

Corporate Office 40 Pacifica Suite 900 Irvine, CA

Direct 949.214.1000 corelogic.com

October 25, 2021

Acting Director Sandra L. Thompson Office of the Director Federal Housing Finance Agency 400 7th Street SW, 10th Floor Washington, DC 20219

Acting Director Thompson,

Thank you for the opportunity to respond to the Federal Housing Finance Agency's (FHFA) Request for Information (RFI) regarding the Equitable Housing Finance Plans for Fannie Mae and Freddie Mac. We applaud FHFA for taking proactive steps to address the barriers to sustainable homeownership opportunities, and for engaging with industry participants (through mechanisms such as this RFI) as you craft plans for future action.

At CoreLogic, property data – most notably single family and multifamily residential property data – is our DNA. We provide real estate professionals, mortgage lenders, financial institutions, insurance carriers, government agencies, and other housing market participants with gold-standard-level data, analytics, and platforms that can deliver the most qualified, comprehensive housing information available on the market. We couple this with the country's most extensive network of field researchers, analysts, and data scientists in order to curate, connect, and uniquely enrich this property data with further insightful intelligence.

Due to our position as the industry's most trusted source for property data and analytics – in addition to our ongoing public policy engagements and partnerships at the federal, state, and local levels – we believe that we can offer novel insights into the very issues that FHFA seeks to address through this RFI, and that we are uniquely positioned to advise FHFA, the Government-Sponsored Enterprises (GSEs), and the rest of the federal government on solution pathways that address these issues and advance equity in our nation's housing finance system.

We hope the following pages provide you with useful insights on innovative capabilities that already exist today: capabilities that can be leveraged by FHFA, including via novel public/private partnerships, to craft equitable housing policies built upon granular data & forward-looking analytics.

Our team of public policy experts, economists, and scientists would welcome the opportunity to brief FHFA staff on the information contained in this response. We look forward to continued conversations with your office as we work to create a housing finance system that works for all Americans.

Sincerely,

Mr. Jake

Pete Carroll Executive, Head of Public Sector & Policy Direct: 202.276.6295 Email: pcarroll@corelogic.com

The Nature of Inequity

The modern-day housing finance system in the United States has been shaped over the course of the last half century by public policy: from the Fair Housing Act in 1968, to the Community Reinvestment Act a decade later, and all the way to the American Recovery and Reinvestment Act of 2009, to name but a few. These policies helped to pull our country from the depths of the Great Recession and forged a homeownership economy that is the envy of the world, permitting intergenerational wealth creation opportunities for hundreds of millions of Americans. Public policies have fundamentally shaped the opportunity for Americans to participate in the U.S. homeownership economy. They set the very rules by which Americans can find, buy, and insure/protect housing that is safe, sound, accessible, and attainable.

Unfortunately, too often, many of these rules were not written, or have not been implemented, in ways that ensure an equal opportunity for all Americans. Our homeownership system has too often perpetuated inequity amongst individuals of various incomes, races, ethnicities, and genders. This lack of equity, in turn, exacerbates a range of economic mobility issues for those on the outside looking in, including, for example, access to public transportation, good paying jobs, quality education, and much more. The benefits of achieving equity in our nation's homeownership system do not stop when a homeowner (or renter) steps out their front door - it persists throughout all aspects of their life.

Additionally, there are several economic conditions that exacerbate these issues and bear on what we view as intersecting, selfreinforcing supply-and demand- challenges. On the supply side, the current inventory of affordable homes for sale to low-tomoderate income (LMI) first-time and repeat ("prospective") homeowners is incredibly low, and this is due to a number of factors affecting the various participants in this process. Home builders are facing increased land acquisition and construction costs, most notably the price of lumber. Local government ("city/county") officials too often have established zoning and land use regulations that constrain the supply of new types of housing that can satisfy prospective LMI homeowner demand at affordable price points. Investors are too often buying up available inventory with cash offers and turning them into rental properties, further reducing the available inventory. And all of this takes place in the current low-interest rate environment that is contributing to driving up the price of homes, reducing the inventory of homes available for purchase at affordable price points.

On the demand side, our housing system has an insufficient number of affordable, yet responsibly underwritten, mortgage loan programs to assist LMI prospective homeowners. This includes a lack of awareness and access to down payment assistance programs, as well as reduced credit availability for LMI prospective homeowners due to increasing home prices that is fueling the gap between the listing price of a home and the appraised value. This combination is preventing LMI prospective homeowners from purchasing or rehabilitating new or existing homes.

These issues coalesce to create a vicious cycle of supply and demand challenges which exacerbates a cycle of housing inequity.

So, how do we achieve equity in housing?

We see the overarching challenge as being driven by several supply and demand-related factors that have come together to create a perfect storm of housing market dynamics, negatively affecting LMI individuals who are disproportionately people of color. We believe that with the right policy interventions - enabled by state-of-the-art technology innovation - we can not only address and overcome these challenges, but we can also reverse the direction of the cycle into one that positively reinforces the concept of equity in housing, promotes homeownership, creates opportunities for intergenerational wealth formation and, along with it, the opportunity to achieve economic mobility for everyone.

CoreLogic views these supply-and demand- challenges as falling into two distinct - yet interconnected - categories, both of which must be addressed simultaneously in order to make progress toward equity: the absence of granular local neighborhood knowledge and data to facilitate sizing and scoping a range of problems, alongside a lack of formal collective action mechanisms at the local level, which may serve as one of many solution pathways to consider.

Regarding local neighborhood knowledge: data sets and business intelligence platforms rely on information that are grouped at the census tract level, composed of 72,738 geographic boundaries and an average of approximately 1,600 households nationwide.¹ This geographic boundary level is too often not granular enough to accurately target the specific communities, neighborhoods, properties and individuals that are most in need of support, including (though not exclusively) the construction of new or rehabilitated single family, entry-level units (homeownership supply support) and the management of affordable yet responsibly underwritten mortgage lending programs (homeownership demand support), targeted to LMI prospective homeowners.

To effectively promote housing equity, we must be able to reliably and comprehensively delve down to the census block group level, of which there are 217,421 geographical boundaries nationwide at an average of roughly 550 households (approximately 3 times the level of local information reliably available today).² This local neighborhood data must cover a wide spectrum of information that can support the evaluation of a variety of homeownership supply-and demand- related questions, spanning a variety of stakeholder objectives (e.g., profit, mission, public interests). Additionally, it is critical that this local data also include rich information describing the parcel, structure, and individual units within a structure that compose the individual properties residing in these census block groups.

Rich information describing census block groups (a.k.a. local neighborhoods) and properties residing within those census block groups (a.k.a. individual homes) together form the lifeblood that will permit FHFA, the GSEs, and potentially other collaborators/stakeholders to answer elusive questions that too often make or break a decision to move forward with a new affordable homeownership development project or to design and take to market an affordable mortgage lending product to serve prospective LMI homeowners in a particular neighborhood.

