Federal Housing Finance Agency

Duty to Serve

FHFA presents Snapshots from Freddie Mac's & Fannie Mae's Duty to Serve Underserved Markets Plans for Residential Economic Diversity

Effective January 1, 2018

Snapshots from Freddie Mac's and Fannie Mae's Duty to Serve Underserved Markets Plans: Residential Economic Diversity

Compiled by the Federal Housing Finance Agency

FHFA has compiled Snapshots from Freddie Mac's and Fannie Mae's Duty to Serve Underserved Markets Plans addressing activities that support Residential Economic Diversity. This document also contains related text from the Duty to Serve Evaluation Guidance. To access the Duty to Serve Underserved Markets Plans in their entirety, please visit FHFA's Duty to Serve website (see below). Residential Economic Diversity activities may also be eligible for Duty to Serve extra credit.

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FHFA's Duty to Serve Evaluation Guidance: Residential Economic Diversity

Duty to Serve Evaluation Guidance – Residential Economic Diversity

An Enterprise may receive extra Duty to Serve credit for activities that are particularly challenging to accomplish in an underserved market or that serve a segment of an underserved market that is relatively less well-served. Enterprise activities that promote residential economic diversity are eligible for extra credit under the affordable housing preservation market.

A "residential economic diversity activity" for Duty to Serve purposes means an eligible Enterprise activity, other than an energy or water efficiency improvement activity or other activity that FHFA determines to be ineligible, that supports financing of mortgages on: (1) affordable housing in a high opportunity area; or (2) mixed-income housing in an area of concentrated poverty.

(1) Affordable Housing in a High Opportunity Area

The Duty to Serve regulation defines a "high opportunity area" for Duty to Serve purposes generally as:

> (i) an area designated by the Department of Housing and Urban Development (HUD) as a "Difficult Development Area" (DDA) during any year covered by a Plan or in the year prior to a Plan's effective date, whose poverty rate is lower than the rate specified by FHFA in the Guidance; or
> (ii) an area designated by a state or local Qualified Allocation Plan (QAP) as a high opportunity area and which meets a definition FHFA has identified as eligible for Duty to Serve credit in the Guidance.

Difficult Development Areas: FHFA has elected to set poverty rate thresholds for DDAs to qualify as high opportunity areas. For this Plan cycle, FHFA will identify the poverty rate of each census tract within a HUD-designated DDA and only include as high opportunity areas those tracts with poverty rates below 10 percent (for metropolitan DDAs) and below 15 percent (for non-metropolitan DDAs). FHFA selected these thresholds to balance the objective of excluding high-poverty DDAs from its definition of high opportunity area with ensuring that the definition covers a reasonable segment of the population. FHFA considered applying the same poverty rate threshold for metropolitan and non-metropolitan DDAs but elected to apply different thresholds because the poverty rate of non-metropolitan DDAs tends to be higher than that of metropolitan DDAs. While approximately 40 percent of metropolitan DDAs have poverty rates in excess of 10 percent, nearly three-quarters of non-metropolitan DDAs have poverty rates above 15 percent. The national poverty rate in the last five years has ranged from 13.5 to 15 percent.

Definitions from Qualified Allocation Plans: For this Plan cycle, to meet the second component of the definition of high opportunity area, FHFA has elected to use state or local definitions of high opportunity areas (or similar terms) contained in Low-Income Housing Tax Credit QAPs or QAP-related materials that meet the following criteria:

1. The definitions are intended to describe areas that provide strong opportunities for the residents of housing funded through the QAP. Use of terminology such as “high opportunity areas,” “very high opportunity areas,” “areas of opportunity,” “opportunity areas,” or “economic integration areas” (singular or plural) can be helpful in signaling this intent; and
2. The QAP describes the location of the areas in sufficient detail to enable them to be mapped and/or includes a list(s) or map(s) of such high opportunity areas.

FHFA has determined that the following states have definitions of high opportunity areas in their Low-Income Housing Tax Credit QAPs that qualify as high opportunity areas for purposes of the Duty to Serve program:

California
Connecticut
Delaware
District of Columbia
Florida
Illinois
Indiana
Iowa
Louisiana
Maine
Maryland
Minnesota
Mississippi
Ohio
Oregon
South Dakota
Utah
Virginia
Washington

FHFA has published on its website a list of census tracts in these states that qualify as high opportunity areas for purposes of the Duty to Serve program, along with a narrative explanation of the basis for the identification of these census tracts.

(2) Mixed-Income Housing in an Area of Concentrated Poverty

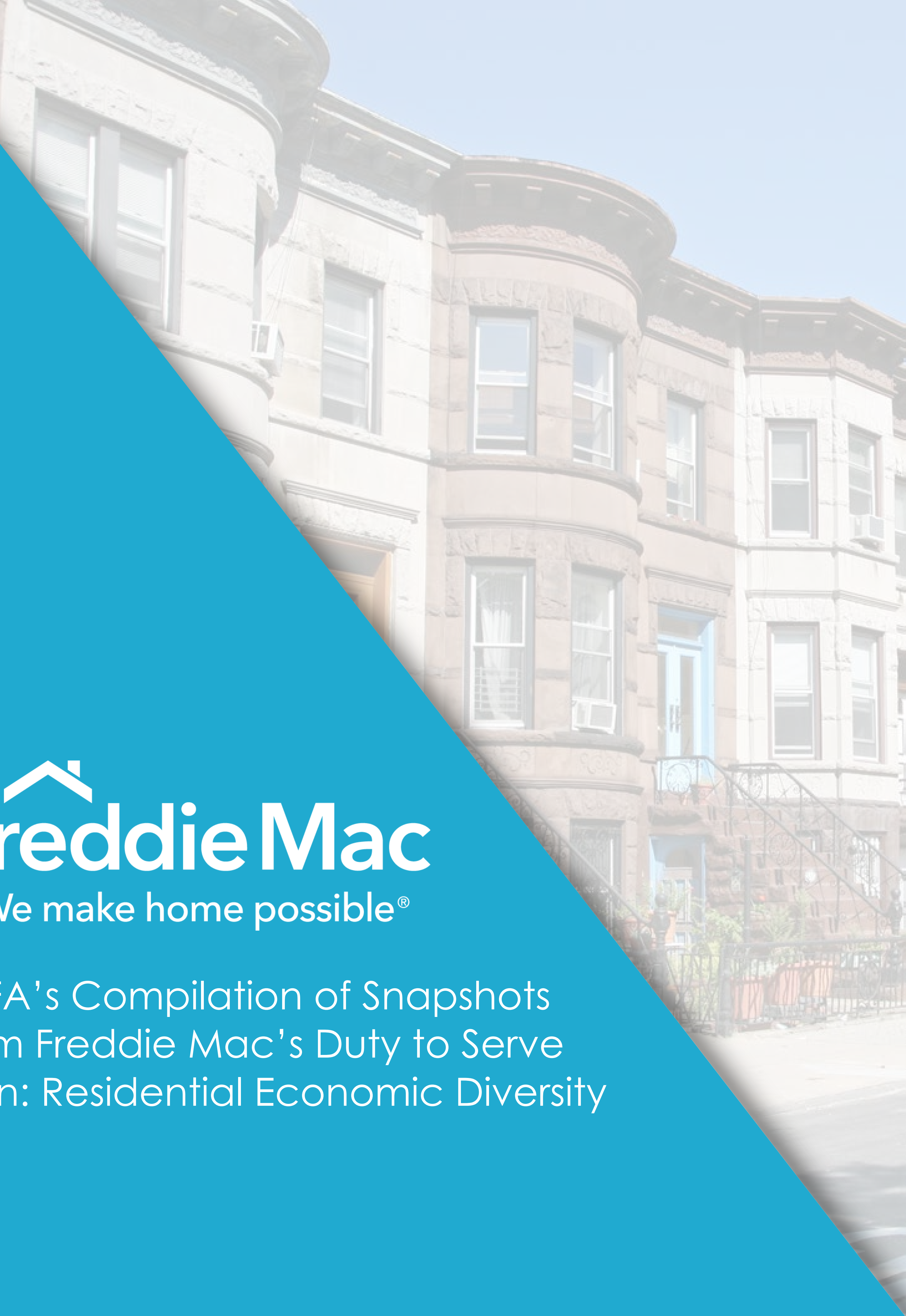
Mixed-Income Housing: FHFA determined that minimum thresholds for both affordable and unaffordable units would ensure *that the mixed-income housing the Enterprises are encouraged to support is affordable to households at a range of income levels.* For this Plan cycle, the minimum thresholds for mixed-income housing, which were specified in the preamble of the Duty to Serve final rule, are the following:

(i) at least 20 percent of the units are unaffordable to families with incomes at 80 percent of area median income; and

(ii) at least 20 percent of the units are affordable to families with incomes at or below 50 percent of area median income, or at least 40 percent of the units are affordable to families with incomes at or below 60 percent of area median income.

Area of Concentrated Poverty: Means a census tract designated by HUD as a Qualified Census Tract, pursuant to 26 U.S.C. 42(d)(5)(B)(ii), or as Racially or Ethnically-Concentrated Area of Poverty, pursuant to 24 CFR 5.152, during any year covered by an Underserved Markets Plan or in the year prior to a Plan's effective date.

