC units are located in low-income/high-burden tracts. Among the six states that have built more than 100,000 affordable LIHTC units since 1988, this percentage is 33 percent. In California and New York, two of the nation's least affordable states and the #1 and #3 LIHTC

Maps 1 and 2 combine production levels across the 70% and 30% LIHTC programs. Tables 4A and 4B distinguish between 70% and 30% tax credit units and also add large cities as spatial tabulation unit. Table 4A presents the share of 70% LIHTC projects located in low-income/high-burden census tracts by state, metro area, and large city. Table 4B presents the same

information for projects developed using the 30% LIHTC program. Each group of tabulations—there are three sets per table—are sorted from high-to-low based on the share of projects located in these high-burden tracts, and each is limited to the top and bottom 15 listings.

Because the 70% LIHTC program is competitive and criterion-based, it should offer greater poverty and housing cost burden targeting potential than the queue-based 30% LIHTC program. This is borne out by comparing the targeting percentages across Tables 4A and 4B. Totaled across the fifty states, 31 percent of 70% LIHTC projects are located in lower-income/high-burden census tracts, versus 26 percent for 30% LIHTC projects.

Among high-producing states (i.e., those with more than 100 70% LIHTC projects), Michigan and Florida do best at targeting 70% LIHTC projects to high-need tracts, followed by Mississippi, Louisiana, and Illinois. Among very high-producing states (those with 300 70% LIHTC projects) California, North Carolina, Texas and Ohio are distinctly mid-pack in terms of need targeting, while New York, Washington, Virginia, Wisconsin, and Alabama all bring up the rear.

Among metro areas with one-hundred or more 70% LIHTC projects, the targeting leaders are Miami-Ft. Lauderdale (with 75 percent of its 70% LIHTC projects located in high-need tracts), Detroit (64 percent), Memphis (64 percent), Cleveland (59%), and Orlando (58 percent). The laggards are Seattle-Tacoma (9 percent), Washington, DC (15 percent), Portland (19 percent) and the Greater New York Metropolitan Area (20 percent). Averaged across metro areas with more than fifty 70% LIHTC projects, just 35 percent are located in high-burdened tracts.

Among individual cities with forty or more 70% LIHTC projects, the clear leaders in terms of income-and-burden targeting are Miami (with 75 percent of its 70% LIHTC projects located in high-need tracts), Milwaukee (72 percent), and Kansas City (71 percent). Bringing up the rear are Brooklyn (6 percent), Seattle (5 percent), Sioux Falls (4 percent), and Manhattan (4 percent). Averaged across cities with more than forty 70% LIHTC projects, 42 percent are located in high-burdened tracts.

Turning to Table 4B and the set of 30% LIHTC projects, the states with the best income-and-targeting records are Florida (with 53 percent of its 30% LIHTC projects located in high-need tracts), Nevada (43 percent), North Carolina (41 percent), and Michigan (40 percent). Among metro areas, the best-performers include Charlotte (72 percent), Miami-Ft. Lauderdale (65 percent), Tampa-St. Petersburg (59 percent), and Bakersfield (56 percent). Among individual cities, Charlotte has performed best (with 86 percent of its 30% LIHTC projects located in lower-income/high-burden tracts), followed by Milwaukee (83 percent), Harrisburg (73 percent), and Baltimore (65 percent).

Comparing the 70% and 30% LIHTC programs to each other, states and metro areas do a slightly better job targeting 70% LIHTC projects to high-burdened tracts than they do targeting 30% projects. Cities do a comparable job targeting the two programs.

Overall, Florida, Michigan, and Nevada (albeit with lower production levels) appear consistently at the top of the list of best-performing states for both 70% and 30% LIHTC projects while Nebraska, Utah, and Kansas appear at the bottom. Among metro areas, Miami-Ft. Lauderdale, Detroit, and Tampa-St. Petersburg top both sets of burden-targeting lists, while among cities, Miami and Milwaukee

appear at the top. Among the high-producing cities appearing at the bottom of the two targeting lists are Seattle, Brooklyn, Denver, and San Jose.

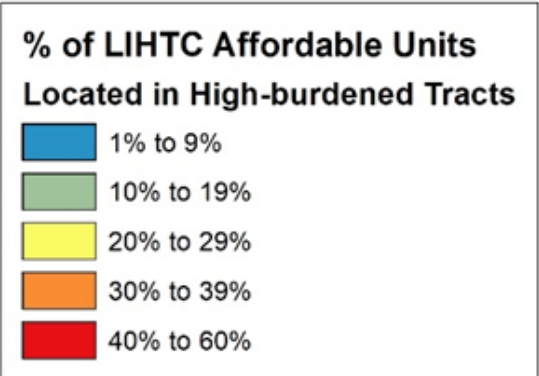
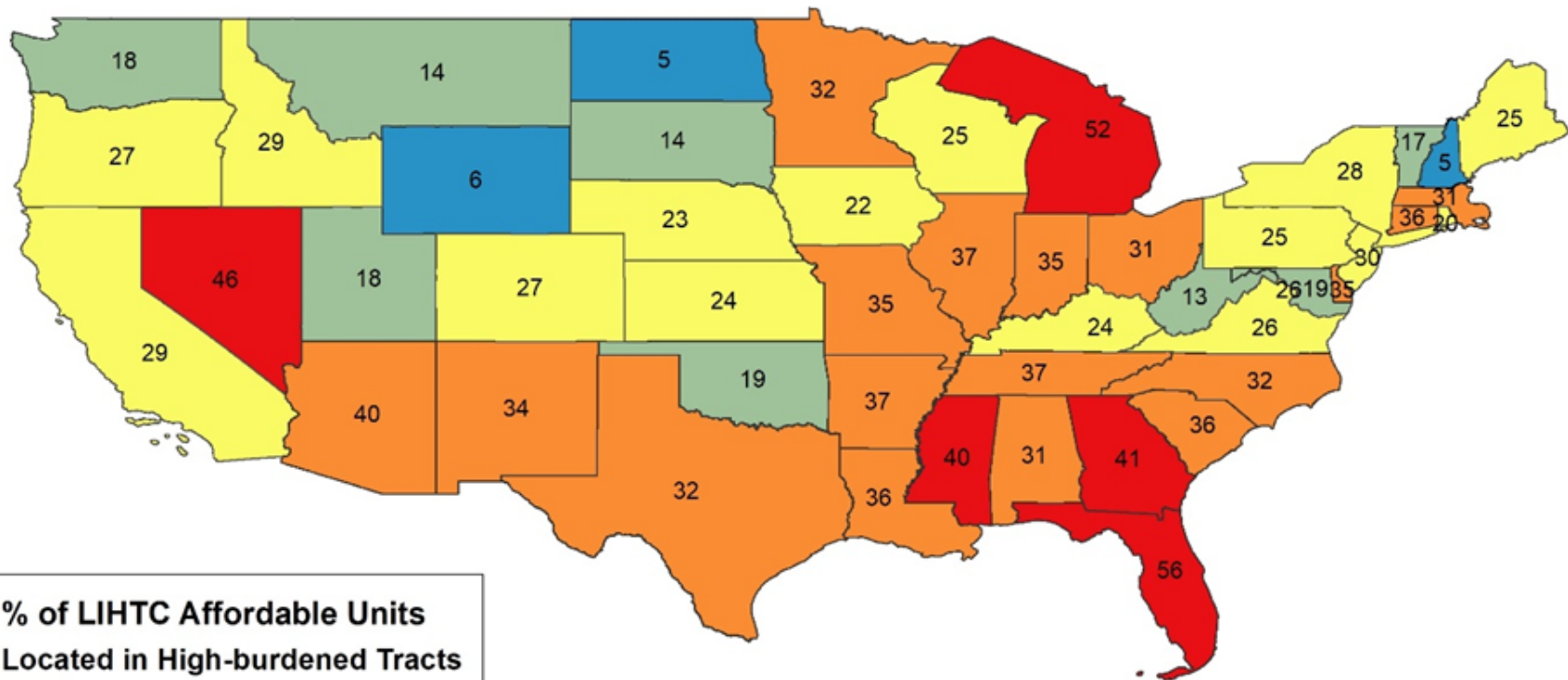
Disparate Racial Impact

Since African-Americans and Hispanic households have lower incomes and are more cost-burdened on average than Whites—nationwide, Black households in 2017 earned just \$.62 for every \$1 of income earned by White households—housing program administrators must walk a difficult line between trying to alleviate extreme housing cost burdens and not over-allocating LIHTC funds to predominantly Black and Hispanic neighborhoods, thereby violating the spirit of the Fair Housing Act.

This line is not just symbolic. The Fair Housing Act prohibits any and all acts of racial discrimination in the buying or renting of homes. This means that even if a project sponsor wanted to promote racial integration by preferentially leasing a LIHTC unit in a predominantly white neighborhood to a Black or Hispanic household, they would be prohibited by the Fair Housing Act from doing so.

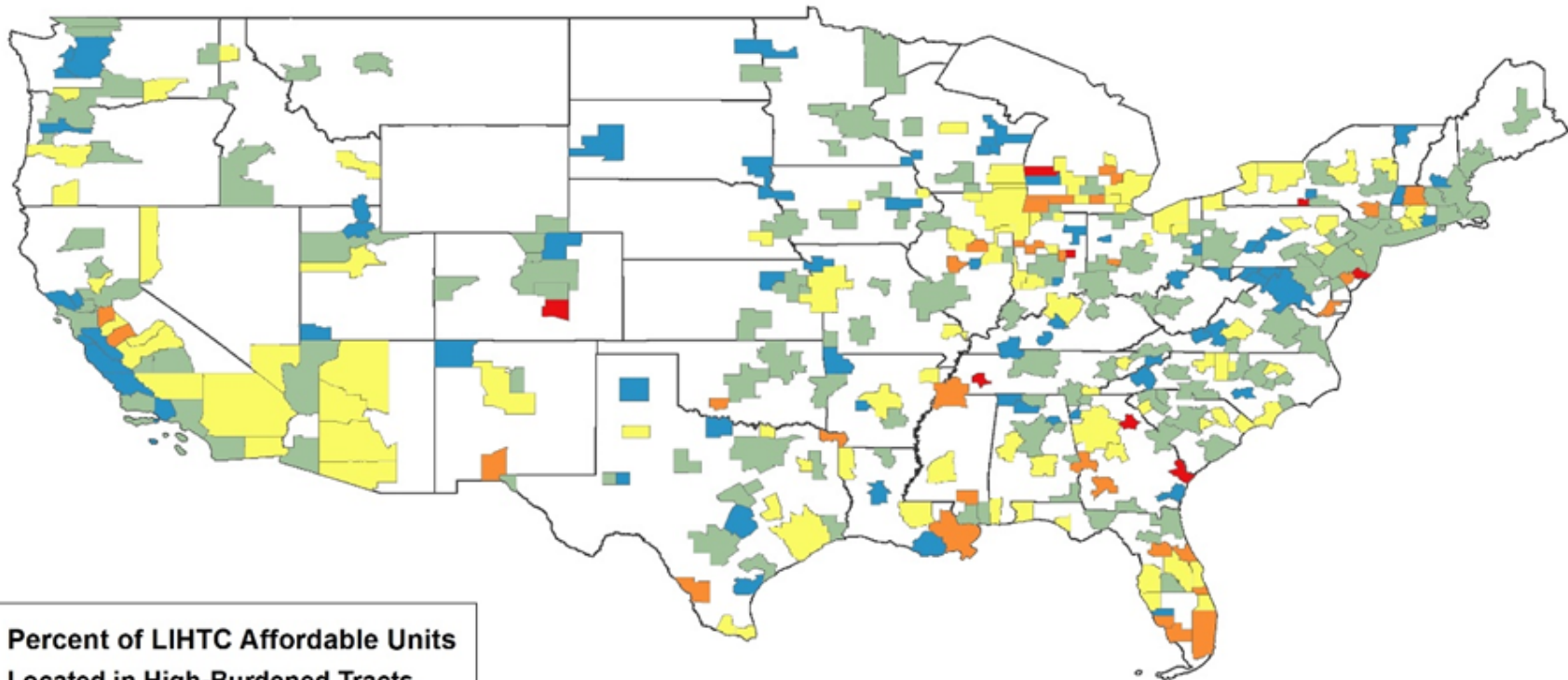
Thus, in places where race and poverty are highly correlated, efforts to deliver affordable housing to low-income families cannot help but have the effect of promoting rather than reducing residential segregation. It is precisely this unintended but unconstitutional outcome that was highlighted by the Supreme Court in its 2015 *Texas Dept. of Housing and Community Affairs v. Inclusive Communities Project* decision as constituting an unacceptable “disparate impact.”