Secondly, no one entity is in a position to possess both the depth and breadth of local neighborhood and property data and knowledge needed to answer critical business and public policy questions. Moreover, the presence of robust local data and knowledge is merely an enabler of solutions, not a solution in and of itself. As a nation, we need to find creative ways to put this local knowledge into action, including collective action mechanisms designed to align the disparate goals and interests of those who play a role in identifying, implementing, and regulating the processes to develop new and rehabilitated affordable homeownership stock and mortgage lending programs. This includes local, regional, and national home builders, realtors, construction investors, mortgage lenders, neighborhood associations, and other stakeholders. If we can create formal mechanisms for these participants to efficiently collaborate – using evidence-based insights and knowledge garnered from robust, local neighborhood and property data – we can overcome a number of obstacles that stand in the way of achieving equity in housing, including (but not limited to) clearing a path that facilitates city and county approval of new/rehabilitated affordable homeownership development projects, as well as instilling confidence in the sources of capital (including the GSEs) that provide novel, affordable, responsibly underwritten, mortgage lending programs for those prospective LMI homeowners who wish to purchase these new/rehabilitated homes.

Technology will play a key role in this transformation, as we will discuss throughout our response. Commercial data, business intelligence platforms and workflows, predictive modeling capabilities, and data analytics deployed in a public/private partnership framework, is the key to ensuring that we are aggregating this "lifeblood" neighborhood and property information from virtually all available sources of this data. Such a data set can answer many of the thorniest, most elusive supply- and demand-related questions. Geospatial and property attribute data can help home builders, their investors, and federal, state, and local policymakers determine what kind of affordable homes to build or rehabilitate and where to build them. Spatial boundary data (including formerly redlined areas) and loan-level market analytics can be matched with Home Mortgage Disclosure Act (HMDA) data sets and residential mortgage backed securities data to pinpoint specific geographic locations where racial disparities are most acute.

We believe that Fannie Mae and Freddie Mac (referred to herein collectively as the "GSEs") are uniquely positioned to contribute to these thorny, intersecting, and self-reinforcing supply- and demand-related challenges that drive inequity in homeownership. The GSEs are the largest securitizers and guarantors of single family and multifamily residential mortgage-backed securities. The GSEs are government-chartered entities whose charters include a broad duty to serve the mortgage market, as well as affordable housing goals³ that seek to increase the availability of affordable, responsibly underwritten mortgage loans for LMI borrowers, who are disproportionately people of color. The GSEs charters permit the GSEs to design, test, evaluate, and bring to market (at scale) innovative mortgage lending programs for LMI homeowners, so long as those programs maintain a strong financial condition and reasonable rate of return for the GSEs. In short, the GSEs possess the incentive, brand recognition, capital, housing ecosystem relationships, and local neighborhood and property data/information/knowledge that can be brought to bear to directly solve or contribute to solving these elusive, chronic questions.

The remainder of this RFI response is designed to explore these intersecting and self-reinforcing supply- and demand-related challenges in more detail, including solutions that we recommend FHFA and the GSEs consider incorporating into their annual equity plans.

Housing Supply in Crisis - An Ever-Increasing Gap

The simple reality across the United States today is there are nowhere near enough homes to keep up with demand. Multiple factors have contributed to a prolonged period of depressed home starts across the country. In the wake of the Great Recession and foreclosure crisis, the Census Bureau reported that the 10-year (2008-2017) annual average for new housing starts, including manufactured housing, was 0.95M units.^{4 5} That is considerably less than the previous peak of 2.07M starts in 2005, according to FRED data.⁶ The 2020 total of 1.39M units built, while part of an encouraging upward trend, shows there remains a significant gap in terms of U.S. home building capacity to be filled. Freddie Mac data estimates that the housing supply gap is growing by roughly 370,000 units per year.⁷ The pace of new construction does not come close to addressing a chronic housing supply gap across the U.S. Freddie Mac estimates that by the end of 2022 we will face a housing shortage of roughly 4.35M gap units.⁸ Other studies, such as the National Association of Realtors' (NAR) study, put this gap even higher at 5.5M gap units.⁹ These studies look at the projection of future household formation, available inventory, and projected construction.

While the severity of these supply gaps varies by region, the housing supply gap is ubiquitous across the country. For example, the NAR study shows, "At a sub-regional level, using the number of units permitted, compared with the pace of jobs added by metropolitan area from 2012 to 2019, it is clear that the underbuilding gap extends across almost every major city in the country."¹⁰ Major metro areas (3M+ residents) like Riverside and San Francisco, CA underbuilt by 107,700 and 113,200 units respectively. Moderately sized metro areas (500K – 1M residents) like Lancaster, PA have a housing supply gap of 12,200 homes.¹¹ CoreLogic estimates that the supply gap spans the income spectrum. For Low to Moderate Income (LMI) households, the housing gap is at least 1.2M units and growing.¹² The Extremely Low Income (ELI) and Very Low Income (VLI) housing gap is an estimated 2.6M units. Even economically advantaged households (those above 120% AMI) have a gap of 650K units.¹³ These studies also suggest that a significant portion of this housing gap is single family, entry level housing.¹⁴ The problem is persistent and significant across geographies and socioeconomic status.

Myriad Construction Hurdles

Increasing cost of construction, land use policy, and local political headwinds are a few of the barriers home builders across the country have faced for decades. The cost of land in larger MSAs is increasing.¹⁵ The cost of labor, equipment, and materials (notably lumber) is increasing.¹⁶ According to the Bureau of Labor Statistics (BLS), as of July 2021, there were 344,000 open construction jobs.¹⁷ A 2020 survey conducted by the National Association of Home Builders (NAHB) found that participants ranked, "cost/availability of labor" as the number one concern among home builders with 85% considering it their chief concern.¹⁸ This makes it more expensive to build or rehabilitate new homes, particularly lower priced homes that are affordable for prospective LMI homeowners. Too often, for home builders who make affordable homes, achieving a reasonable target rate of return on a given development project is inherently challenging. Attracting home builders' interest and construction investment capital often involves multilayered, complex capital stacks to get projects funded. Affordable home builders also face a "chicken and egg" dilemma attracting construction investment that fears new development will not stimulate accretive economic growth, resulting in units not selling, which may push construction into areas already improving economically.

There is a consensus forming that local land use policies are exacerbating the supply of accessible and attainable homeownership opportunity. Cities and states across the country are looking at ways to unlock construction through zoning changes. In 2018, Minneapolis adopted a comprehensive plan that, among other changes, amended the zoning ordinance to allow for low density, multi-unit residential structures within single-family zoned neighborhoods. This year, the state of California passed two bills, SB 8 and 9, aimed at reversing the effects of longstanding restrictive zoning ordinances. SB 8 extends a current law, the Housing Crisis Act of 2019, through 2030. Set to expire in 2025, this law accelerates the approval process for housing projects, limits local governments' ability to downzone, and limits fee increases on housing applications. SB 9, like the Minneapolis plan, eases the process for homeowners to build a duplex or split their current single-family residential lot. While these laws have garnered significant attention as first of their kind changes to entrenched protections of single-family zoning, they have yet to be applied at a scale comparable to the enormity of the current housing supply gap. This reflects a broad and pervasive political inertia commonly referred to as Not in my Back Yard or "NIMBYism." Homeowners across the country, in municipalities big and small, have resisted changes at the local level, which would increase density. This opposition may manifest itself in a variety of both good and bad faith arguments that include: the necessity to maintain a neighborhood's "character," speculation that increased density will decrease home values, environmental concerns, and concerns that crime will increase, among others. In a recent national survey of more than 1,000 private and public multi-family home builders and stakeholders, "NIMBYism" was cited as the single most challenging factor in their construction projects, followed by cost of materials.¹⁹ Among some housing activists and scholars, strict single-family zoning ordinances have been viewed at worst as a legally permissible continuation of redlining and at best an unintentional perpetuation of its legacy.²⁰ Whatever the motivation for resisting increases to density, that resistance routinely fends off meaningful changes to zoning or alters a home builder's

plans. The California and Minneapolis laws may become influential bellwethers not only demonstrating the important role cities and counties have in diminishing the housing supply gap, but also spurring meaningful discussions amongst neighborhoods and home builders where legitimate concerns can be addressed in a forum where all parties have consistent information at hand to make informed decisions.