Duty to Serve Final Rule



Freddie Mac

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FHFA's Compilation of Snapshots from Freddie Mac's Duty to Serve Plan: Residential Economic Diversity

Activity 9 - Support Residential Economic Diversity: Additional Activity

The Duty to Serve regulation defines Residential Economic Diversity (RED) as: affordable housing in a high-opportunity area or mixed-income housing in an area of concentrated poverty. The regulation defines “high opportunity area” to mean a HUD-designated “Difficult Development Area,” with a specified poverty rate cap, or an area designated in a state or local Qualified Allocation Plan (QAP), as determined by FHFA. FHFA has specified the state definitions of high opportunity areas in QAPs that qualify as high opportunity areas for Duty to Serve purposes. The regulation defines “area of concentrated poverty” as a HUD-designated Qualified Census Tract (QCT) or Racially or Ethnically Concentrated Area of Poverty (R/ECAP).Most QCTs and R/ECAPs overlap. A QCT is defined as census tracts where 50 percent of households have incomes below 60 percent of the area median income or that have a poverty rate of 25 percent or more. Given this definition, it is evident that these areas need support; we can offer our services to promote affordable housing development and preservation. Promoting economic diversity in housing is consistent with Freddie Mac’s charter mission to provide liquidity, stability and affordability to the US housing market, and our community mission to enable social and economic mobility and promote sustainable communities.

There has been a great deal of academic research conducted to better understand the role of economic diversity in community development. Per research from Harvard’s Equality of Opportunity Project, the zip code where one grows up has a significant, and perhaps disproportionate, impact on a person’s life outcome, and the outcomes of that person’s descendants.[117] Therefore, with our mission to increase the supply of affordable housing and preserve existing affordable housing, we also need to consider how we can promote diverse, vibrant, and healthy communities, using housing as the anchor. In so doing, we will seek to create or reinforce opportunities that will encourage economic and social mobility through Residential Economic Diversity.

Additionally, many states and localities have made deliberate efforts to promote RED through LIHTC QAPs and inclusionary zoning. Various laws, regulations, and federal programs have sought to address RED and economic mobility in different ways, from The Fair Housing Act of 1968, Community Reinvestment Act (CRA) to HUD programs including Housing Choice Voucher Program Section 8, HOPE VI, and the recent Affirmatively Furthering Fair Housing regulation.

Although we are hopeful and excited to further this mission, there are a few challenges that we foresee may extend beyond the capacities of a financial institution to solve. With respect to affordable housing development and Residential Economic Diversity, the following five challenges are especially important:

1. High property development costs
2. Limited land availability
3. The availability of state and local efforts to prioritize Residential Economic Diversity, particularly in high cost locations
4. Public willingness to accept initiatives
5. Lingering effects of prior public policy and redevelopment decisions

While these are significant challenges, the Urban Institute suggests many interconnected ways to further Residential Economic Diversity. These include: enforcement to combat discrimination, education on diverse neighborhoods, affordable housing development, and new incentives to encourage stability and long-term growth.[118] To this point, we intend to focus on four housing related efforts that will both create more opportunities for renters over time, and complement research, public policy, and federal and local efforts:

1. Purchase loans on properties that support Residential Economic Diversity
2. Create a mapping tool to enable deeper understanding of the various aspects of RED

3. Conduct and publish research on housing in high opportunity areas
4. Conduct and publish research on housing in areas of concentrated poverty (QCTs and R/ECAPs)
5. Work with states that prioritize RED in QAPs to identify commonalities and best practices and publish reports

Freddie Mac believes we can contribute to the progression towards diverse, vibrant, and sustainable neighborhoods through these RED initiatives, each of which has a distinct value to offer to the market. This value is magnified when all activities are considered together with each other and the important work they will enable.

In our loan purchases, Freddie Mac can and will continue to provide liquidity to affordable housing in high opportunity areas and support localities in their efforts to promote sustainable communities.

In our research, we will lay a foundation for broader understanding of the role of affordable housing in areas of high opportunity, as well as the role of mixedincome housing in areas of concentrated poverty. Much research has, and will continue to be conducted on this subject beyond our own, but our focus, using housing as the anchor and leveraging our unique position in the market as a housing finance provider with a national scope and extensive expertise, will provide a beneficial complement.

Our mapping tool will provide the first-ever national view of these high opportunity areas and areas of concentrated poverty and the housing opportunities in them, and allow our seller/servicer network to deliberately target properties in these areas in need of financing. Our national analysis of various definitions of opportunity and market size in these areas will demonstrate for the first time the opportunities for scaled investment in real estate that promotes RED and enable FHFA to refine the Duty to Serve definition of RED over time. Our case studies that focus on replicable community approaches to RED and replicable financing methods and lender-locality partnerships will allow us to showcase and leverage emerging standards to further more development, preservation, and financing opportunities over time and increase liquidity for the promotion of Residential Economic Diversity.

OBJECTIVE A: PURCHASE LOANS ON PROPERTIES THAT SUPPORT RESIDENTIAL ECONOMIC DIVERSITY

Evaluation Area	Year	Incomes Targeted	Extra Credit
Purchase	**1, 2 and 3**	**VLI, LI, MI**	**Yes**

Freddie Mac has previously, and currently, provides financing for affordable housing properties in high opportunity areas. The opportunities to purchase loans vary annually depending upon local priority, interest rates, and the LIHTC market. Although the market is consistently changing, we have maintained a constant presence in supporting Residential Economic Diversity. We currently offer a comprehensive suite of debt financing products and flexible underwriting parameters that support LIHTC properties. This suite includes the following offerings:

1. Bridge to Resyndication
2. Immediate Cash Loan for LIHTC Preservation
3. Value-Add
4. Lease-Up

5. 9 percent new LIHTC Loan
6. Tax-Exempt Loan
7. Preservation Rehab Loan
8. Bond Credit Enhancement
9. Tax-Exempt Bond Securitization
10. Green Advantage

Through our array of products, we have offered both forward commitments to support new construction, and immediate loans to support properties that desire refinancing. Our thorough underwriting procedures enable the continuance of affordable housing even where the costs of construction remain high. In addition to these particular debt products, we are able to leverage our industry leading risk distribution measures--our K-series, M-series, and PC executions—to attract private investment to support affordable housing and distribute risk away from the taxpayers. Localities, developers, and lenders will have access to additional liquidity while leveraging our capabilities. We intend to continue our strong support for RED in high opportunity areas by purchasing loans.

Baseline

In setting our baseline, we counted distinct restricted units and properties with restricted units on which we purchased loans during the year in question through our TAH retail seller/servicer network or via TAH negotiated transactions on individual mortgages. Over the past three years our loan purchases in high opportunity areas have been as follows:

Year	2014	2015	2016	Three-Year Avg.
Total Loan Amount	$503.8 Million	$856.2 Million	$622.6 Million	$660.9 Million
Restricted Units	1,471	4,425	1,603	2,500
Properties	14	32	24	23

These purchases are inclusive of LIHTC Debt and Section 8 purchases. This results in a three-year average baseline of the lesser of 2,500 restricted units or 23 properties.

Target

The market for affordable housing in high-opportunity areas is heavily dependent on the LIHTC market and interest rates.

In prior years, especially 2015 and 2016, the LIHTC debt market was highly favorable with historically low interest rates and historically high LIHTC pricing. These market conditions allowed Freddie Mac to provide financing for more units than we would be able to support in a challenging market environment. Even with these favorable market conditions, and even as our LIHTC debt business grew, we did not support as many properties or units in FHFA designated high opportunity areas in 2016 as in 2015. This suggests that there are various local variables that affect the market, such as state and locally administered LIHTC awards, and the availability of qualifying projects in these geographic areas. Additionally, anomalous large transactions can skew purchase volume in a given year. In fact, in 2015, the top five properties in terms of restricted units accounted for 1,663, or 38 percent, of the restricted units in that year, while the bottom five accounted for only 70 restricted units, or 2 percent of the total. As such, past success is not a reliable indicator of future performance, especially in geographically specific submarkets.

Given these variabilities, and the challenges laid out below, we are setting an aggressive target at the lesser of 25 properties or 2,600 restricted units in 2018, and will seek to deliberately increase the target subject to market conditions and states and localities continuing to prioritize affordable housing in high opportunity areas. We may also change these targets based on interest rates, tax rates and LIHTC market implications, or the results of our research described below. In setting our targets, we will also count distinct restricted units and properties with restricted units on which we purchase loans during the year in question through our TAH retail seller/servicer network or via TAH negotiated transactions on individual mortgages. Our targets for each year will be the lesser of the number of restricted units or properties as follows:

Year	2018	2019	2020
Target	The Lesser of 2,600 Restricted Units or 25 Properties	The Lesser of 2,700 Restricted Units or 27 Properties	The Lesser of 2,800 Restricted Units of 29 Properties

These targets will be inclusive of LIHTC debt and Section 8 purchases.

Market Challenges

There are several challenges associated with making purchases on properties in high opportunity areas. In these areas, there are often market complications that will hinder development. These include: high costs of development, limited land availability, and public willingness to accept housing diversity efforts. Additionally, our ability to support affordable housing in high opportunity areas is heavily dependent on state and local priorities and allocations of funds, as affordable housing in high opportunity areas relies upon subsidy in order to operate even a portion of the units at rents that are affordable to residents of very low- and low- income in a market where such rents alone could not generate sufficient cash flow to cover debt service payments.

The most important method states can use to subsidize affordable housing in high opportunity areas is the LIHTC, which can have an even greater impact in a low interest rate environment, such as in 2015 and for most of 2016. In late 2016 and in 2017, the LIHTC market has experienced two simultaneous challenges that have shrunk the market in the near term over recent record high market size and will likely have a sustained impact over time:

1. Reduced LIHTC equity pricing has led to a smaller market.
2. Rising interest rates have increased the need for LIHTC equity and soft subordinate debt.

