Housing  
Underproduction™  
in the U.S. 2022

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Terwilliger Center  
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Mike Kingsella  
Mike Kingsella is the chief executive officer  
of Up for Growth. He has a Bachelor of  
Science in Community Development and Real  
Estate Development from the Toulan School  
of Urban Studies and Planning at Portland  
State University in Portland, Oregon, and has  
worked in housing since 2003.  
Leah MacArthur  
Leah MacArthur is the chief operating officer  
of Up for Growth. Leah has more than a  
decade of experience in affordable housing  
development. She holds an MPA in Public  
Management from the O’Neill School of  
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The Editors  
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Executive Summary  
Drivers and Trends  
in Underproduction  
While most locations experiencing  
underproduction in 2012 are still experiencing  
it, the drivers of the shortage are often unique  
to the location. For example, in Detroit,  
underproduction is driven by uninhabitable  
units, while in Sacramento, a lack of housing  
is driving the shortage. In Washington DC,  
underproduction is fueled by a lack of household  
formation.  
Between the years 2012 and 2019,  
we observed the following trends:  
America is experiencing a housing crisis. As people migrate in  
search of jobs, education, and economic opportunities, the demand  
for housing in our most economically productive regions far  
exceeds the production of new homes. With 3.8 million homes  
short of meeting housing needs, double the number from 2012, the  
nation is in an extreme state of Housing Underproduction™.  
Four years ago, the nation’s housing affordability problem  
appeared to be concentrated along the coasts and in the  
Southwest. As this report shows, the crisis has deepened and  
is more widespread, affecting urban, suburban, and rural areas  
and profoundly impacting residents in nearly every state. Forty-  
seven states and Washington, DC saw the underproduction of  
homes rise, and six states that did not have underproduction in  
2012 now do. The extent of underproduction varies from state  
to state: California has the largest deficit of homes at 980,000,  
while Mississippi is only short 1,000. Only Vermont saw an  
improvement. From 2012 to 2019, the housing deficit became more  
severe in 230 metropolitan areas, and only 25 regions saw their  
housing deficit shrink.  
experienced increased  
underproduction from  
2012 to 2019  
National Housing Underproduction  
3.79 million units  
1.65 million units  
Metro Areas  
Experiencing  
Underproduction  
169  
100  
230metro areas  
2019  
2012  
2019  
2012  
Adequately  
Produced in 2012  
and Now Have  
Underproduction  
Adequately  
Produced in 2012  
and Now  
Trending Toward  
Underproduction  
Underproduced  
in 2012 and Are  
in the Process of  
Recovering  
Underproduced  
in 2012 and Has  
Worsened  
Underproduced  
in 2012 and Have  
Reached  
Adequate  
Housing  
Production  
0  
25  
50  
75  
100  
2017 2019  
Number of Metropolitan Areas  
72 markets that had  
underproduction in 2012 have  
worsened (23.3% of total)  
83 markets that adequately  
produced in 2012 now have  
underproduction (26.9%)  
75 markets that adequately  
produced in 2012 are now trending  
toward underproduction (24.3%)  
11 markets that had  
underproduction in 2012 have  
reached adequate housing  
production (3.6%)  
14 markets that had  
underproduction in 2012 are in the  
process of recovering (4.5%)  
54 markets that adequately  
produced in 2012 have continued  
to meet or exceed housing needs  
through 2019 (17.5%)  
Trends in Underproduction  
4Housing Underproduction™ in the U.S. 2022 //Executive Summary

