BUILD BACK BETTER: INVESTING IN EQUITABLE AND AFFORDABLE HOUSING INFRASTRUCTURE

VIRTUAL HEARING

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HOUSE COMMITTEE ON FINANCIAL SERVICES

MAXINE WATERS, California, *Chairwoman*

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BUILD BACK BETTER: INVESTING IN EQUITABLE AND AFFORDABLE HOUSING INFRASTRUCTURE

Wednesday, April 14, 2021

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON FINANCIAL SERVICES,
Washington, D.C.

The committee met, pursuant to notice, at 10:03 a.m. via Webex, Hon. Maxine Waters [chairwoman of the committee] presiding.

Members present: Representatives Waters, Velazquez, Sherman, Meeks, Scott, Green, Cleaver, Perlmutter, Himes, Foster, Beatty, Vargas, Gottheimer, Lawson, Axne, Casten, Pressley, Torres, Lynch, Adams, Tlaib, Dean, Ocasio-Cortez, Garcia of Illinois, Garcia of Texas, Williams of Georgia, Auchincloss; McHenry, Wagner, Lucas, Posey, Luetkemeyer, Huizenga, Stivers, Barr, Tipton, Williams of Texas, Hill, Emmer, Zeldin, Loudermilk, Mooney, Davidson, Budd, Kustoff, Hollingsworth, Gonzalez of Ohio, Rose, Steil, Gooden, Timmons, and Taylor.

Chairwoman WATERS. The Financial Services Committee will come to order. Without objection, the Chair is authorized to declare a recess of the committee at any time.

As a reminder, I ask all Members to keep themselves muted when they are not being recognized by the Chair. The staff has been instructed not to mute Members except where a Member is not being recognized by the Chair and there is inadvertent background noise.

Members are also reminded that they may only participate in one remote proceeding at a time. If you are participating today, please keep your camera on. And if you choose to attend a different remote proceeding, please turn your camera off.

Today's hearing is entitled, "Build Back Better: Investing in Equitable and Affordable Housing Infrastructure." I now recognize myself for 4 minutes to give an opening statement.

Today, the committee will be focusing on the need for major investments in equitable and affordable housing infrastructure. Last month, Congress passed the American Rescue Plan Act to provide $1.9 trillion in critical pandemic relief, including for families facing eviction or foreclosure through no fault of their own. Now, we will address the shameful homelessness crisis and pressing need for new affordable housing production.

I am pleased that President Biden has, as part of his American Jobs Plan, recognized that housing is a critical part of our nation's infrastructure. The plan includes $213 billion for affordable housing. President Biden's plan will stimulate the economy, create jobs, and benefit communities across the country.

In 2019, I introduced my bill, the Housing is Infrastructure Act, and I have convened a number of hearings to make it clear that as the country experiences an affordable housing crisis, housing must be a major component of any infrastructure package.

Last year, the Housing is Infrastructure Act passed the House as part of the House Democrats' infrastructure bill, the Moving Forward Act. The newest version of my bill provides over $237 billion in new funding, including $70 billion to address the capital needs of our nation's public housing, and $35 billion for the HOME program to provide capital and rental assistance for affordable housing, as well as $45 billion for the National Housing Trust Fund, and $12 billion for the Capital Magnet Fund, which together will leverage private sector investment to create new affordable housing for our country's poorest households, including in rural and Tribal areas. My bill also provides over $6 billion in grants to eliminate exclusionary local zoning barriers that have impeded construction of affordable housing.

In keeping with the spirit of the landmark civil rights legislation, the Fair Housing Act, we must ensure that this generational investment in infrastructure is distributed equitably. My bill includes $10 billion for targeted down-payment assistance to help mortgage-ready renters transition into being homeowners, as well as $5 billion for fair housing enforcement.

We will also discuss legislation to provide $27 billion for the creation of a new national investment authority that supports long-term infrastructure projects and accelerates our transition to a clean energy economy. This committee has a key role to play in this agency's design, and will be closely coordinating with the Biden Administration.

As we explore new ideas to bolster investments in our infrastructure, we must also ensure that we are prioritizing climate resilience: 2020 was the most active hurricane season on record, and the growing cost of climate disasters serves as a reminder of the need to ensure long-term reauthorization of the National Flood Insurance Program (NFIP), that strengthens the Program and preserves its affordability. It is exciting that after years of Federal underinvestment in housing, we really have momentum for serious, equitable investments in our housing system.

So, I look forward to discussing these measures in advance of the infrastructure package.

Thank you. I now recognize the ranking member of the committee, the gentleman from North Carolina, Mr. McHenry, for 4 minutes to give an opening statement.

Mr. MCHENRY. Thank you, Madam Chairwoman, and look, there has been a lot of discussion about what the actual so-called Biden infrastructure plan is, but it may be easier for us to start with what it is not. First, it is not an infrastructure package. In fact, less than 6 percent of the funding of this package would go to roads, bridges, and highways, a little more than that if you add in high-speed internet.

It is not a jobs plan. The Administration's claims that this proposal is going to create 19 million new jobs has already been debunked. The plan is not bipartisan. Even though House Democrats hold the slimmest majority in modern history, they have decided to go all in and go all alone once again. It didn't have to be this way.

Let me just give you an example: We passed long-term bipartisan funding for the National Flood Insurance Program, and it was reported unanimously out of committee, just 2 years ago. Now, emboldened by their so-called one-party rule, Democrats have tossed it aside for the bill we are considering today, which caters to some stakeholders and makes the program far less sustainable.

Now, I don't want to do the Democrats' jobs for them, but if this bill doesn't need bipartisan support, since you are going to try to sneak this into the so-called infrastructure plan, why wouldn't you address climate change in the National Flood Insurance Program? It is a serious question, and frankly, I am shocked to have to ask it. Why does this partisan National Flood Insurance Program bill do nothing to address climate change and the risks associated with weather-related events, even though at the very core of what the NFIP insures, it is focused on the impact of climate change?

I will leave that for you all to discuss amongst yourselves.

The Biden plan is not about economic growth and prosperity. Democrats do not want to admit the economy is thriving, because if they admit that, it might be harder to pass the next multi-trillion-dollar spending bill. They do not want to admit that there are job openings across the country that are not being filled. In my district, there are massive labor shortages. For example, a local hotel operator, who pays a living wage with benefits and typically employs 140 to 160 people, has 50 to 60 openings right now. Or if you look at a forger right now who is helping make bricks for the housing industry, he is paying $20 an hour and he cannot keep up because of labor shortages.

These things are happening across the country, and I know that is conforming with the narrative by some of my Democratic colleagues in Washington.

But finally, the Biden plan is not a housing bill. More funding will not solve the problems associated with housing shortages or our homelessness problems in this country. We need to rethink how we provide affordable, suitable housing for all Americans.

So what, in fact, is the Biden plan? Frankly, it is like the so-called COVID relief plan. It is a liberal wish list that Hill Democrats have been carrying around for a long time, and the attempt is to fundamentally restructure the role of the Federal Government, to expand it beyond its traditional role that we have seen over the last 50 years. No longer will the private sector, or small businesses, for that matter, be the engine of job creation. They want it to be the Federal Government. You do not have to read The New York Times opinion page to see that. You can just see it in the discussions on Capitol Hill.

And when it comes down to is, this is a plan to eliminate jobs in the private sector and then have the Federal Government spend trillions of dollars to recreate them. And this is not the right approach. Our time would be better spent today going out in our neighborhoods and filling potholes in the streets, because that is actual infrastructure.

I yield back.

Chairwoman WATERS. Thank you, Ranking Member McHenry. I now recognize the gentleman from Missouri, Mr. Cleaver, who is also the Chair of our Subcommittee on Housing, Community Development, and Insurance, for 1 minute to talk about this jobs bill.

Mr. CLEAVER. Thank you, Madam Chairwoman, and I thank you for holding this hearing and for your unbending leadership in highlighting housing as not only critical but as an indispensable and fundamental component of this nation's infrastructure.

I am pleased that the President's American Jobs Plan includes a broad framework for investments in affordable housing, and I look forward to today's discussion on implementing the components of the American Jobs Plan under the committee's jurisdiction.

Housing, and I speak experientially when I say this, stabilizes families and, in turn, fortifies neighborhoods, cities, regions, and the country as a whole. I am eager to continue to discuss the critical role of housing as part of the infrastructure as well as the extensive return on investment that adequate funding through this committee would provide. We must fund housing in proportion to its importance to the future of our nation.

Thank you, Madam Chairwoman.

Chairwoman WATERS. Thank you. I now recognize the ranking member of the Subcommittee on Housing, Community Development, and Insurance, the gentleman from Ohio, Mr. Stivers, for 1 minute.

Mr. STIVERS. Thank you, Madam Chairwoman. I would like to address a couple of points on this. First of all, on the housing piece, is it infrastructure? And I will give you the benefit of the doubt. It is a hard asset, so we can say that it is infrastructure. But the second question is, is this the right way to go about it, and I think the answer is no on that. This proposal does not do anything to incentivize new housing units. This proposal is a one-size-fits-all government spending program that ignores programs like the Rental Assistance Demonstration (RAD) Program, Section 8, and Moving to Work, that are tools that should be in the toolkits of all of our local communities.

And finally, the final problem with this is that it is not fair to our rural communities: 21 percent of Americans live in rural America, and only a tiny, tiny portion of this money is going to rural America. We have been without a policy for rural housing for a long time. It is time we developed one. We are working on one, and I would urge the Chair and the members of the committee to work with us.

I yield back.

Chairwoman WATERS. Thank you very much.

I now want to welcome today's distinguished witnesses to the committee: Ms. Diane Yentel, the president and chief executive officer of the National Low Income Housing Coalition; Mr. Michael McAfee, the president and chief executive officer of PolicyLink; Ms. Jacqueline Waggoner, the president of the Solutions Division of Enterprise Community Partners; Professor Saule Omarova, the Beth and Marc Goldberg Professor of Law at Cornell University; and Mr. Brian Riedl, a senior fellow at the Manhattan Institute.

Each of you will have 5 minutes to summarize your testimony. You should be able to see a timer on your screen that will indicate how much time you have left, and a chime will go off at the end of your time. I would ask you to be mindful of the timer and quickly wrap up your testimony if you hear the chime. And without objection, your written statements will be made a part of the record.

Ms. Yentel, you are now recognized for 5 minutes to present your oral testimony.

STATEMENT OF DIANE YENTEL, PRESIDENT AND CEO, NATIONAL LOW INCOME HOUSING COALITION

Ms. YENTEL. Thank you. Chairwoman Waters, Ranking Member McHenry, and members of the committee, thank you for the opportunity to testify today on the urgent need for investments in our nation's affordable housing infrastructure.

The COVID-19 pandemic made it clear that affordable homes are a prerequisite for individual and public health. But renters and unhoused people, predominantly people of color, have struggled to remain safely and stably housed throughout the pandemic, due largely to the underlying affordable housing crisis that existed prepandemic.

At that time, there was a shortage of nearly 7 million affordable and available rental homes for America's lowest-income renters. For every 10 of the lowest-income renter households, there are fewer than 4 homes that are affordable and available to them. Without affordable options, 10 million very low-income households spent more than half of their limited incomes on rent and utilities, leaving them one financial shock away from missing rent and facing eviction or, in the worst cases, homelessness. The coronavirus and its economic fallout was that financial shock. They lost jobs and wages, had increased internet, child care, health care, and food expenses, and they fell behind on rent.

The latest estimates are that 9 million renter households owe over $50 billion in rent and utility arrears and remain at high risk of losing their homes.

In response, Congress extended the CDC eviction moratorium through January, and President Biden further extended it through June, and thanks in large part to Chairwoman Waters' leadership, Congress provided a total of $47 billion for emergency rental assistance and additional resources for communities to address homelessness.

Now, as the nation recovers from the pandemic, Congress must turn its attention to advancing long-term solutions to resolve the nation's underlying housing crisis. Any infrastructure spending bill must preserve our nation's public housing infrastructure with a $70 billion investment to repair and build more public housing as is included in the Housing is Infrastructure Act. Public housing is home to nearly 2 million low-income residents, predominantly people of color, and decades of declining resources have threatened the quality and existence of these affordable homes.

With limited funding, many public housing agencies are unable to make needed repairs, and we lose 10,000 to 15,000 affordable apartments each year to obsolescence and decay, as other public housing units fall into deep disrepair. Seventy billion dollars is needed to repair public housing, to ensure that it provides safe and decent homes for current and future residents, and such an investment would create nearly 800,000 new jobs, many of which would go to public housing residents or other low-income people in the community.

To further expand the affordable and accessible housing stock, Congress should provide at least $40 billion annually to the National Housing Trust Fund to efficiently build, rehab, and operate rental housing for extremely low-income people. Each annual investment of $40 billion in the Housing Trust Fund would support the construction of almost 200,000 homes affordable to people with the lowest incomes while also creating over 250,000 jobs.

In addition, the Federal Government should incentivize or require State and local governments that receive Federal transportation and infrastructure dollars to eliminate restrictive zoning rules that increase the cost of development, limit housing supply for all renters, and reinforce segregation and structural racism in housing and other systems.

The Housing and Infrastructure Act of 2021 includes each of these essential investments and policy reforms, and we strongly support them. And we urge Congress to go further still. Congress should also, in an infrastructure spending bill, expand rental assistance to make it universally available to all eligible households in need. Currently, only 1 in 4 households in need of and eligible for rental assistance receives any. We must also create a permanent emergency rental assistance program, a national housing stabilization fund to keep families stabilized during a crisis, and enact robust renter protections like right-to-counsel and expunging eviction records.

This committee and Congress have a historic opportunity to invest in our country's affordable housing infrastructure, to end the housing crisis, and to advance racial equity in our country. Everybody at the National Low Income Housing Coalition looks forward to working with you on this important work, and I thank you again for the opportunity to testify today.

[The prepared statement of Ms. Yentel can be found on page 159 of the appendix.]

Chairwoman WATERS. Thank you very much.

Mr. McAfee, you are now recognized for 5 minutes to present your oral testimony.

STATEMENT OF MICHAEL McAFEE, PRESIDENT AND CEO, POLICYLINK

Mr. MCAFEE. Thank you. Thank you, Chairwoman Waters, Ranking Member McHenry, and members of the committee for the opportunity to offer testimony on the need for investments in America's housing and financial infrastructure. I am Dr. Michael McAfee, President and CEO of PolicyLink, a racial equity research and action institute operating nationwide with our network of thousands of community-based partners.

Our North Star at PolicyLink is to bring about a world that promotes equity, defined as just and fair inclusion into a society in which all can participate, prosper, and reach their full potential. Centuries of racism, exclusion, and exploitation have over 100 million people in America, including 55 million people of color, struggling to make ends meet, and is preventing generations of children from realizing their potential. That is 1 in 3 Americans.

Daunte Wright's untimely death at the hands of police this week, just miles away from where George Floyd was killed last year, underscores the importance of this hearing. Both incidents are consequences of the same persistent, deliberate, and oppressive racial inequities that have also made it possible for our infrastructure system to divide, pollute, and rob wealth from communities of color.

Fixing and investing in our infrastructure is one of the most important ways to tackle these challenges and ensure that opportunity is not random in America. And housing is at the heart of this, because housing is one of the biggest drivers of the racial wealth gap. Housing shapes the physical landscape of inequity, segregation, disinvestment, and exclusion.

We have not seen the vision and resource commitment needed to address our intersectional infrastructure challenges since the Obama years, when Chairwoman Waters and other committee members played such a critical role in initiatives like Choice Neighborhoods, Promise Neighborhoods, and the Sustainable Communities Initiative. PolicyLink is proud to have played a role in ensuring the success of these programs and to have formed the development of the Affirmatively Furthering Fair Housing data tool and Assessment of Fair Housing pilot programs.

Since then, we have worked with partners to build a strong community of practice and have drawn lessons and insights that can be applied to the current infrastructure package that Congress will consider.

First, those programs demonstrated that comprehensive solutions were required for infrastructure development, including equitable education, housing, and even the physical design of communities to better promote health and prosperity for all.

And second, as these programs have been expanded and reiterated in partnership with local communities, philanthropy, and the private sector, we have seen that the most successful and durable investments are the ones that align with, support, and center community-designed and community-led solutions.

The scale of these and similar efforts must now grow dramatically. Today, 7 million adults live in renter households that are behind on rent due to pandemic-related job and income losses, and they face eviction and homelessness when the nation's eviction moratorium is lifted in July. During the pandemic, renters were disproportionately impacted, especially those of color who have lost their employment income due to the pandemic and have accumulated billions in debt, while predominantly White property owners have gained billions in wealth from low interest rates and increased home value, building on the multi-generational effects of discriminatory housing policies.

We can no longer deny that racial inequity is a feature, not a market failure, of the current housing. We can begin to fix this by investing dramatically more in a range of housing needs, and we welcome Chairwoman Waters' Housing is Infrastructure bill and related legislation as critical starting points. These investments should include over $1.2 trillion over the next decade, starting with an immediate infusion of several hundred billion dollars to capitalize the National Housing Trust Fund, or a similar mechanism, to preserve distressed rental properties and produce new affordable housing, rejuvenate public housing, fully fund vouchers, stabilize rents, and strengthen critical programs like the Community Development Block Grant (CDBG) Program and the HOME Program.

We also have to ensure that as the new Administration works with Congress to shore up our fair housing protections and enforcement, that we put in place similar protections to guarantee that new infrastructure investments most directly benefit the 100 million Americans who are struggling. The return on this investment will pay dividends for generations to come.

Our nation is at a crossroads. If we do not invest in housing and financial infrastructure, we will forfeit the opportunity to significantly improve the social and economic outcomes for millions of Americans with aspirations for better lives. An equitable, prosperous nation for all can only be achieved with our policymaking is commensurate with the scale of the challenges facing our society.

[The prepared statement of Dr. McAfee can be found on page 72 of the appendix.]

Chairwoman WATERS. Thank you, Dr. McAfee.

Ms. Waggoner, you are now recognized for 5 minutes to present your oral testimony.

STATEMENT OF JACQUELINE WAGGONER, PRESIDENT, SOLUTIONS DIVISION, ENTERPRISE COMMUNITY PARTNERS, INC.

Ms. WAGGONER. Good morning Chairwoman Waters, Ranking Member McHenry, and members of the committee. Thank you for the opportunity to testify on the need for robust investment in America's housing infrastructure.

We are just beginning to work our way out of a pandemic in which 22.2 million people lost their jobs and their livelihoods. Low-income people and communities of color were hit the hardest. If you remember nothing else from my opening remarks today, a recovery that is equitable must focus on the needs of the people: good-paying jobs to sustain their families; homes they can afford; infrastructure that is resilient; and a fair shot at upward mobility.

I am the president of the Solutions Division of Enterprise Community Partners. With 40 years of experience and thousands of local partners nationwide, Enterprise has been able to build and preserve 793,000 homes, invest $61 billion in communities across this country, and improve lives. Our strategic priorities include advancing racial equity, climate resilience, upward mobility, and creating and preserving housing that people can afford. I am pleased to say that Enterprise isn't just talking about racial equity in terms of outcomes, but we are doing it in practice by providing capital to housing providers and builders of color who have historically been boxed out.

I am a proud Los Angeles native, and this work is deeply personal to me. My parents took part in the Great Migration, moving from rural East Texas to California in pursuit of the American Dream. Growing up, I was bused 45 minutes from our home in South Los Angeles to a predominantly White school in Pacific Palisades. Every day, I was exposed to two communities divided by race, wealth, and opportunity, but also by housing quality, property values, and private investment.

Today, these divisions remain. The impact of systemic racial discrimination through redlining and blockbusting makes the lack of affordable housing even more dire for communities of color. But if we seize the opportunity to invest in affordable housing, we can level the playing field. Access to a safe and stable home that is affordable is an essential tool to upward mobility.

I applaud Congress for providing emergency rental relief and protections for people on the brink of homelessness, and I applaud this committee for recognizing the role housing can and must continue to play in scaling up solutions to address the impacts of COVID-19.

However, now is the time to use this unique moment to do even more. A major infrastructure package investing in housing programs could get people to work in every community, and do it quickly. There are shovel-ready projects in every county across this country that could immediately begin construction and bring jobs to people who are ready to work, and create affordable homes over the long term. We saw this after the 2008 crash, when the American Recovery and Reinvestment Act was passed. Funds for housing programs moved into the economy faster than investments in highway infrastructure.