In 2017, tax-credit pricing has reduced from historic highs of about $1.03 per credit in mid-2016 to $0.95 in mid-2017 per *Affordable Housing Finance*'s survey of syndicators.[119] In a hypothetical transaction with $10 million of debt and a need for $6 million of equity, this reduction in tax credit pricing equates to a $480,000 funding gap, which would require additional tax credits or soft debt to close.

Increased interest rates have a direct effect on how much debt a property can support, and therefore how much LIHTC equity or soft debt is required. In 2016, interest rates were at historic lows. For example, over the course of 2016, the 10-year Treasury index had an average high for the year of 187 bps and an average low of 180 bps. In 2017 through July, the 10-year Treasury index had an average high for the year of 237 bps and an average low of 232 bps. Using a 50 bps difference in rate we can see the effect on a hypothetical property: if a property qualified for a loan amount of $10 million, a 50 bps increase in the 10-year treasury index would mean that property would only qualify for about $9.44 million at the higher interest rate. This means that property would require an additional $560,000 of equity or soft debt in order to receive financing. This gap would be in addition to the gap caused by reduced LIHTC pricing. The combined effect of higher interest rates and lower equity pricing would be over a $1 million gap in funds to fill.

Additionally, states and localities can apply various subordinate debt programs, but in the current market, they have been required to focus their support on fewer transactions in order to help them succeed, which reduces the resources available for other properties. Indeed, as 2017 progressed, we saw more and more examples of large scale LIHTC market disruption, two of which particularly highlight the impact:

1. On March 15, 2017, the California Tax Credit Allocation Committee (TCAC) passed a resolution allowing developers to exchange their 2016 nine percent LIHTC allocation for 2017 LIHTCs. Given delays in finding equity investors, developers found it impossible to close in time to complete construction by the end of 2018 (LIHTC deals must be “placed in service”- meaning 100 percent construction completion and receipt of the certificate of occupancy- by the end of the second year after receiving a LIHTC allocation.)

2. In the Midwest, the Ohio Housing Finance Agency (OHFA) had to increase the allocation of LIHTC to deals awarded in 2016 because developers were not getting sufficient equity pricing to allow the deals to be economically feasible. Unfortunately, the additional credits had to come from the 2017 allocation, thus reducing the 2017 pool by approximately 12 percent.

As a result of this disruption, in the first half of 2017, there were 16 percent fewer new acquisitions compared to the first half of 2016 according to *Affordable Housing Finance*’s survey of syndicators.[120] We expect the market to remain smaller for some time unless interest rates experience a sustained reduction and either tax code changes or revisions to the LIHTC program are made, either of which could further affect the market.

Market Impacts

Creating and preserving affordable housing in high opportunity areas is difficult, as older properties are often attractive candidates for conversion to market rate housing, and the cost of new construction is prohibitively expensive to allow for 100 percent affordable properties. By providing financing for affordable housing in high opportunity areas with the competitive advantage given by our product set and our risk distribution methods, we are enabling developers and localities to further Residential Economic Diversity and promote affordability in some of the areas where it is hardest to do so.

Given the numerous obstacles that currently limit the deveopment of affordable housing in high-opportunity areas, our success in making loan purchases will not only have a significant impact on the communities we support and the market generally. These purchases will also provide case studies for states and localities to leverage as they prioritize furture development needs and determine how best to apply LIHTCs and their various subsidies to maximum benefit. In support of this, we will publish at least one news story on our website or press release each year about an exemplary or precedent setting transaction. Successful developments and successful loan purchases will also demonstrate to states and localities that do not currently prioritize RED that doing so can be both economically and socially beneficial, and that there are replicable models for achieving these benefits.

OBJECTIVE B: CREATE A MAPPING TOOL TO ENABLE DEEPER UNDERSTANDING OF THE VARIOUS ASPECTS OF RED

Evaluation Area	Year	Incomes Targeted	Extra Credit
Loan Product	**1**	**VLI, LI, MI**	**Yes**

FHFA defines Residential Economic Diversity as either affordable housing in a high opportunity area or mixed income housing in an area of concentrated poverty. FHFA has gone to great lengths to identify specific regions in need of support, and we intend to build upon this foundation to bring greater transparency and understanding to the housing market in high-opportunity areas and areas of concentrated poverty. A key component of this effort is the development of a mapping service that will clearly identify these locations, and categorize and label properties in these locations so we, researchers, policy makers, localities, and developers can better understand precedents, opportunities, and challenges to promoting Residential Economic Diversity.

Baseline

Freddie Mac does not currently offer such a mapping tool. There are various mapping services in the market, but none of them have the foundation for housing and Residential Economic Diversity and national scope that we intend to build.

Challenges, Actions and Market Impacts

Market Challenge	Freddie Mac Action
Lack of accessible data on Residential Economic Diversity and housing ▪ Current data on housing and RED is unconsolidated due, in part, to a lack of institutional investment and to the vast scope of this concept. As a result, the locations and characteristics of properties supporting RED are not clearly documented in a consolidated, accessible manner. **Market awareness** ▪ Not all states and localities actively promote Residential Economic Diversity ▪ The public is often unaware of the benefits and methods of achieving Residential Economic Diversity.	**Year 1 – 2018** 1) Initiate a technology project that will ultimately deliver an interactive mapping tool to identify FHFA-defined areas of interest for RED, affordable and mixed-income properties in those areas as well as: a. If the property meets regulatory agreements for housing subsidies or is market rate (note that we can only perform this service where the data exists, so we cannot likely capture and provide this information in all cases) b. Contact information for a Freddie Mac representative 2) How the tool will be used: a. The tool will be available to our network of seller/servicers who will be able to target localities that support RED b. Localities will more easily recognize locations that count as FHFA-identified high opportunity areas where Freddie Mac is seeking to provide financing, and can adjust their focus as appropriate. c. Freddie Mac will likely use the tool to locate properties that meet RED requirements and seek to provide financing for them. d. Tool will allow users to query by address or other geographic markers to be determined during development. 3) Take the following steps to achieve this : a. Identify/Develop appropriate software for the tool b. Aggregate and align data for use in mapping tool from a selection of the following sources as well as others we may discover in our

	work: The National Housing Preservation Database, data.gov, HUD, Harvard's Equality of Opportunity Project, and Census Bureau information. c. Test the mapping tool in beta form prior to formal release. 4) Solicit market feedback (from research and policy organizations, localities, borrowers, seller/servicers) and release official product to the public 5) While this is a one year objective, we plan to make this tool available to the public in Year 2. We will also make changes as necessary based on feedback from seller/servicers, developers, and borrowers. These updates may also include data changes from FHFA, HUD, or external vendors.
Resource Challenge	**Freddie Mac Action**
Deficiency of consolidated data ▪ Gathering the necessary data to create the mapping system will be labor intensive. ▪ We will need to purchase data from external vendors which can be costly. **Software development** ▪ Creating internal software can be a time-consuming process. ▪ Development cycle will require multiple tests to ensure the products' practicality, ▪ There will need to be multiple teams of developers, testers, researchers, and business planners to implement this product	**Year 1 – 2018** 1) Assemble a design team. Bring together the necessary individuals from IT, Research, and Business teams who will design and implement the product. 2) Reach out to external vendors to acquire or purchase the necessary data to build the platform. Note: With any mapping and searching of data, there will be a margin of error in trying to identify exact locations of properties—address mismatches and latitude/longitude imprecisions may create some ambiguity or false positives in a small minority of cases. 3) Identify the needs of stakeholders, including, but not limited to: a. Research and policy organizations b. Localities c. Borrowers d. Seller/Servicers

Market Impact
Residential Economic Diversity is ultimately a method of promoting opportunity and social and economic mobility. This mapping tool will act as a foundation of research that will broaden the markets' knowledge of economic diversity in housing. Much academic research has been conducted that suggests that promoting economic diversity in neighborhoods leads to healthy and sustainable communities. In creating a mapping service that will outline what properties support and promote RED, Freddie Mac is making it easier for other lenders and developers to engage in RED activities. We expect that this mapping tool will have multiple uses and therefore benefit various parties, including: researchers, policy makers, localities, developers, and ultimately people and communities around the country. Given the breadth of RED as a concept, it is challenging to focus disparate information and fields of study into tools that will enable concrete actions. We believe this mapping service will establish an important foundation to decrease barriers to public policy decision making and financing decisions and allow for the better focusing of private capital for the purpose of promoting RED. We anticipate that this tool will have a great deal of impact on the market by (1) enabling investors to understand what properties meet the requirements for RED, whether the Duty to Serve definitions of high opportunity area and area of concentrated poverty unintentionally exclude areas that promote economic diversity, (2) enabling researchers to better study the distribution of properties and investment in these areas, and (3) enabling policy makers and localities to learn from each other's efforts and make well-considered decisions about how to best promote RED, (4) enabling our seller/servicer network to deliberately target for financing properties that support RED in these areas, and (5) enabling states who value RED in their QAP but do not have their high opportunity areas mapped to leverage our mapping service— over time we can envision using this tool to map all high opportunity areas prioritized by states in their QAP. Through these factors, and likely more as the tool is released to the public and gains market adoption, we will enable greater liquidity in the market for properties supporting RED.