In October 2021, nearly one-half (49%)  
of Americans said the availability and  
affordability of housing was a significant  
problem in their local community, up 10  
percentage points from 2018 (Schaeffer,  
2022). In a ranking of community  
concerns, housing affordability outpolled  
drug addiction, the economic and health  
effects of COVID-19, and crime (Schaeffer,  
2022). Indeed, Americans are paying  
historically high rents and homeownership  
is increasingly out of reach. When working  
individuals and families pay a higher  
percentage of their income for housing,  
they are more vulnerable to housing  
instability or houselessness. For many  
people, limited housing affordability  
means traveling further to access jobs,  
education, and services. The additional  
time spent traveling means not only a  
decreased quality of life for residents, but  
also increased stress on our environment  
in the form of air pollution and congestion  
on highways, roads, and streets.  
In cities and towns across the country,  
the prime developable areas have already  
been consumed, leaving green and open  
spaces, often away from jobs and city  
amenities, at risk of being sacrificed for  
new construction. The cost-per-unit of  
housing infrastructure, such as extending  
or creating the roads and access to  
utilities needed to connect new areas to  
urban centers, has increased over time.  
This forces cities and local governments  
to raise fees to cover the higher costs of  
installing, operating, and maintaining  
this infrastructure. Debt is typically used  
to fund these services, exacerbating the  
problem.  
Housing Underproduction is more  
than a housing problem. Addressing it  
is central to resolving the most urgent  
and important social, economic, and  
environmental issues of our time.  
If we preserve a more of the same  
approach to policymaking, the nation’s  
housing shortage will continue to  
worsen. At the local level, exclusionary  
and discriminatory land-use and zoning  
policies artificially restrict housing  
production. A host of policies and  
practices—too much single-detached  
zoning, minimum lot size requirements,  
unpredictable and lengthy permit  
processes—restrict the availability and  
affordability of homes in high-opportunity  
neighborhoods, places that are rich in  
jobs, transportation, infrastructure, and  
community assets.  
While this affects everyone, it is  
particularly burdensome for working  
families, people with low incomes, and  
people of color. In fact, racial and ethnic  
discrimination has been embedded  
in housing policy for over a century.  
To create access to opportunity and a  
housing system that serves everyone,  
policymakers must prioritize racial,  
ethnic, and economic equity outcomes  
and actively reverse the nation’s history of  
exclusionary policies.  
1,000 3,000 10,000 30,000 100,000 300,000  
EMPIRICAL UNDERPRODUCTION, 2019  
AL  
9K  
AR  
5K  
AZ  
123K  
CA  
978K  
CO  
127K  
CT  
20K  
DE  
8K  
FL  
289K  
GA  
118K  
IA  
8K  
ID  
23K  
IL  
120K  
IN  
27K  
KS  
5K KY  
13K  
LA  
9K  
MA  
108K  
MD  
91K  
ME  
9K  
MI  
87K  
MN  
95K  
MO  
17K  
MS  
1K  
MT  
3K  
NC  
46K  
ND  
NE  
8K  
NH  
23K  
NJ  
137K  
NM  
23K  
NV  
30K  
NY  
234K  
OH  
50K  
OK  
3K  
OR  
86K  
PA  
98K  
RI  
4K  
SC  
12K  
SD  
2K  
TN  
22K  
TX  
322K  
UT  
55K  
VA  
105K  
VT  
3K  
WA  
140K  
WI  
53K  
WV  
WY  
AK  
9K  
HI  
8K  
DC  
13K  
5

Up for Growth’s Housing  
Underproduction in the U.S. report  
A Bold  
New Vision  
for Change  
The good news is that we can choose  
to adopt a new approach to building  
homes that addresses not only  
availability and affordability, but  
also has positive impacts on equity  
and inclusion, economic vibrancy,  
and climate change. We can convert  
Housing Underproduction into housing  
opportunity.  
In this report, Up for Growth is  
introducing A Better Foundation™,  
a new and innovative opportunity  
mapping approach that cities and  
towns can use to think about where and  
what type of housing to build. Highly  
customizable, our approach layers key  
data sets to pinpoint places that are  
the most socially, economically, fiscally,  
and environmentally beneficial for  
jurisdictions to create more homes. We  
have an opportunity to emerge from  
the Housing Underproduction crisis by  
reforming the foundation of housing  
policy, using a framework with the  
explicit mission of reversing policies  
that perpetuate housing unaffordability,  
exacerbate racial disparities, and  
create inequitable access to economic  
opportunity.  
This report not only shines a light on  
the depth and breadth of the housing  
deficit, it also shows a way to produce  
more affordable homes, grow tax  
revenues, increase gross regional and  
gross national product, decrease the  
amount of land needed for housing and  
infrastructure, and lower greenhouse  
emissions, all while making sure  
that the benefits realized are equally  
available to people of all communities.  
This report advances a new  
underproduction estimate and  
offers communities a vision for  
building out of their housing deficits.  
It not only shares our findings and  
data, but it also includes essays  
written by some of the leading  
thinkers in housing, economics, and  
climate change. Here is what you’ll  
find in the report.  
6

We discuss housing unaffordability in more  
detail. We outline the contributors to and  
consequences of the extreme deficit of homes  
across the country and share how A Better  
Foundation can make housing more affordable.  
We examine economic and fiscal issues  
surrounding Housing Underproduction.  
We will show how adopting a new policy  
framework can move communities out of  
economic stagnation and into increased  
economic vibrancy and resiliency.  
We discuss the impacts of Housing  
Underproduction on climate change. We  
will show how A Better Foundation helps  
communities actively work toward their  
climate policy goals while also addressing the  
housing shortage.  
Housing is foundational to economic  
mobility, health and wellbeing, inclusion,  
and livelihood. It is our hope that this report  
will deliver important tangible data into  
the hands of advocates and policymakers.  
A Better Foundation can turn Housing  
Underproduction into housing opportunity, an  
opportunity that can be shared equally with  
everyone.  
We introduce A Better Foundation™, Up  
for Growth’s new and innovative approach  
to converting Housing Underproduction  
to housing opportunity. It is a resource for  
cities and towns as they review policy and  
decide where and what type of housing to  
build.  
We discuss our methodology for  
measuring Housing Underproduction  
and share our results. This includes  
addressing how and why our calculation  
methods changed from our last report and  
the many benefits of the update, such as a  
better understanding of issues of inequity,  
regional results that better support local  
action, and annual replicability. It also  
highlights the racial equity lens we applied  
to our entire process to understand  
better how households of color are  
disproportionately and systematically  
excluded from access to housing.  
We discuss the history of racial inequity  
in housing policy and practice and the  
devastating outcomes communities of  
color continue to experience as they seek  
available, affordable, and healthy housing.  
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A Better Foundation is a policy framework that seeks to  
create more homes in areas with high economic mobility,  
access to jobs, and existing infrastructure. Developed  
using a racial equity lens, it prioritizes housing that can  
be built and distributed in ways that elevate housing  
choice for communities of color. A Better Foundation  
generates better and more socially equitable outcomes  
than historical development patterns, which produce  
unhealthy outcomes among racial and ethnic groups,  
increase housing unavailability and unaffordability, and  
lead to economic stagnation.  
More of the same is a hypothetical growth scenario that assumes  
housing is developed consistent with past patterns and under existing  
policies. For example, if 50% of new homes built in a neighborhood  
(census tract) were single-detached homes from 2010 to 2020, then  
50% of new homes will also be single-detached homes in the same  
neighborhood.  
A Better Foundation optimizes the distribution of these  
underproduced homes by prioritizing development in high-opportunity  
neighborhoods—places that are rich in jobs, transportation,  
infrastructure, and community assets—at a density scaled to fit into  
the existing neighborhood while increasing housing options.  
A Better  
Foundation™  
When comparing more of the same to A Better  
Foundation, it is important to note that both development  
paths produce the same number of homes and the same  
types of housing: single-detached, Missing Middle,  
medium-density, and high-density.  
MORE OF THE SAME  
A BETTER FOUNDATION  
INTRODUCING UP FOR GROWTH’S