Map 1:
Percent of All Affordable LIHTC Units Produced Between 1988 and 2016
Located in High-Burdened Census Tracts* by State
 (Labels indicate numerical share of all LIHTC units)



* High-burdened Tracts are those in which more than half of renters in 2016 had incomes less than \$35,000 and paid more than 30% of their incomes for rent.
 (Source: LIHTC Database and 2016 American Community Survey)

Map 2:
Percent of All Affordable LIHTC Units Produced Between 1988 and 2016
located in High-Burdened Census Tracts* by Metro Area



**Percent of LIHTC Affordable Units
Located in High-Burdened Tracts**

- 1% to 20%
- 21% to 40%
- 41% to 60%
- 61% to 80%
- 80% to 100%

* High-Burdened Tracts are those in which more than half of renters in 2016 had incomes less than \$35,000 and paid more than 30% of their incomes for rent
(Source: LIHTC Database and 2016 American Community Survey)



Table 4A: Share of 70% LIHTC Projects (built between 1988 & 2016) in High-Cost Burden Census Tracts in 15 Top & Bottom States, Metro Areas, and Cities

	Top & Bottom States sorted by High-burden Share	70% LIHTC Projects in High-burden Tracts	Share of 70% Projects in High-burden Tracts	Top and Bottom Metro Areas ¹ sorted by High-burden Share	70% LIHTC Projects in High-burden Tracts	Share of 70% Projects in High-burden Tracts	Top and Bottom Cities ² sorted by High-burden Share	70% LIHTC Projects in High-burden Tracts	Share of 70% Projects in High-burden Tracts
Top 15 Places	Michigan	290	61%	Miami-Ft. Lauderdale FL	115	75%	Miami	59	80%
	Florida	342	56%	Detroit MI	120	64%	Milwaukee	78	72%
	Nevada	26	53%	Memphis TN-MS	51	64%	Kansas City MO	52	71%
	N Jersey	16	47%	Cleveland OH	38	59%	Rochester NY	40	69%
	Georgia	27	45%	Orlando FL	43	58%	Orlando	27	68%
	Mississippi	159	43%	Tampa-St. Pete FL	41	55%	Jackson MS	76	67%
	Louisiana	105	42%	Buffalo-Niagara Falls NY	42	55%	Detroit	84	65%
	Illinois	137	42%	Jackson MS	48	54%	Bronx (Borough)	130	63%
	Tennessee	137	39%	Milwaukee WI	90	54%	Henderson	57	61%
	S Carolina	200	38%	Greensboro NC	135	53%	Cleveland	35	60%
	Missouri	154	38%	Chicago IL	115	49%	Columbia SC	44	59%
	Distr. Columbia	14	38%	Kansas City MO	63	48%	Buffalo	26	59%
	N Carolina	717	37%	St. Louis MO-IL	60	48%	Houston	37	59%
	Conecticut	56	37%	Rochester NY	62	47%	San Diego	27	59%
	Delaware	4	36%	Columbia SC	36	46%	Springfield MO	27	59%
	State Average		31%	Metro Average		35%	City Average		42%
Bottom 15 Places	Kansas	34	22%	Jacksonville FL	14	25%	Charlotte	19	40%
	Nebraska	39	20%	San Francisco-Oakland CA	58	23%	Oakland CA	27	39%
	Rhode Island	14	20%	Pittsburgh PA	16	23%	Philadelphia	42	39%
	Oklahoma	28	18%	Cincinnati OH-KY	18	23%	Columbus OH	25	38%
	Washington	165	18%	Providence RI	20	21%	Richmond	22	28%
	Utah	24	17%	Greater New York Metro Area	193	20%	Madison	11	25%
	W Virginia	23	16%	Portland-Vancouver OR-WA	45	19%	Denver	20	23%
	Vermont	20	15%	Sioux Falls SD	10	16%	San Francisco	16	23%
	Montana	11	14%	Madison WI	11	15%	El Paso	9	21%
	S Dakota	16	13%	Spokane WA	9	15%	Portland OR	29	19%
	Hawaii	7	11%	Washington, DC	30	15%	San Jose	9	18%
	Wyoming	5	8%	Portland ME	7	13%	Brooklyn Borough	18	6%
	N Dakota	3	5%	San Jose CA	11	11%	Seattle	9	5%
	N Hampshire	5	5%	Burlington VT	5	9%	Sioux Falls	2	4%
	Alaska	0	0%	Seattle-Tacoma WA	31	9%	Manhattan Borough	11	4%

¹ Based on tabulations of metro areas with 50 or more 70% LIHTC projects

² Based on tabulations of cities with 40 or more 70% LIHTC projects

Table 4B: Share of 30% LIHTC Projects (built between 1988 & 2016) in High-Cost Burden Census Tracts in 15 Top & Bottom States, Metro Areas, and Cities

	Top & Bottom States sorted by High-burden Share	30% LIHTC Projects in High-burden Tracts	Share of 30% Projects in High-burden Tracts	Top & Bottom 15 Metro Areas ¹ sorted by High-burden Share	30% LIHTC Projects in High-burden Tracts	Share of 30% Projects in High-burden Tracts	Top & Bottom 15 Cities ² sorted by High-burden Share	30% LIHTC Projects in High-burden Tracts	Share of 30% Projects in High-burden Tracts
Top 15 Places	Florida	268	53%	Charlotte NC	46	72%	Charlotte	31	86%
	Nevada	17	43%	Miami-Ft. Lauderdale FL	93	65%	Milwaukee	19	83%
	N Carolina	146	41%	Tampa-St. Petersburg FL	47	59%	Harrisburg	19	73%
	Michigan	166	40%	Bakersfield CA	19	56%	Baltimore	13	65%
	Arizona	32	38%	Milwaukee WI	22	51%	Miami	13	62%
	Delaware	2	33%	Louisville KY	49	49%	Rochester	27	60%
	N Jersey	2	33%	Detroit MI	46	49%	Houston	24	60%
	Minnesota	76	32%	Phoenix AZ	21	49%	Albuquerque	15	60%
	Georgia	10	31%	Orlando FL	50	48%	Detroit	22	59%
	Indiana	18	31%	Fresno CA	16	43%	Dallas	12	57%
	Alabama	33	30%	Grand Rapids MI	16	42%	Tampa	17	55%
	Pennsylvania	233	29%	Riverside-S. Bernardino CA	53	42%	Phoenix	12	55%
	Oregon	41	28%	Little Rock AR	16	41%	Los Angeles	63	54%
	N Mexico	25	28%	Albany NY	12	40%	Jacksonville	13	54%
	Texas	85	28%	Houston TX	27	39%	Bronx Borough	139	54%
	State Average		26%	Metro Average		28%	City Average		42%
Bottom 15 Places	Washington	93	16%	Gr. New York City Metro Area	186	22%	Dayton	6	26%
	Maine	25	16%	Portland-Vancouver OR-WA	29	22%	Pittsburgh	9	23%
	Tennessee	24	16%	Pittsburgh PA	27	22%	Seattle	29	23%
	Distr. Columbia	18	15%	Austin TX	7	21%	Austin	5	22%
	Montana	7	15%	Denver CO	19	19%	Cincinnati	5	21%
	Utah	9	15%	Madison WI	6	19%	Cleveland	6	19%
	Iowa	5	13%	San Francisco-Oakland CA	54	19%	Washington DC	18	17%
	Nebraska	5	12%	Rochester NY	44	18%	San Jose	13	16%
	Kansas	4	7%	Seattle-Tacoma WA	44	13%	Newport CA	3	15%
	N Dakota	1	7%	Boston MA	12	12%	Denver	5	15%
	N Hampshire	3	6%	San Jose CA	16	12%	Vancouver	3	14%
	W Virginia	4	6%	Washington, DC	33	12%	Brooklyn Borough	16	9%
	Oklahoma	8	5%	Cincinnati OH-KY	7	11%	Boston	3	9%
	Alaska	0	0%	Burlington VT	4	11%	Manhattan Borough	6	2%
	Wyoming	0	0%	Santa Rosa CA	0	0%	Santa Rosa	0	0%

¹ Based on tabulations of metro areas with 30 or more 30% LIHTC projects² Based on tabulations of cities with 20 or more 30% LIHTC projects

How extensive is this problem of disparate (racial) impact? To find out, we counted the number of LIHTC projects and units located in census tracts in which at least forty percent of 2016 residents were identified as African-American in the American Community Survey. Nationwide, these “Black-plurality” tracts accounted for eleven percent of U.S. census tracts in 2016 and included 43 percent of the nation’s African-American population.

Map 3 presents the share of affordable LIHTC units located in Black-plurality tracts by state. Nationally, 34 percent of all affordable LIHTC units are located in Black-plurality census tracts,^{ix} and there are eight states in which more than half of all LIHTC units are located in Black-plurality tracts. These include Hawaii (95 percent of affordable LIHTC units are located in Black-plurality tracts), the District of Columbia (92 percent), New York (65 percent), Georgia (61 percent), Mississippi (59 percent), New Jersey (55 percent), Louisiana (53 percent) and Maryland (50 percent). All eight include large non-white populations; and except for New York, none of the eight are among the nation’s top LIHTC unit producers. Among the six states with more than 100,000 affordable LIHTC units, the average share of LIHTC units located in Black-plurality census tracts is 37 percent. Among regions, the proportion of LIHTC units located in Black-plurality census tracts is highest among Southeastern states and lowest among those in the Plains and Mountain regions.

Map 4 presents comparable information by metropolitan area. All told, 34 percent of all affordable LIHTC units within U.S. metro areas are located within Black-plurality census tracts. As a rule, the larger a metro area’s African-American population, the greater the share of LIHTC units located in its Black-plurality census tracts. This pattern is especially notable among metro areas located in the Middle Atlantic, Midwest, and Southeast regions.

Another way to explore the disparate racial impacts of the LIHTC program is to compare the share of LIHTC projects in Black-plurality projects to the share of population. To the degree that Black-plurality census tracts receive more than their per capita share of LIHTC projects, we should worry that the affordability benefits those project convey might be outweighed by their adverse effects on racial segregation. Tables 5a and 5b present these project share-population share comparisons by state, metro area and city. Table 5a compares the share of 70% LIHTC projects located in Black-plurality census tracts with overall population shares in the same tracts. Table 5b provides the same information for 30% LIHTC projects.

Nationwide, the ratio comparing the share of 70% LIHTC projects to population among Black-plurality census tracts stands at 3.6 to 1. Among high-producing states (those that have produced the most 70% LIHTC projects over the years, as listed in the left-hand columns of Table 5A), this ratio is highest, indicating the most severe disparate racial impacts, in Pennsylvania, Tennessee, Missouri, and Michigan. It is lowest in California, Texas, and Alabama. Texas’ location in the bottom-half of Table 5a, an indication that it is actually pretty good in terms of disparate impact, is all the more ironic given its appearance in *Texas Dept. of Housing and Community Affairs v. Inclusive Communities Project, Inc.*

Among high-producing metro areas (listed in the middle columns of Table 5A), Portland, Phoenix, Denver, Tampa, and Orlando have all significantly over-allocated 70% LIHTC projects to Black-plurality tracts relative to their populations. On the flip side, among high-producers, the San Francisco-Oakland and Greater New York metro areas have done a conspicuously good job *not* over-allocating 70% LIHTC projects to Black-plurality tracts. Among high-producing cities (listed in the right-hand columns of Table 5A),

Raleigh and Greensboro have greatly over-allocated their 70% LIHTC projects to Black-plurality tracts, while Jackson (Mississippi) and Detroit have gone the other way and distributed their 70% LIHTC projects in a manner that doesn't generate a disparate (racial) impact.

Similar disparate impact patterns are evident for 30% LIHTC projects. Among high-producing states, Pennsylvania especially has allocated a disproportionate (per capita) share of its 30% LIHTC projects to Black-plurality census tracts; North Carolina, Florida, and Virginia have also been careless in this regard. (Nationally, the ratio of 30% projects-to-population in Black-plurality tracts stands at 3.2 to 1.) Among high-producing metros (listed in the middle columns of Table 5B), Pittsburgh, Louisville, Minneapolis, and Philadelphia have all over-allocated 30% LIHTC projects to Black-plurality census tracts; while among high-producing cities (listed in the right-hand columns of Table 5B) the list of those over-allocating their 30% LIHTC projects to Black-plurality tracts includes Seattle, Minneapolis, and Louisville.

What about places that are under-allocating 30% LIHTC projects to Black-plurality census tracts, thereby not exacerbating racial disparate impacts? There are no high-producing states that fit into this category. The list of high-producing metropolitan areas under-allocating 30% LIHTC projects to Black-plurality tracts is dominated California metros; while the list of high-producing cities in which 30% LIHTC projects have been under-allocated to Black-plurality tracts is headed by Jackson (Mississippi), Sacramento, Detroit, and San Jose.

All in all, the Supreme Court got it right: Both the 70% and 30% LIHTC programs are being administered in a manner that is over-allocating LIHTC projects to Black-plurality neighborhoods. In terms of project shares, the disparate impact

problem is most severe among states, metropolitan areas, and large cities in the Northeast, Mid-Atlantic region, and Southeast.

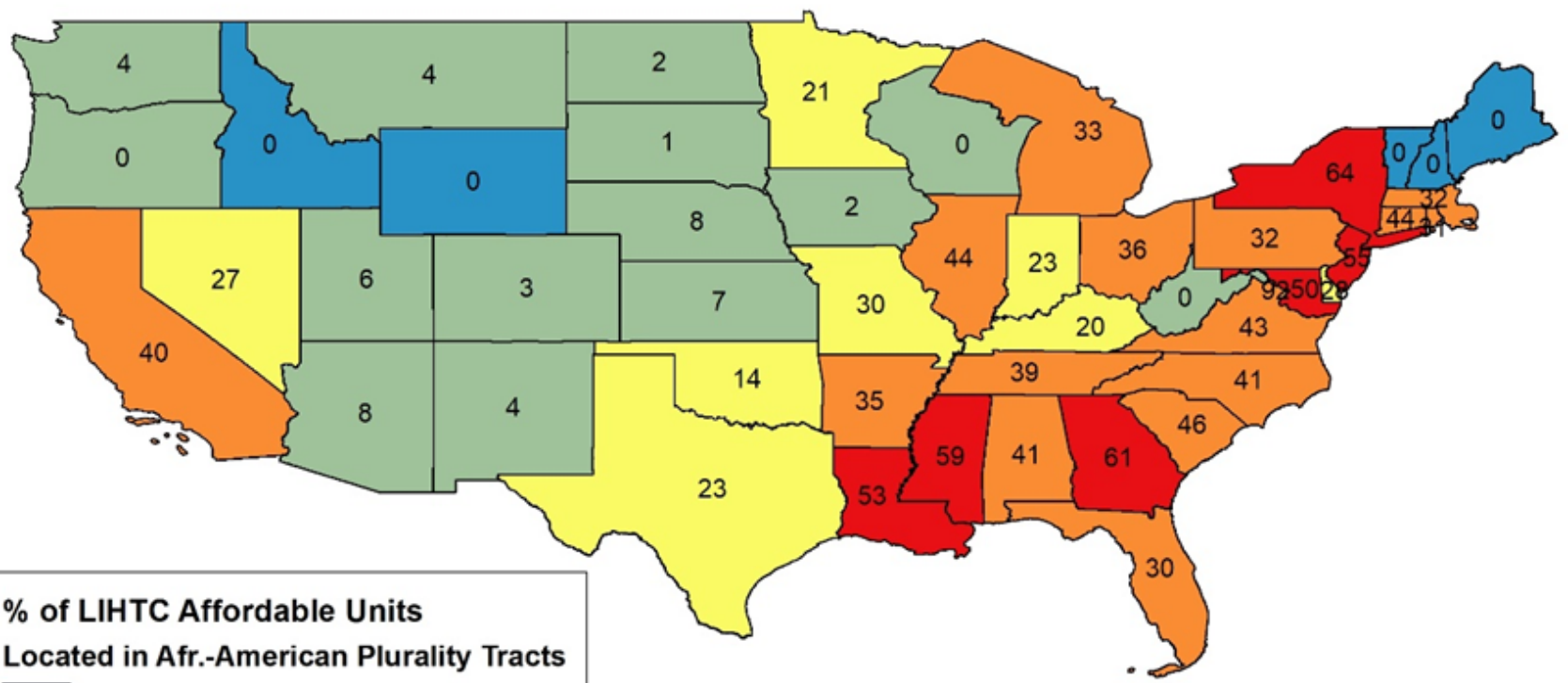
In terms of project-per capita-shares (the ratio of projects to population), the disparate impact problem is most severe in Pennsylvania, Tennessee, Missouri, and Michigan among high-producing states; in Portland, Phoenix, and Denver among high-producing metro areas; and among cities, in Raleigh North Carolina.