The Supply Crisis and its Impacts on Demand

The supply shortage affects potential home buyers across geographies and income ranges at a scale which exacerbates demand side barriers. Severely limited inventory has created an environment of strong competition. Since the financial crisis of 2008, home prices have been marching upwards at a steady pace from 2011 onwards. The National Home Price Index reached its precrisis price level in 2016 and as of 2020 shows a 62.6% increase over its post-recession low point. According to CoreLogic, home prices nationwide, including distressed sales, increased year over year by 18.1% in August 2021 compared with August 2020, marking the largest annual gain in home prices in the 45-year history of the CoreLogic Home Price Index.²¹ Some worries have materialized that 2021 house price increases may be reaching housing asset bubble proportions.²² Even well qualified borrowers are facing stiff competition for houses between each other and institutional buyers offering cash. For anyone not ideally financially situated, the current landscape of continued, dramatic house price appreciation puts an ever-increasing barrier in their way that assistance and subsidy may do little to overcome.

The Need for Supply Side Federal Subsidy

Significant federal subsidy exists to help house low income Americans. However, a significant portion for that subsidy is dedicated to helping renters. It makes sense that subsidy should be concentrated toward rental assistance to house Extremely Low, Very Low, and Low-income people, as renting will be the primary manner in which they consume housing. This is reflected in the Department of Housing and Urban Development's (HUD) 2020 budget expenditures. Of HUD's \$56.5 billion enacted budget authority, \$36.4 billion went to HUD's two primary rental assistance programs, section 8 and project-based housing.²³ Rental assistance is and will be a vital element ensuring that everyone has a safe and affordable place to live, but without addressing the housing supply gap for single family, entry-level purchase, pressures on rent will only intensify. Federal law makers have proposed significant investment in home construction for purchase, meant to serve LMI households,²⁴ but to date no meaningful increase in the subsidies for new home construction has occurred.

A significant increase in federal subsidy to build or rehabilitate affordable homes for purchase would play an important role in reducing the housing supply gap.

Home Builder Preferences and Effects of Local Dynamics

For those home builders whose enterprises are mission guided or organizations with public good charters like community development corporations (CDCs), looking beyond a project's bottom line return on investment makes these enterprises well disposed to tackling the complexities of affordable homeownership, however they also possess a unique set of challenges. These builders bring an acute knowledge of the neighborhoods they work in and the people who will live there. They are often connected to community service organizations whose purpose is to connect low income borrows with the right home for them. Working in a segment where margins are tight to begin with, these home builders must be familiar with the local and state agencies that distribute subsidy. While they may have excellent qualitative knowledge of their local market and residents, the scale at which these home builders operate often means they do not have access to high quality, granular property data that can inform and empirically validate their decisions.

Time is a Significant Barrier for the Non-profit, Home Builder

For smaller scale and mission driven home builders, project cycle time can be as big if not a bigger challenge to maximizing their relatively scarce resources and delivering the most homes possible. The front end of their development cycles tends to be long due to the complications that arise from stitching together multiple funding streams and having to satisfy the concerns of influencers to city/county approval processes, who too often have disparate or even competing objectives. The front end of an affordable homeownership project could include initial concept, planning stages, market analyses, feasibility studies, and permit applications. While any home builder would likely have some or all these steps in their own process, building homes for LMI consumers often means constrained access to data and analytics that supports evidence-based decision making. Building the confidence of investors, city/county approvers, and other stakeholders takes longer under these constraints. When confidence can be achieved quicker, the process moves faster, and more projects can be initiated in a given timeframe. This can lead to more top line revenue and the ability to hire more people to do more projects. Improved upfront decision making should also reduce

unexpected challenges downstream during construction, which can increase the likelihood of delivering projects on time and on budget. Doing so consistently will enhance confidence amongst decision makers and holders of investment capital.

In addition to other considerations, multifaceted capital sources add to the number of stakeholders who must be consulted at each step. Investors need to be persuaded, lenders need to be lined up who are willing and able to work with prospective LMI homeowners, neighborhood associations have significant de facto, if not outright statutory influence, and local elected officials must give their approval to name a few groups, many who will have veto power over a project. These stakeholders often have interacting and overlapping relationships. For the home builder, project permitting and approval often depends on first obtaining approvals from other stakeholders in a nonlinear manner. The interlocking interactions between all these groups necessitates a "shuttle diplomacy" that takes time. Finding ways to answer questions and get approvals simultaneously would drive cycle times down and result in more projects completed.

Driving Down Cycle Time with Technology and Collaboration

We believe that local home builders, housing authorities, construction investors, cities/counties, mortgage lenders, and other stakeholders face challenges to building affordable homes for sale that are unique to their communities, but those unique challenges can be addressed consistently through a technology and collaboration framework that recognizes the fundamental barriers consistent across locations throughout the country. By using technology as a platform for overcoming information asymmetries, while creating forums that give home builders, their investors, city/county officials, local neighborhood associations, and other stakeholders the ability to surface reasonable objections and collaborate on solutions to those objections, we believe home builders can dramatically drive approval cycle times down. As approval cycle times are shortened, the necessity of subsidy will reveal where it could be best implemented and, at a minimum, local, state, and federal government housing agencies can deploy subsidy where it can be most productive and accelerate more projects.

Such quests are no longer the realm of the quixotic. For example, CoreLogic, the Mortgage Bankers Association (MBA), The Tennessee Housing Development Agency (THDA), the Ohio Housing Finance Agency (OHFA), and the Cities of Memphis and Columbus are presently engaged in precisely this kind of partnership. Our partnership entails the following:

Technology Innovation

Via a novel public/private partnership framework, together we are building a data/knowledge repository spanning the cities of Memphis and Columbus that provides the depth and breadth of Census Block Group (neighborhood) and Property (home) data, analytics, and predictive models necessary to efficiently ascertain what kinds of affordable homeownership development projects to build/rehabilitate and where to build/rehabilitate them.