OBJECTIVE C: CONDUCT AND PUBLISH THREE RESEARCH PROJECTS ON HOUSING IN HIGH OPPORTUNITY AREAS

Evaluation Area	Year	Incomes Targeted	Extra Credit
Outreach	**1, 2 and 3**	**VLI, LI, MI**	**Yes**

In defining high-opportunity areas, FHFA has leveraged public input, established geographical criteria—HUD's "Difficult Development Area (DDA)"—and taken local programs into account by identifying states or localities whose LIHTC QAPs recognize or reward efforts to further Residential Economic Diversity. FHFA has also included in its definition a "maximum poverty rate threshold for HUD-designated metropolitan DDAs at 10 percent and for non-metropolitan DDAs at 15 percent" for areas to qualify as high opportunity. However, FHFA has made it clear that DDAs are not a perfect proxy for high opportunity areas and thus there is room to better understand and refine this definition over time.

Through a series of distinct research efforts and publications, we intend to explore several aspects of the high-opportunity areas definition as it relates to economic diversity.

- The extent to which HUD's DDAs do or do not provide the foundation for economic mobility
- The opportunities and barriers for developing or preserving affordable housing in high opportunity areas, potentially based on various measures of opportunity
- Factors, both including and beyond housing, that are necessary to further economic diversity and opportunity

We intend for our research to leverage and complement leading academic and policy work, explore anomalies in various definitions, as well as to explore case studies that can lead to better public understanding and well-considered public policy, and help FHFA to refine or reinforce the definition of high opportunity areas. With a refined or reinforced definition, we will look to create and enable the emergence of standards that will increase liquidity and investment in support of RED.

Given the level of detail and effort that this work requires, we plan to complete distinct individual projects and publications on an annual basis that build upon our findings from each year but have their own unique value. These efforts will begin with a broad market study in 2018, followed by in depth case studies in 2019 and 2020. We view case studies—focused and detailed analysis of particular communities and/or properties—as the best approach for our research in years 2 and 3 because they will allow us to focus on the unique and nuanced challenges of supporting RED in different communities, and take those lessons and apply them more broadly. In order to delve into these studies with appropriate depth and care, it is important to take sufficient time in our outreach, analysis, and writing to ensure that our work is well considered and meaningful to the market. Indeed, each of these efforts will involve a great deal of time, effort, and focus in each year from our internal research team, and will involve outreach to leading researchers in the field to better inform our work and help it to be maximally beneficial to the market and communities across the country.

Our work is summarized as follows:

Year 1 – 2018. The first year of our research will involve gathering necessary data to better define high-opportunity areas, which includes estimating market size and opportunity, as well as comparing different definitions of high-opportunity areas. After consolidating and refining this analysis, we will publish a research report on our findings. This analysis will also be foundational for our efforts in 2019 and 2020.

Year 2 – 2019. The second year of our research will involve conducting case studies on three communities that have undergone deliberate efforts to promote Residential Economic Diversity. We will use the definition of high opportunity area to pinpoint our research to these areas. Our goal will be to explore how residential economic has other economic and social impacts on communities beyond individual properties, and how states, localities, communities, and developers have effectively furthered these benefits. We will publish this research in 2019. We expect that this will be useful for states and localities, as well as developers who will look to support economic diversity. We will look to identify replicable models for other communities to follow in their holistic approach to RED. By enabling more communities to deliberately promote RED, we will likely also promote future loan purchase opportunities and increased liquidity in the market.

Year 3 – 2020. In the final year of our Plan, we will conduct three additional case studies with a new focus: the challenges and opportunities specifically for financing affordable housing in high opportunity areas. We will examine three properties for which Freddie Mac has provided financing, explore how these properties supported RED and opportunity in their communities, and how federal, state, and/or local programs and flexibilities were effectively leveraged to support these transactions. Through this research, and its publication in 2020, we will identify replicable transaction structures and tools that Freddie Mac and localities can use to further RED and opportunity through affordable housing in high opportunity areas. We anticipate that this will lead to more liquidity in the market as other communities and developers avail themselves of these standards and transaction models.

By completing each of these studies and publishing our analyses, we will provide a foundation for the federal, state, and local policy makers, researchers, developers, and financing providers to coalesce around concepts and objectives that will promote economic diversity and opportunity over time.

Baseline

Freddie Mac has not engaged in or published formal research on housing in high opportunity areas. Moreover, no organization has performed or published such research on using this definition of high opportunity areas. This research will be the first of its kind.

Challenges, Actions and Market Impacts

Challenges	Freddie Mac Action
Lack of easily accessible data on high opportunity areas and housing ▪ Gathering information that relates to high opportunity areas will be difficult, as there are many disparate sources of data, not all of which are publicly available. Throughout the course of our research there have been instances where data was temporarily unavailable or where combining sources proved to be more difficult than originally anticipated. The wide range of topics that we intend to cover for our high opportunity research will rely heavily on data, and completing the objective within a narrow timeframe will be very difficult if data issues are encountered. **Public is often unaware of the benefits of Residential Economic Diversity** ▪ Public misconceptions regarding economic diversity and housing may play a role in creating preconceived notions that deter the creation and preservation of affordable housing in high	**Year 1 – 2018** Leverage data aggregated and aligned in conjunction with the mapping tool described in Objective B above from a selection of the following and other sources we discover in our research to better understand housing in high opportunity areas: The National Housing Preservation Database, data.gov, HUD, Harvard's Equality of Opportunity Project, and Census Bureau, 1) Compare and contrast various definitions of high opportunity areas 2) Publish report on housing in high opportunity areas 3) This report will include at least the following: a. Comparison of definitions of high opportunity areas b. Analysis of the geographic distribution in high opportunity areas of LIHTC, Section 8,

opportunity areas

Definitional challenge

- Insufficient industry consensus on what is considered high opportunity
- Understanding the opportunities that exist to expand this market

Resource challenge

- Throughout the Duty to Serve Plan, we are taking on a considerable number of research efforts, all of which require extensive planning, as well as collaboration with key stakeholders, and analysis. The design and research for all of these objectives will have many unique components, and will leverage the expertise and skills of our internal research organization, whose focus extends beyond the scope of the Duty to Serve Plan.

and other programs we may identify in our research, leveraging the data sources identified above

c. Estimation of market size in high opportunity areas of LIHTC debt, Section 8, and other programs we may identify in our research, leveraging the data sources identified above

4) Report will be published on our website, distributed to research organizations, advocacy organizations, and the seller/servicer network, and will be promoted with a press release.
5) Engage with at least two leading researchers on Residential Economic Diversity to help inform and structure our research and identify communities we should focus on in our case studies.

Year 2 – 2019

1) Identify and analyze three high opportunity areas that are approaching economic diversity in different ways and conduct individual case studies for each community, comparing their approaches and their use of housing as a tool to further economic opportunity.
2) Draft a report on these three case studies. Report will include analysis of the approaches taken by each community, the role of housing and housing programs used to promote Residential Economic Diversity, and the relationship between the specific housing and a selection of measures of opportunity identified in different definitions of high opportunity areas. This report will identify factors that successfully enabled affordable housing to be developed and financed so that these factors may be replicated elsewhere. We will also identify factors that inhibit or make more difficult the promotion of Residential Economic Diversity and pathways to avoid or mitigate these challenges.
3) Report will be published on our website, distributed to research organizations, advocacy organizations, and the seller/servicer network, and will be promoted with a press release.
4) Engage with at least two leading researchers on Residential Economic Diversity to help inform and structure our research and identify communities we should focus on in our case studies.

Year 3 – 2020

1) Our research in Year 3 will build off our

	findings in 2019 regarding steps communities can take to promote RED, but will focus more specifically on the avenues to finance properties through state and local programs and Freddie Mac that have successfully promoted Residential Economic Diversity. 2) To do this we will identify and analyze three high opportunity areas in which Freddie Mac has provided financing for affordable housing, and draft a report on these three case studies. Report will include analysis in different high opportunity areas for which Freddie Mac has provided financing, how these properties supported RED and opportunity in their communities, and how federal, state, and/or local programs and flexibilities were effectively leveraged in conjunction with Freddie Mac financing to support these properties. Through these case studies we will identify replicable development models, financing models, and approaches and tools states and localities can use to facilitate development and financing of affordable housing in high opportunity areas. Report will be published on our website, distributed to research organizations, advocacy organizations, and the seller/servicer network, and will be promoted with a press release. 3) Engage with at least two leading researchers on Residential Economic Diversity to help inform and structure our research and identify communities we should focus on in our case studies.

Market Impact

Over time, many programs and studies have focused on Residential Economic Diversity and its role in promoting social and economic mobility. Likewise, there have been many ways of understanding what constitutes the fundamentals of opportunity. Our research will build upon the information collected by numerous academic studies, and look beyond this work as it relates to housing and housing finance as an important aspect of furthering Residential Economic Diversity. The results of each of our research efforts will have several market impacts across all three years of our Plan.

Year 1 – 2018. Our research will build upon the information collected by numerous academic studies, and look beyond this work as it relates to housing and housing finance, an important aspect of furthering Residential Economic Diversity. Better understanding of high opportunity areas, and what can be done to create them, will also ensure that loan purchases we make in these areas have a high level of beneficial impact on communities. The housing market needs access to a consolidated set of research that clearly outlines the benefits of economic diversity in residential communities, and ways in which these may be achieved. This published research will act as a reference for all market particpiants. By working with academic teams and the FHFA, we will be able to refine the definition for high opportunity areas for the use of the housing industry, and, more importantly, for the benefit of the residents in these communities

Year 2 – 2019. Promoting Residential Economic Diversity in high opportunity areas has been a long-term challenge. Identifying and analyzing communities that have succeeded, and the reasons for their success and the challenges they have faced, is fundamental to enabling more communities to follow suit. In evaluating communities that have made a deliberate effort to further Residential Economic Diversity, we will be able to identify and analyze replicable models of community development rooted in affordable housing and economic diversity. Publishing research on this will provide greater attention to these efforts, and will demonstrate models for other communities to follow. This will in turn help to attract more development and investment supporting Residential Economic Diversity.