Poverty Impaction

The term *Impaction* is applied to policies or programs that worsen the incidence of poverty. For housing officials, avoiding impaction means avoiding building new low-income housing units in neighborhoods already characterized by high levels of poverty. Since the residents of high-poverty neighborhoods disproportionately suffer from high rent burdens as well as poverty, this presents a dilemma for affordable housing advocates: programmatic decisions which add to the supply of affordable housing, thus helping reduce rent burdens, will also, by their very nature, exacerbate existing poverty impaction problems.

Where are the adverse effects of LIHTC projects on poverty impaction greatest? To find out, we counted the number of LIHTC projects and units located in census tracts in which the 2016 poverty rate *was at least twice that of the metropolitan area or state*. Note that this approach, which uses a locally comparative poverty metric, will identify more tracts as being poverty-impacted than the traditional criteria which defines a tract as being poverty-impacted when forty percent or more of its residents live below the poverty line.

Map 3:
Percent of All Affordable LIHTC Units Produced Between 1988 and 2016
Located in African-American Plurality Census Tracts* by State
 (Labels indicate numerical share of all LIHTC units)



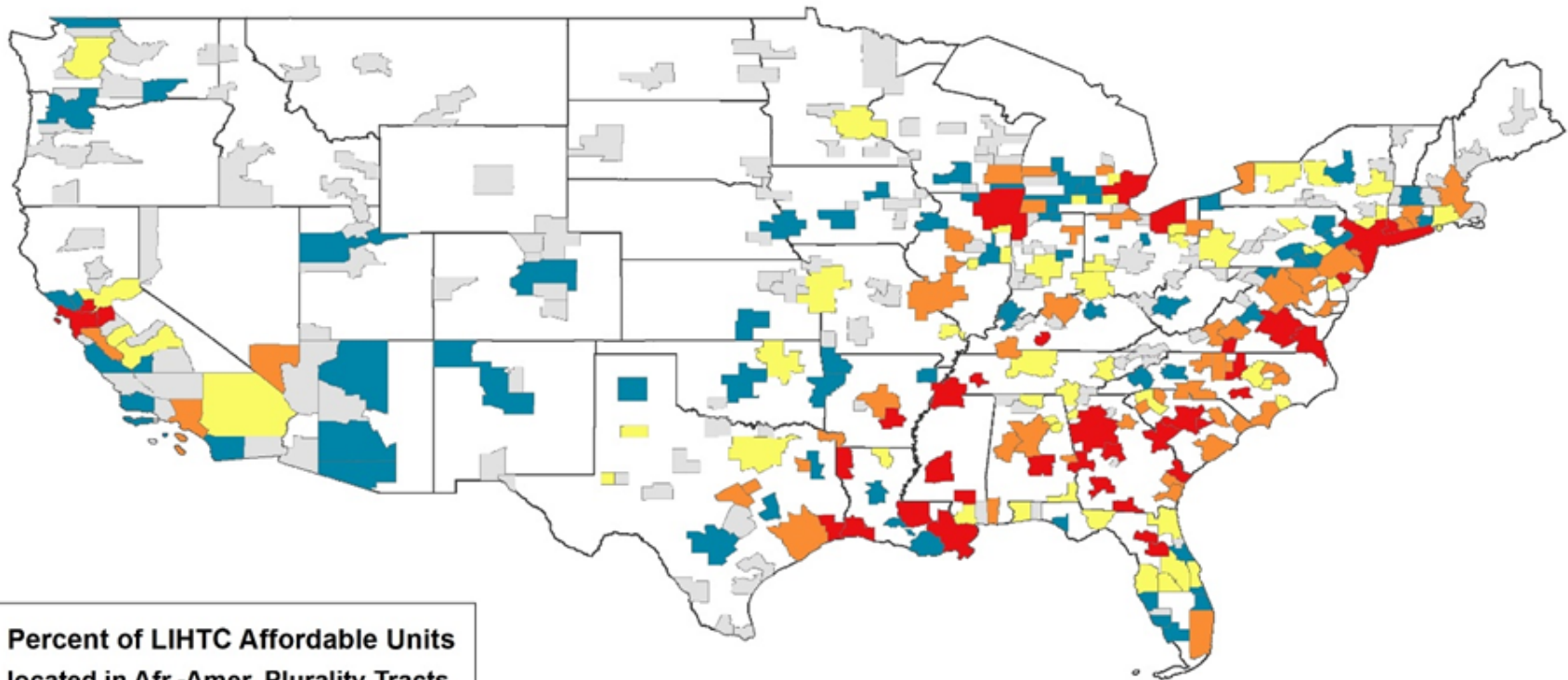
% of LIHTC Affordable Units Located in Afr.-Amer. Plurality Tracts

- No Afr.-Amer. Plurality Tracts
- 1% to 10%
- 11% to 30%
- 30% to 50%
- 50% to 100%






* African-American Plurality Census Tracts are those in which more than 40% of residents were African-American in 2016
 (Source: LIHTC Database and 2016 American Community Survey)



Map 4:
Percent of All Affordable LIHTC Units Produced Between 1988 and 2016
located in African-American Plurality Census Tracts* by Metro Area



**Percent of LIHTC Affordable Units
located in Afr.-Amer. Plurality Tracts**

-  No Afr.-Amer. Plurality Tracts
-  1% to 20%
-  21% to 40%
-  41% to 60%
-  61% to 100%

* African-American Plurality Census Tracts are those in which more than 40% of residents were African-American in 2016
(Source: LIHTC Database and 2016 American Community Survey)



Table 5A: Share of 70% LIHTC Projects (built between 1988 & 2016) in Black Plurality Census Tracts in 15 Top & Bottom States, Metro Areas, and Cities

	Top & Bottom States sorted by Project Share Ratio	70% LIHTC Projects in Black-plurality Tracts	Share of 70% Projects in Black-plurality Tracts	Ratio of Project Share to Population Share in Black-plurality Tracts	Top and Bottom Metro Areas ¹ sorted by Project Share Ratio	70% LIHTC Projects in Black-plurality Tracts	Share of 70% Projects in Black-plurality Tracts	Ratio of Project Share to Population Share in Black-plurality Tracts	Top and Bottom Cities ² sorted by Share Ratio	70% LIHTC Projects in Black-plurality Tracts	Share of 70% Projects in Black-plurality Tracts	Ratio of Project Share to Population Share in Black-plurality Tracts
Top 15 Places	Kentucky	52	21%	5.7	Portland OR	45	19%	24.8	Raleigh	320	127%	5.5
	Delaware	9	82%	5.5	Des Moines IA	19	26%	14.3	Madison	9	20%	4.8
	Nebraska	28	15%	5.1	Phoenix AZ	53	46%	12.2	Omaha	28	54%	4.6
	Connecticut	74	49%	3.5	Denver CO	46	33%	8.2	Phoenix	16	33%	4.3
	Pennsylvania	163	38%	3.4	Omaha NE	32	42%	7.9	Minneapolis	33	103%	3.8
	Iowa	5	2%	3.4	Tampa FL	41	55%	7.6	Greenville SC	39	57%	3.4
	Tennessee	162	46%	3.3	Greenville SC	28	41%	5.7	Greensboro	191	171%	3.3
	Missouri	131	32%	3.3	Orlando FL	43	58%	5.3	Miami	38	51%	3.3
	Massachusetts	94	29%	3.3	Madison WI	11	15%	4.8	Charleston	17	50%	2.8
	Michigan	186	39%	3.2	San Diego CA	48	46%	4.7	Pittsburgh	17	57%	2.7
	Arkansas	89	39%	3.1	Louisville KY	32	43%	4.3	Tampa	19	59%	2.4
	Ohio	151	29%	3.0	Kansas City MO-KS	63	48%	4.2	Seattle	33	34%	2.3
	Oklahoma	26	17%	3.0	Syracuse NY	25	42%	4.1	Manhattan Bor	271	90%	2.3
	Illinois	160	48%	2.8	Pittsburgh PA	16	23%	4.1	Kansas City	55	75%	2.2
	Minnesota	65	16%	2.7	Miami- FL	115	75%	4.0	Louisville	32	67%	2.0
		State Average	33%	3.6	Metro Average		35%		City Average		71%	
Bottom 15 Places	Distr. Columbia	32	86%	1.4	Little Rock AR	15	27%	1.2	Oakland	60	87%	1.1
	Texas	121	18%	1.4	Virginia Beach VA	51	34%	1.2	Nashville	72	69%	1.1
	California	794	38%	1.3	Jackson MS	48	54%	1.1	Denver	5	6%	1.1
	Washington	72	8%	1.3	Richmond VA	34	30%	1.1	Tacoma	8	24%	1.1
	Maryland	94	45%	1.2	Charlotte NC-SC	47	31%	1.1	Montgomery AL	23	72%	1.1
	Hawaii	56	90%	1.0	Birmingham AL	20	31%	1.0	San Diego	10	22%	1.1
	N Mexico	5	7%	0.8	Los Angeles CA	244	39%	1.0	Bronx Bor.	202	98%	1.1
	Oregon	2	0%	0.8	Baltimore MD	29	29%	0.9	Detroit	121	94%	1.0
	Alaska	5	9%	0.5	Durham NC	15	26%	0.9	Sacramento	29	58%	1.0
	Utah	2	1%	0.5	Seattle WA	31	9%	0.8	Florence SC	6	19%	1.0
	W Virginia	2	1%	0.2	Montgomery AL	16	31%	0.7	Rochester	34	59%	0.9
	S Dakota	1	1%	0.1	Gr. New York City Metr	193	20%	0.5	Portland	1	1%	0.9
	Idaho	0	0%	0.0	San Francisco CA	58	23%	0.5	Hartford	23	64%	0.9
	N Dakota	0	0%	0.0	Washington DC	30	15%	0.4	Jackson MS	82	73%	0.8
	Wyoming	0	0%	0.0	San Jose CA	11	11%	0.2	El Paso	0	0%	0.0

¹ Based on tabulations of metro areas with 50 or more 70% LIHTC projects

² Based on tabulations of cities with 40 or more 70% LIHTC projects

Table 5B: Share of 30% LIHTC Projects (built between 1988 & 2016) in Black Plurality Census Tracts in 15 Top & Bottom States, Metro Areas, and Cities

	Top & Bottom States sorted by Share Ratio	30% LIHTC Projects in Black-plurality Tracts	Share of 30% Projects in Black-plurality Tracts	Ratio of Project Share to Population Share in Black-plurality Tracts	Top & Bottom Metro Areas ¹ sorted by Share Ratio	30% LIHTC Projects in Black-plurality Tracts	Share of 30% Projects in Black-plurality Tracts	Ratio of Project Share to Population Share in Black-plurality Tracts	Top & Bottom Cities ² sorted by Share Ratio	30% LIHTC Projects in Black-plurality Tracts	Share of 30% Projects in Black-plurality Tracts	Ratio of Project Share to Population Share in Black-plurality Tracts
Top 15 Places	Kentucky	67	22%	5.8	Pittsburgh PA	43	35%	6.2	Miami	14	67%	4.2
	Minnesota	59	25%	4.3	Louisville KY	48	48%	4.9	Seattle	41	55%	3.8
	Pennsylvania	308	38%	3.4	Albany NY	11	37%	4.5	Minneapolis	32	97%	3.6
	Massachusetts	34	30%	3.3	Tampa FL	21	27%	3.7	Pittsburgh	22	56%	2.6
	N Jersey	4	67%	3.0	Harrisburg PA	22	42%	3.7	Louisville	53	79%	2.3
	Rhode Island	15	31%	2.7	Dayton OH	17	40%	3.3	Tampa	17	55%	2.2
	N Carolina	181	51%	2.6	Providence RI	15	28%	3.2	Dallas	14	67%	2.0
	Missouri	49	26%	2.6	Cleveland OH	28	60%	3.2	Bronx Bor.	253	176%	1.9
	Florida	138	27%	2.6	Minneapolis MN	58	29%	3.1	Brooklyn Bor.	136	110%	1.9
	Virginia	121	41%	2.5	Philadelphia PA-NJ-DE	216	73%	3.0	Manhattan Bor.	152	76%	1.9
	Ohio	98	24%	2.4	Kansas City MO-KS	17	32%	2.8	Los Angeles	91	78%	1.8
	Washington	84	14%	2.3	Allentown PA	9	14%	2.8	Kansas City	15	60%	1.7
	Connecticut	14	32%	2.3	Boston MA	33	33%	2.7	Houston	24	60%	1.7
	Indiana	10	17%	2.0	Miami- FL	68	48%	2.6	Jacksonville	11	46%	1.7
	Georgia	19	59%	1.8	Charlotte NC-SC	46	72%	2.5	Orlando	20	38%	1.7
	State Average	30%	3.2	Metro Average	44%	City Average	69%					
Bottom 15 Places	Utah	2	3%	1.2	Orlando FL	21	20%	1.8	St. Louis	28	67%	1.3
	Hawaii	25	100%	1.2	Columbus OH	17	23%	1.8	Cleveland	21	66%	1.2
	Oklahoma	9	6%	1.0	Washington DC	170	60%	1.6	Phoenix	2	9%	1.2
	N Mexico	6	7%	0.8	Jackson MS	42	75%	1.6	San Jose	58	72%	1.2
	S Dakota	1	5%	0.7	Memphis TN	30	71%	1.5	Boston	16	46%	1.1
	Arizona	3	4%	0.7	Vallejo-Fairfield CA	24	67%	1.4	Oakland	31	84%	1.1
	Colorado	3	1%	0.6	Sacramento CA	56	35%	1.4	Detroit	35	95%	1.1
	Delaware	0	0%	0.0	Los Angeles CA	216	53%	1.4	San Diego	12	21%	1.0
	Idaho	0	0%	0.0	San Francisco CA	184	64%	1.3	Sacramento	38	60%	1.0
	Iowa	0	0%	0.0	Riverside-SB CA	36	29%	1.3	Rochester NY	26	58%	0.9
	Montana	0	0%	0.0	San Diego CA	17	11%	1.1	St. Paul	8	35%	0.8
	N Dakota	0	0%	0.0	Fresno CA	10	27%	1.1	Lancaster PA	6	21%	0.8
	Oregon	0	0%	0.0	San Jose CA	72	53%	1.0	Springfield IL	3	12%	0.7
	W Virginia	0	0%	0.0	Rochester NY	26	11%	0.8	Jackson MS	30	64%	0.7
	Wyoming	0	0	0%	Denver CO	3	3%	0.8	Denver	1	3%	0.6

¹ Based on tabulations of metro areas with 30 or more 30% LIHTC projects² Based on tabulations of cities with 20 or more 30% LIHTC projects

Nationally, 38 percent of all affordable LIHTC units are located in high-poverty tracts as identified above. As shown in Map 5, there are nine states (plus the District of Columbia) in which 40 percent or more of affordable LIHTC units are located in high-poverty tracts. These include Connecticut (in which 56 percent of affordable LIHTC units are located in high-poverty tracts), New York (55%), Massachusetts (55%), Rhode Island (52%), Ohio (45%), New Jersey (43%), Pennsylvania (42%), Illinois (41%) and Nevada (40%). Except for Nevada, these are states in which large numbers of manufacturing jobs began disappearing in the 1950s, leading to the entrenchment of deep poverty in many urban neighborhoods. The connection between poverty impact and the location of LIHTC units is more tenuous in the Southwest, West, and Mountain regions, where, except for California, Arizona, and the aforementioned Nevada, the share of LIHTC units located in high-poverty census tracts is generally in the 20 percent to 30 percent range.