We do this by first using CoreLogic's best-in-class data manufacturing capabilities to aggregate and append CoreLogic single family and multifamily residential data sets with other applicable data sets owned by local government agencies and other private stakeholders. Together this data set covers the gamut of data one would seek when evaluating the feasibility of an affordable homeownership development proposal, including Census Block Group attributes and predictive trends spanning critical issues such as employment, home price appreciation and stability, proximity to schools, job centers and other locations characteristic of a vibrant community. We also aggregate property-level information that not only describes the "current state" of the property, but also the "future state" of the property including the style and attributes of the home the home builder seeks to develop/rehabilitate. Using this data, the home builder can answer a number of traditionally thorny, elusive questions necessary to satisfy the objectives of disparate stakeholders with differing or even competing objectives, including (but not limited to):

- 1. Is the neighborhood a good candidate for investment (will investment catalyze economic growth)?
- 2. Will an affordable homeownership development project stimulate economic growth (but not too much economic growth i.e., gentrification)?
- 3. What is the maximum price point for affordable homeownership demand in the neighborhood?
- 4. Will the prospective LMI homeowner qualify for mortgage financing?
- 5. Will the project be eligible for federal, state, or local subsidies?
- 6. Will the project generate the target rate of return required by the investor?
- 7. Are the housing designs consistent with the integrity of the neighborhood and conform to the local zoning and building codes?

By answering these questions, the home builder can assemble evidence-based housing designs and analyses, which ultimately underpin an affordable homeownership development proposal that is responsive to a broad set of stakeholder concerns.

Collaborative Housing Design Workshops

Through the convening power of local city/county governments, we have observed first-hand the power and potential of facilitated workshops whereby the goal is to secure early buy-in from affordable homeownership stakeholders. This includes identifying key participants, providing empirical analyses for the project, and permitting extensive communication and collaboration. Such workshop forums can identify and elevate reasonable project objections, which too often can be hurdles to obtaining timely city/county approval. A successfully executed workshop is expected to shorten the time from initial project ideation through project feasibility assessment and planning, and ultimately to city/county approval and "shovel in dirt." When project cycle time decreases, particularly in these early process stages, home builders have greater capacity to develop more affordable homes annually, enabling homeownership for LMI families.

Perhaps most notably, a key feature of this facilitated workshop approach is that it does not require the city/county to make any changes to their existing processes whatsoever. A key critical success factor is to conduct these facilitated workshops upfront, prior to the home builder assembling and submitting their affordable homeownership proposals to the city/county for permitting and approval. In fact, if executed properly, the workshops should reduce burden and cost on the city/county as there should be fewer objections raised by external stakeholders during the permitting and approval process.

Via our partnership, we have designed a Collaborative Housing Design Project Plan, or facilitated workshop methodology that is composed of four (4) work tracks:

- 1) Secure commitments from and initiate collaboration with key city/county departments;
- 2) Secure commitments from construction investors and mortgage lenders;
- 3) Adapt local data knowledgebase, housing development/decision support platform, and prepare pilot local land developer affordable homeownership analyses/designs; and
- 4) Collaboration workshop execution and evidence gathering.

The activities outlined in each track are representative of items identified as critical to the successful execution of a collaborative workshop amongst stakeholders, though are expected to be adapted to each city/county that adopts the methodology.

Collaborative Housing Design Project Plan Framework:

Via our workshop pilots in Memphis and Columbus, we have designed a strategic "playbook" of collaboration that we believe is replicable in virtually any city/county in the U.S. The following is a high-level description of the four tracks that compose a framework that FHFA and/or the GSEs might consider participating in or consider using its unique strengths to sponsor.

Track 1 – Secure Commitments from and Initiate Collaboration with Key City/County Departments

While every city/county is organized in a different manner, the following city departments (including specific offices within those departments) are examples of critical stakeholders to the objective of efficiently answering thorny questions of affordable homeownership development project plans prior to their submission to the applicable city/county for permitting and overall project approval. Engagement with the following types of departments, via the facilitated workshops, and answering questions before they are asked can eliminate reasonable project objections upfront across multiple stakeholders, potentially resulting in more expeditious city/county approval processes, thereby markedly reducing project cycle time.

- 1) Department of Zoning, Land Use and Building Codes (Local Regulations)
- 2) Municipality (City or County) Council Representation (Project Approval Body)
- 3) Department of Engineering (Enforcement Body)
- 4) Department of Public Works (Infrastructure Investment and Enforcement Body)
- 5) City/County "Open Data" Initiatives (Data/Knowledge Enabler)
- 6) Local Law Enforcement (Development Site Security)
- 7) Land Bank (Contributor of Available Properties and Novel Project Structures (i.e., Land Trusts)
- 8) Utilities (Infrastructure Availability)

Track 2: Secure Commitments from Construction Investors and Mortgage Lenders

A critical success factor for a workshop partnership will be to ensure that investors in single family construction projects participate in the process. These investors should be well capitalized, reputable, and demonstrate strong interest in financing home builders' affordable homeownership development proposals. Candidate investors include:

- 1) Commercial Bank Community Lending Divisions
- 2) Bank and Non-Bank Mortgage Lenders
- 3) Community Development Financial Institutions (CDFIs)
- 4) Social Impact/ESG Investors

<u>Track 3: Adapt Local Data Knowledgebase, Housing Development/Decision Support Platform, and Prepare Pilot Local Home</u> <u>Builder Affordable Homeownership Analyses/Designs</u>

As with the construction investors, it is critical that the home builders who participate in a workshop have proven track records of finishing the projects they start. Moreover, partnerships should emphasize Community Development Corporations (CDCs) who have limited resources for technology and data and would benefit greatly from the resources made available through the partnership.

Adapt Local Data Knowledgebase via Public/Private Partnership Model

A critical success factor is to consolidate relevant data sets into a single, cloud-based, data repository to support the partnership. These data sets include, but are not limited to:

- 1) *Neighborhood Analytics:* Demographic information and Predictive Analytics for Census Block Groups (Neighborhoods) and Census Tracts.
- 2) *Property-Level Data:* Including land, structure, and unit data attributes, most notably including geospatial location as well as indicators of when a property is for sale, vacant and abandoned, land bank-owned, or pre-or-post-sale REO.
- 3) *MLS Data*: Which provide critical listing data and market comparable properties for model analysis.
- 4) *Construction Cost Data:* Should be industry-standard, such as CoreLogic Marshall & Swift/Beck (MSB), data and related technologies to accurately cost hard construction costs as well as soft construction costs.

In addition, the platform should be structured as a public/private partnership that includes the ability to append and secure external data sets, such as those that are available from a city/county open data initiative, as well as other stakeholder data sets that are not presently publicly available. While seeking to work with "open source" data sets has its benefits, too often these data sets are incomplete and fail to provide the underlying knowledge needed to form comprehensive, persuasive analyses across stakeholders. Rather, we suggest that a private/public partnership model is the superior paradigm that will achieve the objective of assembling a comprehensive local neighborhood and property-level data set, which can be used by stakeholders to answer thorny questions that too often serve as barriers to timely affordable homeownership project approval. In this paradigm, a commercial entity provides the cloud-based data infrastructure to assemble and append comprehensive, though disparate data sets, across private and public sources, secure those data sets so that only their owners can control who has access to those data sets, and make those data sets available through state-of-the-art business intelligence and visualization tools, such as geospatial (mapping) visualization, machine learning models, and software application workflows. Such a paradigm combines the benefits of a commercial enterprise with the benefits of open source data to achieve a level of depth and breadth in local data/knowledge not yet achieved at the city/county level.