Year 3 – 2020. Our publication in Year 3 will build upon our findings in Year 2 as we seek to take the lessons of community development identified in Year 2 and apply them more specifically to the financing of affordable housing that promotes RED. We will focus specifically on how Freddie Mac financing and other sources have been leveraged to promote Residential Economic Diversity, and the challenges faced in doing so. Our focus on replicability, not just of our debt, but also of steps communities can take to further development and make transactions work, will provide a clear signal to the market of how to facilitate more development in support of Residential Economic Diversity, and how to promote greater opportunity for residents in strong, sustainable communities. This will lead to greater liquidity in this market as more developers, lenders, and localities leverage the tools and new standards identified in our analysis.

OBJECTIVE D: CONDUCT AND PUBLISH THREE RESEARCH PROJECTS ON HOUSING IN AREAS OF CONCENTRATED POVERTY (QCTs and R/ECAPs)

Evaluation Area	Year	Incomes Targeted	Extra Credit
Outreach	**1, 2 and 3**	**VLI, LI, MI**	**Yes**

Developing mixed income housing in areas of concentrated poverty is an important objective, but one that comes with many challenges. Increasing opportunity in these areas is something that extends beyond housing. Freddie Mac is committed to healthy neighborhoods for all through our role in supporting affordable housing. Enabling growth in persistent-poverty areas is consistent with our charter and community missions.

As we look to provide financing for mixed-income housing in poverty areas over time and perform research into the role of housing and economic development in these areas, it will be important to look at how we can enable Residential Economic Diversity and attract new capital to these neighborhoods without creating negative secondary outcomes. In promoting development in such areas today, it will be important that it is done with the community, while preserving safe and decent housing opportunities for residents living there today, something that has historically been a casualty of redevelopment efforts. For example, as a result of urban renewal efforts in the 20th century, hundreds of thousands of affordable units were lost, a legacy that has left lingering impacts on communities today. Per analysis from Marc Weis in "The Origins and Legacy of Urban Renewal," "As of June 30, 1967, 400,000 residential units had been demolished in urban renewal areas while only 10,760 low-rent public housing units had been built on these sites"[121].

While researching opportunities to promote Residential Economic Diversity in these areas, we expect many of the necessary efforts to further economic diversity will extend beyond housing. It will take the collaboration of residents, local leaders, governmental entities, planners, developers, and financing providers, among others, to enable job development and infrastructure improvement. Freddie Mac's products, purchases, and outreach will be a basis for the revitalization of these areas, but cannot and will not be the only factor. Through our research, we will look beyond housing to help lay a foundation for collaboration of various institutions that can aid in promoting economic diversity in areas of concentrated poverty.

Given the level of detail and effort that this work requires, we plan to complete distinct individual research projects and publications on an annual basis that build upon our findings from each year but have their own unique value. These efforts will begin with a broad market study in 2018, followed by in depth case studies in 2019 and 2020. We view case studies—focused and detailed analysis of particular communities and/or properties—as the best approach for our research in years 2 and 3 because they will allow us to focus on the unique and nuanced challenges of supporting RED in different communities, and take those lessons and apply them more broadly. In order to delve into these studies with appropriate depth and care, it is important to take sufficient time in our outreach, analysis, and writing to ensure that our work is well considered and meaningful to the market. Indeed, each of these efforts will involve a great deal of time, effort, and focus in each year from our internal research team, and will involve outreach to leading researchers in the field to better inform our work and help it to be maximally beneficial to the market and communities across the country.

Our work is summarized as follows:

- **Year 1 – 2018.** The first year of our research will involve gathering necessary data to better define areas of concentrated poverty, which includes estimating market size and opportunity, as well as comparing different definitions of "areas of concentrated poverty." After consolidating and refining this analysis, we will publish a research report on our findings. This analysis will also be foundational for our efforts in 2019 and 2020.

- **Year 2 – 2019.** The second year of our research on areas of concentrated poverty will be focused on conducting case studies on three communities that have undergone deliberate efforts to promote Residential Economic Diversity. We will use the definition of areas of concentrated poverty to pinpoint our research to these areas. Our goal will be to explore how Residential Economic Diversity has other economic and social impacts on communities outside of housing, and how states, localities, communities, and developers have attempted to provide these benefits in areas of concentrated poverty. We will publish this research in 2019. We expect that this will be useful for states and localities, as well as developers who will look to support economic diversity. We will look to identify replicable models for other communities to follow in their holistic approach to RED. By enabling more communities to deliberately promote RED, we will likely also promote future loan purchase opportunities and increased liquidity in the market.

- **Year 3 – 2020.** In the final year of our plan, we will conduct three additional case studies with a new focus: the challenges and opportunities specifically for financing mixed-income housing in areas of concentrated poverty. We will examine three properties for which Freddie Mac has provided financing, though perhaps in different range of income-mixing than FHFA has defined depending on availability in our recently-financed loan portfolio, explore how these properties supported RED and opportunity in their communities, and how federal, state, and/or local programs and flexibilities were (or were not) leveraged to support these transactions. Through this research, and its publication in 2020, we will identify replicable transaction structures and tools that Freddie Mac and localities can use to further RED and opportunity through mixed-income housing in areas of concentrated poverty. We anticipate that this will lead to more liquidity in the market as other communities and developers avail themselves of these standards and transaction models.

By completing each of these studies and publishing our analyses, we will provide a foundation for federal, state, and local policy makers, researchers, developers, and financing providers to coalesce around concepts and objectives that will promote economic diversity and opportunity in areas of concentrated poverty over time.

Baseline

Freddie Mac has not engaged in or published formal research on Residential Economic Diversity as it relates to areas of concentrated poverty. Moreover, while various organizations have analyzed housing opportunities in these areas, FHFA's work in formalizing a definition of Residential Economic Diversity as it relates to areas of concentrated poverty sets a foundation for us to perform research that will be the first of its kind.

Challenges, Actions and Market Impacts

Challenges	Freddie Mac Action
Promoting economic growth without the displacement of current neighborhood residents ▪ Many community rehabilitation programs have resulted in the displacement of residents that have been living there **Public perception and preference** ▪ Public misconceptions regarding economic diversity and housing may play a role in creating preconceived notions ▪ Higher income residents may be unwilling to live in areas of concentrated poverty without demonstrable local incentives	**Year 1 – 2018** Leverage data aggregated and aligned in conjunction with the mapping tool described in Objective B above from a selection of the following and other sources we discover in our research to better understand housing in areas of concentrated poverty: National Housing Preservation Database, data.gov, HUD, Harvard's Equality of Opportunity Project, and Census Bureau. 1) Compare and contrast various definitions of areas of concentrated poverty. 2) Publish a report on housing in areas of concentrated poverty. This report will include at

Definitional Challenge

- Insufficient industry consensus on what is considered an area of concentrated poverty and methods to provide support
- Throughout the course of our research there have been instances where data was temporarily unavailable or where combining sources proved to be more difficult than originally anticipated. The wide range of topics that we intend to cover for our areas of concentrated poverty research will rely heavily on data, and completing the objective within a narrow timeframe will be very difficult if data issues are encountered.

Resource Challenge

- Throughout the Duty to Serve plan, we are taking on a considerable number of research efforts, all of which require extensive planning, as well as collaboration with key stakeholders, and analysis. The design and research of all of these objectives will have many unique components, and will leverage the expertise and skills of our internal research organization, whose focus extends beyond the scope of the Duty to Serve plan.

least the following:

a. Comparison of definitions of areas of concentrated poverty
b. Analysis of the geographic distribution in areas of concentrated poverty of LIHTC, Section 8, and other programs we may identify in our research, leveraging the data sources identified above
c. Estimation of market size in areas of concentrated poverty for LIHTC debt, Section 8, and other programs we may identify in our research, leveraging the data sources identified above

3) Report will be published on our website, distributed to research organizations, advocacy organizations, and the Seller/Servicer network, and will be promoted with a press release.
4) Engage with at least two leading researchers on areas of concentrated poverty to help inform and structure our research and identify communities we should focus on in our case studies.

Year 2 – 2019

1) Identify and analyze three areas of concentrated poverty that are approaching economic diversity in different ways and conduct individual case studies for each community, comparing their approaches and their use of housing as a tool to further economic opportunity.
2) Draft a report on these three case studies. Report will include analysis of the approaches taken by each community, the role of housing and housing programs used to promote Residential Economic Diversity, the methods of financing used, and the relationship between the specific housing and a selection of measures of opportunity identified in different definitions of areas of concentrated poverty. This report will also identify factors that successfully enabled mixed-income housing to be developed and financed so that these factors may be replicated elsewhere.
3) Publish a report on our website, distribute it to research organizations, advocacy organizations, and the seller/servicer network, and promote it with a press release.
4) Engage with at least two leading researchers on areas of concentrated poverty to help inform and structure our research and identify communities we should focus on in our case

	studies. **Year 3 – 2020** Identify and analyze three areas of concentrated poverty in which Freddie Mac has provided financing for mixed-income housing. 1) Draft a report on these three case studies. Report will include analysis of three properties in different areas of concentrated poverty for which Freddie Mac has provided financing, how these properties supported RED and opportunity in their communities, and how federal, state, and/or local programs and flexibilities were or were not leveraged in conjunction with Freddie Mac financing to support these properties. Through these case studies we will identify replicable development models, financing models, and approaches and tools states and localities can use to facilitate development and financing of affordable housing in areas of concentrated poverty. This report will also consider different levels of income-mixing on properties. 2) Publish a report on our website, distribute it to research organizations, advocacy organizations, and the seller/servicer network, and promote it with a press release. 3) Engage with at least two leading researchers on areas of concentrated poverty to help inform and structure our research and identify communities we should focus on in our case studies.