Support climate policy  
goals by:  
Intended outcomes of A Better Foundation:  
• Acknowledging current and historical policies that have  
produced disparate housing outcomes among racial and  
ethnic groups  
• Considering who might benefit or be burdened by a given decision, and  
what the potential unintended consequences of policy recommendations  
may be  
• Disaggregating data by race and ethnicity when available  
• Acknowledging the limitations of our data sources and noting any  
measures we have taken to overcome those limitations  
• Increasing GDP, job creation,  
and equitable access to  
opportunity  
• Increasing economic mobility  
• Increasing tax revenues  
for local, state, and federal  
governments  
• Lowering emissions and traffic  
congestion by reducing vehicle  
miles traveled (VMTs)  
• Consuming less land relative to  
each new unit of housing built  
• Enabling communities  
to increase resiliency to  
the worsening climate  
crisis  
Increase housing  
availability and  
affordability  
Advance economic  
and fiscal benefits  
by:  
Promote racial equity by:

Expansive vs Expensive: A  
False Choice  
Policymakers have choices in how they  
zone and incentivize (or disincentivize)  
housing development. Historically, regions  
with strong demand for housing have  
grown either expansive—moving outward  
in sprawling patterns— or expensive—  
having strong demand for housing but  
limitations on development due to natural  
boundaries or policies that artificially limit  
development (Romem, 2016).  
Places like Las Vegas, Boise, Austin,  
and others demonstrate the limits  
and consequences associated with  
expansive growth. These cities are  
experiencing increased traffic congestion  
and greenhouse gas emissions from  
longer commutes as people search for  
affordable housing options on the fringes  
of the metro area. Neighborhoods home  
to communities of color have seen  
disinvestment and blight or gentrification  
from urban renewal projects. Economic  
growth is limited as more land is used  
for housing rather than other resources  
(Litman, 2015). Importantly, even with  
a development pattern of expansion,  
residents in these cities continue to  
experience housing unavailability and  
unaffordability.  
Places like San Francisco, Seattle, and  
New York demonstrate the consequences  
associated with expensive growth.  
With natural boundaries like water  
and mountains or growth management  
policies, the area that can be developed for  
housing is limited, driving up competition  
and ultimately prices. Residents of these  
areas face severe shortages of affordable  
housing options, and many become  
cost-burdened when they are forced to  
rent homes more expensive than they  
can afford. In addition, development can  
be expensive and face strong opposition,  
slowing down production.  
A Better Foundation offers a solution to  
the puzzle of expansive versus expensive  
development by providing a path to  
increase housing availability while  
not expanding geographically. This is  
accomplished through:  
Identifying the best locations to build  
housing  
Identifying the appropriate increase in  
density for each location  
Identifying the optimal housing mix in  
each location  
1:1 ratioDeveloped residential area growth (%)  
Housing price index growth (%)  
100  
200  
300  
100  
200  
300  
100  
200  
300  
100 200 300 100 200 300 100 200 300  
Salt Lake City, UT  
Denver/Aurora/Lakewood, CO  
Seattle/Bellevue/Kent, WA  
Portland/Vancouver/Hillsboro, OR/WA  
Minneapolis/St. Paul/Bloomington, MN  
Austin/Round Rock/Georgetown, TX  
Boise City, ID  
Raleigh-Cary, NC  
Las Vegas/Henderson/Paradise, NV  
Cities like Las Vegas, Boise, and Austin were able to expand to maintain  
affordability in the face of population growth from 1990 - 2010. More recently,  
these sprawling communities still became more expensive.  
10Up for Growth Housing Underproduction Report //A Better Foundation  
2000 2010 2020