Adaptation of Housing Development/Decision Support Platform

In this stage, home builders complete affordable homeownership development proposals through a decision-support platform leveraging the aggregated data sets. Home builders will ultimately present their completed analyses at the workshop with the goal of obtaining commitments from the construction investors to finance their project and from the mortgage lenders to provide affordable, yet responsibly underwritten mortgage loans to the prospective LMI homeowner, as well as efficiently resolve thorny questions from all applicable stakeholders.

The features and functions of this platform will include:

- 1) Workflows: Software application functions that step the local home builders through the processes of:
 - a) Selecting "tipping point" neighborhoods that are good candidates for affordable homeownership investment.
 - b) Selecting specific parcels within the chosen neighborhood.

- c) Reviewing microeconomic indicators of housing demand and affordable price points for homeownership in the selected neighborhood.
- d) Reviewing and selecting market comparable properties that serve as the benchmark for designing new singlefamily entry-level housing.
- e) Configuring housing designs for their properties, including home styles, number of bedrooms, number of full bathrooms, total living area square footage, and numerous other features, measurements, and construction materials that can either drive down construction costs or differentiate the housing design to make it more marketable to LMI homeowners.
- f) Running a financial pro forma that will better ensure that the forecasted sales price of the constructed units, when compared to the project's hard and soft construction costs, results in a rate of return that is amenable to the construction investor and other stakeholders.



- 2) Machine Learning Models: Artificial intelligence algorithms that seek to accelerate home builder efforts by first offering an optional prediction of which Census Block Groups probabilistically represent the "best fit" from a neighborhood selection, parcel availability, market demand and affordability, and investor rate of return perspective. Builders can choose to use this model to guide their efforts in searching for specific parcels to build on as well as determining what types and styles of homes to build. However, the builder can also ignore/override the model and complete the above referenced workflows from scratch using their own discretion.
 - a) Importantly, the platform has been designed to be "modular" in the sense that the builder can use part or all of the platform as they desire. The only caveat being that the depth, breadth, and accuracy of the local data sets assembled in the knowledge repository will be critical for engendering trust in the integrity and accuracy of the analyses produced as part of the home builder's proposals.



Track 4: Collaboration Workshop Execution and Evidence Gathering

Execute Collaboration Workshops

As noted, the objective of the collaboration workshops is to gather any concerns with the home builder's proposal upfront, prior to submission to the city/county for permitting or approval. Objections will hopefully be minimized as the analyses underlying the proposals will have been carefully crafted from the Housing Development Platform and Local Data/Knowledge Repository and inherently designed to optimize the housing designs to satisfy the concerns of each of the stakeholders attending the workshop. The transparency afforded by the data and technology platform will contribute to greater confidence in the analyses presented by the home builders and should result in significantly increased communication, collaboration, and trust. As a result, a key goal of the workshop is to swiftly resolve questions posed by stakeholders with respect to the home builder's proposals. Swift resolution from such a comprehensive set of stakeholders, in our experience, will make the process of obtaining any applicable city/county permits and project approvals much more expeditious and without requiring the city/county to change their permitting and approval processes one iota.

Gather and Analyze Empirical Evidence

If successful, this approach could result in numerous benefits including:

- 1. *Generate Efficiencies:* A drastic reduction in cycle time for home builders from initial concept ideation to obtaining all required development project permits and approvals. We think we can shorten the overall timeline from nine months or more (in some cases, much more) to three months or less.
- 2. *Engender Trust:* An acceleration of cycle time, demonstrated through a repeatable process, should have the effect of engendering confidence amongst the most crucial of stakeholders, in particular the construction investors who are the lifeblood of new projects and the city/county departments who want to know that there is broad agreement that what is being proposed is in the best interests of the community.
- 3. Increase Builder Capacity: Once trust is established, we expect this will initiate a virtuous cycle of new partnerships, whereby home builders find it is easier to obtain construction financing from more sources and for more units, while continuing to benefit from drastic reductions in the cycle time required to start new projects. While it remains to be seen how much this dynamic will free up local home builder capacity to start more projects annually than they would

have otherwise, we will want to track this metric as it is fundamental to demonstrating how our partnership approach scales the opportunity for affordable homeownership development, resulting in more units produced each year.

4. *Lower Project Costs:* The more rich and accurate the Local Data/Knowledge Repository and analyses produced through the Public/Private Housing Development Platform, the lower the likelihood that the builder will experience an unwanted and unpleasant challenge downstream when they initiate and complete the construction process, post-approval. This will have the result of reducing project costs, but equally as important, making it more likely that the original pro forma financial analysis for the project matches the end results, further engendering confidence in all stakeholders and contributing to a virtuous cycle of housing development.

Nationwide Implementation to Address Local Challenges

We recommend that FHFA and the GSEs consider what role they can play in helping small, non-profit, and mission driven home builders close the housing supply gap. While every community will not face the same challenges, every community could benefit from a single framework through which to navigate and overcome the barriers that are often present across the country. The financial resources, strong brand name recognition, and deep industry connectivity put the GSEs in a uniquely ideal position to bring community stakeholders together to work in concert to address the barriers that lengthen project timelines and help home builders build more homes more often. The GSEs can pilot data-driven convenings, like the one outlined above, in select metro areas across the country to create a replicable and scalable framework that can be exported to communities looking to increase their supply of housing stock.

The questions, solutions, and pain points discovered and addressed through Collaborative Housing Design Workshops may be of interest to FHFA and the GSEs as you focus your efforts to address the affordable homeownership gap. Streamlining the affordable homeownership project pipeline may also reveal the best policy levers available for FHFA and the GSEs to pull to accelerate home building. We are ready and capable to work with FHFA and the GSEs (including via our other existing partnerships, including the MBA and State Housing Finance Agencies) to help facilitate the convening of repeatable, data verifiable processes through local stakeholder convenings to reduce cycle times and close a supply gap which cannot rely on status quo solutions.

In addition, and not mutually exclusive to this potential role, FHFA and the GSEs may wish to partner with CoreLogic on the development, roll-out, and national scaling of the Local Data/Knowledge Repository and the Housing Development/Decision Support Platform. We believe such a platform also has tremendous utility for a variety of federal, state, and local agency departments charged with addressing the affordable housing and homeownership crisis facing our nation. Such a platform could be used to facilitate many manner of public policymaking, including targeting the allocation and amounts of federal subsidies, evaluation of local zoning and land use policies, and even as an adjunct for urban planning initiatives that include the need to consider where and what type of affordable housing to build at the local level.

Homebuyer Competition - Back by Popular Demand

The addition of new housing supply will go a long way toward increasing homeownership in LMI and majority-minority communities. However, in order to make meaningful strides toward our goal of an equitable homeownership system, we cannot ignore the other side of the equation: demand.

Demand for both new and existing homes has steadily rebounded since our nation emerged from the Great Recession more than a decade ago, as evidenced in recent home sales demand data from HUD²⁵:



In the years since, the housing market has been affected by a number of factors: quantitative easing policies providing for persistently low interest rates²⁶; increased investor demand²⁷ for high-income rental and multifamily housing; and the (potentially long-lasting) societal effects²⁸ of the COVID-19 pandemic. These demand-related tailwinds all contribute to the current housing affordability crisis, and we must understand the impacts of each before we can begin to craft policy solutions that target the most vulnerable and those most in need.