Market Impact

Economic diversity where affordable housing is preserved for the community is essential to transforming areas of concentrated poverty into areas of economic prosperity and opportunity. Our outreach and research will be fundamental to examining how we, and other institutions, can make an impact in this market. Our research will build upon the information collected by numerous academic studies, and look beyond this work as it relates to housing and housing finance, an important aspect of furthering Residential Economic Diversity. The results of each of our research efforts will have several market impacts across all three years of our plan.

Year 1 – 2018. Our research will act as a foundation for policy makers, federal and local government agencies, lenders, housing finance agencies, and developers that want to support Residential Economic Diversity. Better understanding of the definition of areas of concentrated poverty will ensure that loan purchases we make in these areas have a high level of beneficial impact on communities. The housing market needs access to a consolidated set of research that clearly outlines the benefits of economic diversity in residential communities, and ways in which these may be achieved. This published research will act as a reference for all market participants. By working with academic teams and the FHFA, we will be able to reinforce and/or refine the definition of areas of concentrated poverty to be used by the housing industry to benefit the residents in these communities.

Year 2 – 2019. Promoting Residential Economic Diversity and bringing economic prosperity to areas of concentrated poverty to benefit, and not displace, the residents living there today is a long term and difficult challenge. Identifying and analyzing communities that have succeeded, and the reasons for their success and the challenges they have faced, is fundamental to enabling more communities to follow suit. In evaluating communities that have made a deliberate effort to further Residential Economic Diversity, we will be able to identify and analyze replicable models of community development rooted in affordable housing and economic diversity. Publishing research on this will provide greater attention to these efforts, and will demonstrate models for other communities to follow. This will in turn help to attract more development and investment supporting Residential Economic Diversity.

Year 3 – 2020. Our publication in Year 3 will build upon our findings in Year 2 as we seek to take the lessons learned of community development identified in Year 2 and apply them more specifically to the financing of mixed-income housing that promotes RED. We will focus specifically on how Freddie Mac financing, and perhaps other sources, have been leveraged to promote Residential Economic Diversity. Our focus on replicability, not just of our debt, but also of steps communities can take to further development and make transactions work, will provide a clear signal to the market of how to facilitate more development in support of Residential Economic Diversity, and how to promote greater opportunity for residents, and promote strong, sustainable communities. We expect that the lessons we learn from this research will also enable us to better tailor our financing offerings for the benefit of RED as it relates to areas of concentrated poverty. This will lead to greater liquidity in this market as more developers, lenders, and localities leverage the tools and new standards identified in our analysis.

OBJECTIVE E: CONDUCT AND PUBLISH THREE RESEARCH PROJECTS ON STATES THAT PRIORITIZE, OR COULD PRIORITIZE, RED IN QAPS

Evaluation Area	Year	Incomes Targeted	Extra Credit
Outreach	**1, 2 and 3**	**VLI, LI, MI**	**Yes**

There have been many states and localities that have made it their policy to support Residential Economic Diversity, some in ways that meet FHFA's qualifications, some in ways that do not, while others have not overtly stressed RED at all. The extent to which states support this idea is not widely known or researched. Over the next three years, we will conduct and publish three research projects to better understand the following:

- Year 1 - 2018: What states are emphasizing in their furtherance of RED through QAPs, what are the leading factors in their furtherance of RED, and what is the market size and opportunity;
- Year 2 - 2019: How Freddie Mac financing can be leveraged into replicable programs with these states; and
- Year 3 - 2020: In states that are not emphasizing RED to the degree FHFA views as qualifying for Duty to Serve credit, how might they do so, and how might Freddie Mac financing be aligned with their efforts for the furtherance of RED?

Given the level of detail, outreach, and effort that this work requires, we plan to complete these distinct individual projects and publications on an annual basis that build upon our findings from each year but have their own unique value. These efforts will begin with a broad market study in 2018, followed by in depth case studies in 2019 and 2020. We view case studies—focused and detailed analysis of particular communities and/or properties—as the best approach for our research in years 2 and 3 because they will allow us to focus on the unique and nuanced challenges and methods of supporting RED in different communities, and take those lessons and apply them more broadly. In order to delve into these studies with appropriate depth and care, it is important to take sufficient time in our outreach, analysis, and writing to ensure that our work is well considered and meaningful to the market. Indeed, each of these efforts will involve a great deal of time, effort, and focus in each year from our internal research team, and will involve outreach to leading researchers in the field to better inform our work and help it to be maximally beneficial to the market and communities across the country.

Through these efforts individually and in the aggregate, we anticipate that we will enable more states to prioritize RED, be able to better tailor our loan offerings to support them (and how they might tailor theirs to work better with us), and provide more liquidity to support RED.

Baseline

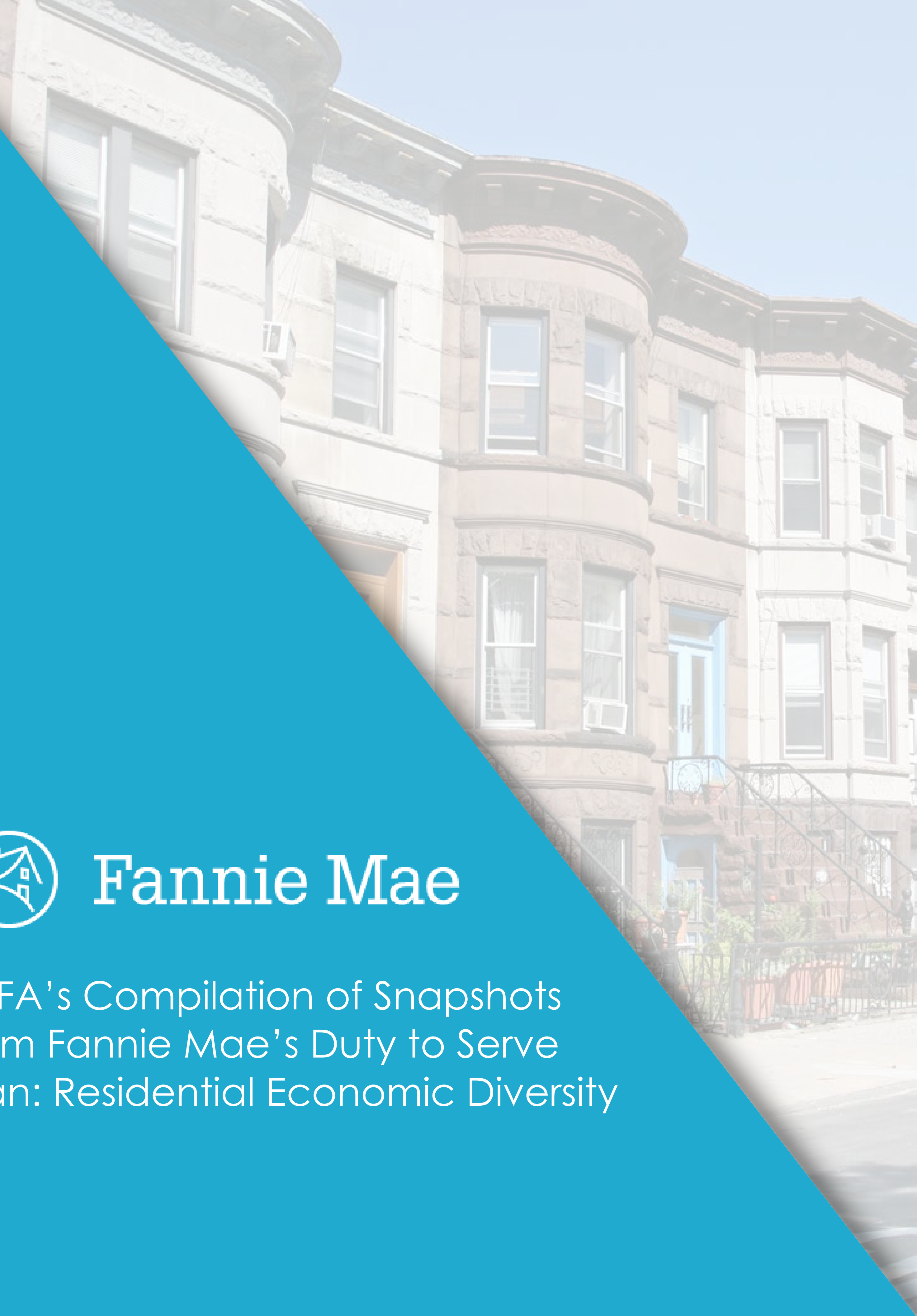
Freddie Mac has not explicitly worked with the identified states with the goal of studying and furthering RED in this context.