The investment in our nation's infrastructure should also support our communities by protecting the impacts of the new climate. In the past year alone, disasters across the U.S. caused nearly $95 billion in damage. The effects of these disasters are disproportionately felt by low-income communities. Investing in resilient infrastructure, including housing, reduces disaster recovery costs and saves lives. The infrastructure package could be the largest investment in affordable housing for decades, so we need to prioritize the good that can come with it: good-paying jobs; homes people can afford; infrastructure that is resilient; and a fair shot at upward mobility, moving America forward together.

In conclusion, on behalf of Enterprise Community Partners, I would like to offer my gratitude to Chairwoman Waters and the committee for your leadership and for the recognition that we need bold action to move our country forward in a more promising and hopeful direction. I look forward to answering your questions. Thank you.

[The prepared statement of Ms. Waggoner can be found on page 140 of the appendix.]

Chairwoman WATERS. Thank you very much.

Professor Omarova, you are now recognized for 5 minutes to present your oral testimony.

STATEMENT OF SAULE T. OMAROVA, BETH AND MARC GOLDBERG PROFESSOR OF LAW, CORNELL UNIVERSITY

Ms. OMAROVA. Chairwoman Waters, Ranking Member McHenry, and members of the committee, thank you for inviting me to testify. The purpose of my testimony is to describe a proposal for the creation of a National Investment Authority, a new Federal entity with a mandate to design, finance, and implement a long-term strategy of U.S. economic development. The core element of this strategy will be systematic channeling of public and private capital into critical public infrastructure, which includes high-quality affordable housing.

President Biden unveiled a $2 trillion infrastructure spending plan. This type of public investment commitment would be a powerful start for our post-pandemic recovery. It is critical, however, to supplement this commitment with a concrete plan to build an institutional platform for managing the infrastructure investment program on an ongoing basis and in a way that truly serves the interests of the American people. Otherwise, private financial intermediaries, Wall Street banks, private equity funds, and asset managers will control the process and divert public money to more privately beneficial uses. Given the stakes, we simply cannot allow this to happen.

And that is why we need a National Investment Authority (NIA) now more than ever. The NIA will be a dedicated public platform for strategically coordinated, large-scale financing of roads and bridges, broadband, clean energy and transportation networks, manufacturing facilities, and, of course, good affordable housing in every geographic region and in every community across America, regardless of skin color, political creed, or median income.

The NIA's core objective will be to promote inclusive, equitable, and sustainable growth of the nation's economy. The NIA will not replace direct fiscal spending on public infrastructure, nor is it going to compete with investment opportunities that already attract sufficient private funding. The NIA will target investments in publicly beneficial projects that are currently not funded at the necessarily scale, in private markets or through fiscal channels.

While there is plenty of private capital eager to invest in hard assets like toll roads around major cities, private investors are rationally averse to funding risky, transformative projects that take a long time to become commercially profitable. And public investment is often constrained because of political and budgetary limitations, jurisdictional conflicts, and lack of internal coordination. The NIA will step into this funding gap. It is envisioned not as a typical standalone infrastructure bank but as a system governed by an independent Federal agency, the NIA Governing Board. The NIA Board will develop a long-term national investment strategy and oversee its implementation by the NIA's operating subsidiaries.

The National Infrastructure Bank (NIB) will be the NIA's credit mobilization arm. It will support public and private infrastructure investment through loans, guarantees, securitizations, and secondary market-making. The National Capital Management Corporation, or "Nicky Mac," will be a public equity investment manager. It will channel the more risk-tolerant institutional capital into high-impact, innovative, potentially transformative public infrastructure projects that cannot be financed solely in credit markets. In this role, Nicky Mac will function as a public alternative to private equity.

Finally, the NIA's network of regional offices will work closely with local communities, businesses, and public authorities on region-specific infrastructure needs, and ensure meaningful community input into the NIA's investment strategy. In short, the NIA's design is a democratically accountable institution with broad legal authority and in-house capacity to identify long-term economic goals, translate them into specific investment priorities, and then actively finance and implement those priorities in practice. We currently do not have such an institution.

The last historical precedent of this kind was the Reconstruction Finance Corporation, which injected massive amounts of capital into the economy during the Great Depression and World War II. Today, neither the Treasury nor the Federal Reserve are equipped to engage in this type of strategic investment management. This gap becomes especially obvious and dangerous during financial and economic crises.

The NIA's financial market operations will supplement and support both the Treasury's and the Fed's policies. The NIA will provide that strong institutional muscle that U.S. Government needs not only to respond to crises but also to support the balanced growth and structural resiliency of the nation's economy on a daily basis.

As we are coming out of the COVID pandemic, the need for institutional muscle is particularly great. The long-term economic impact of the pandemic is uncertain, but the signs are troubling. A wave of corporate bankruptcies, home mortgage foreclosures, and residential evictions, for example, could have a devastating effect on low-income Americans and people of color, while enabling private equity to scoop up distressed assets on the cheap. We need an NIA to keep an American economy from becoming one big, distressed asset.

Thank you very much.

[The prepared statement of Dr. Omarova can be found on page 82 of the appendix.]

Chairwoman WATERS. Thank you very much, Professor Omarova.

Mr. Riedl, you are now recognized for 5 minutes to present your oral testimony.

STATEMENT OF BRIAN RIEDL, SENIOR FELLOW, MANHATTAN INSTITUTE FOR POLICY RESEARCH

Mr. RIEDL. Thank you. Good morning, Chairwoman Waters, Ranking Member McHenry, and members of the committee. Thank you for inviting me to participate in today's hearing. My name is Brian Riedl. I am a senior fellow at the Manhattan Institute, and I have been invited here to take a step back and provide a critique of the American Jobs Plan.

I will make four points. First, the $2.6 trillion cost is fiscally irresponsible, given America's daunting Federal budget outlook. This would be the most expensive non-emergency law in half a century, and it is coming at a time when the national debt is already projected to double, from $17 trillion to $35 trillion between 2019 and 2030. Overall, Washington is projected to run $100 trillion in budget deficits over the next 30 years, by CBO, and if interest rates exceed the Congressional Budget Office (CBO) baseline by 1 percentage point, that would add $30 trillion in interest costs over 3 decades, just 1 percent. Even if this $2.6 trillion is fully paid for in new corporate taxes, it is still not fiscally responsible, because we already need nearly every progressive tax proposal just to pay for the current programs we have.

Second, while infrastructure can certainly use some upgrades, lack of funding is not the main problem. Rather, America's infrastructure is among the most bureaucratic, expensive, and slowly built in the world. Consider that CBO reports that Federal investments deliver returns of just 5 percent, versus 10 percent from private sector investments. The per-mile of the interstate highway construction quadrupled from 1960 through 1990, and has continued to grow since. The Davis-Bacon Act raises wages by 22 percent. Our subway systems cost as much as quadruple the world average to build.

Many of these delays are driven by the necessary but slow environmental impact statements and historical artifact reviews. Consider that environmental reviews commonly exceed 1,000 pages and require 7 years to complete, with several taking more than 17 years, and no ground can be broken until the project has survived the legal gauntlet, including appeals by any litigant. By comparison, these statements take 2 years in Canada, and 3½ years in the European Union.

Third, despite the title of, "American Jobs Plan," there is a broad economic consensus that infrastructure policies do not provide short-term stimulus: first, because of the 7 years needed to finish the environmental impact statements before you can break ground; and second, because Federal investment is often offset by State and local investment reductions, and the infrastructure is most needed in fast-growing communities where the unemployment rate is already low.

Thus, the Congressional Research Service (CRS) has concluded that the short-term effect on output and employment could be nullified or even negative. When combining the painful taxes and ineffective spending, just yesterday the Penn Wharton budget model reported that the American Jobs Plan will, over the long run, create no net jobs, reduce wages by 0.8 percent, reduce the capital stock by 3 percent, and reduce the GDP by 0.8 percent. And Penn Wharton is not a conservative group.

Finally, the American Jobs Plan includes a historic expansion of corporate grants, loans, and contracts with little to no congressional oversight. Rather than rely on tax incentives and tightening patents and copyrights, Washington would micromanage the innovation process by steeply raising corporate tax rates and then returning hundreds of billions of dollars in Federal grants to companies that undertake government-approved projects. The Administration is seeking huge discretion in dispensing hundreds of billions of dollars, which risks becoming a budget-busting slush fund for favored industries, businesses, and allies.

From Solyndra to the now-defunct Advanced Technology Program, Washington's track record of picking winners and losers is not particularly strong, and these programs often invite corruption and collusion between big business and government.

Today's promising companies have no problem securing loans and equity from a financial system awash in capital and low interest rates. More corporate welfare is not necessary.

Therefore, I recommend that Congress pare back the cost of this proposal, encourage State and local governments to use their $500 billion in recent aid for infrastructure, and that we reform our infrastructures to make them more effective, more efficient, and get more bang for the buck.

Thank you.

[The prepared statement of Mr. Riedl can be found on page 129 of the appendix.]

Chairwoman WATERS. I thank all of the witnesses, and I now recognize myself for 5 minutes for questions. I think I will be addressing this first question to Dr. McAfee.

Dr. McAfee, the last time the Federal Government made a massive investment in infrastructure, it laid the foundation for generations of families and long-time economic growth for the nation. Yet, many were left behind in the process through discriminatory housing policies, highway systems that displaced entire neighborhoods, and unequal community development that created segregated living patterns. Today, where we live has become a central predictor of health, education, employment, and even financial outcomes. Nearly all of our Federal housing stock remains concentrated in areas of poverty and racial segregation.

With the infrastructure plan that the Biden Administration has put forward, we have a unique opportunity to ensure that the next generation of Federal infrastructure development is much more equitable than the last.

Would you share your thoughts on the importance of ensuring that the use of infrastructure funds for housing adheres to the Fair Housing Act and results in net housing and community opportunities for historically marginalized people and communities?

Mr. MCAFEE. Yes. The Fair Housing rule uses what I think is the essence of government, the ability to advance equity, just and fair inclusion into a society in which all can participate, prosper, and reach their full potential. That is what we should be paying attention to. And if you look at our recoveries over the years, we have often skipped over the communities who have needed the investment the most. We have not centered on Black and Brown communities. We may use the language in our rhetoric, we may use the language in our written documents, but generally we can't answer the question, are they better off?

So as we go forward, when we think about this package of investments, it is important for us to prioritize folks who have been left out, folks who still haven't, quite frankly, recovered from 2008, who have lost more than half of their wealth, that is, Black and Brown folks.

The reality is that this is an unprecedented opportunity. Yes, the definition of infrastructure has expanded. It has expanded because we have learned now that you can't just do roads and bridges. You have to deal with lead; more than 77 million folks in this country are struggling because their water is not clean.

So if you want to solve the issues of housing, education, community safety, and build communities of opportunity, you have to hold all of those intersections, and that means you have to hold the interest of equity, and that means you have to do the thing that this nation has not often wanted to do, design opportunity in the very communities that we have been so intentional of designing opportunity out of.

Chairwoman WATERS. Thank you so very much.

Ms. Waggoner, when we discuss providing more funding for affordable housing, one of the counter-arguments we hear when it comes to equity and climate justice is that addressing these issues is too costly. Your written testimony says that, "Centering racial equity in housing is not just good policy. It is also good business."

What does that mean in the context of affordable housing? Similarly, would requiring green building and mitigation to prepare for possible disasters make construction prohibitively expensive for the affordable housing sector, or can these types of longer-term investments also be seen as good business?

Ms. WAGGONER. Thank you, Chairwoman Waters. Yes, absolutely, this could be seen as good business. Building housing actually creates jobs. We know for every 1,000 units that are built, you get roughly 1,200 jobs, and when you think about green development and resilience—Mr. McAfee touched on it—it is important that we build housing that is resilient and green and healthy for people.

We have learned, through our own efforts in our green communities, which over half of the States in the country utilize, that it actually is not more expensive to build this type of housing. To build green and resilient housing means that we spend less on recovery when disasters come. We know that they are imminent, and we have learned that when you invest in housing that is sustainable and green, that people live healthier lives, that the assets are more resilient so they can survive natural disasters, and that it is good business all the way around, and it is good for the people.

Chairwoman WATERS. Thank you very much.

The gentleman from Ohio, Mr. Stivers, is now recognized for 5 minutes.

Mr. STIVERS. Thank you. As you know, the U.S. population in non-metro areas, rural areas, stood at 46 million in 2019. That is the most recent data available. Ms. Yentel, in your testimony you highlighted that in my district in particular, in rural central and southern Ohio, there are 4 affordable housing units available for every 10 of the lowest-income renter households. Could you outline what the NLIHC's view of the top three priorities for Federal Government policymaking should be to ensure that these rural households are properly housed?

Ms. YENTEL. Yes. Thank you for the question, Congressman Stivers. The affordable housing shortage that exists in our country exists in urban, suburban, and rural communities alike, and a shortage of homes [inaudible] state that has a sufficient number of homes affordable to those lowest-income people.

In rural communities, we need to build more apartments and make them affordable to the lowest-income people, extremely low-income seniors, families with kids, people with disabilities, and we do that through expanding the National Housing Trust Fund. That is a block grant to States to allow them to build, preserve, and operate rental homes affordable to extremely low-income people, and it could be highly effective in rural communities.

We also need to make sure, in rural communities, that we are preserving the housing and the affordable housing that exists. USDA rural properties are struggling right now. Many of them need repairs, capital repairs, and we need to ensure that the funding allows for these properties to maintain their affordability. If these properties lose their affordability restrictions, then the lowest-income rural renters in those communities won't have other options and won't be able to afford their housing.

So we need to build more apartments that are affordable to the lowest-income people in rural communities by expanding the National Housing Trust Fund, and we need to prioritize repairing and preserving the rural housing through USDA that already exists.

Mr. STIVERS. Thank you. Mr. Riedl, I have heard a lot of different estimates about the jobs created by this infrastructure plan. I know the Administration is claiming that it would produce 19 million new jobs. Do you have an estimate of how many jobs the plan would actually create?

Mr. RIEDL. Thank you, Congressman. The 19 million figure was extremely overestimated, and, in fact, after The Washington Post fact-checked it, the Administration pared the number significantly back and admitted that it was an error.

In terms of the actual jobs created, again, just last night, the Penn Wharton budget model came out with an estimate that said there would be zero long-term jobs created in this bill, in part because of the taxes negating whatever small impacts you could get on the spending side. In fact, they said wages would fall, and GDP would fall over the long term.

The Tax Foundation also just looked at the tax side of the bill. Granted, they didn't look at the spending side. But in looking at the tax side, they said that it would reduce long-term output by 0.8 percent, eliminate 159,000 jobs, and reduce wages by 0.7 percent. Specifically, the Tax Foundation said that the bottom 20 percent of earners would see a 1.5 percent drop in after-tax income over the long term as a result of this bill. Again, it is because a lot of the spending is not particularly effective in getting long-term bang for the buck, and then you also have $1.8 trillion in taxes.

Mr. STIVERS. Great. Thank you. Can you give us an update on the current state of the economy? I see, "Help Wanted" ads everywhere. I just did a job fair in my district. There were 2,000 open positions in my area, and we only had about 400 job applicants who came to our online job fair last week. And what do you think this bill could mean for inflation?

Mr. RIEDL. We gained 916,000 jobs last month. We have already gained back 14 million of what we lost. The unemployment rate is down to 6 percent. CBO says we are on pace to get close to 5 percent by the end of the year, 4 percent next year. If that is the case, you actually risk overheating the economy, and that is when you start to see some inflation. The economy is recovering just fine, and these long-term effects, again, you start to get overheating and then you start to get inflation, and there are some real economic costs there.

Mr. STIVERS. I yield back, Madam Chairwoman.

Chairwoman WATERS. Thank you very much. The gentlewoman from New York, Ms. Velazquez, who is also the Chair of the House Committee on Small Business, is now recognized for 5 minutes.

Ms. VELAZQUEZ. Thank you, Madam Chairwoman. Ms. Yentel, one of the bills we are discussing here today is my bill, H.R. 235, the Public Housing Emergency Response Act. Thank you for the

National Low Income Housing Coalition's endorsement and ongoing support.

While President Biden's plan calls for an investment of $40 billion for public housing, my bill, like the chairwoman's, calls for an investment of $70 billion. Would you support a higher investment of this kind? Can you explain why $70 billion is important?

Ms. YENTEL. Absolutely. Thank you, Congresswoman Velazquez. Yes, $70 billion is necessary to repair our public housing infrastructure. Public housing is home to nearly 2 million low-income renters, predominantly people of color. Congress has disinvested in public housing for decades, and as a result we are losing 10,000 to 15,000 units a year to obsolescence or delay, as many more public housing units fall into deep disrepair.

So, $70 billion is the amount that is needed to repair public housing so that it is decent and habitable for the people who live there today and for future residents and future generations.

Ms. VELAZQUEZ. Thank you for that answer. Ms. Yentel, according to most estimates, we lose about 10,000 units of public housing each year due to a lack of investment. Could you please explain what would happen if we choose not to make a historic investment in public housing as part of our infrastructure plan?

Ms. YENTEL. We have a tremendous affordable housing crisis in our country right now that is most impacting the lowest-income tenants, extremely low-income people, many of whom live in public housing. So if we continue to disinvest in our public housing infrastructure and lose it in many of our communities, it means we are losing the few affordable housing units that exist for those extremely low-income people, which will exacerbate the affordable housing crisis and impact low-income people and people of color the most.

And I would say, too, that there are really consequential health impacts to families and children when we continue to disinvest in public housing. Those leaky roofs and leaky toilets result in mold infestation, which results in asthma or other respiratory illnesses. When there are holes or peeling paint it can lead to lead exposure, which can have devastating, long-term harmful consequences for children and families.

So, there are real, harmful consequences from disinvesting in public housing. We need to invest at least $70 billion to repair public housing, keep it habitable, and maintain this essential affordable housing infrastructure in our communities across the country.

Ms. VELAZQUEZ. Thank you. We have seen that during this pandemic, where we see ventilation systems that needed to be upgraded to prevent the spread of the virus.

Ms. Waggoner, another one of my bills we are discussing here today will re-establish Federal financing-backed funding for HUD-insured, multi-family, risk-sharing mortgages, which was a successful partnership between Treasury, HUD, and the States on local HFAs during the Obama Administration. Can you please explain the importance of re-establishing this program and what it will mean for the development and redevelopment of multi-family properties?

Ms. WAGGONER. Thank you, Congresswoman Velazquez. We really need every level of government participating, especially those things such as the FDA, housing credits, USDA. We need all of those resources to make these projects feasible. We have to be clear that wages and housing costs have not aligned. Many Americans are on the brink of homelessness, and so you need public-private partnerships that leverage additional resources, because the government can't do it alone.

So I am fully supportive of such things, because we need to leverage what the Federal Government will invest with private partners to scale.

Ms. VELAZQUEZ. Thank you. Thank you, Madam Chairwoman. I think my time is about to expire.

Chairwoman WATERS. Thank you very much. The gentlewoman from Missouri, Mrs. Wagner, is now recognized for 5 minutes.

Mrs. WAGNER. Thank you, Madam Chairwoman. Madam Chairwoman, Republicans on this committee agree that improvements to America's infrastructure are sorely needed. In Missouri, my home State, alone, there are over 2,000 bridges and over 7,000 miles of highway that require repair. We all generally agree on fixing bridges, improving dams and levees, paving roads, and extending broadband to underserved communities.

But the nearly $2.3 trillion in President Biden's plan has nothing to do with infrastructure and does nothing to fix outdated and inefficient programs currently in place. The Biden Administration has touted this proposal as a jobs creator, but we know that the private sector does a much better job of creating and maintaining jobs than the Federal Government.

The recent stimulus checks and continued additional unemployment benefits have disincentivized many Americans to return to work. In my district, I have heard from countless employers in the hospitality, restaurant, grocery, and farming industries who have job openings that pay over $15 an hour, and yet they cannot find anyone to fill them because folks are willing to stay home and receive the same wage from the Federal Government. If we want to support our economy and create jobs, we need to incentivize people to get back to work.