Federal Oversight & Governmental Actions

In late 2008, central banks around the world - including the Federal Reserve System in the United States - began instituting quantitative easing policies to help their economies withstand the shocks reverberating throughout the global financial system as a result of the Great Recession. In the United States, these policies have resulted in persistently low interest rates²⁹, designed to fuel home purchase demand following the widespread housing market collapse. And, in that specific regard, they appear to have worked - CoreLogic Home Price Index data has consistently shown an increased demand for both single-family and multifamily homes across the country over the past decade, reflected in U.S. annual home price gains that continue to increase by double digit percentages year-over-year:



Source: CoreLogic HPI August 2021³⁰

Unfortunately, while these policies have been successful in increasing demand, our housing system has not responded with the right mix of new homeownership opportunities to effectively match the increase. Due to several incentives that were discussed in the previous section on supply-side challenges, home builders and investors have few incentives to focus on single family, entry-level homeownership stock. This lack of focus toward the LMI community has led to a shrinking of stock of affordable housing inventory, further putting the dream of homeownership out of reach for millions of Americans, while also likely exacerbating the inequalities between low- and high-income homeowners. In a recent New Housing Production Report from HUD³¹, the authors cite a recent research brief³² from the Urban Institute when noting that "continued supply constraints will result in low-price home and rental prices continuing to increase faster than prices for high-price homes, widening residual income inequality between low- and high-income households and hurting the ability of low-income households to build financial resources to protect them from future economic shocks."

Market Participants & Economic Trends

This increase in home prices has fueled an increase in demand³³ amongst investors, many of whom are looking to convert single-family homes into single-family rental properties. This, in turn, further reduces the inventory of homes available for sale to prospective LMI homeowners and further exacerbates inequity in homeownership.

Many cities across the US have seen cash investors continuously outbid mortgage-financed homeowners, a problem that the Biden Administration noted in its recent statement on steps to increase affordable housing supply:

"As supply constraints have intensified, large investors have stepped up their real estate purchases, including of singlefamily homes in urban and suburban areas. One out of every six homes purchased in the second quarter of 2021 was acquired by investors, and reports indicate that in some markets, that number is one in four. Within investor purchases, typically more than 35 percent of purchases are made by investors that own more than ten properties. Large investor purchases of single-family homes and conversion into rental properties speeds the transition of neighborhoods from homeownership to rental and drives up home prices for lower cost homes, making it harder for aspiring first-time and firstgeneration home buyers, among others, to buy a home. At the same, these purchases are unlikely to meaningfully boost supply in the lower-cost portions of the rental market, as investors charge more for rent to recoup higher purchase costs. President Biden is committed to using every tool available in government to produce more affordable housing supply as quickly as possible, and to make supply available to families in need of affordable, quality housing – rather than to large investors."³⁴ In its statement, the Administration further identifies actions needed to address supply problems exacerbated by this market dynamic:

"Make more single-family homes available to individuals, families, and non-profit organizations – rather than large investors – by prioritizing homeownership and limiting the sale to large investors of certain FHA-insured and HUD-owned properties, in addition to expanding and creating exclusivity periods in which only governmental entities, owner occupants, and qualified non-profit organizations are able to bid on certain FHA-insured and government-owned properties."³⁵

In order to implement this plan of action, the Administration will benefit by making available to state and local government agencies, non-profit organizations, and individuals the appropriate data, analytics, and modeling tools to effectively identify the specific neighborhoods and properties that serve as the best candidates for building or rehabilitating new entry-level single family housing stock for homeownership opportunity.

Affordable Mortgage Lending (Demand) Challenges at the Local-Level:

As noted previously, CoreLogic continues to engage in creative Public/Private Partnership initiatives in the cities of Memphis, TN and Columbus, OH via partnerships with the MBA, the State Housing Finance Agencies (HFAs) of TN and OH, the Cities of Memphis and Columbus, and other key stakeholders. The primary goal of these partnerships is to pilot solutions that address the chronic under-supply of single-family, entry-level homeownership opportunity for prospective LMI homeowners. Our partnerships consist of a grassroots coalition spanning non-profit Community Development Corporations (CDCs), smaller for-profit home builders, realtors, mortgage lenders, the Memphis and Columbus Land Banks, title companies, and notably, Fannie Mae.

While our team efforts have focused on barriers to home builders adding affordable homeownership units in Memphis and Columbus, as we have previously noted, it is impossible to separate out "supply-side" challenges from "demand-side" challenges. At least with respect to our Partnership initiatives, one of the major barriers to advancing the new supply of affordable homeownership units is a lack of confidence amongst construction investors. Among the issues affecting the confidence of construction investors is the question of whether there will be adequate mortgage credit availability for the prospective LMI homeowners who wish to occupy those units. These decidedly "demand-side" issues include, but are not limited to, the following barriers:

- 1. Appraisal Gaps As noted previously, one of the challenges of adding single family, entry-level, affordable homeownership units for prospective LMI homeowners is making the case (to multiple stakeholders) that an investment in housing will effectively serve as a catalyst for economic growth in the home builder's target neighborhood. Too often, however, home builders who focus on investing their resources in LMI neighborhoods must address the challenge that the neighborhood they have targeted for affordable homeownership development does not have market comparable properties to use as the basis for the prospective LMI homeowner's mortgage appraisal. As a consequence, the appraised value of new or rehabilitated affordable homeownerships unit will be chronically lower than the market listing price of other homes in the neighborhood, which tend to be older, not in as good a condition, or use older technology materials that are less durable and energy efficient as the new/rehabilitated property targeted for development. We believe this to be a "threshold" issue for increasing affordable homeownership for LMI people: Novel appraisal gap subsidy programs can cover the difference between the appraised value and market listing price in neighborhoods that do not possess adequate market comparable properties. Such a subsidy ought to be accretive, functioning as the "catalyst" establishing an initial set of market comparable properties that will serve as a baseline set of market comparable properties for subsequent affordable homeownership projects in that (and potentially adjacent) neighborhood. In other words, with the help of a carefully targeted appraisal subsidy program, the appraisal gap problem should significantly attenuate with each subsequent affordable homeownership development until it is virtually eliminated. Part and parcel with such an initiative is also ensuring that appraisers are trained to ensure they are not consciously or unconsciously engaging in bias when valuing homes due to the racial or ethnic composition of those neighborhoods, which should be addressed with continuous training and monitoring of appraisal activities.
- 2. Down Payment Assistance There are thousands of down payment assistance programs that can assist prospective LMI homeowners with coming up with a down payment for their homes. However, this requires prospective LMI homeowners and lenders to have easy access to tools that match these homeowners to available programs in order to

make sure the homeowner is eligible. It also involves knowing which prospective LMI homeowner populations are most likely to be in need of down payment assistance and where they are located so that down payment assistance programs can be targeted and allocated accordingly.

3. *Rehabilitation Loan Programs* – FHA and the GSEs each offer loan programs to prospective LMI homeowners that permit the homeowner to take out a mortgage to rehabilitate a home that they subsequently occupy. However, these programs are in need of varying amounts of retooling so that they can be more adaptive to the local neighborhoods they are serving.

Using Technology to Analyze Effectively

The creation and scale distribution of novel, affordable, yet responsibly underwritten, mortgage lending products is critical to alleviating the demand side of the housing equation. Such a task begins with analyzing where the prospective LMI homeowners, particularly those living in majority-minority census tracts, reside.