The picture changes slightly when the connection between LIHTC projects and poverty impact is considered at the metropolitan level as in Map 6. This connection is strongest among old and former manufacturing metros like Cleveland, Hartford, and New York City. It is also strong in many large and newer metros in the West such as Phoenix, Las Vegas, and San Francisco-Oakland. Bigger metropolitan areas, we would hypothesize, are more likely to have more neighborhoods in which poverty can concentrate, exacerbating the tension between providing affordable housing for those who need it most and adding to the burden of neighborhood poverty.

Another way to look at the connection between LIHTC project siting decisions and poverty impact is to compare the share of LIHTC

projects in high-poverty tracts to the population share. These comparisons are presented in ratio form for the 70% LIHTC program in Table 6A and for the 30% LIHTC program in Table 6B. Both tables include data for states, metro areas, and large cities, with each geography level sorted from high (indicating a per capita over-concentration of LIHTC projects in high-poverty tracts) to low (indicating a per capita under-concentration)

Nationally, the ratio of 70% projects-to-population in high-poverty tracts stands at 2.6 to 1. Among high-producing states (which are listed in the left-hand set of columns of Table 6A), this ratio is highest in Wisconsin, Virginia and Tennessee, and lowest in Alabama. Among high-producing metro areas (listed in the middle columns of Table 6A), Miami, Memphis, Houston, Detroit, Nashville, Chicago, Dallas-Ft. Worth, and Raleigh have all over-allocated 70% LIHTC projects (relative to population) to high-poverty tracts. On the flip side, Cleveland and Hartford are the only two high-producing metro areas to have consistently under-allocated 70% LIHTC projects to high-poverty census tracts. Among high-producing cities (listed in the right-hand columns of Table 6A), San Diego, San Francisco, and Greensboro have all over-allocated 70% LIHTC projects to high-poverty tracts (relative to population), while Hartford, Richmond, St. Louis, Detroit, and Oakland have all under-allocated them. This last result would suggest that cities with high concentrations of poverty are especially careful about not allocating LIHTC projects in a manner that further exacerbates poverty.

Similar allocation patterns are evident for the 30% LIHTC projects summarized in Table 6B. Among high-producing states, Virginia and North Carolina have tended to over-allocate 30% LIHTC projects to high-poverty census tracts. (Nationally, the ratio of 30% projects-to-

population in high-poverty tracts stands at 2.2 to 1.) Among high-producing metros, Miami, Pittsburgh, Louisville and Charlotte have all over-allocated 30% LIHTC projects to high-poverty tracts; while among high-producing cities, the list of those over-allocating their 30% LIHTC projects to high-poverty tracts includes Charlotte, Seattle, and San Francisco. By contrast, Cleveland, St. Louis, and Detroit all appear on the list of high-producing cities that are under-allocating 30% LIHTC projects to their high-poverty tracts.

At best, the 70% and 30% LIHTC programs are being administered in a manner that is blind to the problem of poverty impaction; at worst, they are exacerbating it. Among states, the problem of incremental poverty impaction is most severe in Northeast, Mid-Atlantic and Midwestern regions. Among metropolitan areas, it is also severe in the South. Among cities, it is especially severe in places like San Francisco, and New York City where the income distribution is extremely unequal. While in theory the QAP process should enable the 70% LIHTC program to be more effective at deconcentrating poverty, in practice that potential does not seem to have been realized.

Targeting Opportunity

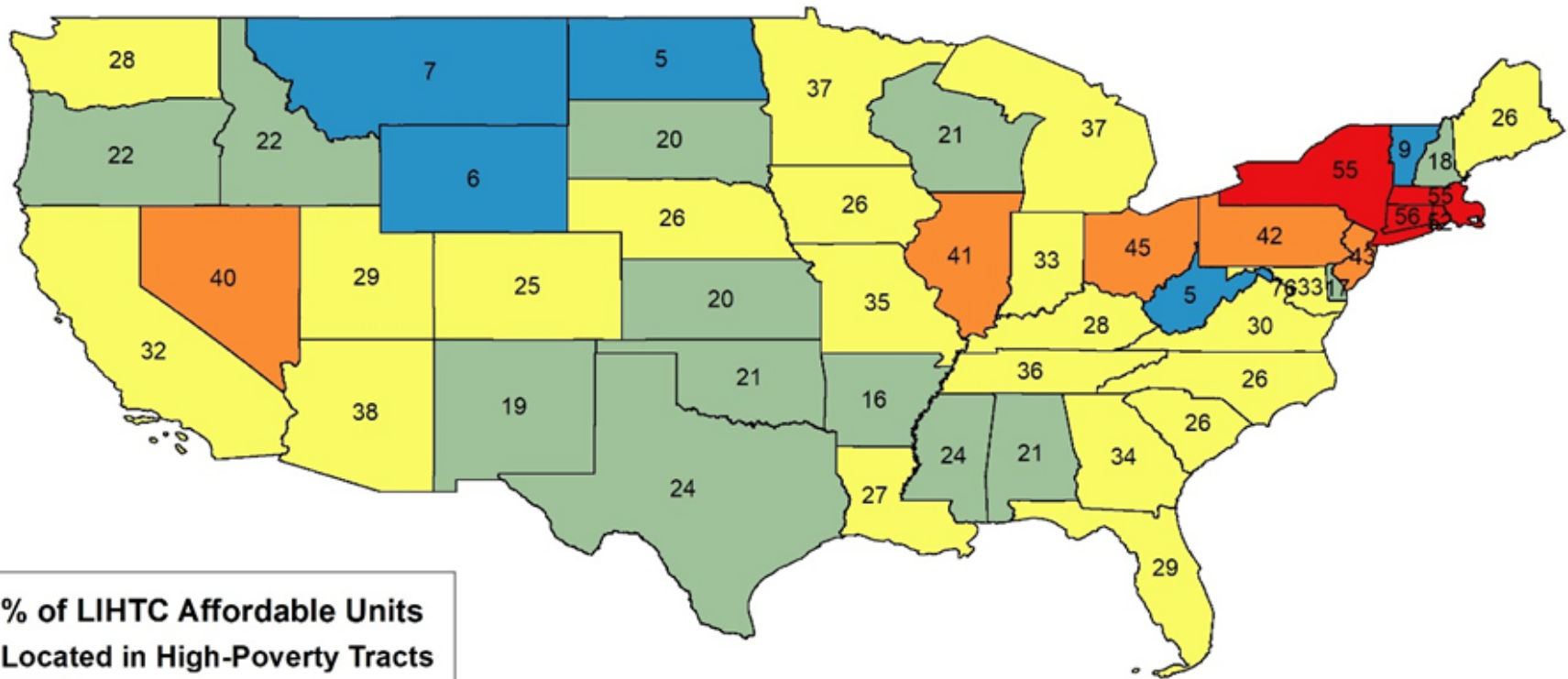
One of the original core goals of the LIHTC program was to facilitate the construction of mixed-income housing projects as a means of promoting upwardly-mobile social and economic aspirations, and alleviating the adverse economic mobility conditions that plagued so many public housing projects. More recently, this goal has fallen by the wayside because of worsening affordable housing needs and greater than anticipated competition for LIHTC funding. Even so, the idea that LIHTC tenants should ultimately graduate to market rate housing and that LIHTC projects are best

located in areas of upward socio-economic opportunity remains firmly embedded in the program's ideology.

How well is this aspiration being realized? To find out, we compared the locations of 70% and 30% LIHTC affordable units to a set of census tracts identified as "opportunity zones" by Harvard economist Raj Chetty and his colleagues at Opportunity Insights. Opportunity zones include those census tracts in which an African-American or Hispanic child growing up in poverty in the late-1970s and early-1980s had a better-than-average likelihood of attaining an adult income in the 75th-or-higher percentile of their age and race cohort. Unlike previous moving to opportunity evaluation studies, which looked at the role of subsidized housing programs in avoiding negative outcomes (such as dropping out of school or teenage pregnancy), Chetty's work looks at opportunity in terms of positive income attainment. Drawing on Chetty's work^x, we identified 16,232 census tracts that could be classified as opportunity zones for Black and Hispanic children (Appendix A tabulates these tracts by state).

As shown in Map 7, the states with the highest percentages of affordable LIHTC units in Black and Hispanic opportunity tracts are Wyoming (52 percent), Rhode Island (39 percent), Virginia (36 percent), and Louisiana (34 percent). The states with the lowest opportunity percentages are Vermont (1 percent), Maine (2 percent), North Dakota (2 percent), West Virginia (4 percent), and Idaho (6 percent). Among the five top-producing states (California, New York, Florida, Texas, and Washington), just 25.4 percent of LIHTC units are located in Black and Hispanic high-opportunity tracts.

Map 5: Pct. of All Affordable LIHTC Units Located in High-Poverty Census Tracts, 1988-2016
(Numbers indicate share of all LIHTC units)



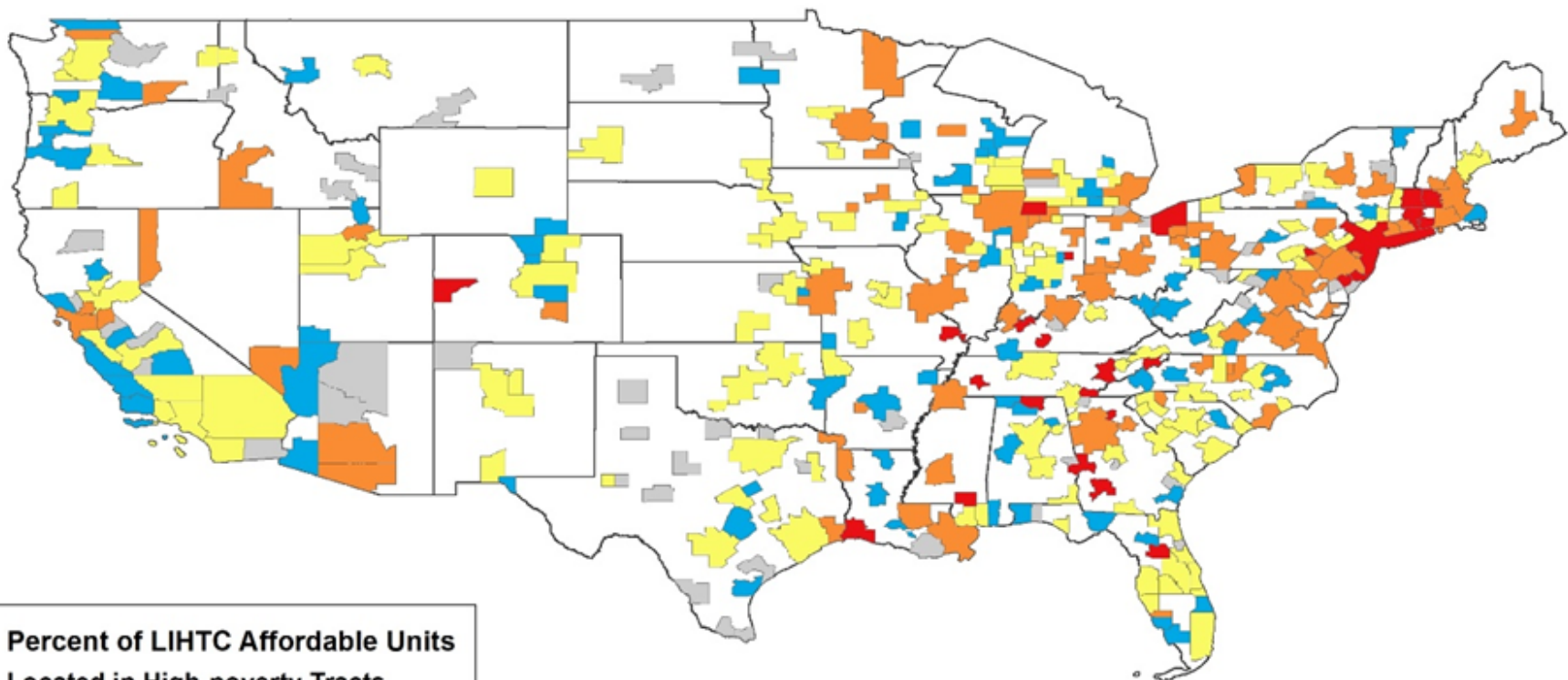
% of LIHTC Affordable Units Located in High-Poverty Tracts