We have to be good stewards, I think, of the American taxpayer dollars, and when an infrastructure plan of $2.3 trillion only includes 7 to 10 percent for roads, highways, bridges, ports, and traditional infrastructure, I am concerned that this is not a good use of taxpayer dollars.

Additionally, the Administration wants to raise taxes in order to pay for it. Mr. Riedl, what are your thoughts on this package?

Mr. RIEDL. Thank you, Congresswoman. I agree with your critique. I think we all agree we want a better infrastructure, and we all agree infrastructure is the key to economic growth. I think there are some concerns that, again, when you only have $115 billion for highways, roads, and bridges, I think we can do a lot more on that. Certainly, our infrastructure is more than highways, roads, and bridges, but I am not sure it is everything in this package. I am not sure that long-term care, whatever its merits, has a place in an infrastructure package.

I also agree with your point that the economy is actually recovering pretty well. We had 900,000 new jobs last month. We are going to get the unemployment rate down to 5 percent at the end of the year. I think a better infrastructure package could be a lot leaner, and it could also take advantage of the fact that States just got $530 billion between multiple programs in order to—they are not supposed to cut taxes and we do not want to create permanent programs, but their budget deficits are going away. We need to leverage States. We also need to get more bang for the buck, and I think, as I mentioned in my testimony, we could do a lot more to make sure that these programs are more effective, streamlining some of the red tape.

Overall, I think this is not necessarily the bill to do the biggest expansion of government in 50 years.

Mrs. WAGNER. It is, frankly, just a reordering of our entire social structure, the hundreds of billions that have already been distributed. The last $1.9 trillion spending bill, that is what I am going to call it, had very little to do with COVID, in a timely, targeted, and tied-to-COVID basis. It is kicked out for years down the road, quite frankly. And this particular piece of legislation has over $400 billion for Medicaid expansion. It has $174 billion for electric cars and other climate programs and things.

Mr. Riedl, can you discuss the economic benefits of private sector versus Federal investment when it comes to infrastructure spending?

Mr. RIEDL. Thank you. The Congressional Budget Office did a report in 2016 which says that private investment has an average return of 10 percent, and government investment has a return of only 5 percent. And that is, in part, because government does not respond to market forces, it has very high labor costs, it is ineffective, as crowded out by less investment in the private sector in State and local governments.

So the government is only half as effective as the private sector. Don't take my word for it. That was from the Congressional Budget Office in 2016.

Mrs. WAGNER. Thank you very, very much for your testimony. I yield back.

Chairwoman WATERS. Thank you very much. The gentleman from California, Mr. Sherman, who is also the Chair of our Subcommittee on Investor Protection, Entrepreneurship, and Capital Markets, is now recognized for 5 minutes to speak on the jobs bill.

Mr. SHERMAN. Thank you. The gentlelady from Missouri argues that recharging stations are not infrastructure. It is a peculiar thought to think that you can build a road for the cars, and that is infrastructure, but you try to recharge the cars and that isn't infrastructure. Only if you are dedicated to fossil fuel cars would you conclude that roads are good but recharging stations are somehow excluded.

A number of the Republican—well, especially a number of the witnesses, actually one witness, has said, "Oh, our economy is going to overheat. We are on our way to 4-percent unemployment." Well, 4-percent unemployment may be great for the Chamber of Commerce. It creates enough demand to keep the stores open. But pay for those without a college education in this country is at the same level now that it was 30 years ago, adjusted for inflation.

We need a labor shortage in this country. We need employers screaming that they can't get the labor they need, and then they will start giving the raises as they compete for employees that the working class has been deprived of for the last 3 decades, and we will see higher labor market participation as well.

We need to build more. NIMBY-ism (Not in my Backyard) is a real problem. So many communities in this country are open to rich and poor, people of color and people without color, as long as you can afford a McMansion build on a one-quarter acre lot. That isn't open housing. We have people sleeping on park benches and we see them. We have people sleeping on couches, two and three families to a unit. We don't see them. But we have a housing shortage in this country.

One thing that exacerbates that shortage slightly, Ms. Waggoner, is the decision by FHFA to reduce the amount of apartment loans that Fannie Mae and Freddie Mac can make by saying that green loans, those to finance energy and water improvements, felt against the $70 billion cap. Should we have those green loans count against the cap, and how does constricting the cap prevent the financing of the new apartments that we need?

Ms. WAGGONER. Thank you, Congressman Sherman. I really appreciate that question about green housing. I have a number of experts on my team who know whether it should be included in the total or not. I would be happy to follow up with you to give you that information.

Mr. SHERMAN. I would say that if we are going to include them, we ought to raise the cap, because we have an excellent program in our country to provide for middle-class and upper-middle-class housing. We have tax incentives. We have financing, without any cap, and, of course, the zoning rules. And we have the finest upper- and middle-class housing in the world, with more space per person than anywhere in the world. We need to see financing and tax incentives to match that for the apartment units, for the affordable units that we need.

Ms. Yentel, we are considering Chairwoman Waters' Housing is Infrastructure Act, which would incentivize State and local governments to remove barriers for high-density affordable housing. We are going to be funding a lot of transit in this bill, and a lot of communities are anti-density. But without density, transit doesn't have enough customers to be able to operate, and without transit, density just creates traffic jams.

And I know in your testimony you say that we need 100,000 new—that we are running 100,000 new housing units behind. Should we tie both CDBG and transportation funding to communities willing to allow for the construction of moderate-income housing, particular rental housing?

Ms. YENTEL. We absolutely should, and I would say we should be as bold as possible there. Restrictive local zoning inhibits the supply of any kind of apartments, and especially affordable apartments. This drives up costs for everybody. It further entrenches segregation and racial discrimination. And there is a tremendous opportunity now, with an over $2 trillion infrastructure package, to create incentives or requirements for local communities who receive these funds to address, remove, and eliminate these restrictive zoning laws that have real harmful consequences.

And I would say we should go broader than the CDBG funds. I think that is a good place go. But for the communities who may not want to make these changes, the big infrastructure dollars are going to be a better motivation for them.

Mr. SHERMAN. Thank you.

Chairwoman WATERS. Thank you very much. The gentleman from Oklahoma, Mr. Lucas, is now recognized for 5 minutes.

Mr. LUCAS. Thank you, Madam Chairwoman. Projects have always, unfortunately, been hamstrung by red tape. The National Environmental Policy Act (NEPA) process is time-consuming, and I fear unnecessarily complex, resulting in inflated costs, delays, and endless litigation.

Mr. Riedl, you describe, in your testimony, and you have made comments about how the environmental review process can last for years. Could you discuss how reforming the process is needed to ensure an infrastructure investment is spent in an efficient and effective way, and timely?

Mr. RIEDL. Absolutely. Right now, the average environmental review takes 7 years in the United States, compared to, in Canada, if they believe a full review is necessary, it is capped at 1 to 2 years, and in the EU, it is capped at 3½ years, and I wouldn't say that those countries just don't care about the environment.

The average in the U.S. is 7 years. Several recent reviews have taken 17 years. And in a particularly egregious example, the Southeast High Speed Rail Project, first proposed in 1992, and the draft environmental review was finished in 2017—25 years.

One of the big reasons that we have delays is because the United States is unique in that environmental reviews can be challenged in court by virtually anybody who wants to do so. In other countries, they do the reviews more quickly, and when it is challenged, it is challenged administratively. You don't necessarily have every case go to court and have endless appeals. That draws out the process much longer, and additionally, it leads to defensive design. It is one of the things that raises our costs in that contractors over-design projects in a defensive way because they don't want to have to deal with all of the expensive lawsuits.

We can learn a lot from Canada and the EU in streamlining the process, streamlining the lawsuits, getting it done in 2 years instead of 7, 17, or 25 years.

Mr. LUCAS. The Biden Administration plans to permanently raise the taxes on businesses—and taxes are taxes; we all wind up paying them—for this massive infrastructure proposal. You have touched on this before, Mr. Riedl, but can you discuss how this will impact U.S. competitiveness and investment?

Mr. RIEDL. Absolutely. What the President is proposing would raise us back to the highest statutory corporate tax in the world. It would go from 21 to 28 in the U.S., and if you add State taxes it would go to 33 percent, which means, again, you have the highest rate in the world. While everyone else is cutting their corporate tax, we are raising it.

Additionally, one of the results of their proposal would essentially create a global minimum tax of about 26 percent, which is higher than the 23 percent average rate in the European Union. What that means is that an American multinational company in

England is going to be paying 26 percent, while the French, the Germans, and every other multinational is paying 19 percent in England. So once again, American companies are going to have to compete with their hands tied behind their back. They are going to have a higher rate in these countries than their competitors.

The Tax Cuts and Jobs Act isn't perfect, but one of its goals was to increase competitiveness and investment, and we have seen growth in business investment. Overall, business investment is 50 percent higher than it was projected before the Tax Cuts and Jobs Act. That will, in the long term, give us the investment that we need, that we are talking about.

And so, the idea of raising us back to the highest corporate rate, having our multinational companies pay more in other countries than their competitors, is just going to reverse some of that progress we have made. You can't raise taxes by $1.8 trillion and not have it hurt investment, hurt wages, and hurt growth.

Mr. LUCAS. Decades ago, when I was an ag econ student at Oklahoma State, I took a number of intermediate and advanced economics classes over at the business school, and one of the topics of discussion then was how to create more mobility in the workforce and how to create a more flexible workforce. And that was 40 years ago. Maybe, in some ways, we are looking at this problem from the wrong direction. We don't want to warehouse people and trap them in a particular place, and we don't want to make them inflexible or unable to adjust with the economy. Maybe we are just looking at this from the wrong angle, and the sooner we refocus, the better off everybody in America will be.

With that, I yield back.

Chairwoman WATERS. The gentleman from New York, Mr. Meeks, who is also the Chair of the House Committee on Foreign Affairs, is now recognized for 5 minutes.

Mr. MEEKS. Thank you, Madam Chairwoman, for this very, very important hearing. Housing infrastructure is absolutely key for America, because if we don't improve our housing infrastructure, people in the richest country in the world will continue to be living on the street.

I think back to my childhood, when America was thinking big, and it was thinking about housing infrastructure. I remember, as a child, I lived in a tenement that was poor. My parents were able to move into New York City Housing Authority public housing, and it was an opportunity for me and my sisters to live in a decent, clean place. We thought it was heaven.

That was over 60 years ago. While it is not investing in housing infrastructure, number one, those developments have gone down tremendously because there was nothing to do to keep them up, so they are virtually like the tenement houses that were run down, that we moved from to get into public housing, and we stopped investing in that infrastructure.

So, investing in affordable public housing is tremendously important. That is infrastructure that we need to do. It is not reinventing the wheel. It is what we did to make America move forward to become a better country for all, whether you had money or not. It gave us pride. And now we need to make sure that we are reinvesting in that infrastructure.

And given where we are today—and I guess I will direct this to Ms. Yentel—we see that on the commercial side, given the pandemic, et cetera, there is a lot of commercial real estate that now is there. People's working norms seem to be changing, due to barriers of working at home.

So given the glut in commercial real estate, what do you think about the prospect of increasing housing supply, by governments and developers working together to transform distressed commercial properties into affordable housing units? Do you think there are barriers to such repurposing of properties at the Federal level that Congress should consider?

Ms. YENTEL. Thank you, Congressman Meeks. I will say a few things on this. One, it is always less expensive to convert existing properties into affordable housing than it is to construct new affordable housing, so any opportunity we have to take abandoned buildings or existing buildings that we can repurpose and convert into affordable housing, we should. We will be able to stretch out further in that way and create more units.

Two, I would say that there are new resources that were made available in the American Rescue Plan, $5 billion for communities to address homelessness, that specifically can be used for communities to acquire and convert hotels and motels into permanently supportive housing, and we strongly encourage communities to do that, and for Congress to consider providing additional resources to do that. It is a logical next step and exit strategy for the communities that moved, people who are experiencing homelessness during the pandemic to safety into hotel rooms. Those permanent supportive housing units can then become an exit strategy for those households, and the community then has permanent housing that they can keep in that community for future needs and future generations.

Where challenges exist, it comes down to, again, restrictive local zoning and this sense of NIMBY-ism of communities opposing having affordable housing in their communities, and local zoning that empowers them to continue that opposition. So again, I would really encourage the Congress to think about how they use the full suite of resources in this infrastructure spending package, as those [inaudible] for local communities to remove those restrictive zoning laws and allow for more affordable housing to be built or converted into affordable housing.

Mr. MEEKS. Thank you. Let me ask, really quickly, in my last 40 seconds, Ms. Waggoner, your testimony discussed the importance of federally funded infrastructure projects, including housing, but being built to resiliency standards. I know public housing in my neighborhood was devastated by Superstorm Sandy. Can you talk a little bit about the importance of investing and building up some of these places to resiliency standards?

Ms. WAGGONER. Thank you, Congressman. Yes, absolutely. Enterprise was involved with you in New York during Hurricane Sandy, and we know what infrastructure looks like. It's lifting up the buildings, investing in infrastructure so it can sustain such natural disasters. So we have plans for earthquakes, water, and other efforts. Thank you.

Mr. MEEKS. Thank you. I yield back.

Chairwoman WATERS. Thank you very much. The gentleman from Florida, Mr. Posey, is now recognized for 5 minutes.

Mr. POSEY. Thank you very much, Madam Chairwoman, for holding this hearing, as you have held others on affordable housing. I really appreciate your passion for this issue.

I was sad to see the gentleman from California take a shot at Mrs. Wagner. Since she didn't have an opportunity to respond, I think it needs to be clear. She supported the economic policies of former President Trump that resulted in the strong economy that resulted in more job openings than people looking for work. And when you have a demand for workers like that, it increases the economic value of every single person in the workforce.

By profession, I have been a dues-paying REALTOR for over 40 years, and no one in this room appreciates or supports the value of housing more than I do. Decent housing is essential to the American Dream and a civil and prosperous society for all.

In my district, we currently have an all-time high housing shortage, in large part due to the flight from some high-tax, overregulated northern States. And, of course, our sellers' market harms those who have the most limited means available to them the most.

Mr. Riedl, am I wrong to believe that former President Trump's economy, which resulted in the lowest unemployment rate for minorities, was the best thing possible to make home ownership affordable to more people?

Mr. RIEDL. Thank you for the question, Congressman. The economy did very well, particularly for wages. The Congressman from California mentioned that what we really want is to see rising wages. Well, under the first 4 years of President Trump that we have data for, real wages jumped 3.5 percent annually, which was significantly faster than at any point in the previous 15 years. And if you want to look at the bottom, the bottom-earning quartile saw their real wages rise 4.2 percent annually, versus 3.1 percent for the top-earning quartile, meaning wages were rising a third faster for the bottom earners than the highest earners.

Additionally, wages grew faster for non-Whites than for Whites during those 4 years. Some of these trends started under President Obama, but they vastly accelerated. And that is because you had an unemployment rate of 3.5 percent. When the unemployment rate drops low enough, you start to see wages rise, particularly at the bottom. And if you want people to be able to move up, afford homes, and be prosperous, the key is a low unemployment rate in a fast economy that raises wages at the bottom, like we saw before the pandemic.

Mr. POSEY. Thank you, Mr. Riedl. So, just to be clear, do you agree that cutting taxes creates jobs, spurs investment, grows the economy, and makes housing more affordable to more people?

Mr. RIEDL. Absolutely, and it is not just theory. Like I said, business investment has grown 50 percent faster than projected since the 2017 tax cuts. Before the pandemic at least, the real GDP was growing 50 percent faster than projected. This is the key to raising wages. You create incentives to work, save, and invest, you get investment out there, and wages start to rise.

Again, it is not theory. If you take a look at the projections of the economy before the tax cuts, and the performing after, we beat the CBO, Federal Reserve, and blue chip projections.

Mr. POSEY. What do you think about the concept of tax incentives for creating affordable housing?

Mr. RIEDL. I'm sorry, what?

Mr. POSEY. What are your thoughts on using tax incentives to enhance affordable housing?

Mr. RIEDL. I am not sure. In terms of building affordable housing, I am not sure that tax incentives by themselves are enough. I think what we need is a growing economy and demand. I think tax incentives can be part of the solution, but if wages are rising, demand is rising, you are overcoming a little bit of NIMBY-ism with local zoning, that is the key to getting housing. And we saw that in the late 1990s, when the economy was on fire, and we saw that before the pandemic. What you need is a growing economy with growing wages at the bottom. Otherwise, a tax incentive itself is not necessarily going to help the people afford the houses whom we want to get in the houses.

Mr. POSEY. Right, and I thank you for your comments. Madam Chairwoman, I see my time is up, so I yield back. Thank you.

Chairwoman WATERS. Thank you. The gentleman from Georgia, Mr. Scott, who is also the Chair of the House Agriculture Committee, is now recognized for 5 minutes.

Mr. SCOTT. Thank you very much, Madam Chairwoman. I was very pleased to lead the legislation, along with Chairwoman Waters, that dealt with bringing $10 billion in for homeowner assistance, which was included in the American Rescue Plan, as well as $25 billion for rental assistance and utilities. We moved on that. It had a great impact.

But I want to pause for a moment here, because my Republican friends have this talking point, "I looked at all of this that is in the bill, and 1 percent has to do with COVID-19." And here we are, and I have heard some of the comments from my Republican friends, and they are raising issues of, what does this housing shortage, homelessness, have to do with COVID-19? That is why we have this. We have had this problem with homelessness. We have had it all along. But now it has been exacerbated. Why? Because of COVID-19.

They had the same sound bite when we had to deal with why we needed to increase the food supply, why the lines were long. All you have to do is look in any city, any town, and you see the homelessness that has grown, and the impact that COVID-19 has had on this, because they don't have the money. They are losing it.

So, I hope my Republican friends will understand that this economic situation we are in is because of COVID-19. We wouldn't be in it if this disease and pandemic hadn't been on us. So, we are trying to deal with this in a rational way.

But now, Ms. Yentel and Mr. McAfee, and others, I am concerned about what we have done. What is your understanding of our getting this money out? It is critical that this funding is distributed efficiently and effectively and immediately, so that our States and Territories can help. In other words, we have the funding, we have the need, but now where we are on implementing this money?

Where are we, in your opinion? Are we moving fast enough? Is our information in place to get the money that we have already gotten down to help them? Mr. McAfee and Ms. Yentel, I think you all may want to give me a yes or a no, and other members too. Are we moving quickly enough? Is that money still sitting there and not getting down to the people?

Mr. MCAFEE. That money is moving. It is beginning to get down to the people. And as we have heard before, we do need to refocus. We do need to refocus, because we do need a healthy, vibrant economy. That economy needs to be equitable. No matter where you sit on the political spectrum, the reality is that in this nation, 100 million folks are economically insecure. That is the reality. One in three people are struggling to make ends meet, no matter the color of their skin.

Mr. SCOTT. Ms. Yentel, your thoughts?

Ms. YENTEL. Yes, thank you. So at this point, Congress has appropriated a combined $46.5 billion to help address the nearly $50 billion in rent and utility arrears that renters have accrued during the pandemic. Communities are getting programs up and running. We are tracking all of them throughout the country. At last count, there were close to 180 emergency rental assistance programs that are using the first tranche of the $25 billion, and more are coming online every day. There are about 30 Statewide programs in effect, and many more city and county programs.

I think we have to find the balance between getting the money to the people who need it the most, the lowest-income people, the most marginalized renters, and small landlords, and recognize that takes more time to do the deliberate outreach. That is why it is so essential that we keep the Federal eviction moratorium in place until communities can get these resources to the people who need it the most.

Mr. SCOTT. Thank you very much.

Chairwoman WATERS. Thank you, Mr. Scott. The gentleman from Missouri, Mr. Luetkemeyer, is now recognized for 5 minutes.

Mr. Luetkemeyer. Thank you, Madam Chairwoman. I just want to clarify a little something here. I think Mr. Sherman, a while ago, went after Mrs. Wagner with regards to her comments about charging stations and infrastructure. I think if you are going to equate charging stations to infrastructure, then that means the gas pumps at traditional quick shops and filling stations would also be infrastructure. According to my car dealer friends, roughly 2 percent of the cars on the road are electric cars, which means 98 percent of them are gasoline and diesel fuel, which means if you really want to be helpful to the folks on the road, maybe we could find a way to make the gas pumps a little more energy-efficient at the quick shops. Obviously, tongue-in-cheek, but I think it makes the point.

