Housing
Underproduction™
in the U.S. 2022

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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.
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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