- 10% or less
- 11% to 25%
- 26% to 40%
- 40% to 50%
- 50% to 76%

High-Poverty Tracts include census tracts in which the share of adults in poverty exceeds 200% of the average poverty rate for the metro area or state (see text for more details)



Map 6:
Percent of All Affordable LIHTC Units Produced Between 1988 and 2016
located in High-Poverty Census Tracts* by Metro Area



**Percent of LIHTC Affordable Units
Located in High-poverty Tracts**

- No High-poverty Tracts
- 1% to 20%
- 21% to 40%
- 41% to 60%
- 61% to 100%

* High-poverty Census Tracts are those in which the 2016 poverty rate was more than double that of the metro area
(Source: LIHTC Database and 2016 American Community Survey)



Table 6A: Share of 70% LIHTC Projects (built between 1988 & 2016) in High-Poverty Census Tracts in 15 Top & Bottom States, Metro Areas, and Cities

	Top & Bottom States sorted by Share Ratio	70% LIHTC Projects in High-poverty Tracts	Share of 70% Projects in High-poverty Tracts	Ratio of Project Share to Population Share in High-poverty Tracts	Top & Bottom 15 Metro Areas ¹ sorted by Share Ratio	70% LIHTC Projects in High-poverty Tracts	Share of 70% Projects in High-poverty Tracts	Ratio of Project Share to Population Share in High-poverty Tracts	Top & Bottom Cities ² sorted by Share Ratio	70% LIHTC Projects in High-poverty Tracts	Share of 70% Projects in High-poverty Tracts	Ratio of Project Share to Population Share in High-poverty Tracts
Top 15 Places	N Jersey	19	56%	5.7	Miami-Ft. Lauderdale F	97	63%	6.8	San Diego	30	65%	4.4
	Wisconsin	142	23%	5.7	Memphis TN-MS-AR	58	73%	5.4	San Francisco	39	56%	4.2
	Virginia	197	28%	5.6	Columbia SC	51	65%	5.3	Greensboro	89	79%	3.9
	Delaware	4	36%	5.4	Louisville KY-IN	45	60%	5.2	Bakerfield	16	50%	3.5
	Tennessee	158	45%	4.9	Houston TX	73	63%	5.1	Orlando	17	43%	2.8
	Maine	40	40%	4.9	Greenville SC	33	49%	5.0	Tucson	21	66%	2.7
	Mississippi	100	27%	4.4	Detroit MI	156	83%	4.5	Charleston	16	47%	2.7
	Indiana	53	33%	4.4	Pittsburgh PA	36	51%	4.5	Los Angeles	215	66%	2.6
	Kentucky	83	34%	4.3	Nashville TN	74	50%	4.4	Greenville SC	25	37%	2.6
	Georgia	27	45%	4.1	Chicago IL	140	59%	4.3	Fresno	16	41%	2.5
	Michigan	250	52%	4.0	Richmond VA	74	65%	4.2	Henderson NC	6	13%	2.5
	Conecticut	87	57%	3.9	Dallas-Fort Worth TX	45	36%	4.1	Houston	41	65%	2.3
	Massachusetts	165	52%	3.8	Raleigh NC	308	50%	4.0	Sacramento	35	70%	2.3
	Florida	206	34%	3.7	San Diego CA	47	45%	3.9	Denver	34	40%	2.3
	Nevada	24	49%	3.5	Tampa FL	29	39%	3.9	Omaha	36	69%	2.3
	State Average	31%	2.6	Metro Average		42%		City Average		82%		
Bottom 15 Places	Alaska	12	22%	2.3	Jackson MS	13	15%	0.9	Baltimore	38	69%	1.4
	Oregon	74	17%	2.3	Madison WI	8	11%	0.8	Jackson MS	62	55%	1.3
	Rhode Island	30	43%	2.2	Greensboro NC	30	12%	0.8	Tacoma	14	42%	1.3
	Utah	26	18%	2.2	Burlington VT	10	19%	0.5	Buffalo	32	73%	1.3
	Kansas	25	16%	1.9	Yakima WA	9	14%	0.5	Oakland	48	70%	1.3
	Distr. Columbia	27	73%	1.9	Visalia CA	11	19%	0.4	Detroit	124	96%	1.2
	Montana	5	6%	1.7	Spokane WA	22	37%	0.3	Rochester	40	69%	1.2
	N Dakota	3	5%	1.6	Durham-Chapel Hill NC	29	51%	0.3	Cleveland	44	76%	1.1
	Alabama	79	15%	1.5	Syracuse NY	32	54%	0.3	St. Louis	42	61%	1.1
	Vermont	17	13%	1.4	Montgomery AL	22	43%	0.3	Madison	11	25%	1.1
	N Mexico	9	12%	1.4	Portland ME	22	42%	0.3	Richmond	44	55%	1.0
	Idaho	25	16%	1.3	Cleveland OH	48	75%	0.2	Hartford	26	72%	1.0
	S Dakota	16	13%	1.3	Charleston SC	23	42%	0.2	Sioux Falls	9	19%	0.7
	W Virginia	15	10%	1.0	Hartford CT	56	95%	0.2	Lancaster PA	14	42%	0.6
	Wyoming	3	5%	0.9	Little Rock AR	26	0	0.2	El Paso	1	2%	0.5

¹ Based on tabulations of metro areas with 50 or more 70% LIHTC projects² Based on tabulations of cities with 40 or more 70% LIHTC projects

Table 6B: Share of 30% LIHTC Projects (built between 1988 & 2016) in High-Poverty Census Tracts in 15 Top & Bottom States, Metro Areas, and Cities

	30% LIHTC Projects in High-poverty Tracts	Share of 30% LIHTC Projects in High-poverty Tracts	Ratio of Project Share to Population Share in High-poverty Tracts	Top & Bottom 15 Metro Areas ¹ sorted by Share Ratio	30% LIHTC Projects in High-poverty Tracts	Share of 30% LIHTC Projects in High-poverty Tracts	Ratio of Project Share to Population Share in High-poverty Tracts	Top & Bottom 15 Cities ² sorted by Share Ratio	30% LIHTC Projects in High-poverty Tracts	Share of 30% LIHTC Projects in High-poverty Tracts	Ratio of Project Share to Population Share in High-poverty Tracts	
Top 15 Places	Iowa	12	32%	5.6	Portland OR-WA	35	80%	7.4	Charlotte	30	83%	4.7
	N Jersey	3	50%	5.1	Miami-Ft. Lauderdale FL	68	48%	5.1	Seattle	42	57%	4.5
	Virginia	75	25%	5.0	Pittsburgh PA	69	56%	4.9	San Francisco	33	53%	4.0
	Hawaii	8	32%	4.7	Louisville KY-IN	55	56%	4.8	Little Rock	9	45%	3.4
	Minnesota	98	42%	4.7	Charlotte NC	48	75%	4.7	Brooklyn Bor	117	94%	3.0
	N Carolina	135	38%	4.4	Albany NY	19	63%	4.3	Minneapolis	43	130%	3.0
	Wisconsin	39	14%	3.6	Minneapolis- MN-WI	93	47%	4.1	Orlando	24	45%	2.9
	Kentucky	86	28%	3.6	Philadelphia PA	216	73%	4.1	Dallas	19	90%	2.8
	Pennsylvania	376	47%	3.4	Harrisburg PA	25	48%	4.0	Bronx Bor.	243	169%	2.7
	Georgia	12	38%	3.4	Baltimore MD	23	56%	4.0	San Jose	38	47%	2.7
	Massachusetts	49	43%	3.2	Chicago IL	46	55%	4.0	San Diego	22	39%	2.6
	Nevada	17	43%	3.1	Dallas-Fort Worth TX	28	35%	3.9	Los Angeles	69	59%	2.3
	Washington	143	25%	3.1	Washington DC-VA-MD	123	43%	3.9	Manhattan Bor.	115	57%	2.2
	Oregon	32	22%	3.0	Gr. New York City Metro Area	539	65%	3.9	Milwaukee	22	96%	2.1
	Conecticut	18	41%	2.8	Memphis TN-MS-AR	21	50%	3.7	Chicago	38	69%	2.1
		State Average	28%	2.2	Metro Average		43%		City Average		71%	
	Bottom 15 Places	Michigan	78	19%	1.4	Oxnard CA	14	35%	2.3	Denver	9	26%
Tennessee		18	12%	1.3	Denver CO	23	23%	2.2	Cincinnati	18	75%	1.5
N Mexico		10	11%	1.3	Allentown PA	21	33%	2.2	Boston	22	63%	1.5
N Hampshire		4	9%	1.3	Buffalo-Niagara Falls NY	14	33%	2.0	Oakland	28	76%	1.4
Idaho		8	12%	1.0	Sacramento CA	37	23%	1.7	Richmond	33	75%	1.4
Louisiana		18	11%	1.0	Fresno CA	6	16%	1.3	Sacramento	26	41%	1.4
S Dakota		2	10%	1.0	Portland ME	14	11%	1.2	Jackson MS	26	55%	1.4
Wyoming		1	5%	0.8	Madison WI	4	13%	1.1	Rochester NY	32	71%	1.3
Arkansas		9	4%	0.7	Burlington VT	4	11%	1.0	Detroit	36	97%	1.2
Kansas		3	5%	0.7	Rochester NY	32	13%	1.0	Springfield MO	10	38%	1.2
Vermont		6	5%	0.5	Santa Rosa CA	1	2%	1.0	Jacksonville	5	21%	1.2
Oklahoma		5	3%	0.4	Grand Rapids MI	4	11%	1.0	St. Louis	24	57%	1.0
W Virginia		1	2%	0.1	Bakersfield CA	7	21%	0.6	Cleveland	21	66%	1.0
Delaware		0	0%	0.0	Vallejo-Fairfield CA	16	44%	0.4	Lancaster PA	15	52%	0.7
N Dakota		0	0%	0.0	Austin TX	3	9%	0.3	San Antonio	1	4%	0.2

¹ Based on tabulations of metro areas with 30 or more 30% LIHTC projects² Based on tabulations of cities with 20 or more 30% LIHTC projects

Map 8 looks at the connection between opportunity zones and LIHTC unit locations by metro area rather than state. Among the metro areas in which 40 percent or more of affordable LIHTC units are located in Black and Hispanic opportunity zones are Houston, Washington DC, Bakersfield, New Orleans, and Tulsa. At first glance, these top performing metros don't seem to have a lot in common. Nor do the metros at the other end of the opportunity scale where fewer than 10 percent of affordable LIHTC units are located in Black and Hispanic opportunity tracts. Among these notable "low Black and Hispanic opportunity" metros are Tucson, Salt Lake City, Pittsburgh, and Portland (Maine). Before we make too much of these findings, it is worth noting, as Chetty does, that because opportunity zone designation is based on income attainment probabilities rather than discrete characteristics, places with fewer Black and Hispanic residents will have higher margins of error, resulting in both over- and under-estimates of opportunity potential, and thus the resulting overlaps between opportunity and LIHTC project locations. So, while we can say for sure that census tracts identified as opportunity zones will indeed offer greater economic opportunities than their non-opportunity neighbors, we cannot say that every Black and Hispanic child who grows up in an opportunity zone will automatically be successful.

Table 7A lists the 15 top and bottom performing states, metro areas, and large cities in terms of whether their 70% LIHTC projects are located in high-opportunity census tracts. Nationally, just 19 percent of 70% LIHTC projects are located in these tracts. Among high-producing states (i.e., those that have accommodated more than 400 70% LIHTC projects), Texas, Virginia, California, and New York have all performed well above the national average; while North Carolina,

Wisconsin, Ohio, Michigan, Oregon, Pennsylvania, and Missouri have performed well below it. Among high-producing metropolitan areas, Washington, DC, San Francisco-Oakland, Seattle, and New York City have all done much better than average in directing 70% LIHTC projects to high-opportunity tracts; while Goldsboro, Portland (Oregon), Detroit, Milwaukee, Charlotte, and especially Nashville have all done much worse than average. Among cities that have accommodated more than fifty 70% LIHTC projects, Seattle, Denver, Miami, San Francisco, Houston, and Minneapolis have all done quite well at directing their 70% projects into high-opportunity census tracts; while Detroit, Jackson (Mississippi), Nashville, Kansas City, Columbus (Ohio), Cleveland, Baltimore, and Omaha have all done poorly.