Ms. Yentel, I guess in the Biden legislation, and also Chairwoman Waters' program, there is no mention of the Rental Assistance Demonstration (RAD) program that was initiated in the Obama Administration, that was specifically to reduce the backlog of capital needs in the public housing program. The RAD program has leveraged private capital to repair and convert over 100,000 housing units.

Do you think this program is worthwhile? Why wouldn't it be included in something like this, if it is?

Ms. YENTEL. The Rental Assistance Demonstration Program is a demonstration, and it was created in response to Congress disinvesting and underfunding public housing operations and capital repairs for many decades. So, it was an innovative way to find additional capital elsewhere to try to keep up with repairs as they were needed.

One, I think we need to study what worked and what didn't in the Rental Assistance Demonstration before we expand it further. There are places where strong renter protections are embedded in the law but not always practiced in reality in communities. And also, as Congress considers investments in infrastructure, certainly they should make a $70 billion investment in the public housing capital to bring all of these units and ensure that they are habitable for the people who live there today and for future residents who may need them.

Mr. LUETKEMEYER. This is a program that was initiated back in the Obama years, and that was at least 4, 5, 6 years ago. So, I don't know why we haven't gotten a study done by now to figure out if this is a worthwhile program. I was the Chair of the Subcommittee on Housing and Insurance for a period of time, so I am familiar with the program and its effects. And it has always been a point of discussion about whether or not it is worthwhile. So, your comment about studying it is a head-scratcher for me.

Also, HUD generally does not do direct financing on construction of new homes, except for the fact that they do in the Housing Trust Fund. I think, Ms. Yentel, you made the comment with regards to the Housing Trust Fund. This program, to me, illustrates how little new housing HUD actually spends money on. Through February, the Housing Trust Fund had received nearly $1.2 billion in funding over the last 5 years, and so far has produced 485 units of completed new housing construction. That is an abysmal average of 97 completed, newly constructed units per year, at a cost of $2.7 to one, in total funding to newly constructed housing units.

Explain to me why we need to continue to use the Housing Trust Fund to build new houses? A $2.7 million house would be a pretty nice house in my neighborhood.

Ms. YENTEL. No, that is not at all a fair comparison, Congressman. The average unit cost to build or rehabilitate a National Housing Trust Fund unit is $200,000 to $250,000. As you know, new construction takes time, and building apartments that are affordable to extremely low-income people can often take more time. There can be delays at the local level related to zoning, restricted zoning laws, as we have discussed in this hearing already.

So, the average unit cost for a Housing Trust Fund unit is closer to $200,000, and more needs to be done to build these units faster, and the current funding level for the Housing Trust Fund is about $700 million. It is the largest allocation for the Trust Fund yet. It was just announced by HUD last week. It is an important resource that will be put to good use to build apartments for extremely low-income—

Mr. LUETKEMEYER. My time is running out—

Ms. YENTEL. —and much more is needed.

Mr. LUETKEMEYER. It is very concerning to me, when we have that much money spent per house, and I think you made the point already with regards to zoning laws, and the bureaucratic red tape of an agency like this, that adds costs to these homes, that is something that we need to take a very close look at.

I yield back.

Chairwoman WATERS. Thank you very much. The gentleman from Texas, Mr. Green, who is also the Chair of our Subcommittee on Oversight and Investigations, is now recognized for 5 minutes.

Mr. GREEN. Thank you very much, Madam Chairwoman. I would like to start my 5 minutes by recognizing what you are doing in the area of flood insurance. REALTORS are constantly asking me about this, and will we do something, and they want something done that will have a long-term impact. And I see that the proposal that you have would record relief for 5 years. I think that is beneficial

It would also help us with this debt, something that we have been plagued with. I just appreciate what you have, because it would give me an opportunity to say to the REALTORS that there is some movement that you are part of, and I think this will be important to them and also to the people who actually buy the properties, because you need the flood insurance in many instances before you can acquire the property. Thank you so much for what you are doing there.

I would like to talk about the Community Development Block Grant Disaster Relief Program (CDBG–DR), that deals with disaster relief. This is an important program. I was fortunate enough to travel with Mr. Cleaver and Chairwoman Waters to New Orleans after Hurricane Katrina, and we had a chance to see the devastation, not only in public housing, but also in an area known as the Lower Ninth Ward. Some of the devastation there was just unimaginable. You had to see it to believe that things of this nature could happen.

Well, the community did not get the kind of recovery that a good many other places were able to receive. They were able to build back better, to borrow a phrase, and some of these folks will never build back. So, this legislation hopefully will help moderate-income communities after they have been devastated. This is something that is very important and it would create a permanent framework for the CDBG–DR program, Community Development Block Grant Disaster Relief Program.

I think this is important, because we reinvent the wheel after each catastrophe. This would eliminate the necessity to do this. It would reduce the volume of Federal Register notices. These notices take time, and when you compile one on top of another, it takes a lot of time to get things done. Standardizing the rules for all of the grants, I think is important, because when we anticipate what will happen, it is good to know the rules ahead of time, and it would ensure the timely disbursement and closing of grants.

So, Ms. Yentel, I would like to ask, these are some of the things that I believe are going to be beneficial. Give me your thoughts on having a codified CDBG program such as the CDBG–DR Program. Thank you.

Ms. YENTEL. Yes. Thank you, Congressman. We strongly support your bipartisan bill to permanently authorize the CDBG–DR Program. As you know, after disasters Congress essentially reauthorizes that after every disaster through the appropriations process, which: one, takes too long for communities who are waiting for urgently needed resources to be able to rebuild and recover; and two, it doesn't have the kind of requirements in it that it should. And so the legislation that you have advanced, and that we strongly support, would permanently authorize it and also would require that local communities distribute those funds equitably, equitably split between infrastructure and housing, equitably split between homeowners and renters, and there are real racial equity implications to this as well. For example, after Hurricane Harvey, we know that a lot, the majority of CDBG disaster recovery funds went to higher-income homeowners and not to the lower-income Black and Brown renters who needed those resources the most.

So ensuring that there are equitable distributions and split so that enough money is going to housing and going to low-income renters will go a long way towards more equitable recovery in communities hit by disasters.

Mr. GREEN. Thank you for your comments. Mr. McAfee, do you find favor with the program? Probably a simple yes, with about 10 seconds of a response is all that we have left.

Mr. MCAFEE. Yes, I do.

Mr. GREEN. I greatly appreciate your sentiments in such a short fashion.

Thank you very much, and I yield back, Madam Chairwoman.

Chairwoman WATERS. Thank you very much. The gentleman from Kentucky, Mr. Barr, is now recognized for 5 minutes.

Mr. BARR. Thank you, Madam Chairwoman, and as I listen to the conversation it just occurs to me that nobody here seems to recognize that we have maxed out the credit card, trillions and trillions and trillions of dollars in borrowing, and we still say there is no problem, just spending money like it grows on trees. It just boggles my mind.

I recently received a disturbing email from a constituent that demonstrates the breathtaking shortfalls of this multi-trillion-dollar tax-and-spend, big-government, jet-exploding strategy that the Biden Administration is pursuing. My constituent owns 14 restaurants and he employs hundreds of workers in my district. And a few days after receiving their third economic impact payment of $1,400, 85 of his 267 employees walked off the job. I want to repeat that—85 of his employees, who have a job, they were employed, they walked off the job. And to save everyone the math, that is 32 percent of his entire workforce that quit because of the American Recovery Plan. They quit because of the ARP. With $1,400 for themselves, their spouses, and dependents, they felt they no longer had to work.

Now, he is having big trouble backfilling those roles because the job market is so tight. The NFIB recently reported that 40 percent of small businesses have job openings that they cannot fill right now, and he is one of the victims. And his employees are victims now because they no longer have a job, because the government, and Congress specifically, has told those people to go home and not work.

And he is now having trouble even operating his business. My constituent told me he didn't see a similar pattern with the first economic impact payments under the Coronavirus Aid, Relief, and Economic Security (CARES) Act, back when employees were truly struggling and they really needed the money and when restaurants were forced to actually shut down.

I know that many of my colleagues on both sides of the aisle are hearing similar stories in their districts, and it shows the consequences when Congress and the Administration ignore basic economics and plow through trillions of dollars in poorly targeted spending, even as the economy is recovering.

Mr. Riedl, in your research have you encountered similar anecdotes? And since we are talking about infrastructure and housing, is paying people not to work helping those people's prospects for housing security in the long run?

Mr. RIEDL. Thank you for the question. The history of anti-poverty programs has shown that you have to be very careful with incentives. The old AFTC programs were notorious for having huge incentive effects against working because the phase-out rate was so steep. Even people on the right and left agree that was poorly designed.

In terms of unemployment benefits, the average unemployment benefit right now is about 100 percent of the wage replenishment for the average unemployed worker. Now, that is not bad when the unemployment rate is 14 percent and we are paying people to stay home and you don't want people to work. The danger is that as soon as the economy recovers, as it is starting to, as soon as people start to go back to work, as soon as people get their pandemic shots, all of a sudden, when you want people to go back to work, having that 100-percent wage replacement from unemployment benefits will create a cliff.

I don't think it was a big problem when we didn't want people to work, but very quickly, I think we are going to see over the next couple of months, it is going to become a problem when the economy reopens and individuals see that the marginal additional wage of working is at least, in the short term, almost zero.

Mr. BARR. Just to reclaim my time, and I only have a minute left, but look, I think that the best way we can help people have long-term, sustainable, non-subsidized housing is to make sure that they have wage growth, and increasing taxes and reversing the positive benefits of the Tax Cuts and Jobs Act, where we saw, in the first 2 years after the tax cuts, real median household income increased $4,900, employment surged, especially among the long-term unemployed, poor and minorities' wealth for the bottom 50 percent of households advanced 3 times as fast as the top 1 percent, average median income increased 6.8 percent. Why would we reverse that when we were actually helping people achieve their own housing and to be able to afford their own housing without relying on the government?

It just seems totally counterintuitive to me that we would reverse the progress we have made, that actually helped people in the lower echelons of the income scale. And I yield back.

Chairwoman WATERS. Thank you very much. Just a moment here before I call on the next member.

I want to clarify Mr. Barr's statement. Congress has told no one to go home and not to work. I don't think he really meant that.

With that, the gentleman from Missouri, Mr. Cleaver, who is also the Chair of our Subcommittee on Housing, Community Development, and Insurance, is now recognized for 5 minutes.

Mr. CLEAVER. Thank you very much, Madam Chairwoman. Mr. Riedl, did I pronounce your name correctly?

Mr. RIEDL. It is "Riedl," but you can call me anything.

Mr. CLEAVER. "Riedl." Thank you so kindly. I have to just respond. I am from Missouri, as the chairwoman just announced, as is she, but as you had said earlier, you talked about the delays in a lot of projects. There is something called the MetroLink in St. Louis, and there were some delays in MetroLink because it was going through a slave cemetery, an African-American cemetery after we began slavery, including the burial site for Harriett Scott, the wife of Dred Scott. So, there was a delay.

Help me understand what we could have done, other than stop slavery before 1619, to prevent that from happening?

Mr. RIEDL. Oh, certainly some delays are inevitable, and no one is assuming that we can build the Empire State Building in 400 days all over again. Some delays can work.

I guess the point is, Canada can do it in 1 to 2 years. The EU can do it in 3½ years. I think we can identify these things and come to solutions quicker than 7 years, 17 years, or 25 years. Part of the reason we have delays is litigation. The issue you just brought up is one that can be dealt with administratively rather than having these statements come out and then relying on the court system to litigate everyone who has an issue with the environmental impact statement. You bring up a very common-sense issue with that line, that could have been addressed administratively in a lot less than 7 years.

Mr. CLEAVER. Okay. I don't want to be argumentative, so thank you very kindly.

The ranking member, my classmate, said, "The Biden plan is not a housing bill. More funding will not solve the problem associated with the housing supply shortage or our homeless problems in this country. We need to rethink how we provide affordable, suitable housing for all members," and I agree with him, so that is why if you go through and read the President's plan, you will find that when we put these programs together it brings local leaders, residents, and other stakeholders on board to develop community transformation plans that extend beyond physical assets. And I am very proud of the fact that in my 8 years as mayor, Kansas City actually became the first City in the country to go into a HOPE VI Program with HUD, which is severely distressed public housing projects. And it focuses on transforming neighborhoods.

So I would like to ask any or all the panelists if they could do a one- or two-word answer, do any of you believe that America can adequately respond to the affordable housing crises without increased Federal investment? Anybody?

Ms. WAGGONER. Thank you, Congressman Cleaver. Absolutely, we cannot do it without more resources. It is necessary.

Mr. CLEAVER. Thank you. Does anyone believe that we can do it without resources?

Ms. YENTEL. No, absolutely not. We can't.

Mr. MCAFEE. We can't. And we are not a poor nation, so we need to stop acting like we are.

Mr. CLEAVER. Well, maybe we ought to just shut this hearing down and go out and start trying to get this housing bill, because— I don't have an economic background, but just being a preacher, I can't reform the nursery down in the basement unless I spend some money. People just will not do that stuff for free. Anybody's church get people to rebuild a new church for free? Just raise your hand. Or a synagogue? A mosque?

Okay. Thank you, Madam Chairwoman. I yield back.

Chairwoman WATERS. Thank you very much. The gentleman from Texas, Mr. Williams, is now recognized for 5 minutes.

Mr. WILLIAMS OF TEXAS. Thank you, Madam Chairwoman. I just want to reinforce something my colleague, Mr. Barr, mentioned. He is right when he talked about unemployment, because when people are on paid, enhanced unemployment, they tend to not work. I can tell you, I have an economics background, and that is the truth. So that means that we can't be raising taxes on businesses. I can tell you, I am a Main Street person, I live on Main Street America. And when we do that, Main Street businesses will hire less people. They will make fewer jobs available. And you won't have affordable housing if Main Street and businesses are punished through higher taxes. The government can create a job but the government can't create net worth, which is what the private sector does.

In a recent study by the National Association of Manufacturers, the tax increases that have been been proposed to help pay for the infrastructure plan would cost over 1 million jobs in the first 2 years alone. Regardless of how many jobs that this temporary injection of money may create, it is not sustainable to think we can consistently maintain infrastructure by taxing corporations. You can't tax corporations enough to pay for this.

Instead, we need to be leveraging the private sector to partner with the Federal Government to help reduce the cost of these projects, because the more the private sector is involved, the less the Federal Government needs to spend. And we all know, and I think we all agree that when you deal with the private sector, projects get completed quicker, they get completed cheaper, and they get completed better and have better quality since there is an incentive to maintain the projects, not an incentive to not go to work.

So, Mr. Riedl, can you discuss some of the benefits, and you have done it earlier, of public-private partnerships?

Mr. RIEDL. Thank you, Congressman. Again, going back to the Congressional Budget Office, the Congressional Budget Office has concluded that the private sector is more efficient at infrastructure investments than the public sector. They are more responsive to market signals, they can do it at a lower cost, they are more effective, they are quicker, and when the government is doing the investing, you see the claw-back, which is the crowd-out, which is the fact that when the Federal Government is doing it, State and local governments respond by doing less, almost dollar for dollar, and the private sector responds by doing less.

So, the Congressional Budget Office has said lower costs, faster, more efficient, more market signals equals double the return on investment as when the government does it.

The issue is not, do we rebuild this country, do we make it stronger, of course, we do. The question is, do we do it, and how effectively?

Mr. WILLIAMS OF TEXAS. Okay. Thank you. And it does work in Texas, too. I can tell you that.

Secondly, I have long been supportive of an infrastructure package, as we all are. When the Federal Government invests in roads and bridges, the economic activity in communities gets more efficient. I have even been supportive of increasing the scope of traditional infrastructure to include broadband, which we need badly. Because as we have learned during the pandemic, it is a necessary component to participate in the 21st Century economy.

But this proposal tries to include every progressive priority in the bill by calling anything—anything—infrastructure. Included in this bill are provisions to bolster labor unions by eliminating the right-to-work laws in Republican-controlled States. There are the Green New Deal mandates that we always hear about, to retrofit homes to make them more energy-efficient, instead of dealing with the supply issues that are prevalent all across this country today. And there is a new $10 billion Civilian Climate Corporation to advance environmental justice, which sounds a lot like a handout to our President's progressive allies. None of these have anything to do with the infrastructure deal that would truly benefit our country. Infrastructure, to me, is what you can touch. It is not what you can feel in your heart.

So, Mr. Riedl, I would like to give you the opportunity to highlight any other extraneous provisions in the infrastructure proposal, and get your opinion on what we should be focused on for a targeted infrastructure bill that could provide economic growth and real jobs.

Mr. RIEDL. Well, I think it is telling that the single largest line item proposal in this bill is the Medicaid long-term care proposal. Look, I like long-term care, but I don't think $400 billion of that is infrastructure. Infrastructure, as has been defined by every dictionary, is physical structures that help make the economy more productive.

Additionally, there are a lot of corporate welfare grants in this bill that I wouldn't call infrastructure. We are bringing back a lot of the approaches that we have been trying to move away from for the last 10, 20, 30 years, where we just kind of give grants to corporations that will do government-approved projects. This is very ineffective. Corporations can raise their own money.

Mr. WILLIAMS OF TEXAS. Madam Chairwoman, I yield back.

Chairwoman WATERS. Thank you. The gentleman from Colorado, Mr. Perlmutter, who is also the Chair of our Subcommittee on Consumer Protection and Financial Institutions, is now recognized for 5 minutes to talk about the Housing is Infrastructure Act.

Mr. PERLMUTTER. Thanks, Madam Chairwoman. This is a great hearing. We have a lot of different perspectives, and everybody is getting to share them.

I do have a couple of questions for Ms. Waggoner and Ms. Yentel, but I want to make a couple or three points first. One is a response to my friend, Mr. Barr. He was talking about some restaurant that had a lot of its employees leave the restaurant, and he was complaining about the American Rescue Plan. Well, at 10:42 this morning, just before Mr. Barr spoke—I have been working with a restauranteur in Colorado who had to close his restaurants for the last year, during this pandemic. And I have been working with him on the American Rescue Plan in the restaurant section of that bill. He writes, "Hey, Ed. I wanted to let you know that Coperta—one of his restaurants—reopened last Saturday, and Beast + Bottle is slated to reopen this Friday. Thank you for all your help and communication with this endeavor."

Then he goes on and says a lot of nice things about me, but I won't read that. He says, "I wanted to propose an idea and help pay it forward. If I can ever be a resource to you for any type of roundtable, please think of me." So to my friend, Mr. Barr, at least in Colorado, the restaurant owners really appreciate the American Rescue Plan.

Now, Mr. Riedl, you were very kind in mentioning how many jobs were brought on board last month, I think you said 916,000. Well, all I can say is thank goodness for Joe Biden and Kamala Harris, because at the end of the Trump Administration, we lost, initially, 21 million jobs. We were down 11 million jobs from this time last year. And thank goodness we have a Democratic White House, a Democratic Senate, and a Democratic Congress to get this economy moving again.

The last thing I will say and then I will get to my questions is, Ms. Waggoner talked about infrastructure being, "sorely needed." Those were her words. And Mr. Lucas talked about competitiveness. And the real purpose of this is to put people back to work and allow our country to be competitive with the rest of the world for the next 50 years, and especially China, whether it is roads and bridges, broadband, electrical grid, water system, housing—which is what we are talking about in this bill—schools, and manufacturing.

Ms. Waggoner and Ms. Yentel, last Congress I introduced a bill called the Green Neighborhoods Act. This was an updated version of the Green Act, which Enterprise helped me write back in 2008, and which passed the House twice. One component of this legislation is focused on how to incorporate energy efficiency into the Department of Housing and Urban Development (HUD) assistance and lending programs. Specifically, the bill would require HUD to offer incentives for new construction and retrofitting existing properties that meet certain green building standards.

Ms. Waggoner and Ms. Yentel, is there a set of green building standards you think HUD should adopt across all of its programs?