Challenges, Actions and Market Impacts

Market Challenge	Freddie Mac Action
Deficiency of research on the involvement of states and localities in RED ▪ It is unclear how states and localities support RED **External factors outside of housing** ▪ How public policy has contributed to concentrations of unsustainable neighborhoods ▪ Our ability to affect conditions outside of housing is very limited ▪ Development of jobs, highways, and other infrastructure is not in our control but is essential for community growth **Resource Challenge** ▪ Throughout the Duty to Serve Plan, we are taking on a considerable number of research efforts, all of which require extensive planning, as well as collaboration with key stakeholders, and analysis. The design and research of all of these objectives will have many unique components, and will leverage the expertise and skills of our internal research organization, whose focus extends beyond the scope of the Duty to Serve Plan.	**Year 1 – 2018** Create and/or assign an internal team to contact and meet with states and localities regarding their involvement in Residential Economic Diversity. 1) Conduct outreach to states and localities that are involved in promoting RED to determine how we can provide financing to complement their efforts. 2) Aggregate and align data from a selection of the following and other sources we discover in our research as it relates to states identified by FHFA as having QAPs that emphasize RED: The National Housing Preservation Database, data.gov, HUD, Harvard's Equality of Opportunity Project, and Census Bureau information 3) Publish a report of our findings that will include at least the following: a. Leading factors that states prioritize in promoting RED b. Analysis of the distribution of LIHTC, Section 8, and others we may identify in our research, leveraging the data sources identified above in states identified by FHFA as having QAPs that emphasize RED 4) Publish report on our website, distribute to research organizations, advocacy organizations, and the seller/servicer network, and promote with a press release. 5) Engage with at least two leading researchers on state QAPs to help inform and structure our research and identify communities we should focus on in our case studies. **Year 2 – 2019** 1) Identify and analyze three states in which Freddie Mac has provided financing for affordable housing that supports RED. 2) Draft a report on these three case studies. Report will include analysis of three properties in states for which Freddie Mac has provided financing, how these properties supported RED and opportunity in their communities, and how they have done so in the context of state QAPs and other state or local efforts. Through these case studies we will identify replicable

	development models, financing models, and approaches and tools states and localities can use to facilitate development and financing of affordable housing in high-opportunity areas. 3) Publish the report on our website, distribute it to research organizations, advocacy organizations, and the seller/servicer network, and promote it with a press release. 4) Engage with at least two leading researchers on RED to help inform and structure our research and identify communities we should focus on in our case studies. **Year 3 – 2020** 1) Identify and analyze three states that either do not currently prioritize RED or do not meet FHFA's definition for a qualifying QAP. 2) Draft a report on these three case studies. Report will include analysis of these state's QAPs and how they differ from FHFA's standard and how they could meet that standard, as well as analysis of properties that may be considered as supporting RED for which Freddie Mac has provided financing in these states, the financing used along with state or local programs, and the replicability of the model. 3) Publish the report on our website, distribute it to research organizations, advocacy organizations, and the seller/servicer network, and promote it with a press release. Engage with at least two leading researchers on RED to help inform and structure our research and identify communities we should focus on in our case studies.

Market Impact
With respect to Residential Economic Diversity, it is important to examine how states and localities have been involved in supporting economic and social mobility. Freddie Mac is committed to outreach with these entities—both those whose QAPs meet FHFA's standard for promoting RED, and those whose QAPs do not, to thoroughly understand their role in this market, and to identify and support emerging standards. Our three research projects will have distinct benefits independently, and their combined effect will likely be even greater. 1. In 2018, our work will not only reveal the property makeup and distribution in states with qualifying QAPs, it will also identify emerging standards and illustrate how other states may follow suit. 2. In 2019, our report will identify replicable financing models that pair Freddie Mac debt with state and local programs, including LIHTC, to further RED and bring more private capital into this space. 3. In 2020, our work will enable more states to meet FHFA's standard for QAPs that prioritize RED, which will lead to more deliberate financing opportunities and more liquidity across a broader RED-focused market. From our findings and our outreach, we can demonstrate to other states and localities how they can promote RED. Additionally, in the aggregate, consistent outreach to states and localities will enable us to further understand their financing needs, which will allow us to tailor our products (and them to tailor theirs) to support RED in a manner befitting the needs and objectives of their communities while channeling private capital at a growing scale through our risk-distribution methods.



Fannie Mae

FHFA's Compilation of Snapshots from Fannie Mae's Duty to Serve Plan: Residential Economic Diversity

M. Additional Activity: Residential Economic Diversity Activity (12 C.F.R. §§ 1282.32 (d)(3) and 1282.36(c)(3)).

Note: Fannie Mae seeks extra credit for this Activity.

1. *Objective #1: Establish a Residential Economic Diversity (RED) initiative to increase loan purchases relating to the Statutory Activity for the provision of debt for LIHTC under Section 42 of the Internal Revenue Code (Partner and Innovate, Do What We Do Best).*

Meeting the Challenges
Preserving affordable housing while incorporating notions of RED has several key challenges, including: • Existing subsidized affordable housing, including LIHTC properties, is often located in neighborhoods that are not economically diverse.
• Economically challenged neighborhoods are often deprived of needed public services and private sector investments and are therefore, unattractive to renters who could pay market prices and who have an abundance of other choices. • Gentrification has pushed affordable housing out of neighborhoods as housing prices and rents increase. • Higher end communities often oppose affordable housing development in their neighborhoods out of fear and misinformation. To address these challenges, Fannie Mae will: • Establish an initiative to incorporate RED into Fannie Mae's Statutory Activity relating to the acquisition of mortgages on LIHTC financed properties. • Work with lenders originating LIHTC loans and LIHTC sponsors and investors to increase awareness of RED and proactively seek RED LIHTC projects. • Through outreach and loan product review, increase Fannie Mae's percentage of our LIHTC Debt purchases that qualify as RED from 15 percent in 2016 to 20 percent by the end of the Plan. • Review RED LIHTC projects in both high opportunity areas and mixed income neighborhoods. • Publish our experience incorporating RED into our LIHTC Debt program as part of an overall white paper (or similar document) regarding RED.

SMART Factors

Fannie Mae will undertake the following measurable Actions in the years indicated.

Year	Actions
2018	• Meet with seven DUS lenders to increase awareness of RED and to specifically identify projects eligible for four percent and nine percent LIHTC that may meet the requirements of RED as provided in the Regulations (RED Transaction(s)). • Meet with five sponsors to better understand the difficulties of including RED concepts in housing development. • Meet with three LIHTC investors to discuss hurdles faced when reviewing potential investment opportunities in RED deals. • Based on the outreach conducted, identify two potential enhancements to Fannie Mae's existing products that could increase the volume of LIHTC deals that qualify as RED Transactions. • Review and approve at least one of the identified potential enhancements. • Confirm projected loan purchases for 2019 and establish a Baseline for mixed-income LIHTC Debt.
2019	• Commence work on a RED white paper on lessons learned from activities including LIHTC Debt transactions in order to educate and inform stakeholders. • At least 17 percent of Fannie Mae's LIHTC Debt purchases will be secured by LIHTC properties that qualify as RED Transactions. This represents a two percent increase in the percentage of Fannie Mae's LIHTC Debt purchased in 2016 that qualified as RED (15 percent).
	o **Baseline:** Under FHFA's Draft Evaluation Guidance, activities that support financing of mortgages on affordable housing in high opportunity areas qualify for duty to serve credit if they are undertaken in connection with a Statutory Activity, such as the financing of LIHTC Debt. Accordingly, to establish the Baseline for this Objective, Fannie Mae analyzed our portfolio to determine how many of our LIHTC Debt purchases were loans located in high opportunity areas. Between 2014 and 2016, an average of 14 percent of the LIHTC Debt purchased by Fannie Mae was located in a high opportunity area and, therefore, qualified as RED (2014: 14 percent; 2015: 14 percent; 2016: 15 percent). However, given that the percentage in 2016 was higher than the average, Fannie Mae will use the 2016 percentage (15 percent) as the Baseline for RED LIHTC Debt purchases. Fannie Mae believes we have purchased LIHTC Debt on mixed income properties, however, we are not able to track these loans at this time. Part of the work completed during 2018 will be to confirm/refine the Baseline for this Objective. Currently, however, the Baseline is based solely on loans in high opportunity areas. As noted above, a Baseline for mixed income LIHTC Debt purchases will be established based on research and outreach completed in 2018. • Confirm RED LIHTC Debt purchase goals for 2020.
2020	• At least 20 percent of Fannie Mae's estimated LIHTC Debt purchases will be secured by LIHTC properties that qualify as RED Transactions. • Review initiative for lessons learned to be included in the white paper. • Publish and distribute a white paper that includes Fannie Mae lessons learned regarding LIHTC Debt purchases secured by LIHTC properties qualifying as RED Transactions, so that other LIHTC stakeholders can use the information to increase awareness of and investment in RED Transactions. • Prepare for the 2021 – 2023 Duty to Serve Plan.

Fannie Mae believes that the Statutory Activity relating to LIHTC Debt also provides an excellent potential opportunity to finance RED Transactions. By affirmatively incorporating RED Transactions into the identified Statutory Activity involving LIHTC Debt, Fannie Mae can better coordinate our internal activities, share lessons learned across different work channels, and bring the expertise of various stakeholders to the subject as a whole. Accordingly, we believe our activities are better implemented and assessed on this basis. This RED Activity does not raise issues relating to whether there are adequate levels of consumer protections or benefits to the tenants or homeowners that are consistent with the requirements of other Statutory and Regulatory Activities in the Regulations. If Fannie Mae were to acquire a mortgage on a RED Transaction, that acquisition would not impact homeowner or tenant rights. Fannie Mae's security instruments require the parties to adhere to all applicable federal, State, and local laws and such laws would remain in full force and effect to the same extent and with the same application as if Fannie Mae had not acquired the mortgage, including State and local landlord-tenant, zoning, and other laws and regulations relating to LIHTC tenants.