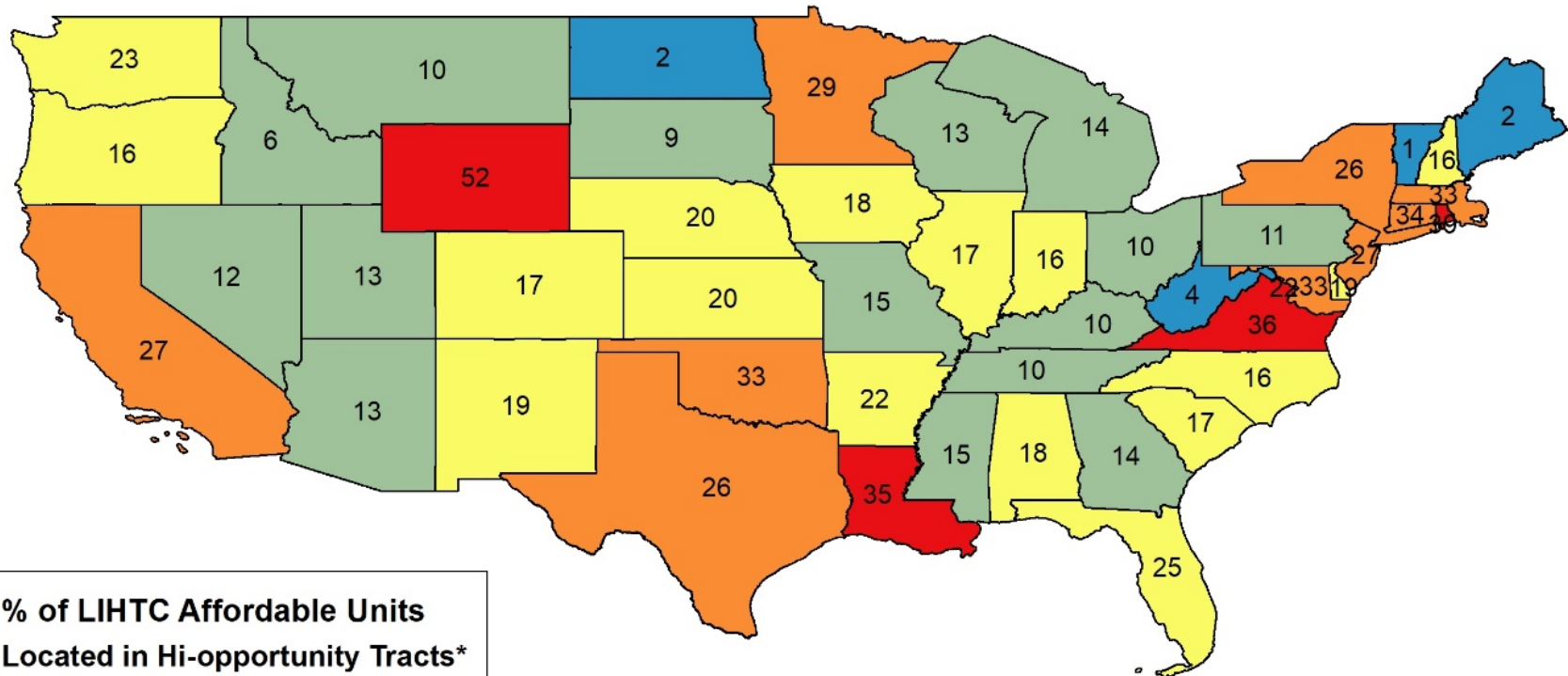
Table 7B presents comparable results for the set of 30% LIHTC projects. Nationally, 31 percent of 30% LIHTC projects are located in high-opportunity tracts. Compared to this national share, Florida, Michigan, and North Carolina have performed well among high-producing states (i.e., those that have accommodated 200 or more 30% projects since 1988) in directing their 30% LIHTC projects toward high-opportunity tracts; while Washington and Arkansas have performed poorly. Among high-producing metro areas, the only one to beat the national average in this regard is Washington, DC. By contrast, among high-producing metros, Rochester, Pittsburgh, Riverside-San Bernardino, Philadelphia, and Portland (Oregon) all under-performed the national average in accommodating 30% LIHTC projects in high-opportunity areas. The story is much more positive among high-producing cities (as reported in the right-hand columns of Table 7B), with Philadelphia, Los Angeles,

Louisville, Sacramento, Chicago, Orlando, Jackson (Mississippi), Richmond, and Houston, as well as the Bronx in New York City all doing well by national standards in directing 30% LIHTC projects to high-opportunity census tracts; leaving Brooklyn, Manhattan, Washington, DC and San Jose as the laggards.

A closer look at these listings suggests that it is the spatial distribution of opportunities rather than the distribution of LIHTC projects that most affects how a particular place performs when matching project locations to opportunity areas. As an example, consider the case of

Washington, DC, which as a metropolitan area performs well in matching its 70% and 30% LIHTC projects to opportunity zones, but as a city, does not perform anywhere near as well. Boston, by contrast, performs extremely well as both a metropolitan area and a city. The difference between Washington, DC and Boston is that opportunity tracts are widely distributed throughout the Boston metropolitan area, whereas in the Washington, D.C. metro area, they are concentrated in a few suburban census tracts. Lastly, and it is worth emphasizing that our identification of opportunity tracts applies only to Black and Hispanic residents, and that a different analysis which looked at economic opportunity regardless of race might come up with a significantly different result.

Map 7:
 Percent of All Affordable LIHTC Units Produced Between 1988 and 2016
 Located in High-Opportunity Tracts* by State
 (Labels indicate numerical share of all LIHTC units)

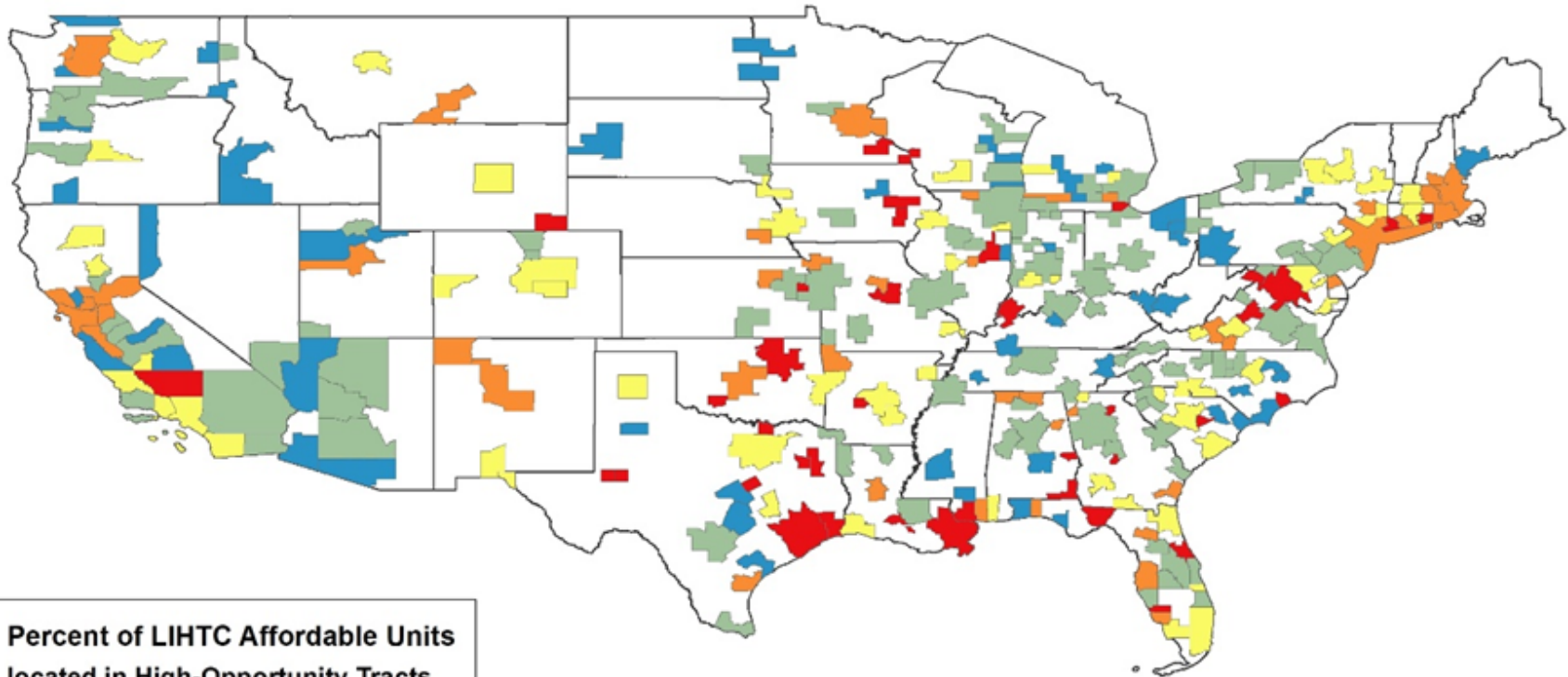


% of LIHTC Affordable Units Located in Hi-opportunity Tracts*

- 5% or less
- 6% to 15%
- 16% to 25%
- 26% to 35%
- 36% and higher

*High-Opportunity Tracts are those in which a Black or Hispanic child growing up in poverty in the 1970s and 1980s had an adult income in the 75th or higher percentile of their cohort
 (Source: LIHTC Database and Opportunity Insights)

Map 8:
Percent of All Affordable LIHTC Units Produced Between 1988 and 2016
located in High-Opportunity Census Tracts* by Metro Area



Percent of LIHTC Affordable Units located in High-Opportunity Tracts

Blue	1% to 10%
Green	11% to 20%
Yellow	21% to 30%
Orange	31% to 40%
Red	41% to 100%

* High-Opportunity Census Tracts are those in which a Black or Hispanic child growing up in a poverty household in the 1970s and 1980s had an adult income in the 75th or higher percentile of their cohort.
(Source: LIHTC Database and Opportunity Insights)



Table 7A: Share of 70% LIHTC Projects (built between 1988 & 2016) in High-Opportunity Census Tracts by Top & Bottom 15 States, Metro Areas, and Cities

	Top & Bottom 15 States sorted by High-opportunity Share	70% LIHTC Projects in High-opportunity Tracts	Share of 70% Projects in High-opportunity Tracts	Top & Bottom 15 Metro Areas ¹ sorted by High-opportunity Share	70% LIHTC Projects in High-opportunity Tracts	Share of 70% Projects in High-opportunity Tracts	Top & Bottom 15 Cities ² sorted by High-opportunity Share	70% LIHTC Projects in High-opportunity Tracts	Share of 70% Projects in High-opportunity Tracts
Top 15 Places	Wyoming	32	53%	Washington, DC	104	52%	San Jose	23	47%
	Rhode Island	27	39%	Bakersfield CA	34	45%	Minneapolis	25	40%
	Conecticut	52	34%	San Francisco-Oakland CA	99	39%	New York Borougl	103	34%
	Louisiana	76	30%	San Jose CA	37	39%	San Diego	15	33%
	Texas	178	27%	Houston TX	44	38%	Henderson	29	31%
	Massachusetts	86	27%	Seattle-Tacoma WA	132	37%	Columbia SC	23	31%
	N Jersey	9	26%	Charleston SC	20	36%	Seattle	55	29%
	Virginia	185	26%	Boston MA	68	33%	San Francisco	20	29%
	Oklahoma	40	26%	Gr. New York City Metro Area	309	32%	Springfield MO	13	28%
	New York	406	26%	Providence RI	29	31%	Brooklyn Borougl	87	28%
	California	516	25%	Dallas-Ft.Worth TX	38	30%	Bronx Borough	58	28%
	Maryland	52	25%	Durham-Chapel Hill NC	17	30%	Madison	12	27%
	Florida	139	23%	Poughkeepsie NY	20	29%	Miami	20	27%
	N Mexico	17	23%	Sacramento CA	29	28%	Houston	17	27%
	Washington	203	22%	Hartford CT	16	27%	Denver	23	27%
		State Average		26%	Metro Average		28%	City Average	
Bottom 15 Places	Pennsylvania	54	12%	Buffalo-Niagara Falls NY	9	12%	St. Louis	8	12%
	Nebraska	23	12%	Cincinnati OH-KY	9	11%	Milwaukee	12	11%
	Wisconsin	65	10%	Cleveland OH	7	11%	Louisville	5	10%
	Delaware	1	9%	Columbus OH	11	11%	Orlando	4	10%
	Kentucky	21	9%	Visalia CA	6	11%	Baltimore	5	9%
	W Virginia	12	8%	Detroit MI	18	10%	Cleveland	4	7%
	Ohio	43	8%	Portland ME	4	8%	Columbus OH	4	6%
	S Dakota	10	8%	Memphis TN-MS	6	8%	Jackson MS	5	4%
	N Hampshire	8	8%	Louisville KY	5	7%	Kansas City MO	3	4%
	Montana	6	8%	Greensboro NC	15	6%	Detroit	4	3%
	N Dakota	4	7%	Pittsburgh PA	4	6%	Greensboro	5	3%
	Idaho	10	7%	Jackson MS	5	6%	Cincinnati	1	2%
	Tennessee	19	5%	Omaha NE	4	5%	Memphis	1	2%
	Maine	4	4%	Nashville TN	6	4%	Omaha	1	2%
	Vermont	0	0%	Burlington VT	0	0%	Nashville	1	1%

¹ Based on tabulations of metro areas with 50 or more 70% LIHTC projects² Based on tabulations of cities with 40 or more 70% LIHTC projects

Table 7B: Share of 30% LIHTC Projects (built between 1988 & 2016) in High-Opportunity Census Tracts by Top & Bottom 15 States, Metro Areas, and Cities

	Top & Bottom 15 States sorted by High-opportunity Share	30% LIHTC Projects in High-opportunity Tracts	Share of 30% LIHTC Projects in High-opportunity Tracts	Top & Bottom 15 Metro Areas ¹ sorted by High-opportunity Share	30% LIHTC Projects in High-opportunity Tracts	Share of 30% LIHTC Projects in High-opportunity Tracts	Top & Bottom 15 Cities ² sorted by High-opportunity Share	30% LIHTC Projects in High-opportunity Tracts	Share of 30% LIHTC Projects in High-opportunity Tracts
Top 15 Places	W Virginia	45	68%	Washington, DC	151	53%	Arlington VA	15	60%
	Arizona	49	58%	Bakersfield CA	18	53%	Tampa	16	52%
	Florida	268	53%	Tampa-St. Petersburg FL	35	44%	Minneapolis	24	41%
	Nevada	17	43%	Houston TX	30	43%	Boston	14	40%
	N Carolina	146	41%	Boston MA	37	37%	Newport CA	7	35%
	Michigan	166	40%	San Francisco-Oakland CA	103	36%	Brooklyn Borough	61	34%
	Wisconsin	93	34%	Providence RI	19	36%	San Jose	27	33%
	Delaware	2	33%	Minneapolis-St. Paul MN	70	35%	Houston	13	33%
	N Jersey	2	33%	Sacramento CA	54	34%	Albuquerque	8	32%
	Minnesota	76	32%	Vallejo-Fairfield CA	12	33%	San Diego	18	32%
	Georgia	10	31%	San Jose CA	44	33%	Washington DC	33	30%
	Indiana	18	31%	Seattle-Tacoma WA	104	31%	Sacramento	19	30%
	Alabama	33	30%	Santa Rosa CA	14	30%	Little Rock	6	30%
	Pennsylvania	233	29%	San Diego CA	46	30%	Oakland	10	27%
	Oregon	41	28%	Gr. New York City Metro Area	245	29%	Manhattan Boroug	72	26%
	State Average		26%	Metro Average		28%	City Average		42%
Bottom 15 Places	Maine	25	16%	Buffalo-Niagara Falls NY	5	12%	Rochester	6	13%
	Tennessee	24	16%	Cincinnati OH-KY	7	11%	Springfield Mo	3	12%
	Arkansas	32	16%	Cleveland OH	5	11%	Baltimore	2	10%
	Distr. Columbia	18	15%	Grand Rapids MI	4	11%	Chicago	5	9%
	Montana	7	15%	Albany NY	3	10%	Toledo	2	9%
	Utah	9	15%	Detroit MI	9	10%	Dayton	2	9%
	Iowa	5	13%	Pittsburgh PA	12	10%	Milwaukee	2	9%
	Nebraska	5	12%	Harrisburg PA	5	10%	Cincinnati	2	8%
	Kansas	4	7%	Jackson MS	5	9%	Detroit	3	8%
	N Dakota	1	7%	Charlotte NC	5	8%	Pittsburgh	3	8%
	N Hampshire	3	6%	Rochester NY	16	7%	Jackson	3	6%
	Oklahoma	8	5%	Memphis TN	2	5%	Charlotte	2	6%
	Washington	28	5%	Portland ME	2	5%	Chester PA	1	4%
	Alaska	0	0%	Austin TX	1	3%	Cleveland	1	3%
	Vermont	0	0%	Burlington VT	0	0%	Austin	0	0%

¹ Based on tabulations of metro areas with 30 or more 30% LIHTC projects² Based on tabulations of cities with 20 or more 30% LIHTC projects

III. WHICH STATES PERFORM BEST AND WORST OVERALL?

Returning to the core question motivating this paper, which states have done best at using the LIHTC program to meet their affordable housing needs while *also* promoting racial integration *and* deconcentrating poverty *and* promoting upward economic opportunity? To find out, we first sorted all 50 states (and the District of Columbia) into eight lists based on their respective shares of 70% LIHTC projects and 30% LIHTC projects in high-need tracts, in non-Black-plurality tracts, in non-poverty-impacted tracts, and in intergenerational high-opportunity tracts. We next identified the states that fell in the top-half and bottom-half of each list. Because addressing affordable housing needs is the principal goal of the LIHTC program, we next identified those states that were in the top half of meeting affordable housing needs *and were also* in the top half of reducing Black segregation *or* reducing poverty impactation *or* promoting intergenerational opportunity. We also identified the states that were consistently at the bottom of each list.