Ms. WAGGONER. Thank you for the opportunity. Yes. Green Communities, which is in 30 States across this country, all of those things that we need to prioritize are written there. And we should do it as a practice, because I always tell people you either pay for it now or pay for it later. If we don't pay for green infrastructure and resilience, we will pay for it on the back end when we do have disasters and/or people are experiencing health or other issues, because they don't live in a housing building that is healthy and green.

Mr. PERLMUTTER. Thank you. Ms. Yentel?

Ms. YENTEL. I agree with Ms. Waggoner, and I just would say, though, at the National Low Income Housing Coalition, we also strongly support the Green Communities standard that Enterprise created and implemented, that has proven effective.

Mr. PERLMUTTER. How would writing the standards help grantees, and what role would technical assistance from HUD play in the process? I will start with you again, Ms. Waggoner.

Ms. WAGGONER. We have heard a lot about government partners being more efficient and effective as key to success with these resources, so advisory services, we do that across the country, to aid governments in absorption of such practices and resources. And so aid is needed to ensure that this money is spent well and serves its purpose.

Mr. PERLMUTTER. Thank you. Ms. Yentel, I have 10 seconds.

Ms. YENTEL. I think with any kind of program like this local communities need resources to build capacity and the understanding of how to utilize them best.

Mr. PERLMUTTER. Thank you very much, Madam Chairwoman. I yield back.

Chairwoman WATERS. Thank you very much. The gentleman from Arkansas, Mr. Hill, is now recognized for 5 minutes.

Mr. HILL. Thank you, Madam Chairwoman. We simply have to remove all of the energy drinks from Congressman Perlmutter's office. We just can't take it anymore, but we appreciate your enthusiasm. Thanks for your leadership on these issues.

And, of course, I am really pleased to be a part of this hearing. I hoped, Madam Chairwoman, that this would be the beginning of a discussion, committee by committee, that was bipartisan, including a bipartisan consensus on just what the definition of "infrastructure" is. But as we have learned in recent days, "infrastructure" means everything to every Member of the House and Senate, and when "infrastructure" means everything, it can mean nothing. So, we really have to focus on targeting our debates in the Congress.

Second, I wish we were not using, again, budget reconciliation as a way to cram down on the American people an enormous tax increase across the economy as we are trying to come out of this pandemic, get people back to work, and new government regulatory mandates, and again, put through what is this broad wish list that goes way beyond infrastructure.

This is not something that is just a Republican view. There are detractors. I think it has detractors on both sides of the aisle for using large tax increases to fund a very partisan wish list.

With that said, I was looking at the Committee for a Responsible Federal Budget, and even they outlined that only about 30 percent, in a generous definition, would be considered transportation-type infrastructure, which is what President Biden campaigned on and what Congress has talked about time and time again.

I don't need to remind anybody that we have already invested in the economy in rebounding our economic growth and killing the virus, $4 trillion to fight the pandemic and make significant impacts in social policy, and that was before the Congress passed the American Rescue Plan, and that was signed into law with trillions of dollars more. So infrastructure—I think we could do a much better job of focusing here, targeting, and making it bipartisan.

The big picture bill that President Biden has talked about, although we have seen no details and no written legislative text, but the memorandum outlining his goals for infrastructure had a special carve-out for energy, including electric vehicles and vehicle charging stations. And this is not bad per se, but I think these funds could be better used within the energy sector to go towards projects that are much more complex, much more expensive, have much less private sector already rapid investment, and one of those that would be benefitted, in my view, is nuclear energy.

I have long been an advocate for the greater use of nuclear energy. Ranking Member McHenry and I recently introduced the International Nuclear Energy Financing Act, which would bring back financing for nuclear power through the World Bank. This legislation seeks to flip the script on the narrative and encourages U.S. representatives at the multilateral development banks, including the World Bank, to advocate and push for nuclear energy projects and solutions around the world. Years of climate talks have resulted in handshakes and a lot of photo ops, but little action, and it is past time to advocate for truly emission-free, carbon emission-free nuclear power.

Recently, I published an op-ed in The Hill, where I argued for a renewed focus on this form of power and its consistent low carbon product. In my view, nuclear power is a better alternative to many other renewable type choices because it is a large, solid, baseline, 24-hour-a-day, 7-day-a-week, reliable, carbon-free power source. And, in fact, in our country's nuclear plants, 92.3 percent operate 363 days out of 365 days, without any work stoppages, and that is the kind of baseline power that benefits American competitiveness.

So, Mr. Riedl, I wanted to ask you a question, to get your perspective. As nuclear energy provides 52 percent of our carbon-free baseline power for electricity in 2020, making it our largest domestic source of clean energy, would reducing costs, increasing competitiveness of nuclear energy to the forefront of this legislation make American more energy independent and competitive?

Mr. RIEDL. Absolutely. Nuclear power is cleaner, it is cost-effective, and it is better for the environment. If we really want to decarbonize, moving to nuclear, I think, should have to become part of the solution. Solar and wind are helpful, but they are not there yet. I think nuclear has to be part of the solution.

Mr. HILL. Thanks so much, and, Madam Chairwoman, I yield back. Thanks for the time.

Chairwoman WATERS. Thank you. The gentleman from Illinois, Mr. Foster, is now recognized for 5 minutes.

Mr. FOSTER. Thank you, Madam Chairwoman. First off, I would just like to second my colleague, Mr. Hill's, enthusiasm for nuclear power, which is not really the subject of this hearing, but also to point out that the projects that we are funding in nuclear will provide not only baseload power but the ability to follow the day-night [inaudible].

However, what several Members have brought up here in different forms is the dangers of politically allocated capital. A famous example of this was the Republican proposal for a bridge to nowhere, which many of you may remember, which was the half-million-dollar federally funded bridge to an island in Alaska with 50 residents. The obvious danger of building, for example, subsidized housing in areas where the jobs have gone away and they are not coming back, is a real danger, a point that my colleague from Oklahoma made earlier.

And for this reason, the National Investment Authority Act, the infrastructure bank, has numerous safeguards to prevent politically driven misallocation of capital into projects that really serve no long-term economic purpose. So I guess, Dr. Omarova, or whomever would like to pick it up, could you describe some of the safeguards built into the infrastructure bank to ensure that taxpayer support goes into economically useful projects?

Ms. OMAROVA. Thank you so much. Yes, I absolutely agree it is extremely important to make sure that the National Investment Authority, or any infrastructure bank for that matter, makes decisions based on what the market needs and what the people need, rather than what political incumbents need.

The NIA would basically be tasked with developing a strategic view of what the economy really needs, starting on a trial basis, originally geographically but also in terms of communities, and to channel capital right into those pockets rather than according to the whims of some local politicians. And the NIA will also be working with private investors and private partners as well as with local communities and public authorities. So, incorporating market signals into the NIA's activities is a very important safeguard in this respect. I also propose the creation of a public interest council, kind of a watchdog over the NIA's allocation decisions.

Mr. FOSTER. Thank you. Does anyone else have any comments on this, because it is something that in Congress, we have to watch very carefully, to make sure that the public gets a good return on its investment in this area.

Ms. YENTEL. I would add that the formula for the National Housing Trust Fund is also very well-targeted to ensure that these resources go to the communities with the greatest needs. The formula for the Housing Trust Fund is based on the number of communities that have a limited supply of homes affordable to the lowest-income people, the number of communities with the highest percentage of extremely low-income renters, renters who are cost-burdened. So, it is very precision-focused in ensuring that the funds go to the communities who have the greatest needs, to build more apartments affordable to the lowest-income renters who live there.

Mr. FOSTER. There are really two variables here. There is the greatest need, and then there is the future economic promise, and so trying to figure out how to balance those two factors to some kind of signal, is a challenge that I think we encounter very often in Congress when we are structuring these.

One of the barriers to housing for the underhoused and underbanked is the lack of a digital footprint to establish credit or even a digital identity. We have seen that the emergency assistance programs that Congress has established have become a magnet for online fraud.

Affordable broadband internet connectivity for all Americans seems to be one of the areas of bipartisan agreement for infrastructure investment, but that really doesn't do you much good in this area if you don't have the digital infrastructure for a person who is marginally banked to really establish their identity and prove who they are online. In response to that, some States have begun providing so-called digital driver's licenses and other mechanisms for people to assert their identity online, and have seen a tremendous benefit to the marginally banked and the underbanked for this.

Does anyone have any comments on the very large literature that sort of backs this up, and what the promising initiatives are?

Ms. OMAROVA. If I may, this is a very important issue, and we do need to invest in digital infrastructure. It is not what you touch, it is what serves the needs of the people and the economy.

Chairwoman WATERS. Thank you very much. I would like Mr. Stivers to indicate who is next from his side of the aisle. If not, we will move on until they determine who will be speaking next, and we will recognize the gentleman from Ohio, Mr. Davidson, for 5 minutes.

[pause]

Chairwoman WATERS. The gentleman from Texas, Mr. Taylor, is now recognized for 5 minutes.

Mr. TAYLOR. Thank you, Madam Chairwoman. Can you hear me?

Chairwoman WATERS. Yes.

Mr. TAYLOR. Thank you so much. I appreciate this hearing. This is clearly a huge subject. It is actually a $2 trillion subject, and so I think it really is important that we sit down as Members of Congress and think about the economic impacts of what we are about to do.

I would like to, if I could, Madam Chairwoman, submit into the record an article from Goldman Sachs published on April 1st, entitled, "Top of Mind Reflation Risk."

Chairwoman WATERS. Without objection, it is so ordered.

Mr. TAYLOR. Thank you, Madam Chairwoman.

This is a chart from that report. I don't know if you can see it on the screen, but it shows how much the Federal Government has injected in terms of fiscal stimulus relative to slack in the economy. In 2020, last year, we actually injected 5½ times the slack in the economy, and already this year, we have injected 6 times the slack in the economy. So, our stimulus is the most aggressive stimulus ever tried in the history of our country. This chart will show you that previously, in 2009 and 2010, we were injecting between 1 and 2 times stimulus in 2009 and 2010.

So, this is an extraordinary level of stimulus that has already been injected, so it is already here. Forget this $2 trillion bill that we are talking about today. This is already what has passed, already what is in the hopper, so to speak.

I am deeply concerned that we are overheating our economy. We are seeing extraordinary increases in prices across-the-board. And, too, I am going to read a Reddit blog, but look at this: Steel up 145 percent, lumber up 126 percent, oil prices up 80 percent, soybeans up 71 percent, copper up 50 percent, silver up 38 percent. I heard from employers across my district, all kinds of industries, saying they are having a hard time finding labor, they are seeing prices go up, they have orders with very long times to fill, long lead times. I am very concerned. We have already overheated the economy. There are many indications we already have.

Mr. Riedl, could you speak to what is going to happen with what we have already done, and if we pour $2 trillion more, literally gasoline on the fire, what would that actually mean? How does that end up?

Mr. RIEDL. Thank you, Congressman. I think going into this year, the Congressional Budget Office said that the output gap was about $400 billion. Then, Congress responded with a $1.9 trillion bill, which was nearly 5 times the output gap. So, unless you are assuming that there is pretty much no multiplier, you have more than closed the output gap. In that context, anything you do now, if you do another $1 trillion, $2 trillion, that gets spent this year, you already are going to be hitting your maximum output. There is only so much you can do, which means at that point you get a little overheating, and ultimately you have prices rise, you get inflation, and you get a misallocation of resources, unless the Federal Reserve can start to reverse course and basically peg banks to hold as much money in banks as possible, start paying reserves. If that is the case, then the stimulus itself is self-defeating. All you have done is put money out there and then have the Federal Reserve pay banks to keep as much as you can in the bank. You are adding to the deficit with no economic positive impact at that point.

Mr. TAYLOR. Right. And think the lesson is you can take up the slack, but once the slack is gone, there is nothing left to do. You are just creating tremendous dislocation within the economy. And I think you make a great point that this could potentially be self-defeating. We may have already done it. The indications I have, from my time at home, in Texas, is that the economy is heating up. I am not saying that it is perfect. There are still people out there who are hurting, and I don't want to sound like I don't care. I absolutely do. But I think that our economy is heading in the right direction. I believe that we have overstimulated it, and this bill is going to exacerbate that overstimulation, and I think it is going to lead to inflation. I think we need to really step back and think carefully about what we, as a Congress, are going to do before we do it.

Madam Chairwoman, thank you for calling on me early. I yield back.

Chairwoman WATERS. Thank you very much. The gentlewoman from Ohio, Mrs. Beatty, who is also the Chair of our Subcommittee on Diversity and Inclusion, is now recognized for 5 minutes.

Mrs. BEATTY. Thank you so much, Madam Chairwoman, not only for allowing me 5 minutes, but certainly for hosting this very important and on-time committee hearing. We have a lot of work to do, but I am actually going to take 10 minutes of my time to applaud you, not only for your leadership, but for understanding that we have a job, a role, and an obligation as we craft and write legislation, to also stand up for the people. And your work on housing, your work on infrastructure has certainly put you in a space that the nation is watching. And I want to just say thank you for that.

With that said, Ms. Waggoner, my first question—and I am going to try to get through two questions, so if I am rushing, it is only because I am racing against the clock. Ms. Waggoner, I am going to start with a question for you. Based on your organization's work, actually in my district as well as, I know, you work across the country, the shortage of housing that we are experiencing in my district in Columbus, Ohio, is playing out not only in my district, but in cities across this country. Housing just cannot keep pace with the demand, which results in, as you know, higher housing prices.

Prior to the housing crisis of 2008, Columbus, Ohio, was producing 1,000 housing units per month. Despite the surge in population growth in Columbus over the past 10 years roughly 32,000 residents per year, our housing supply has just been not able to keep up the pace, producing only about 400 units per month prior to the pandemic.

Ms. Waggoner, why isn't the free market filling this obvious need?

Ms. WAGGONER. Thank you, Congresswoman Beatty. It's good to see you again today. I would say that what we need to recognize, in Ohio and other places, whether it is suburban, urban, big city, or small town, is that we haven't built the housing that people can afford at the scale that is needed, and the private sector can't do it alone. It needs public resources to balance and invest in that infrastructure.

So to your point, the shortage has to do with the lack of resources to actually build the type of housing that is needed by Americans.

Mrs. BEATTY. Thank you so much for that. I am going to go to Ms. Yentel now. You are probably aware of this, but created in, I think it was 2008, the National Housing Trust Fund is the first new housing program aimed at not only building but rehabilitating and preserving and actually operating rental units for housing for extremely low-income people, since, I believe, about 1974.

Well, last year HUD awarded nearly $700 million to States around the country to invest in the building and preserving of affordable housing throughout this country. Since that program started awarding funds, just in 2015, the State of Ohio alone has financed the building or preserving more than 3,000 units of affordable housing.

I have a bill, and that bill is the GROW Affordable Housing Act, which, if enacted, would actually result in nearly 5 times more funding for the National Housing Trust Fund each year than the current levels.

So I guess I want you to describe to us the impact that roughly $50 billion over 10 years would have on the National Housing Trust Fund?

Ms. YENTEL. Sure. Thank you, Congresswoman, and thank you for your strong support and leadership of the National Housing Trust Fund. The Trust Fund is an essential and proven resource from the Federal Government that provides block grants to States to, as you say, build, preserve, and operate homes that are affordable to extremely low-income people. Extremely low-income people are the only segment of the population for which there is an absolute shortage of homes affordable and available to them, and the private market, on its own, cannot build and operate homes that are affordable to them because the rent that they can pay doesn't cover the costs to build and maintain those properties. So, subsidies are necessary, and the National Housing Trust Fund is a proven way to achieve that goal.

So expanding the Housing Trust Fund, whether through your legislation or through the Housing is Infrastructure Act, to over $40 billion a year, a one-year allocation of $40 billion would mean over 200,000 apartments affordable to these extremely low-income renters built. It would mean over 260,000 jobs created. And as you say, these homes [inaudible] throughout the country and they are housing seniors, people with disabilities, veterans, survivors of domestic violence, people who were chronically homeless, and youth aging out of foster care. This is an essential resource housing people [inaudible].

Mrs. BEATTY. Thank you so much. My time is up, but that is a great deal to all my colleagues.

Chairwoman WATERS. Thank you. The gentleman from Ohio, Mr. Davidson, is now recognized for 5 minutes.

Mr. DAVIDSON. I thank the Chair, and I thank my colleagues. I appreciate my colleague from Ohio and her concern for affordable housing in our great State.

I want to highlight a couple of things. There is no question that affordable housing and infrastructure are both important issues that deserve attention here in Congress and in our committee. Unfortunately, conflating the two issues is not an entirely effective way to a sustainable solution for either one. Rather, all that is happening is that my Democratic colleagues are redefining the word, "infrastructure." They do this to justify government spending anywhere they see fit, and then they apply their antiquated solutions, comprised of federally managed housing programs.

As John Maynard Keynes, a favorite economist of big government advocates, once aptly said, "The difficulty lies not so much in developing new ideas as in escaping from old ones." While I disagree with many of his theories, I certainly agree with this quote.

For about a century, Washington has been married to the idea that the more money that government spends, the more the economy flourishes. I do hope that one day Washington can get out of this mindset and stop compounding one problem after another by running up our deficit and destroying the value of the U.S. dollar and growing the wealth gap, which is exactly what this Biden infrastructure does and would do.

So, Mr. Riedl, is a community generally better off if the government owns and operates the housing, or is the community doing better when there is private investment in the economy?

Mr. RIEDL. I think private investment is better when it is available, and housing, and I think certainly public housing, for all of its laudable goals, has had a lot of challenges with breakdowns and poor management. We are hearing about the $70 billion needed in order to bring it up-to-speed. It is often built in parts of town that don't have the jobs that we want and sometimes not close to public transportation.

I think private infrastructure, privately built housing often is cheaper, it can be faster, there are more incentives, and I think it is better for the individuals. And the Congressional Budget Office says private infrastructure spending is twice the return as public infrastructure spending. We all want nice housing. We all want infrastructure. The question is, how do we do it, how do we get the most bang for the buck?

Mr. DAVIDSON. Thanks for highlighting that. I appreciate some of the things you have highlighted today about part of the barriers to investment that private investment are the expense, the regulatory hurdles, things like that, where you want to get the investment made in the right parts of the community.

But one of the other barriers that helps people—you talk about escaping failed ideas or bad ideas. Unfortunately, a lot of times our social safety net turns into a snare. People stay trapped and shackled in bad programs because of benefit cliffs, in particular. Could you highlight how benefit cliffs keep people in a failed system?

Mr. RIEDL. Absolutely. Again, this goes all the way back to Aid to Families with Dependent Children (AFDC), where, at its extreme, if your income goes up by a dollar, your benefits go down by a dollar. So there is no marketable gain from working. Even programs today, from the earned income tax credit (EITC) to child credit to public programs, collectively have huge benefit cliffs. Casey Mulligan from the University of Chicago has shown that the cumulative effect of these programs—when you earn another dollar, your benefits can drop 80 to 85 percent. People are smart. They notice that. They respond to incentives. Even in housing programs, there can be dangers that if your income rises enough, you might lose a lot of your benefits there.

And so I think programs have the best intentions, but the phase-out cliffs can be steep enough that you actually trap people in poverty rather than fully help them out as much as needed.

Mr. DAVIDSON. Thank you for that. I wish I had more time, but just as an employer, before coming to Congress, we experienced people turning down promotions in jobs because they were worried they would lose a benefit.

We have a bill called the People CARE Act, that would create a bipartisan, four-four commission where the commission couldn't cut a benefit, couldn't launch new ones, but you could redesign programs. And the Congress, at the end of that recommendation by the commission, would simply vote yes or no on the overall package. One of the things that I think would be certainly agreeable is that we would end benefit cliffs.

The last thing I will say is, how does this massive inflation grow the wealth gap? I think Larry Summers is onto something by sounding the alert, and he is a guy with whom I wouldn't commonly agree.

Thanks, Madam Chairwoman, and I yield back.

Chairwoman WATERS. Thank you. The gentleman from California, Mr. Vargas, is now recognized for 5 minutes.

Mr. VARGAS. Thank you very much, Madam Chairwoman. Thank you very much for holding this hearing. I think it is very, very important, and I appreciate it.