Modern data, analytics, predictive modeling, and spatial analysis and visualization capabilities provide us the enabling tools to:

- 1. As we discussed previously, ascertain what types of new or rehabilitated single family, entry-level housing to develop and where to develop it (supply side insights).
- 2. Ascertain which census tracts or census block groups prospective LMI homeowners are likely to reside in.
- 3. Ideally, provide an overlay of these intersecting supply and demand insights so that federal, state, and local policymakers, as well as relevant stakeholders, can optimize their ability to service prospective LMI homeowners across both dimensions.

The first step is to ensure that we are working with the most recent and most complete data sets available.

The Targeting Capabilities of Enhanced Data Overlays

Private-sector mapping capabilities have evolved to the point where it is possible to identify neighborhoods, properties and individuals that are the best candidates for investment in affordable mortgage lending programs by combining various data sets, representing them spatially, and then overlaying those spatial analyses one on top of another to provide a comprehensive view of the current housing landscape in a particular geographic area. Such analyses may guide decisions with respect to prioritization of where to deploy scarce subsidies or where to target novel affordable homeownership programs.

Combining econometric location intelligence with predictive analytics allow us to make assessments all the way down to the census tract or even census block group level. These analyses include spatial overlays of projected credit scores, LMI populations, minority populations, and a variety of factors that contribute to upward economic mobility such as crime rates, public school performance, unemployment rates, and more.

By overlaying projected credit scores with demographic and socioeconomic data, we can identify communities that may need the most assistance – such as financial education or increased access to subsidies – in helping individuals qualify for mortgage loans (or be accepted for rental properties). We can also use this analysis to identify the other end of the spectrum: communities that may already be in better financial shape, and where additional investment would lead to immediate increases in the number of individuals who have access to safe, affordable homeownership opportunity.

Additional boundary layers allow us to delve even further into issues at the intersection of race and equity. These tools have the capability to capture formerly redlined areas that would benefit most from additional investments/subsidies. This analysis can also capture a property's proximity to key infrastructure within that same Census Tract or Census Block Group, such as local schools and accessible, well-paid employment opportunities.

These spatial analyses can also help us identify areas with a lower and higher forecasted appraisal gap, where the Multiple Listing Service (MLS) list price is materially higher or lower than automated valuation model (AVM) assessments. By identifying lower forecasted appraisal gap areas, these tools further help identify which LMI and Minority Census Tracts have prospective homeowners that are likely to encounter less friction when applying for mortgage financing for their home purchase. On the

other hand, by identifying higher forecasted appraisal gap areas, these tools help identify which LMI and Minority Census Tracts have prospective homeowners that are more likely to encounter friction when applying for mortgage financing, providing FHFA, the GSEs, and their counterparties with insights as to where to direct efforts/resources to address these appraisal gaps.

Finally, our current capabilities allow us to identify concentrations of vacant and abandoned land or properties that are candidates for rehabilitation at the Census Tract or Census Block Group level. This type of parcel identification tool can be incredibly useful for municipalities in expanding the supply of affordable homeownership opportunity in areas where the demand is highest, as we discussed in detail in the Collaborative Housing Design Workshops section earlier in this response.



Overlap of Projected Credit Score Average and LMI Neighborhoods



Upward Economic Mobility can be defined as the likelihood that persons raised in the bottom 20% of income will rise to the top 20% of income in one generation. Census tracts or block groups that score higher are places where LMI people growing up have a much better likelihood of breaking out of poverty. From a review of the literature, the three most powerful conditions to predict upward economic mobility are: low crime, good performing public schools, and low rates of unemployment. We used CoreLogic crime data, alongside patented CoreLogic school performance data, and data on unemployment by location to create the following assessments of Upward Economic Mobility.

Low-to-Moderate Income Census Blocks





This upward economic mobility analysis can further be combined with the aforementioned overlays to produce spatial analyses that allow us to identify individual geographic areas that contain affordable housing opportunities, high populations of LMI consumers, and high populations of minority consumers, as exemplified below.

Overlap of Affordable Housing and Upward Economic Mobility







Overlap of >50% African American and Upward Economic Mobility



The Predictive Insights of Propensity Models

Propensity models provide predictions of the likelihood that a homeowner will take certain actions regarding their home, allowing us to identify consumers who are most likely to purchase a new home, refinance their current home, list their home for sale, or list their home for rent, to provide a few examples. This property-level insight can be used by the GSEs to improve their targeting capabilities and take strides toward achieving their affordable housing goals.

Propensity models can further be combined with the data overlays mentioned above, to produce spatial analyses that allow us to identify individual geographic areas that contain high populations of LMI consumers and/or minority consumers that are most likely to take action regarding their current housing situation, as exemplified below.



Propensity to Purchase Models



Taking the predictive analyses even further, we can combine our Upward Economic Mobility assessments with the propensity models to identify the census block groups that rank high on the mobility scale and exhibit a high propensity to purchase, sell, or refinance. This type of insight would allow FHFA to target subsidies and programs much more effectively, sending assistance where it is both most needed and most impactful.



Overlap in Upward Economic Mobility and Propensity to Buy (both are in 3rd and 4th guartile)



The final step is to combine all of the capabilities we have outlined above – basic demographics, financial information, economic mobility assessments, and propensity models – and overlay the supply-side analyses with the demand-side analyses via predictive modeling.

This type of insight could fuel the creation of a machine-learning model, spanning the entire U.S., that can probabilistically rankorder the Metropolitan Statistical Areas (MSAs) that have the highest probability of both adding new accessible and attainable single family entry-level housing stock, while also containing large populations of prospective LMI, minority homeowners who meet the upward economic mobility rankings and propensity models. These exact same analytics could then be used to drill down from the MSA level to the Census Track and then Census Block Group levels with precisely the same probabilistic analytics. This analysis could provide the heart of a solution that can help easily dissect and diagnose the intersecting supply and demand challenges we face today.

The Path Forward for FHFA

We applaud FHFA and the GSEs for recognizing the pivotal roles they can play to address equity in homeownership in the U.S. In this RFI response, we have provided an in-depth review of the specific barriers that our experiences suggest are having the greatest effect with respect to perpetuating a crisis in affordable homeownership. We have also outlined in detail two solution pathways that we believe can be scaled to help solve the affordable homeownership crisis and increase equity in our homeownership system.

First, by working on a city-by-city and county-by-county basis (where applicable) to build out a Local Data/Knowledge Repository and Housing Development/Decision Support Platform, such as the one CoreLogic has recently debuted. Such capabilities can be broadly used by federal, state, and local agencies and other affordable homeownership stakeholders to answer some of the

thorniest economic, market, business, and policy questions that, if answered well, can help solve our affordable homeownership crisis.