These compilations yielded the six “leading performer” and six “lagging performer” crosstab lists shown in Table 8. The crosstab list of leading performer states includes those with the highest shares of 70% LIHTC projects (and 30% projects) in high-need tracts *and* low Black-plurality tracts, high-need tracts *and* low poverty impactation tracts, and high-need tracts and high-opportunity tracts. We compiled similar crosstab lists for the set of lagging performer states. Lastly, we counted up the number of times a state appeared in a leading performer crosstab list or a lagging performer crosstab list. These summary tabulations appear in the rightmost two columns of Table 8.

Five states dominate the summary list of leading performers—those that did best in using their 70% and 30% tax credits to meet their affordable housing needs, reduce racial segregation, reduce poverty impactation, and promote intergenerational opportunity: New Mexico, Texas, Indiana, Arizona, and Colorado. These states appeared on four or five of the leading performer lists. Except for Indiana, all five are in or near the Southwest, are fast-growing, have large Hispanic populations, have higher proportions of homeowners, do not score particularly highly on measures of racial segregation, and, by national standards, have low land and housing construction costs. Again, except for Indiana, all five tend to favor larger projects over smaller ones, and when measured on a per capita basis, produce fewer units overall. Texas and Indiana favor using the 70% credits while Arizona and New Mexico slightly favor using the 30% credits. Texas’ and Indiana’s QAPs give proportionately more points to community revitalization and opportunity creation than other states, while New Mexico and Arizona give proportionately less. As a measure of institutional capacity, Texas and Colorado are each home to more than 20 individual or organizational members of the National Low Income Housing Coalition while Arizona, Indiana and New Mexico each have a half-dozen or fewer.^{xi}

The summary list of lagging performer states—those appearing in five or more lagging performance categories—is much more extensive, and includes Iowa, Hawaii, Kansas, Maine, Maryland, Montana, North Dakota, New Hampshire, Nebraska, New York, Oklahoma, Rhode Island, South Dakota, Utah, Vermont, Virginia, Washington, West Virginia, Wyoming. The list can be conveniently subdivided into two groups, consisting of New York, Virginia,

Washington and Maryland; and everybody else. This latter group of 15 states are relatively modest in terms of population size (ranging from Wyoming's 578,000 residents to Oklahoma's 3.9 million), and except for Hawaii, are fairly homogeneous in terms of race and ethnicity. Except for Utah, none are growing particularly fast, and West Virginia is actually losing population. Except for Rhode Island, none are home to a metro area with more than 1.5 million residents. Poverty, although certainly not unknown, is not particularly concentrated. Homeowners greatly outnumber renters, and housing costs and rents are relatively low. Both homeowners and renters move less frequently than the national average. Gentrification is occurring, but at a slow rate.

This combination of demographic and housing characteristics has not created a pressing demand for affordable rental housing production, and except for South Dakota and Wyoming, per capita use of the 70% tax credits tends to be on the low side. Likewise, the typical 70% tax credit project is rather small, averaging fewer than 40 units in size (the typical 30% tax credit project is slightly larger). In terms of institutional capacity, most have only a handful of non-profit or not-for-profit developers. Except for Rhode Island, none have QAPs that strongly promote community revitalization.

The four lagging performer states that don't share these common characteristics—New York, Virginia, Washington and Maryland—are themselves extremely diverse. Between them, the four states are home to the 1st, 6th, 15th, and 20th largest U.S. metro areas (New York City, Washington, DC, Seattle, and Baltimore). Their metropolitan populations are all extremely diverse in terms of race and household type, and except for Baltimore, include sizeable numbers of rich as well as poor residents.

Although homeowners dominate at the state level, renters make up a large portion of urban households, making gentrification an issue of growing concern. Except for Washington, all four include urban neighborhoods characterized by deep poverty and unaffordable housing. Metropolitan household growth is outstripping new home production in all four states, leading to significant increases in home prices and rents. NIMBYism is present in many neighborhoods. While typically Republican at the state level, their metropolitan areas mostly vote Democratic, and all four are home to sophisticated non-profit housing developers and community development corporations.

New York and Maryland make use of the 70% tax credits at a much lower per capita rate (.11 low income units per year per 100,000 population) than do Virginia (.24) and Washington (.27). Virginia and Maryland's 70% tax credit projects are typically much larger than the national average, while New York's 70% projects are typically smaller. New York, Virginia and Washington have all made much greater use of the 30% credits than the 70% credits to fund affordable housing, while in Maryland, the ratio of 70% units to 30% units is nearly 1:1. In all four states, projects built with the 30% tax credits are typically much larger than those built with the 70% credits. New York State's QAP gives much greater scoring weight than most others to projects located in neighborhood revitalization areas, while Washington State's QAP gives slightly less. Because of its higher construction costs, New York State also gives higher weight in its QAP to financial "ready to go" status. As of 2018, Washington gave almost half of its QAP points to projects meeting deep affordability needs and those with more permanent affordability provisions.

Table 8: Crosstab Lists of States According to Their Use of the 70% and 30% LIHTC to Meet Excess Rent-Burden Needs, Reduce Racial Segregation, Avoid Poverty Impaction, and Promote Individual Opportunity

Leading Performer Lists	States with Higher Shares of 70% LIHTC Projects in			States with Higher Shares of 30% LIHTC Projects in			Summary Tabulations	
	High-need AND Black minority census tracts	High-need AND lower poverty impaction tracts	High-need AND high-opportunity tracts	High-need AND Black minority census tracts	High-need AND lower poverty impaction tracts	High-need AND high-opportunity tracts	State	Number of times a state appears on a leading performer list (Max = 6)
	Arizona	Arkansas	Arizona	Arizona	Alabama	Alabama	New Mexico	5
Colorado	Mississippi	California	Colorado	Arkansas	Arizona	Texas	5	
Indiana	N. Mexico	Conecticut	Delaware	Colorado	California	Arizona	4	
N. Mexico	S. Carolina	Distr. Columbia	Idaho	Delaware	Colorado	Colorado	4	
Texas	Texas	Florida	Indiana	Idaho	Delaware	Indiana	4	
		Georgia	Michigan	Indiana	Florida	Delaware	3	
		Louisiana	N. Mexico	Louisiana	Georgia	Michigan	3	
		Massachusetts	Nevada	Michigan	Illinois	North Carolina	3	
		N. Carolina	Oregon	Mississippi	Indiana	Alabama	2	
		N. Jersey		N. Mexico	Kentucky	California	2	
		N. Mexico		Texas	Michigan	Florida	2	
		S Carolina			Minnesota	Georgia	2	
		Texas			Mississippi	Mississippi	2	
					Missouri	New Jersey	2	
					N. Carolina	Nevada	2	
					N. Jersey	Oregon	2	
					N. Mexico	Illinois	1	
					Nevada	Kentucky	1	
					Ohio	Minnesota	1	
					Oregon	Missouri	1	
					Pennsylvania	Ohio	1	
					Texas	Pennsylvania	1	

Lagging Performer Lists	States with Lower Shares of 70% LIHTC Projects in			States with Lower Shares of 30% LIHTC Projects in			Summary Tabulations	
	High-need AND Black minority census tracts	High-need AND lower poverty impaction tracts	High-need AND high-opportunity tracts	High-need AND Black minority census tracts	High-need AND lower poverty impaction tracts	High-need AND high-opportunity tracts	State	Number of times a state appears on a lagging performer list (Max = 6)
	Alaska	Alabama	Alabama	Alaska	Alaska	Alaska	Iowa	6
Hawaii	Alaska	Alaska	Hawaii	Distr. Columbia	Distr. Columbia	Kansas	6	
Idaho	Hawaii	Hawaii	Iowa	Hawaii	Hawaii	Maine	6	
Iowa	Idaho	Idaho	Kansas	Iowa	Iowa	Maryland	6	
Kansas	Iowa	Iowa	Maine	Kansas	Kansas	Montana	6	
Maine	Kansas	Kansas	Maryland	Maine	Maine	N. Dakota	6	
Maryland	Kentucky	Kentucky	Montana	Maryland	Maryland	N. Hampshire	6	
Montana	Maine	Maine	N. Dakota	Massachusetts	Massachusetts	Nebraska	6	
N. Dakota	Maryland	Maryland	N. Hampshire	Montana	Montana	New York	6	
N. Hampshire	Minnesota	Minnesota	Nebraska	N. Dakota	N. Dakota	Oklahoma	6	
Nebraska	Montana	Montana	New York	N. Hampshire	N. Hampshire	Rhode Island	6	
New York	N. Dakota	N. Dakota	Oklahoma	Nebraska	Nebraska	S. Dakota	6	
Oklahoma	N. Hampshire	N. Hampshire	Rhode Island	New York	New York	Utah	6	
Rhode Island	Nebraska	Nebraska	S. Dakota	Oklahoma	Oklahoma	Vermont	6	
S. Dakota	New York	New York	Tennessee	Rhode Island	Rhode Island	Virginia	6	
Utah	Oklahoma	Oklahoma	Utah	S. Carolina	S. Carolina	Washington	6	
Vermont	Oregon	Oregon	Vermont	S. Dakota	S. Dakota	Wyoming	6	
Virginia	Pennsylvania	Pennsylvania	Virginia	Tennessee	Tennessee	Hawaii	5	
Washington	Rhode Island	Rhode Island	W. Virginia	Utah	Utah	W. Virginia	5	
Wyoming	S. Dakota	S. Dakota	Washington	Vermont	Vermont	Wisconsin	5	
	Utah	Utah	Wisconsin	Virginia	Virginia	Alaska	4	
	Vermont	Vermont	Wyoming	W. Virginia	W. Virginia	Idaho	3	
	Virginia	Virginia		Washington	Washington	Tennessee	3	
	W. Virginia	W. Virginia		Wisconsin	Wisconsin	Alabama	2	
	Washington	Washington		Wyoming	Wyoming	Kentucky	2	
	Wisconsin	Wisconsin				Massachusetts	2	
	Wyoming	Wyoming				Minnesota	2	
						Pennsylvania	2	
						Oregon	2	
						S. Carolina	2	
						Washington, DC	1	

The QCT Conundrum

As noted previously, many state QAPs give preference to projects located in HUD-designated Qualified Census Tracts (QCTs). QCTs are census tracts with a poverty rate of 25% or more, or in which more than half of resident households make less than 60 percent of Area Median Income (AMI). Of greater practical importance, LIHTC sponsors who propose projects in QCTs and Difficult-to-Develop Areas (DDAs) are automatically eligible for a 30% “bump-up” in their LIHTC allocation, bringing the share of total development costs that can be covered by the 9% LIHTCs to well above 70%. The combination of these provisions creates strong incentives for LIHTC project sponsors to propose projects in high-poverty neighborhoods and for which all units are reserved for low-income households. This has the potential to worsen neighborhood poverty, and to the extent that poverty and race are correlated, exacerbate racial segregation and isolation.

How serious is this problem in practice? To find out, we used correlation coefficients to compare the percentage of QCT tracts in each state and metropolitan area (as well as the share of population in QCT tracts) with the corresponding shares of affordable LIHTC units in high rent-burdened census tracts, in Black-plurality tracts, in high-poverty tracts, and in high-opportunity tracts. Higher correlation coefficient values indicate that states and metro areas with higher proportions of QCT tracts and QCT population tend to over-allocate affordable LIHTC units to those tracts. Lower correlation coefficient values indicate no such connection.

When compared at the state level (as in the top half of Table 9), there is a very strong correlation

between the share of QCT tracts and QCT population and the share of affordable LIHTC units allocated to Black-plurality tracts. This suggests that QCT tract designation is working against the purpose of racial integration, at least when analyzed at the state level. Indeed, the correlation coefficient between QCT tract share and the share of LIHTC units allocated to Black-plurality tracts actually exceeds the correlation coefficient between QCT tract share and the share of affordable LIHTC units allocated to high-poverty tracts. This is surprising given that the designation of a tract as a QCTs is based on its poverty status. The correlation between the share of QCT tracts and the share of affordable LIHTC units allocated to high rent-burdened tracts is somewhat weaker; while the correlation between QCT tract share and the share of affordable LIHTC units allocated to high-opportunity tracts is not statistically significant. Taken in total, these statistics indicate that designating a tract as a QCT tract makes it more attractive to LIHTC project sponsors in a manner that exacerbates both poverty and racial segregation.

When compared at the metropolitan scale (as in the bottom part of Table 9), these various correlations are much less prominent. This suggests that the connection between QCT designation and the over-allocation of LIHTC units to high-poverty and Black-plurality census tracts is much more variable when compared by metropolitan area than when compared by state. Indeed, the strongest connection between QCT status and LIHTC project locations is with high rent-burdened tracts. This suggests that QCT designation may have some value when used for income targeting at the metropolitan scale.