Redesigning infrastructure—I think we always redefine infrastructure, and we should. I think it is what do we do to invest smartly for the future. Obviously, infrastructure before used to mean horses. It meant horses, anyway, so you could ride out to the West. It is a whole bunch of different things. The Republicans say it is something you can touch. Well, there is a whole bunch of stuff, of course, in this package that are things you can touch, for example, we have roads, bridges, rail, broadband, electrical grid.

And I hope I don't hear from Texas anymore telling us how great they are with everything, when they couldn't keep the electricity on, or they couldn't keep their water on, because they didn't invest. And they keep telling us, "Oh, that is not the way we do it in Texas." Well, I can tell you, in California we do not have to melt snow in the bathtub so we can flush the toilet. That is what they had to do. So please, people from Texas, don't tell us how great you guys are. Just stop that, okay?

But they have this notion that we are going to do this through reconciliation. Don't do that. They said, "Don't do that." Like they did. They gave the biggest tax giveaway to the wealthiest Americans [inaudible].

But the truth of the matter is, we need this, and it is a great investment. And we do have to invest smartly.

Now one of the things that we have been talking about [inaudible] the focus for us is housing, and I am very concerned about that, especially for Native Americans in Tribal areas. And so could I get someone to comment on that, because there is a great need in the Tribal areas in this nation?

Ms. YENTEL. Absolutely. Thank you for the question. Native Americans face some of the most [inaudible] and acute housing needs throughout the country, especially Native Americans who live on Tribal lands. They face high poverty rates, low incomes, overcrowding, lack of plumbing, and unique development issues. And despite the growing need for affordable homes on Tribal lands, and for Native Americans off Tribal lands, investments in programs that could help ensure that Native Americans are safely and stably and affordably housed have declined or leveled off.

So again, I would point to the importance of significantly expanding the National Housing Trust Fund, which would build apartments and affordable housing for low-income people on Tribal lands and off. And I would also point to a recent competitive program that Congress created that directs limited funds to the Tribal areas that have the greatest needs, and I would encourage Congress to continue that program and to expand it.

Mr. VARGAS. Maybe for you or for someone else, how do we do that in a culturally sensitive way, because I think that is one of the things that we have to be very sensitive to. Again, we haven't in the past with Native Americans, and we should. So, how do we do that in a culturally sensitive way? That is for you or for maybe—

Ms. WAGGONER. May I?

Mr. VARGAS. Yes.

Ms. WAGGONER. This is Jacqueline Waggoner. First of all, thank you for asking about Native Americans. I really appreciate that.

We, at Enterprise, have been running a rural and Native American program since 1997, working with Tribes across the country, and making sure that they have the capacity to build. And what I can tell you about affordable housing in working with our Tribal partners is that a lot of the housing that gets built there that is affordable has both public and private investments, such as housing credits and USDA sources. So we find it of critical importance, and we have full cultural competency on how we work with our Tribal leaders. We take it very seriously.

Mr. VARGAS. I do appreciate that, and I guess just to conclude, I would say this to the notion that we are running up the deficit and making the wealthier wealthier, the Republicans seemed to forget that when they were in charge. They ran up this huge deficit, a huge debt, during the good times. And they made the wealthy, especially the super wealthy, much wealthier with their tax giveaway. And now that we are trying to build back for everybody, somehow they, all of a sudden, become deficit hawks and say, "You know, we are running up the deficit. We are running up the deficit." Well, what happened when you guys were in charge and you were doing it? That didn't matter, and now it matters. No.

We are investing for the future, this is a smart investment, and I really thank you, Madam Chairwoman, for bringing this forward. There is nothing more important for infrastructure, in my opinion, than housing that is adequate for the American people, and I really do appreciate you for doing this. Thank you.

Chairwoman WATERS. Mr. Mooney, are you here?

Mr. MOONEY. Yes, I am here.

Chairwoman WATERS. Okay. You are now recognized for 5 minutes.

Mr. MOONEY. Thank you. It is great to follow my two good friends, Juan Vargas and Warren Davidson, and their comments, and I certainly agree with the sentiment. Spending should be a bipartisan issue. No matter who is in charge, we have to watch our spending. And that is really what my questions are about and my comments. I am going to address them to Mr. Riedl.

First, just for starters, since the COVID-19 pandemic began last year, the Federal Government has spent more than $5.3 trillion. That is roughly $16,000 of spending for every American. I think a lot of Americans would have just rather had that amount, and maybe given it to their kids and grandkids to pay it back, because we do have to pay a lot of this back at some point.

The Democrats and the Biden Administration passed a $1.9 trillion package just a month ago, on a pure party line vote. But here we are again, considering an even larger proposal with $2.3 trillion in new spending, so right to the deficit.

Mr. Riedl, in President Biden's proposal—and it is a proposal, not a bill, at this point—but in his proposal, would the tax increases in that proposal in the plan be enough to pay for it?

Mr. RIEDL. Thank you for the question. Not over the period of the spending. The President would use an 8-year spending bill to be funded by 15 years' worth of taxes, or at least [inaudible] taxes, but it would take approximately 15 years for the taxes to pay for the 8 years of spending.

Historically, this has been considered a gimmick, and it has been considered a gimmick because the spending never actually expires at the end of 8 years. The spending gets renewed. Things like long-term care are going to get renewed, which means that you get twice the window for taxes as you do for spending, which means you do add to the long-term debt.

Mr. MOONEY. Well, that is a problem. My constituents, as do most Americans, have kids and grandkids and school-aged, grade school, high school, even college, and eventually this has to be paid back. So if this package becomes law and our country does not rein in our current rate of spending, what will the Federal budget look like in 20 years?

Mr. RIEDL. The long-term Federal budget is actually quite terrifying. The baseline is where we go from $17 trillion back to $35 trillion in debt over 10 years. If all of President Biden's agenda is enacted, we go to $42 trillion in debt by the end of the decade, and then it gets even worse. Over the next 30 years, the Congressional Budget Office is estimating $100 trillion in baseline deficits.

If you assume President Biden's proposals get enacted, you have a debt of 260 percent of the economy, which is unlike anything we have ever seen in a developed country. And then, you even assume interest rates rise 1 percentage point, you get a debt of 150 percent of GDP. At that point, you would need 80 percent of all your taxes just to pay the interest on the debt.

So for those who say we can afford a little bit of debt now, the baseline is already going to be huge debt growing. If you add in the President's proposals, and you add in slightly higher interest rates, you are looking at a debt of 350 percent of GDP over the next 30 years. At that point, an interest rate rise would bury us.

Mr. MOONEY. Those are great points. It leads into my next point and question, which is about 20 years from now, if our country continues down this road, and you mentioned 260 percent. We are going to be approaching at least 200 percent or even 300 percent debt as a percent of gross domestic product. What kind of budget measures would the government need to implement, at that point, when things are much worse at that point, to bring our budget back to solvency?

Mr. RIEDL. At that point, you have spending at about 33 percent of GDP, or even close to 38 percent of GDP, and revenues at about 17 percent of GDP, depending on interest rates. At that point, the choices are to completely double all taxes as a percent of GDP or eliminate about two-thirds of all program spending.

We don't want to get to that point. It is much better to avoid the huge spending spree in the first place and start to implement common-sense reforms now, rather than try to double tax revenues or get rid of 70 to 80 percent of program spending. That could be potentially catastrophic.

Mr. MOONEY. Thank you, Mr. Riedl. We have 20 seconds left. I just want to close by saying that more than 20 percent of Americans are already fully vaccinated, schools and businesses are reopening, and the economy is coming back. We simply do not need to spend trillions more. The out-of-control spending proposed by

President Biden will leave a mess that our children and grandchildren will have to clean up and pay for. If we make irresponsible decisions today, then they will be paying for them 20 or 30 years from now.

Thank you, Madam Chairwoman. I yield back.

Chairwoman WATERS. You are welcome. The gentleman from Florida, Mr. Lawson, is now recognized for 5 minutes.

Mr. LAWSON. Thank you, Madam Chairwoman, and I welcome all of the witnesses to the committee today.

One of the things that I talked about in the Housing Subcommittee, and this can be for the whole panel, on March 24th, and I would like to ask all of you the same thing—today, it is estimated that $70 billion backlog of capital needs are for our public housing stock. Each year we lose about 10,000 units of public housing due to disrepair. These 10,000 affordable housing units that could have been led to evictions and homelessness, 10,000 households that are gone. Without an investment in the public housing infrastructure, these important assets and the Federal dollars would not have been well-spent.

Now I can tell you, and if any of you care to respond, but for many years I went into housing projects as a basketball coach, recruiting athletes, 20, 30 years ago. And those same units existed the same way they are now. When many of my colleagues talk about how the private sector can do it better, most of the units are managed by private housing groups, and they have reinvested. I even took the former HUD Secretary down to Jacksonville to look at some of the area that looked like third-world countries, where people are actually staying.

But nothing happened with these units. We just pat them on the hand and say, "Hey, you all need to clean up," but they never cleaned it up.

So how are we going to fix up these housing units, have some kind of accountability, at the same time we are losing 10,000 units per year, and leading people more into homelessness and eviction and on the streets? What is the answer? I would like to know the answer, if any of you all can respond to it.

Mr. MCAFEE. The chairwoman's leadership in advancing this package around housing is a perfect example. You make the investments. We have neglected this population for years. That is why I am telling you, you have 100 million folks who are struggling in this nation, and you are not going to solve that until you target those investments.

It is fascinating that we can target investment to corporate America, but when it comes to everyday folks who are struggling to make ends meet, we do not have any money. And I reject the premise that Americans don't want to work or that they are so lazy as to just want to stay on a safety net that barely allows them to exist.

The package here gets us beyond some of these tropes about the motivations of folks whom I know want to work, want to move into the middle class and beyond, and that is why it is such an important package. It does improve housing. It does provide the community supports that people need as a springboard into the middle class. And yes, programs should be made to operate more efficiently and effectively.

But this is not the moment to punish the folks who have been on the front lines in this pandemic, making sure that we are comfortable in our homes. It is time to honor them by making the necessary investments in their communities, the same way we make in the communities that we are privileged to be in. And so, that is how you do it. You center the very folks who have built this nation, and whom we continue to ignore, that 100 million.

Mr. LAWSON. Ms. Waggoner, do you want to comment on that?

Ms. WAGGONER. Well, first of all, I want to high-five and echo what Michael McAfee just shared. But what I would say is, we have to invest in things. We can't expect buildings to stay in good and healthy condition and kids not be exposed to lead and other unhealthy and unsafe conditions in our homes. And this bill is moving us towards, let's invest in existing infrastructure, let's build new infrastructure. People need stable, safe homes so that they can thrive. It is important that we focus on that. People do want to work. People do want housing that they can afford. Let's do what is right by the American people.

Mr. LAWSON. And I want to ask another question, but I have to say to Mr. Riedl, the stuff that he has been talking about, about reinvesting in the future and what is going to happen, I have heard it for 50 years. The deficit is relevant when other people are not actually paying for it. And I think when you look at all the statistics and the stuff you get from universities and find out that, oh, things are getting better, but they are really not getting better. So all this assistance that you give about where are we going to be 40, 50 years from now, none of us will be around anyway. But at the same time, it will work out if corporate America and everybody else pays their [inaudible] to help the people in this country who need help.

Chairwoman WATERS. Thank you very much, Mr. Lawson. The gentleman from North Carolina, Mr. Budd, is now recognized for 5 minutes.

Mr. BUDD. I thank the Chair for hosting. Government programs rarely, if ever, result in the creation of any actual units of housing, and there is nothing in the Biden proposal that would change that outcome.

We see this language—build, preserve, retrofit—but that is deliberately chosen to merge three separate ideas into one lump category and blur the difference between building new housing and modifying existing housing.

The reality is that there is nothing in this proposal that will actively lead to greater development of housing, so we need to focus on the problems at hand. The pandemic has only exacerbated inventory shortages for new construction.

So, Mr. Riedl, this question is for you. How can we actively tackle inventory shortages, which we all see, and does focusing on retrofitting existing housing help this problem at all?

Mr. RIEDL. I think if money was unlimited, of course we would love to retrofit every house. We would love to make them all as efficient as possible. However, given the fact that money is limited, and we have talked a lot in this hearing about the need to increase affordable housing, I am not sure retrofitting should necessarily be at the top of the goal when, again, that takes away money from increasing the capacity that we are hearing so much about.

Mr. BUDD. Thank you. According to the National Association of Home Builders, during the Great Recession—so, 2008, 2009, 2010—I think of a lot of my friends who were tradesmen—we lost 1.5 million of them, including tradesmen, electricians, and carpenters. We have recouped some of these losses but not fully.

Apprenticeships play a really big role in preparing the next generation of American workers. So as we get back to low unemployment, it is imperative that there are high-salary, low-debt learning opportunities available to students from every background.

I have actively worked on legislation to expand apprenticeship opportunities to more Americans. Again, Mr. Riedl, how can increasing access to these high-paying jobs help boost the economy and thus spur housing development?

Mr. RIEDL. Absolutely. If we are going to build more housing, and we all agree the country does need to build more housing, whether the solution is in more Federal funding or zoning or NIMBY-ism, we are going to need more housing. And to do that, you are going to need a lot more carpenters, builders, electricians, plumbers, everything. There are great opportunities out there. It is a great way to get out of college without a big student loan and actually make a pretty good income.

And so, programs that encourage individuals and make this an option for them and show them that you can again make a good salary without a legitimate student loan are absolutely necessary, because we need to meet the demand with the workers to supply the capacity. Absolutely.

Mr. BUDD. Are you seeing this happening now? People are frustrated with student debt, and yet, they were never shown that there were other opportunities when it comes to these high-paying but very low-debt, low-cost educations.

Mr. RIEDL. I don't think it is being emphasized enough. In the schools that I see, in the high schools, there is such a focus on math and science and STEM, which is great. We absolutely need that. But there are individuals for whom that is not necessarily the right path. There are individuals who aren't necessarily going to become physicists or mathematicians. For a lot of those individuals, the trade schools and the trades are a great option. And a lot of these individuals are going to end up making more money out of college than a lot of the people who have BA's and BS's in other topics or other fields, and with smaller student loans.

I don't think it is being emphasized enough in schools, though, because I think the emphasis on STEM is great for a lot of people, but I think you need to emphasize the trade options for others for whom it is a better fit.

Mr. BUDD. Thanks. This Biden proposal calls for American job creators to, "pay their fair share," which, to the Biden Administration, means the largest tax increases since 1968. So if this proposal is enacted, the result would be permanent tax increases of over $2 trillion imposed on our businesses. Our corporate tax rate would be raised to the highest level in the developed world, and even higher than Communist China's, at 62.7 percent.

Mr. Riedl, does it make economic sense to pay for short-term spending based on borrowed money with permanent tax increases on America's job creators?

Mr. RIEDL. Absolutely not. It is very short-sighted, and it ignores the fact that the rest of the world has been cutting their corporate tax rate to become more competitive. And we are trying our own companies' hands behind their back. You can't raise taxes by $1.8 trillion and not have it hurt wages, competitiveness, investment, and growth. That means a lot of money is going to hamstring the economy, and the rest of the world has figured this out.

Mr. BUDD. They sure have. I yield back. Thank you.

Chairwoman WATERS. Thank you. The gentlewoman from Iowa, Mrs. Axne, is now recognized for 5 minutes.

Mrs. AXNE. Thank you, Madam Chairwoman, and thank you to all of our witnesses for being here today.

Ms. Waggoner, Enterprise is broadly focused on addressing the lack of affordable housing in America and does so through things like developing and operating housing, helping local groups, and through assistance with mortgage lenders, is that correct?

Ms. WAGGONER. That is accurate.

Mrs. AXNE. Thank you. And that is Bellwether Enterprise, is that correct?

Ms. WAGGONER. Yes. Enterprise Community Partners does capital investment, we provide programs, and we support policy efforts to build affordable housing.

Mrs. AXNE. Thank you, and I so appreciate that effort.

I actually have some familiarity with Bellwether Enterprise. I am not sure if you are aware, but they are the lender who financed Havenpark Capital's purchase of Midwest Country Estates in my district. It is a manufactured housing community in Waukee, and they funded the Haven Park purchase of that. And then when Havenpark came in, unfortunately, they raised rents by more than 35 percent within the first couple of months of purchasing the place, leaving many residents with limited opportunities. They are often on fixed incomes, of course, struggling to make ends meet, and we certainly do not want to evict thousands of folks. But Havenpark, unfortunately, has continued to use this same model of adding fees and jacking up rents that they used in Iowa and other parts of the country, including North Dakota, Michigan, Montana, et cetera. And, unfortunately, they have continued to get funding from Bellwether Enterprise for many of these purchases.

This has been brought to Enterprise's attention before, but unfortunately, nothing has changed, and I certainly wouldn't call rents going up somewhere between 20 to 40 percent within a year being reasonable. It pushes people out of their homes and it certainly is not affordable.

So I am wondering, Ms. Waggoner, can you commit to me that Enterprise is going to act here to ensure that the lenders that you control are acting in line with your mission to support affordable housing?

Ms. WAGGONER. First of all, Congresswoman, I share your concern about the need of people having housing they can afford. I am unfamiliar with what you are referencing, but we will certainly look into it and circle back with you.

Mrs. AXNE. I very much appreciate that, because I know that you want to make sure that we have affordable housing for folks, and I am assuming that, of course, you want to support purchases that would allow that. So, thank you. We will make sure that you have the information to follow up with.

I want to turn here to rural housing. I hear regularly from folks in my district, from mayors to individuals, and I just heard this visiting all of the counties in my district this past month, that they face similar shortages of affordable housing as the urban areas. And I have said to the committee that the affordable housing crisis is not solely an urban issue.

Ms. Yentel, this is a question for you. Could you share some of the difficulties you have seen when it comes to affordable housing in our rural areas in this country?

Ms. YENTEL. Yes, absolutely. Thank you for the question. Certainly, when we are talking about extremely low-income renters, there is a shortage of homes affordable to them in rural areas, just as there is in suburban and urban areas, and comprehensive solutions are needed.

In rural areas, while there is a similarity in having a shortage of homes affordable to extremely low-income people, there is some weakness in terms of high costs for constructing housing, because there are not economies of scales. And while the costs for housing might be lower, wages are often lower as well.

So, it is very important that we invest in the National Housing Trust Fund so that in rural areas we can build apartments that are affordable to extremely low-income people, and it is essential that we ensure that we are preserving and maintaining the limited affordable housing stock that doesn't exist in rural areas, which is that which is funded by USDA Rural Housing. Many of those units, too, are in need of capital repairs, and there should be an infusion of funds to ensure that we can repair and preserve those funds, and continued funding into the future to ensure that those units can maintain their affordability for the people who live in them now and need them in the future.

Mrs. AXNE. I couldn't agree with you more. I thank you for bringing that up to folks. I have introduced a bill to preserve that USDA Rural Rental Housing funding, and I couldn't agree with you more. It is so necessary.

I would ask you, does this kind of approach make sense to you as a way to keep some of our existing affordable housing stock, and do you think that we also need to invest in building more housing in rural areas as well?

Ms. YENTEL. Yes. We need to do both. We support your legislation. We have to preserve the limited affordable housing that does exist already in rural areas where we can't afford to lose more, and we have to build more.

Mrs. AXNE. Thank you so much.

Chairwoman WATERS. Thank you very much. The gentleman from Tennessee, Mr. Rose, is now recognized for 5 minutes.

Mr. ROSE. Thank you, Chairwoman Waters and Ranking Member McHenry, for convening this hearing, as well as thank you to our witnesses for testifying today. This hearing is focused on a so-called infrastructure proposal where, regretfully, only 6 percent of the $2.3 trillion package goes to funding roads and bridges, not to mention that the plan to pay for this Washington giveaway is through permanent job-crushing tax increases on American businesses. Today, we are specifically looking at the housing piece of the infrastructure plan, where I believe Democrats continue to simply throw money at the problem instead of providing a plan for actual innovation or expanding the housing supply in a meaningful and constructive way.

The infrastructure proposal released by the White House unfortunately continues to throw money at old, outdated programs that will not build or incentivize the creation of new housing units. Several modern innovative programs do exist, and they are working well in States like Tennessee. The Rental Assistance Demonstration, or RAD, Program, is a bipartisan, proven solution that allows residents greater choices and flexibility. This program specifically has been extremely successful in dealing with the same deferred maintenance issues that the Biden Administration is planning to spend $40 billion of precious taxpayer resources to resolve. Mr. Luetkemeyer emphasized the success of this program earlier in this hearing.