Second (and not mutually exclusive), we believe the time and resources of FHFA and the GSEs can be brought to bear to help convene public/private partnership initiatives as one means to develop, scale, and syndicate these technology capabilities to all applicable stakeholders (including FHFA and the GSEs as primary consumers of such tools). In our response, we outlined one grass-roots solution that CoreLogic has partnered on: multi-stakeholder, collaborative housing design workshops executed at the city- or county- level. However, there are many business and policy approaches that can leverage such technology capabilities and offer solutions to our affordable homeownership crisis. Innovative technologies provide us with the ability to help solve nationwide issues at an individual household level, but it will require substantial data & analytical work. FHFA has the workforce, budgets, and regulatory authority (perhaps in concert with HUD and other federal, state, and local agencies) to undertake such a project, as well as work with the GSEs to ensure they are actively engaging on these matters via their annual equity plans. The GSEs have the brand reputation, industry relationships, financial capacity, and data assets to lead or significantly contribute to such an effort.

The GSEs have a direct interest in solving the issues outlined in our response, specifically on the demand-side. Engagement by the GSEs on either of these two solution pathways aligns with their charters that include a broad duty to serve the mortgage market and provide affordable housing goals that seek to increase the availability of affordable, responsibly underwritten mortgage loans for Very Low, Low, and Moderate-Income borrowers. Due to the intersecting nature of these supply and demand issues the GSEs should engage, to the maximum extent practicable, to make sure that we as an industry are addressing supply and demand issues simultaneously. The only way to break this logjam and achieve equity in homeownership, is to bring scale economies to affordable homeownership supply and demand in LMI and minority neighborhoods.

CoreLogic welcomes the opportunity to engage further with FHFA and the GSEs on how these solutions can be achieved.

https://www.fhfa.gov/SupervisionRegulation/Rules/Pages/2022-2024-Enterprise-Housing-Goals-Proposed-Rule.aspx

series/econ/mhs/shipments.html

⁶ New Privately-Owned Housing Units Started: Total Units. FRED. https://fred.stlouisfed.org/graph/?g=HtoL

⁷ The Major Challenge of Inadequate U.S. Housing Supply. Freddie Mac.

http://www.freddiemac.com/research/insight/20181205_major_challenge_to_u.s._housing_supply.page ⁸ Ibid

⁹ Once-In-A-Generation Response Needed to Address Housing Supply Crisis. NAR.

https://cdn.nar.realtor/sites/default/files/documents/Housing-is-Critical-Infrastructure-Social-and-Economic-Benefits-of-Building-More-Housing-6-15-2021.pdf

10 Ibid

¹¹ Ibid

¹² CoreLogic analysis (rough order of magnitude) adapted from Freddie Mac research and Harvard Joint Center for Housing Studies, Estimating the Gap in Affordable and Available Rental Units for Families, April 2019, Whitney Airgood-Obrycki & Jennifer Molinsky (Using 2017 Census Bureau American Community Survey (ACS) data)

¹³ Ibid

14 Ibid

¹⁵ INCREASING LAND PRICES MAKE HOUSING LESS AFFORDABLE. JCHS. https://www.jchs.harvard.edu/blog/increasing-land-prices-make-housing-less-affordable

¹⁶ Lumber demand looks to strengthen as price volatility gives way to a 'new normal.' Market Watch.

https://www.marketwatch.com/story/lumber-demand-looks-to-strengthen-as-price-volatility-gives-way-to-a-new-normal-11632417290

¹⁷ Construction: NAICS 23. BLS. https://www.bls.gov/iag/tgs/iag23.htm#workplace_trends

¹⁸ Labor Shortages Remain Top Concern for Builders. NAHB. https://nahbnow.com/2020/02/labor-shortages-remain-top-concern-for-builders/

¹⁹ U.S. Barriers to Apartment Construction. National Apartment Association.

https://www.naahq.org/sites/default/files/naa-documents/naa_has_barriers_to_apartment_construction_index_11-may-19_4.pdf

²⁰ An Economic Fair Housing Act. TCF. https://tcf.org/content/report/economic-fair-housing-act/?session=1

²¹ HPI National Change. CoreLogic. https://www.corelogic.com/intelligence/u-s-home-price-insights/

²² Is There a Housing Bubble? Vox. https://www.vox.com/22464801/housing-bubble-market-crash-supply-shortage-great-recession

²³ Fiscal Year 2021 Budget in Brief. HUD. https://www.hud.gov/sites/dfiles/CFO/documents/BudgetinBrief_2020-02_06_Online.pdf

²⁴ Neighborhood Homes Investment Act. Congress.gov. https://www.congress.gov/bill/117th-congress/senate-bill/98?q=%7B%22search%22%3A%5B%22s98%22%2C%22s98%22%5D%7D&r=1&s=1

²⁵ Demand Data – Home Sales, U.S. Housing Market Conditions, National Housing Market Summary and Data. United States Department of Housing and Urban Development. https://www.huduser.gov/portal/ushmc/hd_home_sales.html
²⁶ Ultra-Low Interest Rates are Here to Stay: 2021 Central Bank Guide. Bloomberg News. January 05, 2021.

https://www.bloomberg.com/news/articles/2021-01-05/ultra-low-interest-rates-here-to-stay-2021-central-bank-guide

²⁷ Four Ways Multifamily Investing Is Lucrative, Even During A Pandemic. Forbes. December 3, 2020. https://www.forbes.com/sites/forbesbusinesscouncil/2020/12/03/four-ways-multifamily-investing-is-lucrative-evenduring-a-pandemic/?sh=463bcbf27ec0

²⁸ Pandemic population change across metro America: Accelerated migration, less immigration, fewer births and more deaths. Brookings Institute. May 20, 2021. https://www.brookings.edu/research/pandemic-population-change-across-metro-america-accelerated-migration-less-immigration-fewer-births-and-more-deaths/

¹ 2020 CoreLogic analysis

² Ibid

³ 2022-2024 Enterprise Housing Goals Proposed Rule. Federal Housing Finance Agency.

⁴ New Residential Construction. U.S. Census. https://www.census.gov/construction/nrc/historical_data/index.html

⁵ Shipments of New Manufactured Homes. U.S. Census. https://www.census.gov/data/tables/time-

²⁹ The Great Recession and Its Aftermath. Federal Reserve History.

https://www.federalreservehistory.org/essays/great-recession-and-its-aftermath

³⁰ U.S. Home Price Insights. CoreLogic. October 5, 2021. https://www.corelogic.com/intelligence/u-s-home-price-insights/

³¹ New Housing in High-Productivity Metropolitan Areas: Encouraging Production. United States Department of Housing and Urban Development. June 2021. https://www.huduser.gov/portal/sites/default/files/pdf/New-Housing-Production-Report.pdf

³² Why the Most Affordable Homes Increased the Most in Price between 2000 and 2019. Urban Institute. May 12, 2020. https://www.urban.org/research/publication/why-most-affordable-homes-increased-most-price-between-2000-and-2019

³³ Why Investors Are Flocking to SFR. Renters Warehouse. March 27, 2020.

https://www.renterswarehouse.com/education/why-investors-are-flocking-to-sfr

³⁴ Fact Sheet: Biden-Harris Administration Announces Immediate Steps to Increase Affordable Housing Supply. The White House. September 1, 2021. https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/01/fact-sheet-biden-harris-administration-announces-immediate-steps-to-increase-affordable-housing-supply/

³⁵ Fact Sheet: Biden-Harris Administration Announces Immediate Steps to Increase Affordable Housing Supply. The White House. September 1, 2021. https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/01/fact-sheet-biden-harris-administration-announces-immediate-steps-to-increase-affordable-housing-supply/