Table 9: Qualified Census Tract Share and Population Comparisons with the Spatial Distribution of Affordable LIHTC Units

Spatial Level	Share Comparisons	Correlation Coefficients	
		vs. QCT Tract Share	vs. QCT Population Share
State-Level Comparisons (N = 51)	Share of Affordable LIHTC Units in High-Burdened Tracts	0.47	0.42
	Share of Affordable LIHTC Units in Black-Plurality Tracts	0.61	0.61
	Share of Affordable LIHTC Units in High-Poverty Tracts	0.55	0.59
	Share of Affordable LIHTC Units in High-Opportunity Tracts	0.10	0.12
Metro-Level Comparisons (N = 366)	Share of Affordable LIHTC Units in High-Burdened Tracts	0.30	0.25
	Share of Affordable LIHTC Units in Black-Plurality Tracts	0.11	0.05
	Share of Affordable LIHTC Units in High-Poverty Tracts	0.26	0.20
	Share of Affordable LIHTC Units in High-Opportunity Tracts	-0.04	-0.01

IV. CONCLUSIONS AND POLICY RECOMMENDATIONS

Now more than thirty years old, the Low-Income Housing Tax Credit Program must be regarded as huge success by any traditional housing policy criteria. As of 2018, the LIHTC program has generated more than 2.5 million rental housing units of which 92 percent have been affordable to low-income households and families. Beyond meeting its income targeting and housing affordability objectives, the LIHTC has proven to be impressively robust:

According to the Novogradac Company (2016), fewer just .62% of LIHTC projects have failed financially and almost all of the units put into service since 1988 are still in service today.

Administered by existing state housing finance agencies, the program's administrative and compliance costs are extremely low.

This is not to say that the program has achieved all of its objectives. LIHTC units can be very expensive to build, especially in high-cost markets. The program's original statutory 15-year affordability requirements are still in place

in many states, requiring many project owners to scramble to keep projects affordable once the limits have expired. The program has had only limited success in meeting one of original goals of expanding and deepening the community development and non-profit developer communities. Despite being almost universally indistinguishable from market-rate rental projects, community opposition to building new LIHTC projects remains. Lastly, because federal passive loss limitation rules make the program inaccessible to individual investors, the program has had to depend on corporate America's appetite for tax breaks; and with the 2018 reduction in the corporate tax rate from 35% to 21%, the sustainability of that appetite is somewhat in doubt

Beyond issues of long-term financial sustainability, the LIHTC program has largely failed to help deconcentrate urban poverty or promote greater racial integration—especially for African-American families. According to our analysis of the National Low-Income Housing Database, 38 percent of affordable LIHTC units nationwide are located in census tracts in which

the poverty rate is more than twice the local average. Thirty-four percent are located in Black-plurality census tracts. Both of these rates are significantly higher than the 32 percent of affordable LIHTC units that are located in low-income/high-rent burden tracts, and far, far higher than the nineteen percent of 70% LIHTC units located in census tracts identified by researchers at Opportunity Insights as being high Black and Hispanic opportunity tracts.

These shortcomings are mostly structural. They are the result of the highly competitive nature of the 9% tax credit allocation process—which pushes project sponsors to propose 100% affordable projects in high-need neighborhoods—and of the additional 30% tax credit bump that project sponsors can gain by locating their projects in Qualified Census Tracts. They are also the result of the fact that very few states actively use their Qualified Allocation Plans (QAPs) to actively encourage poverty reduction or opportunity creation.

Fortunately, a few simple changes to the LIHTC program could go a long way to ameliorating these problems:

- Eliminate the Qualified Census Tract 30 percent credit boost. Currently LIHTC projects in Qualified Census Tracts (QCT) are eligible for a 30 percent “boost” in their annual tax credit allocations, making these more attractive to project sponsors and in many cases, to state housing finance agencies. This advantage has served to concentrate LIHTC projects and affordable units in census tracts that are extremely poor and include large shares of minority residents, adding to problems of racial segregation and poverty impactation at the expense of promoting economic opportunity. Eliminating the 30 percent
- credit boost would undo this counter-productive bias while having little or no adverse effect on income-targeting. The comparable 30 percent credit boost for Difficult-to-Develop Areas (DDAs) should remain in place.
- Add a 30 percent credit boost to LIHTC projects proposed for designated “opportunity zones.” Recent work by Chetty et.al. document the presence of opportunity neighborhoods promising upward economic mobility even in the midst of deep urban and rural poverty. The LIHTC program should be changed to reallocate the current 30 percent QCP credit boost to these opportunity tracts, subject to additional research validating and updating Chetty and his colleague’s findings.
- Limit the allocation of the 9% credits to high-poverty census tracts to more than 50 percent of the available credits. Many of the renter households with the highest rent burdens live in high-poverty neighborhoods, and it would be unfair to further burden for the purpose of just promoting economic mobility. It should be possible to find a balance between these two objectives—meeting the greatest needs while also promoting opportunity—by limiting the allocation of the 9% tax credits to high-poverty neighborhoods to half of the yearly total to be awarded.
- Change the income-based credit proration schema to better encourage the construction of mixed-income projects. Currently, credits are allocated based on the share of units in a LIHTC project that are affordable to households who make less than 60% of area median income. This has served to discourage the construction of

mixed-income housing, especially when using the 9% tax credits. To promote the construction of more mixed-income apartments—one of the original goals of the LIHTC program—projects in which at least three-quarters of available units are reserved for poor households should be eligible to apply for 100% of their applicable credit basis. This will have an additional salutary effect of increasing project cash flows, thereby reducing the amount of additional gap financing needed.

- Permit a specified share of yearly tax credits to be converted to vouchers if used in high-opportunity zones. There are neighborhoods throughout urban America in which the tax credit rent is significantly above the market rent, making LIHTC projects a difficult and expensive proposition. In these locations, the rent subsidies implicit in the LIHTC program would be more economically used as voucher payments, enabling their holders to secure housing in the private rental market. This approach would offer a double-barreled benefit if the vouchers were used in opportunity zones anywhere in the local metropolitan area.

housing. It is now time to broaden its purpose to include securing opportunity as well.

Because none of these recommendations use race as a criteria they don't violate the provisions of the Fair Housing Act. Nonetheless, as this paper has demonstrated, when it comes to allocating tax credits, race and poverty are strongly interconnected. Too often, LIHTC projects intended to help relieve excessive rent burdens end up exacerbating neighborhood poverty, all the while aggravating the problem of disparate racial impact while limiting upward economic mobility. Over its more than 30-year life, the LIHTC program has proven to be enormously successful at securing the construction of high-quality affordable rental

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Appendix A: Share of Tracts and Population in Rent-burdened, Black-Plurality, High-Poverty & Opportunity Tracts by State										
State	State Totals		Share of Tracts & Population Identified as High-Renter Cost-Burdened		Share of Tracts & Population Identified as Black-Plurality		Share of Tracts & Population Identified as High-Poverty		Share of Tracts & Population Identified as High-Opportunity	
	Number of Census Tracts	2016 Population	% of tracts	% of population	% of tracts	% of population	% of tracts	% of population	% of tracts	% of population
Alabama	1,181	4,841,164	20%	18%	29%	22%	23%	17%	17%	19%
Alaska	167	736,855	2%	1%	22%	18%	15%	10%	13%	17%
Arizona	1,526	6,728,577	16%	17%	6%	5%	15%	15%	19%	20%
Arkansas	686	2,968,472	17%	16%	16%	13%	14%	11%	17%	19%
California	8,057	38,654,206	17%	16%	28%	29%	13%	12%	32%	34%
Colorado	1,249	5,359,295	17%	17%	2%	2%	10%	10%	19%	21%
Connecticut	833	3,588,570	13%	11%	15%	14%	18%	16%	27%	31%
Delaware	218	934,695	16%	16%	17%	15%	11%	8%	29%	33%
District of Columbia	179	659,009	14%	13%	64%	60%	49%	47%	35%	38%
Florida	4,245	19,934,451	24%	24%	11%	11%	13%	12%	30%	33%
Georgia	1,969	10,099,320	22%	20%	34%	32%	22%	19%	21%	24%
Hawaii	351	1,413,673	4%	4%	77%	87%	8%	7%	14%	16%
Idaho	298	1,635,483	14%	13%	1%	0%	7%	6%	11%	13%
Illinois	3,123	12,851,684	21%	19%	21%	17%	19%	14%	20%	23%
Indiana	1,511	6,589,578	23%	20%	11%	8%	19%	14%	15%	17%
Iowa	825	3,106,589	14%	14%	1%	1%	8%	7%	9%	11%
Kansas	770	2,898,292	13%	13%	4%	3%	11%	8%	16%	20%
Kentucky	1,115	4,411,989	14%	14%	4%	4%	10%	8%	9%	10%
Louisiana	1,148	4,645,670	19%	17%	34%	29%	27%	21%	30%	35%
Maine	358	1,329,923	13%	15%	0%	0%	9%	8%	1%	2%
Maryland	1,406	5,959,902	9%	8%	38%	38%	21%	18%	39%	46%
Massachusetts	1,478	6,742,143	12%	12%	10%	9%	17%	14%	21%	23%
Michigan	2,813	9,909,600	25%	25%	17%	12%	20%	15%	10%	12%
Minnesota	1,338	5,450,868	16%	16%	6%	6%	10%	9%	14%	16%
Mississippi	664	2,989,192	21%	20%	38%	32%	24%	18%	17%	18%
Missouri	1,393	6,059,651	18%	16%	13%	10%	16%	12%	14%	16%
Montana	271	1,023,391	10%	10%	4%	4%	4%	4%	7%	9%
Nebraska	532	1,881,259	10%	9%	4%	3%	11%	9%	13%	15%
Nevada	687	2,839,172	15%	14%	13%	13%	15%	14%	23%	24%
New Hampshire	295	1,327,503	5%	5%	0%	0%	8%	7%	6%	7%
New Jersey	2,010	8,915,456	11%	11%	24%	22%	15%	12%	41%	46%
New Mexico	499	2,082,669	18%	19%	10%	8%	9%	9%	20%	20%
New York	4,918	19,697,457	13%	12%	32%	32%	20%	20%	32%	35%
North Carolina	2,195	9,940,828	17%	17%	20%	20%	14%	12%	16%	18%
North Dakota	205	736,162	3%	4%	4%	4%	3%	3%	3%	4%
Ohio	2,952	11,586,941	20%	16%	15%	10%	21%	15%	11%	13%
Oklahoma	1,046	3,875,589	8%	8%	7%	6%	12%	8%	26%	29%
Oregon	834	3,982,267	17%	17%	0%	1%	7%	7%	15%	16%
Pennsylvania	3,218	12,783,977	14%	13%	12%	11%	18%	15%	11%	13%
Rhode Island	244	1,054,491	14%	15%	10%	11%	20%	20%	23%	25%
South Carolina	1,103	4,834,605	19%	18%	24%	23%	17%	14%	15%	16%
South Dakota	222	851,058	7%	8%	9%	7%	10%	10%	5%	6%
Tennessee	1,497	6,548,009	15%	14%	16%	14%	16%	13%	11%	14%
Texas	3,906	20,343,002	16%	15%	13%	13%	13%	11%	38%	42%
Utah	588	2,948,427	8%	7%	3%	3%	10%	9%	16%	16%
Vermont	184	626,249	11%	11%	0%	0%	4%	5%	0%	0%
Virginia	1,907	8,310,301	10%	9%	17%	16%	14%	12%	34%	38%
Washington	1,458	7,073,146	9%	9%	6%	6%	8%	8%	23%	26%
West Virginia	484	1,846,092	12%	10%	0%	0%	6%	4%	4%	4%
Wisconsin	1,409	5,754,798	16%	14%	9%	7%	15%	12%	9%	10%
Wyoming	132	583,029	8%	6%	2%	2%	6%	6%	30%	33%

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- ⁱ Project sponsors who make use of the 9% credits are generally prohibited from using other federal housing fund sources, except for project-based vouchers. Sponsors who make use of the 4% credits may also use other federal housing funds, most notably proceeds from the sale of tax-exempt bonds.
- ⁱⁱ Projects in QCTs and DDAs are eligible for a 30% boost in their annual tax credits.
- ⁱⁱⁱ Sixteen states, including Arkansas, California, Colorado, Connecticut, Georgia, Hawaii, Illinois, Massachusetts, Missouri, Nebraska, New Mexico, New York, Oklahoma, Utah, Vermont, and Wisconsin offer additional state-level tax credits for approved LIHTC projects.
- ^{iv} Congress requires that at least 10% of the 9% credits be set aside for non-profit sponsors.
- ^v The IRS does require that preference be given to projects that serve the lowest-income tenants, serve qualified tenants for longer periods, are located in Qualified Census Tracts and contribute to community revitalization efforts, serve families, are energy-efficient, promote historic preservation, promote eventual tenant ownership, and give preference to tenants on public housing waiting lists.
- ^{vi} Different states use different QAP categories. The categories listed in Table 3 are composites.
- ^{vii} When it comes to reducing poverty or promoting racial integration, giving additional QAP points to LIHTC projects located in designated revitalization and/or economic opportunity areas can cut two ways. On the one hand, to the degree that such designations result in increased public and private investments leading to a reduction in poverty, and a reduction in poverty, they will help push approved LIHTC projects toward enhanced opportunity neighborhoods. If, on the other hand, such designations *do not* attract new resources, QAP point systems that favor such areas will do little to further individual opportunities and may instead maroon future LIHTC projects in low-opportunity areas.
- ^{viii} The ACS categorizes households into the following income categories (\$0 to \$20,000, \$20,001 to \$35,000, \$35,001 to \$50,000, \$50,000 to \$75,000, and more than \$75,000. Nationally, the 2019 poverty threshold for a family of four is \$25,750, which falls into the first two household income categories.
- ^{ix} Idaho, Maine, New Jersey, Oregon, Vermont, West Virginia, Wisconsin and Wyoming include no Black-plurality tracts.
- ^x For a more detailed explanation of how Chetty and his colleagues identify opportunity zones, and to explore census tract-level opportunity data, see: <https://opportunityinsights.org/paper/the-opportunity-atlas/>
- ^{xi} These numbers are based on the current membership lists of the National Low-Income Housing Coalition, which is available at: <https://nlihc.org/partners/members>