Mr. Reidl, since the Biden Administration's proposal includes putting tens of billions of dollars into rehabilitating public housing, do you believe this would be a step away from successful programs like RAD, and an indicator of a larger publicly-funded housing strategy going forward?

Mr. RIEDL. Thank you, Congressman. Public housing should obviously not be the only option for low-income families. I think too many historically have been poorly managed, environmentally dangerous, and built in parts of town that are often away from good jobs and public transportation. And money, I agree with you, can be just a band-aid unless we get management and structural changes, more inspections, higher standards, more effective spending, and better checking for lead, mold, and asbestos.

While public housing should obviously not be left in disrepair because our tenants deserve so much better, I agree with you, lawmakers should focus more on helping those low-income families who want to move into more options to escape public housing through things like vouchers. I think we want to integrate communities together rather than segregate them and separate them. And as has been pointed out earlier, the Federal Government is not very good at building housing. They are not very cost-effective. I would rather they do a better job of leveraging the private sector.

Mr. ROSE. In many rural areas, like those in the 6th District of Tennessee, construction costs are just too high to incentivize building affordable housing. Mr. Riedl, what incentives do you believe are most successful in bringing affordable housing to rural areas across the country?

Mr. RIEDL. I think you need several options. First off, I think you definitely have to provide, on the demand side, a way of making sure families have the means to afford it. You need a growing economy, higher wages, and, for a lot of families, housing vouchers and those sorts of proposals to ensure that they can afford it. On the supply side, you could always address the regulatory barriers, the local costs. Even in rural areas, there can be a degree of

NIMBYism (Not in my Backyard). If you address the supply and demand, I think you can do better than the top-heavy Federal approach.

Mr. ROSE. Yesterday, the Wall Street Journal reported that U.S. consumer prices rose sharply in March, marking what they say is the start of an expected months-long pickup in inflation pressures. Mr. Riedl, could you discuss how spending another $2 trillion could cause further inflationary pressures in our economy?

Mr. RIEDL. Absolutely. The Congressional Budget Office said earlier this year that we have an output gap of about $400 billion. And then, we spent $1.9 trillion on another stimulus bill, and now we are looking at $2 trillion more on this. But if the output gap is only $400 billion, then at a certain point, the additional spending in the economy isn't increasing output; it is putting more pressure on inflation and prices. At that point, you are either going to get inflation, or you are going to be the Federal Reserve more aggressively, essentially bribing banks to keep money in reserve, in which case, you are getting deficits without any stimulus.

Mr. ROSE. Thank you, Madam Chairwoman. I yield back.

Chairwoman WATERS. Thank you very much. The gentlewoman from Massachusetts, Ms. Pressley, is now recognized for 5 minutes.

Ms. PRESSLEY. Thank you, Madam Chairwoman, for holding this important hearing, and I thank each of our witnesses for being here today.

Housing is infrastructure, and it is essential that any upcoming infrastructure package includes meaningful investments in our public housing stock. Black and Brown neighborhoods, like those in Mattapan, Chelsea, and Everett in my district, have been historically divested from and would stand to benefit greatly from robust investments in parks, streets, sidewalks, clean transit, and better buildings. However, often when long-overdue infrastructure improvements are made that could benefit Black and Brown communities, the gentrification that follows pushes them out. Ms. Yentel, as Congress considers an infrastructure package which will bring needed improvements to our communities, would coupling revitalization with investments in public and affordable housing help to fight displacement?

Ms. YENTEL. Yes, absolutely, Congresswoman, because as those communities would otherwise gentrify, as this new investment comes in, and costs increase, and new people move in, that affordable housing that is either constructed or preserved in that neighborhood becomes an anchor for the long-time, lower-income residents, who are often people of color, to remain in that community and benefit from the new investments in the community.

Ms. PRESSLEY. Thank you. In fact, in my district, at least 47,000 families were on the waiting list for public housing even before the pandemic. By failing to fund repairs in the public housing backlog, every year nationwide we have lost more than 10,000 public housing apartments because their conditions became uninhabitable. We need to be building more public housing and sustaining what we already have. The lack of repairs and improvements is also putting my constituents' health at serious risk. Specifically, there are currently an estimated 4 million households in the United States that have children exposed to lead hazards, with a disproportionate number of Black children. This exposure can have lifelong consequences, including seizures, comas, and even death.

I was really encouraged to see President Biden include funding to remove lead pipes in this infrastructure proposal. This is something that I have been fighting for with my friend and colleague, Congressman Chuy Garcia. We recently reintroduced the Lead Abatement for Families Act to provide critical funding for the Department of Housing and Urban Development to identify and remove lead pipes in our housing stock. It is essential that this bill is signed into law.

Ms. Yentel, as Congress considers an infrastructure package, how could including funding to remove lead pipes be beneficial to both our collective public health and our pursuit of racial justice?

Ms. YENTEL. It is very important, and at the National Low Income Housing Coalition, we strongly support your bill and urge Congress to enact it quickly. Any child can be exposed to lead, but certainly, children are at higher risk. And children of low-income families are 8 times more likely to be exposed to lead than higher-income families, and there are profound racial equity issues as well. Black children are 5 times more likely to be lead-poisoned than White children.

Public housing is particularly susceptible to lead exposure because the developments are older, often decades old, and because some of the units are in such a state of disrepair. In 2019, HUD estimated that there were 62,000 public housing units that needed lead abatement, and our partners at the National Housing Law Project have estimated that over 90,000 children who are in the Housing Choice Voucher Program have been lead-poisoned. And as you say, the long-term health consequences for those children are devastating. So, there is a real imperative that we invest in repairing public housing and abating lead so that these children in these communities, and especially Black and Brown children who are overexposed to lead poisoning, have a real shot at a future.

Ms. PRESSLEY. Absolutely. Thank you so much. Our families certainly do not deserve less simply because they can't afford more, so we have to ensure that this recovery does not leave any community behind, especially those that have been disproportionately impacted, given those comorbidities. So, thank you very much. I yield. back

Chairwoman WATERS. Thank you very much. The gentleman from Ohio, Mr. Gonzalez, is now recognized for 5 minutes.

Mr. GONZALEZ OF OHIO. Thank you, Madam Chairwoman, for convening this important hearing, and thank you to the panelists for your contributions. As I sit here having just returned from back home and speaking to folks on the ground about the concerns that they have with things like inflation and a labor shortage, it strikes me that this bill is poorly timed for sure and also pretends that tradeoffs that are natural to the economic environment no longer hold.

Mr. Riedl, I want to start with you. Maybe we are just putting our heads in the sand, but we seem to be buying this notion that debt-to-GDP no longer matters. Can you talk about the historical impacts on an economy for a debt-to-GDP, to the degree that ours is scheduled to be, based on this proposal?

Mr. RIEDL. Thank you for the question. There is really no historical thing to look back on, because we have never had the debt go as big as it is right now. At the end of World War II, the debt hit about 108 percent of GDP, which was the highest we have ever had. The war ended, and so we were able to bring it back down to 25 percent of GDP over the next 40 years, because we basically ran very small deficits and had economic growth.

Right now, again, we are heading towards 130 percent of GDP by the end of this decade, and as much as 200- to 300- to 350 percent of GDP over the next 20 to 30 years. Now, another Member had said, well, we have been hearing these warnings for a long time. Nothing like this, and the retiring baby boomers are the big driving variable. That is going to drive about $100 trillion in baseline borrowing over the next 30 years. Just the Social Security and Medicare shortfalls are going to cost $100 trillion, according to the Congressional Budget Office. So you take that, and then you add on all of this new spending, and then you assume higher interest rates, there is no example of another country with a debt this big. Japan had the biggest debt. They are at about 230 percent of GDP, and their economy has not grown in 30 years at 230 percent. If we get up to 300, 350 percent of GDP, there is no one who is going to bail us out. And at that point, again, just the interest costs are going to bankrupt us.

Mr. GONZALEZ OF OHIO. Thank you. I couldn't agree more. And then there is this other myth that we keep pretending around here, which is that you can raise the corporate interest rate with no tradeoff whatsoever to private sector job growth. I want you to comment specifically on single-digit margin businesses, like many of the manufacturing businesses in my district. What happens to businesses which are already running on tight margins when you jack up their tax rate?

Mr. RIEDL. You can put them under, and that is why the Tax Foundation and the Penn Wharton Budget Model have said this is going to cost jobs, reduce wages, and close businesses. According to the Tax Foundation, the construction industry under the President's proposal would face marginal effective rates rising from the current 18 percent to 24 percent. So, here we are talking about how we want to help the construction industry. We need to build, build, build, and we are going to raise their taxes, their marginal effective tax rate, by one-third. It doesn't really make any sense. You are going to cost jobs, especially for small-margin businesses that can't afford it. This is the tradeoff we face. There is no free lunch. The taxes will affect the economy.

Mr. GONZALEZ OF OHIO. Absolutely. The taxes will affect the economy. They are going to put hundreds of thousands of businesses and hundreds of thousands of workers, potentially in my district, and across my State, out of business. There is no free lunch. We do live in a world of tradeoffs, no matter how much we want to pretend we don't, and this is a horrible, horrible idea at this point in our recovery. Finally, with my final few seconds, you correctly point out that so much of the projections are based on a faulty assumption, which is that interest rates will go nowhere; they will stay effectively at zero. Talk a little bit about the role of rising interest rates and our ability to pay for all of this spending.

Mr. RIEDL. We are doing something very dangerous, which is, we tell any subprime homeowner, don't make a permanent spending commitment based on short-term adjustable interest rates. Rates are low now. There is no way they are going to stay this low. And when they rise, the whole debt is going to reset because the average maturity is only 60 months. I mentioned earlier that if interest rates rise 1 percentage point above the CBO assumption, it will cost $30 trillion in interest over 30 years. That is 1 percentage point, which means 2 percentage points, an extra $60 trillion. We are playing with fire if we are going to gamble our fiscal future on the assumption that interest rates will never rise again.

Mr. GONZALEZ OF OHIO. Thank you. We are playing with fire. I yield back.

Chairwoman WATERS. Thank you. The gentleman from New York, Mr. Torres, is now recognized for 5 minutes.

Mr. TORRES. Thank you. Thank you, Madam Chairwoman. My life has been a journey from public housing in the Bronx to the House of Representatives in Washington, D.C., so the subject of affordable housing is deeply personal to me. The crisis of affordability in America not only exacts an incalculable human cost, it also exacts an economic cost. According to a study from the University of Chicago and the University of California, the affordability crisis costs major metropolitan areas, like New York City, $2 trillion a year in lost economic growth. The affordability crisis, it turns out, is not only bad morals, but it is also bad economics.

President Biden's American Jobs Plan proposes to invest over $200 million in affordable housing. As far as I am concerned, every bit as important as the dollar amount is how those dollars are spent, and when investing those dollars, we need to bear in mind two overarching objectives. We need to create more affordable housing to bridge the gap between supply and demand, but we also need to ensure that the housing we do create is affordable to the poorest Americans. If we do one without the other, if we expand housing supply without expanding housing subsidy, then we run the risk of creating the illusion of affordable housing. We run the risk of creating deceptively affordable housing that will leave behind the poorest Americans.

My first question is to Ms. Yentel. Do you share my concern about the risk of expanding housing supply without sufficiently expanding housing subsidy?

Ms. YENTEL. I certainly do, yes. Subsidies are necessary to make these homes affordable to the lowest-income people who have the greatest and clearest needs.

Mr. TORRES. The lack of affordability in the American housing stock underscores the urgent need for housing vouchers for all programs. Every family in need should have access to a housing voucher, which ensures that rent is no more than 30 percent of household income. Now, it is worth noting that the affordability crisis is not evenly distributed across income brackets. The heaviest rent burden falls on the shoulders of the poorest Americans.

Consider the following statistics from the Association for Neighborhood and Housing Development: 60 percent of New York City households earning less than $20,000 a year are severely rent-burdened. Sixty percent of these households pay more than half their income toward their rent and face a higher risk of eviction, displacement, and homelessness. By contrast, only .05 percent of households earning more than $100,000 a year are severely rent-burdened. The data is crystal clear that the lowest-income Americans have the greatest need for affordable housing, and yet most of the affordable housing we create is unaffordable to those in greatest need. As a matter of good governance, we should allocate resources according to need, and the need lies with the lowest-income Americans.

Ms. Yentel, how can we better tailor affordable housing to the families in greatest need?

Ms. YENTEL. I strongly agree with the data that you share. It is very clear that it is extremely low-income renters who have the greatest and clearest needs, and that is everywhere in the country, whether it is in urban, suburban, or rural communities.

There are three main solutions that we need in an infrastructure spending package. One, we need to build more apartments and ensure that they are affordable to the lowest-income people, and we do that through expanding the Housing Trust Fund to at least $40 million a year. We need to preserve the affordable housing that exists today. Public housing is an essential resource of affordable, stable homes for low-income, and very low-income, and extremely low-income people in communities throughout the country. We need to preserve those homes with a $70 billion investment in public housing capital repairs.

And we need to expand rental assistance. As you say, we have a system in our country today where only 1 out of every 4 households who needs housing assistance and is eligible for it receives any, so 75 percent of extremely low-income people in need don't get any housing assistance. They are instead waiting in lines to add their names to years- or decades-long waiting lists, hoping to win what is essentially a housing lottery system in our country where only the lucky 25 percent get the help that they need.

The Biden Administration has recognized housing as a human right. He has committed to universal housing vouchers for all eligible households. We strongly support this commitment and believe Congress should get to work towards realizing it.

Mr. TORRES. I will end here: As you said, public housing is said to have a need of $70 billion, but even that might be an underestimation because it fails to factor in the cost of electrification.

Chairwoman WATERS. Thank you very much. The gentleman from Wisconsin, Mr. Steil, is now recognized for 5 minutes.

Mr. STEIL. Thank you very much, Madam Chairwoman. I would like to start by highlighting my concerns with President Biden's spending proposal here, that we are discussing in this conversation virtually. We all look forward to being back in person. I think it would be productive to be in person when we are talking about spending trillions of dollars of hardworking American taxpayers' money.

My colleagues are calling it an infrastructure bill, but really, when you dig into this package, it is a wish list of liberal priorities designed to fundamentally change our economy. Before the pandemic, before we were punched in the face by the coronavirus, the unemployment rate was 3.5 percent, one of the lowest in history.

Wages were beginning to rise for Americans, and hard workers were seeing their paychecks begin to go up. Smart reforms, low taxes, pro-opportunity agenda, that works. We had a healthy, growing economy. Parts of the country that had been left behind for far too long were beginning to see opportunities again. Obviously, the pandemic has been challenging, but we are beginning to experience a remarkable comeback now.

But my colleagues here want to spend another $2 trillion, centralize more power in Washington, D.C., and impose job-killing tax increases. This proposal would create more bureaucracy, including a $50 billion office to monitor industrial capacity. As someone who came from the manufacturing sector, I can tell you what we don't need is more bureaucrats in Washington, D.C., making it harder to create jobs across the country. It is the wrong approach for America, it is the wrong approach for hardworking families, taxpayers, and it is the wrong approach, in particular, for folks in Wisconsin.

But let's dive in, if I can. Mr. Riedl, I have raised concerns about both what I view as the mismatch of our fiscal policy as well as our monetary policy multiple times on this committee. Many in Washington continue to assert that the current low interest rate environment means it is a good time to take on debt to fuel future growth. They dismiss worries about rising inflation because of aggressive fiscal and monetary policies. I have great concerns with this. I am worried that inflation will spike, and, inevitably, higher future interest rates will follow and will cause our debt to spiral out of control. Can you just walk us through your concerns—I know you have talked about this—and the risks that we face with the continuation of this current spending spree that we are seeing in Washington?

Mr. RIEDL. Thank you, Congressman, for the question. It is nice to have Wisconsin, my home State, represented on this committee. Inflation is certainly a concern. As I mentioned earlier, we only had a $400 billion output gap going into this year, according to the Congressional Budget Office. We have already put in $1.9 trillion to close that gap, and now we are talking another $2 trillion more. At a certain point, the output gap is more than closed, and everything else is just pushing on a wall. At that point, that is when you risk overheating and getting inflation, and the only way to stop the inflation at that point is for the Federal Reserve to aggressively pay banks higher interest rates to keep the money in reserve. In that situation, though, the Federal Reserve is paying to do the opposite of fiscal policy, which means you are counteracting yourself, and all you are doing is raising the deficit, so that is the danger we face. You are going to have the Federal Reserve doing the opposite of fiscal policy.

Additionally, on interest rates, interest rates are not going to stay this low forever, and the national debt—on average, our Treasury bonds roll over every 60 months. So when interest rates start to rise, if you are rolling over a $20-, $30-, or $40-trillion debt into a higher interest rate, the cost will become enormous, and that is why you don't make permanent spending promises on short-term adjustable interest rates. When they arise, it can cost tens of trillions of dollars.

Mr. STEIL. I really, really appreciate that insight. I think that is helpful for all of us to continue to be aware of. I have a couple of seconds left. I just want to shift gears. I felt one of the things in your testimony that was spot on was pointing out how this Biden spending plan is really corporate welfare in disguise. I think a lot of people would be surprised to hear you use that term in the description. Could just explain what you mean by that so everybody can have the benefit of that?

Mr. RIEDL. Absolutely. This bill would spend hundreds of billions of dollars in grants to companies who undertake government-approved research projects and investments. We have seen in the past from Solyndra to the Advanced Technology Program that when government starts picking winners and losers in funding grants, we start to see a lot of losers that are funded by taxpayers, and we start to see some corruption in politics as well.

Mr. STEIL. I share a lot of your concerns. We are going to continue this discussion. I yield back.

Chairwoman WATERS. Thank you very much. The gentlewoman from North Carolina, Ms. Adams, is now recognized for 5 minutes.

Ms. ADAMS. Thank you, Madam Chairwoman, for convening this critically important hearing today, and thank you to our witnesses for your insight and expertise on how we can make long overdue investments in infrastructure.

My first question is for Dr. McAfee. In my district and all across the country, families living in overcrowded housing situations have been disproportionately affected by COVID-19, and, in many cases, families and individuals have had to move into motels and other short-term supportive housing. Due to the limited stock of affordable housing, some large families are forced to live in smaller apartments to save money. Multiple studies have indicated that households with large amounts of individuals are more likely to spread COVID-19 since physical distance can be nearly impossible. These studies found that families and individuals who come from low socioeconomic backgrounds are also more likely to contract the virus. This issue is impacting families as well who are currently staying at congregate facilities that require living in the same space with other families and individuals.

How can investing in housing infrastructure assist families living in overcrowded housing and shelters, and how should housing infrastructure investments take into consideration the needs of multi-generational households?

Mr. MCAFEE. Thank you for the question. Our private sector, and at times our government, has picked winners and losers already. That is why your question is so appropriate. The reality is that we have not had the production of housing that would not make that a problem. So going forward, the first thing we need to do is to make sure that we are providing immediate relief to these families so they can get out of the debt burden that they are going to be in. Folks will not be able to repay the rent that they are behind on through no fault of their own. That is the first thing. If you can pick winners in corporate America and make sure that they can be made whole, it is time for us to also make sure that our own people are made whole. We shouldn't be apologetic about that. We should stand firm on that point. That is the first thing.

The second is we should begin to design communities of opportunity so that is not the problem, and it has everything to do with our zoning patterns in this nation. The reality is this entire conversation today is a conversation about the design of a nation that does not work for the vast majority of people who are living in or near poverty. It doesn't matter what color your skin is, and the opportunity that this bill presents is for us to call it. Do we want to lift them up into the middle class? Do we want to design a nation, our laws and our regulations, so that they buoy them the same way they do our corporate partners? It is time for us to stop pitting one group, one sector against each other and design a nation that will work for everyone. That is the opportunity and that is the path forward, quite frankly.

Ms. ADAMS. Thank you, sir. Ms. Yentel, in 2019, the Charlotte Public Housing Authority launched a new housing program with the aim of boosting families' economic upward mobility. It was a new enhanced voucher program to move families to opportunity areas with higher-performing schools, lower crime rates, access to transportation, and so forth. Madam Chairwoman, I would like to enter into the record a Charlotte Observer article entitled, "I Just Want More for Them: New Programs Aim to Boost Families' Economic Mobility."