Based on Fannie Mae's significant experience in multifamily housing finance and our strong relationship with lenders, owners, and developers, we believe this Objective is realistic and may be achieved within the time periods described. Any product enhancements and/or incentives and loan purchases will be supported by thorough economic, risk, and operational analyses, will be subject to Fannie Mae's governance and approval processes, and will only be made consistent with safety and soundness concerns. The relevant market opportunity is the increased funding of projects that qualify as RED Transactions.

Criteria	2018	2019	2020
Evaluation Factor:	Loan Product	Loan Purchase	Loan Purchase
Income Levels:	Very Low-, Low-, and Moderate-Income Levels for all Years		

2. *Objective #2: Establish a RED initiative to increase loan purchases relating to the Statutory Activity for other comparable State or local affordable housing programs (Partner and Innovate, Do What We Do Best).*

Meeting the Challenges
In addition to several of the challenges noted in the LIHTC Debt RED Objective, preserving affordable housing at the State or local level while incorporating notions of RED has several key challenges: • Some current State and local programs provide very little subsidy to increase affordable housing. • State or local affordable housing programs may differ significantly as to how they address the issue of RED or may not address it at all. To address these challenges, Fannie Mae will: • Establish an initiative to incorporate RED concepts into Fannie Mae's proposed activities related to the Statutory Activity regarding the acquisition of mortgages associated with other comparable State or local affordable housing programs. • Work with lenders, State agencies, sponsors, and other key stakeholders active in other comparable State or local affordable housing programs to increase awareness of RED and proactively seek RED projects. • Review current and propose future loan guidelines to determine and address what, if any, enhancements would be needed to increase Fannie Mae's loan purchases on RED properties under other comparable State or local affordable housing programs.

SMART Factors

Fannie Mae will undertake the following measurable Actions in the years indicated.

Year	Actions
2018	• As part of the review of at least five State or local affordable housing programs identify at least two States or localities that have a successful RED program in their affordable housing strategy. Meet with key stakeholders in those States or localities to better understand the program(s). • Review the identified RED programs to determine what product enhancements might be required to facilitate Fannie Mae loan purchases on RED projects through those particular programs. • Process at least one product enhancement that would facilitate RED loan purchases in the identified State and/or local RED programs. • Meet with four DUS lenders to increase awareness of RED and to specifically identify projects eligible for other comparable State or local affordable housing programs.
	• Based on the research and outreach conducted during 2018, adjust the Baseline if necessary for future RED loan purchases in 2019.
2019	• Commence work on a RED white paper on lessons learned from activities including other comparable State or local affordable housing programs in order to educate and inform stakeholders. • Purchase four loans that qualify as RED Transactions under the Statutory Activity of other comparable State or local affordable housing programs. o **Baseline:** Four loans represents 20 percent of the total 2019 loan purchases to be made by Fannie Mae in connection with Objective #1 of the Statutory Activity for other comparable State or local affordable housing programs. As noted above, this Baseline may be adjusted based on research and outreach completed during 2018. • Confirm loan purchase goals for 2020.
2020	• Purchase eight loans that qualify as RED Transactions under other comparable State or local affordable housing programs, representing approximately 30 percent of the total of loans to be purchased in 2020 in connection with Objective #1. • Review the initiative for lessons learned to be included in the white paper with respect to RED and other comparable State or local affordable housing programs. • Publish and distribute a white paper that includes Fannie Mae lessons learned regarding RED Transactions associated with other State or local affordable housing programs so that other comparable State or local stakeholders can use the information to increase awareness of and investment in RED Transactions. • Plan for the 2021 – 2023 Duty to Serve Plan.

Fannie Mae believes that the Statutory Activity relating to other State or local affordable housing programs provides an excellent potential opportunity to finance RED Transactions. By affirmatively incorporating RED Transactions into the identified Statutory Activity involving other comparable State or local affordable housing programs, Fannie Mae can better coordinate our internal activities, share lessons learned across different work channels, and bring the expertise of various stakeholders to the subject as a whole. Accordingly, we believe our activities are better implemented on this basis. This activity does not raise issues relating to whether there are adequate levels of consumer protections or benefits to the tenants or homeowners that are consistent with the requirements of other Statutory and Regulatory Activities in the Duty to Serve Regulations. If Fannie Mae were to acquire a mortgage on a RED Transaction, that acquisition would not impact homeowner or tenant rights. Fannie Mae's security instruments require the parties to adhere to all applicable federal, State, and local laws and such laws would remain in full force and effect to the same extent and with the same application as if Fannie Mae had not acquired the mortgage, including State and local landlord-tenant, zoning, and other laws and other applicable regulations relating to other comparable State or local affordable housing programs.

Based on Fannie Mae's significant experience in multifamily housing finance and our strong relationship with lenders, owners and State and local entities, Fannie Mae believes this Objective is realistic and may be achieved within the time periods described. Any product enhancements and/or incentives and loan purchases will be supported by thorough economic, risk, and operational analyses, will be subject to Fannie Mae's governance and approval processes, and will only be made consistent with safety and soundness concerns. The relevant market opportunity is the increased funding of projects that qualify as RED Transactions.

Criteria	2018	2019	2020
Evaluation Factor:	Loan Product	Loan Purchase	Loan Purchase
Income Levels:	Very Low-, Low-, and Moderate-Income Levels for all Years		

3. *Objective #3: Establish an initiative to make investments that promote RED in conjunction with Fannie Mae's Additional Activity for Workforce Equity Investments (Partner and Innovate, Do What We Do Best).*

Meeting the Challenges
As noted above, preserving affordable housing while incorporating notions of RED has numerous challenges. With respect to Workforce Equity, the hurdles include: • In some cities, RED takes the form of serving very low-income residents and very wealthy residents (e.g. 80/20 bond deals where 20 percent of the housing must be affordable to very low-income residents and the rest of the property is market rate), which, in high cost areas, is well outside the reach of workforce residents who may have moderate-incomes. • Community opposition to mixed income housing in higher cost neighborhoods can often hamper the development of more affordable housing. • There is no standard definition of "Workforce" housing. To address these challenges, Fannie Mae will: • Identify tools that could be used to increase RED in Workforce Equity projects that utilize Fannie Mae capital. • Seek out and make Workforce Equity Investments in projects that meet RED requirements. • Document Fannie Mae's RED experience and learning involving Workforce Equity and other RED Transactions into a white paper that will be made publicly available in order to allow other investors to learn best practices and expand RED into more projects.

SMART Factors

Fannie Mae will undertake the following measurable Actions in the years indicated.

Year	Actions
2018	• As part of the design of any approved RED program, plan to proactively identify opportunities to finance RED Workforce Equity Transactions: o Research successful RED Workforce housing projects to determine at least three elements required for success that could be incorporated into Fannie Mae's Workforce Equity "product". o Identify potential projects that use Fannie Mae capital that qualify as "workforce" housing and include RED characteristics; research successful RED projects to determine elements required for success.
2019	• As part of the work completed in 2019 for Workforce Equity, including building out the internal team and closing five investments, including at least one RED Workforce Equity Investment. Commence work on a

Year	Actions
	white paper that documents Fannie Mae's lessons learned in all aspects of the RED Additional Activities in the Plan including Workforce Equity Investments.
2020	• Make at least two investments representing 20 percent of the total projected Workforce Equity Investments contemplated in 2020 that qualify as RED Transactions. o **Baseline:** Fannie Mae has not made any RED Workforce Equity Investments and thus the Baseline is zero. • Publish a white paper on Fannie Mae's experience with RED Transactions that includes a section on RED in Workforce Equity Investments.

Fannie Mae believes that the Additional Activity in our Plan relating to Workforce Equity provides an excellent potential opportunity to invest in RED Transactions. By affirmatively incorporating RED Transactions involving Objectives concerning Workforce Equity Investments, Fannie Mae can better coordinate our internal activities, share lessons learned across different work channels, and bring the expertise of various stakeholders to the subject as a whole. Accordingly, we believe our activities are better implemented on this basis. This activity does not raise issues relating to whether there are adequate levels of consumer protections or benefits to the tenants or homeowners that are consistent with the requirements of other Statutory and Regulatory Activities in the Duty to Serve Regulations. If Fannie Mae were to make an investment in a RED Transaction as part of our Workforce Equity Investment activities, that investment would not impact homeowner or tenant rights. Fannie Mae's investment documentation would require the parties to adhere to all applicable federal, State, and local laws and such laws would remain in full force and effect to the same extent and with the same application as if we had not made the investment, including State and local landlord-tenant, zoning, and other laws and regulations applicable to Workforce Equity Investment properties.

Based on Fannie Mae's significant experience in multifamily housing finance and our strong relationship with lenders, owners, developers, and investors, we believe this Objective is realistic and may be achieved within the time periods described. Any investment will be supported by thorough economic, risk, and operational analyses, will be subject to Fannie Mae's governance and approval processes, and will only be made consistent with safety and soundness concerns. The relevant market opportunity is the increased funding of projects that qualify as RED Transactions.

To the extent implementation of this Objective contemplates an investment by Fannie Mae, it is subject to a determination that the investment and related actions are compliant with Fannie Mae's Charter Act, and receipt of FHFA's approval.

Criteria	2018	2019	2020
Evaluation Factor:	Loan Product	Loan Product	Investment
Income Levels:	Very Low-, Low- and Moderate-Income Levels for all Years		

DISCLAIMER

Implementation of the activities and objectives in Fannie Mae's and Freddie Mac's Duty to Serve Underserved Markets Plans may be subject to change based on factors including FHFA review for compliance with the Charter Acts, specific FHFA approval requirements and safety and soundness standards, and market or economic conditions, as applicable.

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