Chairwoman WATERS. Without objection, it is so ordered.

Ms. ADAMS. Thank you. We know that increasing the supply of affordable housing, especially in the areas connected to good schools, well-paying jobs, and so forth, helps lower-income families climb the ladder. So how can Congress invest in affordable housing infrastructure to ensure that all children, including those in America's lowest-income families, can live in neighborhoods of opportunity? Ms. Yentel?

Ms. YENTEL. Thank you for the question, and a couple of things come to mind. One is that certainly as Congress is considering, and hopefully will make, these major investments in preserving and building more affordable housing, they will be creating jobs along with those investments. And for public housing alone, that $70 billion in repairing public housing can result in about 800,000 jobs. And with the public housing program, there is a requirement that jobs that are created through investments through that program go first to residents of public housing, and, next, to other low-income people in those communities. So, it is not only creating jobs in general for the community, but targeting those jobs to the low-income people who live in public housing developments and in the surrounding communities.

Ms. ADAMS. Thank you very much. Madam Chairwoman. I yield back.

Chairwoman WATERS. Thank you very much. The committee will be in recess for 5 minutes, and when you return, Mr. Green will have the gavel. Thank you. The committee is in recess.

[brief recess]

Mr. GREEN. [presiding]. The Chair now recognizes the gentleman from South Carolina, Mr. Timmons, for 5 minutes.

Mr. TIMMONS. Thank you, Mr. Chairman. I appreciate the committee calling this hearing today. This is an important issue, and

I look forward to working with my colleagues on both sides of the aisle to find a good path forward.

I am going to start out with infrastructure generally. I am a "yes" on infrastructure. I think that this country needs to invest. It has been too long since we have invested a substantial amount of money, and we need to take steps immediately to get our overall posture of the economy up to par so we can compete in the global economy. But I guess the next question is, what is infrastructure? In my mind, it is roads, it is bridges, it is trains, air travel, ports, and I would even go to the next level of utilities. You have sewer, water, electricity, and broadband. And I will throw one other thing in there that we are not really talking about, which is cybersecurity, because even if we invest all this money in utilities, if we don't have the cybersecurity protected, it is kind of all for naught.

So if that is infrastructure, the thing that we can all agree on is that there is not a lot of decision-making on how to address it. You literally just have to spend money. It all costs money to invest in updating infrastructure. So the challenge that we are facing right now is that we are expanding the definition of, "infrastructure." And I am going to ignore all the green new deal and social programs, and I am just going to talk about affordable housing.

I am also a "yes" on affordable housing. I believe that it is appropriate and overdue for the Federal Government to invest in affordable housing. The challenge is, different from roads and bridges; you don't just write a check. You don't just throw money at it. There are a lot of policy considerations that you must take into account before you actually invest in affordable housing.

I am just going to point out that 30, 40, 50, 60 years ago, the Federal Government wrote big checks, and I might even argue that the impact, while it was well-intentioned, was possibly worse than if nothing had ever happened, because all of these investments created high-density communities which just didn't turn out well. Obviously, we are not talking about doing the same thing now that we did in the 1970s, because everyone appreciates that is not the best path forward.

I really like the idea of carrots to developers to say, we are going to incentivize you from doing 20 percent affordable housing, 40 percent affordable housing for your development, but you can't force it. You have to incentivize it, and we have to craft policy, Opportunity Zones, new market tax credits, all of these different programs that incentivize private sector developers to be good stewards of our tax dollars. These tax dollars will go infinitely further. So, Mr. Riedl, does what I am talking about make sense? What is the best way to get the most bang for our buck in investing Federal tax dollars in affordable housing?

Mr. RIEDL. I think what we can do is, well, the first thing is, we need a strong economy. We need to have rising wages. We can't strangle the economy with taxes. We need to get the unemployment rate down. We need to grow the economy. And then from there, I think we certainly need to do our part to repair the parts of public housing that are absolutely in disrepair because nobody should have to live in some of the conditions we have heard about today. Beyond that, my approach, and I think the approach of a lot of people who look at this issue, is we need to incentivize building through a lot of local NIMBYism and regulations where people don't want to build low-cost housing around them, but then incentivize the private sector to build and utilize vouchers to help people have more choices so that they are not stuck in public housing.

I am not sure having the government build the housing itself is very cost-efficient. I would rather incentivize the private sector to build it. I think you have to do a lot with zoning. You have to do a lot with NIMBYism, and you need also a growing economy.

Mr. TIMMONS. Mr. Reidl, thank you. I am going to finish with this. The next question is, how do we pay for it? And I always joked when President Trump was saying he wanted to do a $1- or a $2-trillion infrastructure package, I said, there is a big difference between $1 trillion and $2 trillion, and here we are, the new Administration wanted to do $3 trillion. Now, it is down to $2, $2.2 trillion, or whatever. I do not like deficit spending, but if we are investing in infrastructure, there is a role for spending money, investing money.

President Biden just yesterday told some of my colleagues that he wanted this package to be deficit-neutral. If we tax our way to making this deficit-neutral, it will put us in a very bad spot in our economy, and we will not be able to get past this pandemic. With that, I yield back.

Mr. GREEN. The gentleman's time has expired, and the witness may respond for the record at a later time.

The Chair now recognizes the gentlewoman from Pennsylvania, Ms. Dean, for 5 minutes.

Ms. DEAN. Thank you, Mr. Chairman, and I thank Chairwoman Waters and all of our witnesses for being with us today. I do want to apologize for my popping in and out. I am in a Judiciary Committee markup, so I apologize. It is not for lack of interest in this incredibly important issue of affordable housing.

It is very important in my district, in the 4th Congressional District of Pennsylvania, which is suburban Philadelphia, Montgomery and Berks Counties. Housing is, as we know, the base level of infrastructure, the most basic and important pieces of infrastructure in our communities. A roof over my constituents' heads to raise a family, to live their lives, and ultimately to age with dignity is critically important and desperately needed. For too many, including my constituents, affordable housing is not a reality.

I wanted to start with you, if I may, Professor Omarova. I am interested in something you said in your testimony. Could you outline how your National Investment Authority proposal would leverage private investment with public backing for our infrastructure broadly and create more affordable housing specifically?

Ms. OMAROVA. Yes, thank you. I completely agree both with the statement of the need for spurring infrastructural development and affordable housing development, and also with the need to make sure that we channel the money effectively and efficiently. So, the NIA would actually be a direct market actor. It is a public entity, but it would utilize market means, for example, it would be able to create a sort of a secondary market for credit, for bonds that are issued by a variety of public authorities, but also by private actors that are interested perhaps in building better housing with better options in suburban Philadelphia or elsewhere. And so, the NIA would be standing by and effectively allowing them to issue those bonds and make markets in those bonds.

The NIA could also set up public/private investment funds in which various institutional investors that are looking for stable income-producing assets in the long run could invest, but those public funds, public/private funds, would be managed and controlled by the NIA that would be basically channeling money into affordable housing and other public infrastructure. And the Federal Government, for example, the Federal Reserve, could provide back-up liquidity support for the NIA.

Ms. DEAN. Thank you so much. It sounds like smart multiple revenue streams and a really important partnership, public and private, to meet the needs. Ms. Yentel, I would love to talk with you a little more in greater detail about affordable senior housing. Again, in my neighborhoods, it's very desperately needed as people are aging and want to age in place as best and as safely as they can. The problem is stark when you are talking about seniors.

According to a 2020 issue of the American Bar Association's Commission on Law and Aging, nearly 10 million households with an occupant over the age of 65 spend more than 30 percent of their income on housing, and 5 million spend more than 50 percent. The problem will only grow as our senior population booms, expecting to reach 83 million people aged 65 or older by 2050. Ms. Yentel, could you describe, beyond my own ability to describe, the need, with greater detail, for increased supply of affordable and accessible senior housing?

Ms. YENTEL. Yes. Thank you for the question. And especially, again, when we are talking about extremely low-income seniors, we are talking about a senior who is bringing in income from retirement or other sources of less than $12,000 a year, so they can afford very little when it comes to their homes, but certainly they deserve and ought to have affordable and decent homes that allow them to age with dignity.

Thirty percent of all extremely low-income renters are seniors. So, again, I would point to really important and effective programs like the National Housing Trust Fund that would allow communities like yours to build apartments and have them be affordable to those extremely low-income seniors and other extremely low-income people in your communities. Also, the Section 202 Program through HUD is specifically for housing for seniors, and the Housing is Infrastructure Act that Chairwoman Waters introduced would fund another $2.5 billion for that program, which would allow for some new development of Section 202 homes, another really important investment.

Ms. DEAN. Thank you very much. Our family faced it with my own in-laws. Thank you for those important details. I yield back, Mr. Chairman.

Mr. GREEN. The gentlewoman's time has expired. The Chair now recognizes the gentleman from Illinois, Mr. Garcia, for 5 minutes.

Mr. GARCIA OF ILLINOIS. Thank you, Mr. Chairman, and Ranking Member McHenry, for holding this hearing. And, of course, thanks to the witnesses who came to discuss the urgent need to invest in housing. Our housing crisis didn't start with the COVID-19 pandemic. It has been a long time coming. Most of my constituents are renters, and many never recovered from the Great Recession.

You see, in Chicago, the housing crisis is a racial justice issue. Since 2010, in one neighborhood in my district, the Logan Square neighborhood, we lost more than 10,000 Black residents and 20,000 Latinos while landlords profited from sky high rents. There simply isn't enough safe, affordable housing in the City of Chicago. I am proud of what we have done in Congress to keep people in their homes during this pandemic, but Black and Latino households are still more than twice as likely to fall behind on their rent, and working families in communities like mine are pushed into homelessness or unsafe housing. We need to do more.

Ms. Yentel, you mentioned the need to invest in badly-needed repairs to keep our country's public and affordable housing safe for families. Today, my colleague, Ayanna Pressley, and I introduced the Lead Abatement for Families Act. Our bill provides funding for HUD to find and remove lead pipes in affordable housing. Could you talk about how this investment from affordable housing endangers lives in communities like mine, and especially for Latino and Black renters, and what more Congress can do to create safe, affordable housing for all?

Ms. YENTEL. Yes, thank you, Congressman Garcia, and thank you for your leadership on that important legislation, which we strongly support. Certainly, we need to work towards lead abatement in all homes, and especially in public housing and other affordable homes where it is predominantly low-income people of color who are at high risk of lead poisoning. Lead poisoning is a racial justice issue and an economic justice issue where low-income children are 8 times more likely to be exposed to lead than higher-income children. And Black and Brown renters and their children are 5 times more likely to be exposed to lead than children in renter households.

So, unfortunately, there are many public housing units and units on the private market that are rented with vouchers where lead exposure is a real issue. There was a HUD study a couple of years ago that found that about 62,000 public housing units contain lead, and our partners at the National Housing Law Project have estimated that about 90,000 low-income units with Housing Choice vouchers have been exposed to lead. And, as you know very well, there are devastating lifelong consequences for children who are exposed to lead. So certainly, it is a racial justice issue, it is an economic justice issue, and it is a moral imperative that we do lead abatement in all subsidized homes to start with, and then beyond.

Mr. GARCIA OF ILLINOIS. Thank you for that. Professor Omarova, the effects of the pandemic on places like Puerto Rico, which are already devastated by inequality and historic hurricanes, have been disastrous. In some towns in Puerto Rico, Hurricane Maria left 60 percent of the population homeless. What role could a National Investment Authority play in stopping climate change and fostering equitable development in places like Puerto Rico?

Ms. OMAROVA. Thank you for this question. That is exactly part of the reason why we need an NIA, an entity that would basically take a look at the entire country, all of the Territories, not only the ones that we know about, but the ones that really need investment, and then channel the money into those areas. So the NIA could, for example, not only channel credit into Puerto Rico to build new infrastructures and new housing, but also make equity-based investment, joint ventures with various public-private partnerships to make sure that all kinds of needs are satisfied the way they should be.

Mr. GARCIA OF ILLINOIS. And approximately what kind of an investment would be needed to seed this agency that Chairwoman Waters referenced in her opening remarks?

Ms. OMAROVA. It depends. The bigger the pile of money, the stronger and more effective the institution will be. I will take as much as Congress will give us.

Mr. GARCIA OF ILLINOIS. Thank you very much. I yield back, Mr. Chairman.

Mr. GREEN. The gentleman's time has expired. The gentlelady from Texas, Ms. Garcia, is recognized for 5 minutes.

Ms. GARCIA OF TEXAS. Thank you, Mr. Chairman, and thank you also, of course, to Chairwoman Waters for holding this very important hearing at such a critical time. I also want to thank all of the witnesses for being here. I, too, like Ms. Dean, apologize, but I also have been in a Judiciary Committee markup, and we have had a lot of amendments, and they need us for votes. And it has been hard to get around to both today, but I do apologize.

After years of Federal underfunding in housing and infrastructure, I am so grateful, Mr. Chairman, for President Biden recognizing the need for Federal investment in both affordable and equitable housing, especially, as you know, because in Houston, this is imperative. In the last few years, I have seen my constituents endure hurricanes, excessive flooding, and, most recently, a deadly winter freeze. Many of these natural disasters have severely damaged or altogether destroyed people's homes.

Mr. Chairman, you and I witnessed that firsthand in the tour that we did shortly after the freeze. We saw homes that had piping that burst, but the damage was there even before the piping burst, because many of the homes are older. Many of the homes were in disrepair. There just seems to be a lack of affordable housing stock in the core of the City of Houston, much like there is in many cities across America. And, Mr. Chairman, Houstonians are resilient. We have and will recover. But for folks who were already struggling to keep a roof over their head, pay the bills, and put food on the table, these disasters and COVID have just made the inequities even worse. This is why we need a strong investment in affordable housing under President Biden's plan, among other policies. We, as Members of Congress, have a duty to ensure that people have access to affordable, high-quality housing, especially during times of crisis.

So with that in mind, I wanted to ask Professor Omarova a question. What role could the NIA play in financing holistic, community-driven solutions to resilient communities like mine where we often overcome natural disasters and simultaneously experience chronic housing needs?

Ms. OMAROVA. Thank you. Again, this is a great question because it goes to the core of the NIA proposal, which is to create a dedicated Federal entity, a financial institution that is not hamstrung by jurisdictional limitations and internal conflicts, that actually is quite flexible and takes an integrated, unified view of the structural imbalances in the economy.

For example, in Houston, this is an area where inequality, racial inequality, social/economic inequality is also coupled with clear environmental injustice, as people are suffering from bad air and all of the pollution that the fossil fuel industry created and access to basic services, as we know, with the grid issues right now. So how can you solve a housing problem without solving those problems as well? Currently, Federal agencies and State agencies all have different jurisdictional limits. The NIA will step in and do it all in a unified manner.

Ms. GARCIA OF TEXAS. Thank you. Can you explain the process for making investment decisions at the NIA?

Ms. OMAROVA. The NIA will have, first of all, regional offices that will provide this kind of democratic accountability, and community input, and local input channels. That would be one way one the NIA will get information about projects that need financing. There are plenty of shovel-ready projects already at the State levels, and local levels, and Tribal levels that people know about, and the NIA will develop those. But it will also take the development forward, working on its own technological capacity with researchers and academics in figuring out what kind of forward-looking projects are worth financing. There will be public auctions, for example, where everybody, both private and public entities with good projects, can participate. And there will be a transparent process for choosing the kinds of projects that make the most sense economically and socially. And that's how the NIA will do it.

Ms. GARCIA OF TEXAS. So what policy objectives would they hope to achieve?

Ms. OMAROVA. Structured, balanced economic growth that is inclusive, equitable, and environmentally sustainable. This is good not just for liberals. It is not a political issue. It is not an ideological issue. This is just good policy for America and the American future.

Ms. GARCIA OF TEXAS. Now, I have a question for Ms. Waggoner.

Mr. GREEN. The gentlelady's time has expired.

Ms. GARCIA OF TEXAS. My time is up. Thank you, Mr. Chairman. I yield back.

Mr. GREEN. The Chair will now recognize the gentlelady from Georgia, Ms. Williams, for 5 minutes.

Ms. WILLIAMS OF GEORGIA. Thank you, Mr. Chairman, and thank you to all of our witnesses for joining us today. Ms. Yentel's testimony referenced a report, "The Gap," that underscored just how important investing in housing infrastructure is. In the Atlanta Metro area, there are only 29 affordable and available housing units per 100 extremely low-income households. That is below the national average, which is still too low at 37 per 100. To serve the people of Georgia's 5th District and folks across the country, we need millions more affordable housing units. That is why I am proud to work with my fellow Members of Congress and President Biden on the American Jobs Plan. We have a tremendous opportunity to ensure that so many more of us have a decent home while also creating jobs and boosting our economy.

Ms. Yentel, in my district, we have a great deal of vacant property that could be redeveloped to support affordable housing, and I am a co-sponsor of the Restoring Communities Left Behind Act, which, among other things, would support the purchase and redevelopment of vacant property for housing. What would including this type of investment in an infrastructure package mean for low-income residents in need of housing, as well as for the neighborhoods that would get the investments?

Ms. YENTEL. Thank you for that question, and for laying out the data so clearly. Certainly, investing in rehabilitating vacant units and bringing them up to a point where families who need those affordable homes can live in them is a benefit for those families and for the community. I think the legislation that you are leading is an important way to do that. We can also use the Housing is Infrastructure Act's allocation of $45 million for the Housing Trust Fund. In some cases, if these are multifamily rental units, we could also use those resources to rehabilitate those units and make them affordable to the lowest-income people, to those extremely [inaudible] in the community. Any time we can take a standing building and rehabilitate it into something that can be habitable, we should, because that's certainly less expensive than new construction.

Ms. WILLIAMS OF GEORGIA. Thank you so much.

Ms. Waggoner, your testimony highlighted the importance of easing utility cost burdens on low-income families. The Restoring Communities Left Behind Act also provides funds for home weatherization and energy efficiency activities. What benefits does green housing infrastructure provide for low-income families, and how important are investments in this area?

[No response.]

Ms. WILLIAMS OF GEORGIA. I can't hear you. I don't know if anyone else is having that problem.

Ms. WAGGONER. Okay. Thank you. Can you hear me now? Great. I wanted to say thank you for asking that question, and green housing is critically important to the health of the people who live there. We are talking about lead-based paint and other things, and when you build green, you really build a healthier environment for those families who live there.

Second, I would say when you build green housing, the property owner saves money because they are using solar panels and other things, but also the residents who live there also have a cost savings, and they can make different choices for their family, like buying healthier food, investing in their education, or job growth. So, I think green housing is a win all the way around.

Ms. WILLIAMS OF GEORGIA. Thank you so much. And finally, Dr. McAfee, what principle should we keep in mind as we advance housing infrastructure investments to ensure the funds efficiently and effectively benefit our most marginalized communities?

Mr. MCAFEE. Thanks for asking the question. First and foremost, we should center the people who have been left behind, and that should just be at the forefront of our consciousness with everything that we do. We should remember that the work of government is to achieve equity, a just and fair society. We should make sure that we are not just building units, but that we are building communities of opportunity, and that we hold all of the intersectional interests associated with infrastructure.

Good infrastructure investments will ensure that we can improve social and economic outcomes for children and their families, and so those should be the things that we are thinking about. Holding all the complexity from cradle to career—housing, water, jobs, communities of opportunity—that is the work for our generation to ultimately design a nation that works for everyone.

Mr. GREEN. Thank you for your testimony, sir. The gentlelady's time has now expired, and the gentleman from Massachusetts, Mr. Auchincloss, is recognized for 5 minutes.

Mr. AUCHINCLOSS. Thank you, Mr. Chairman, and thank you to our witnesses today. I represent, in the Massachusetts 4th District, a socioeconomically diverse district. In the north, we are close to 5 times what they are in the south with a concomitant diversity of housing prices as well, but there is one uniform concern across the district, and that is the affordability of housing. I hear it in every town hall and every roundtable that I do. We are in the midst of a housing crisis, and I am pleased that Congress is considering housing to be an imperative part of infrastructure.

Dr. McAfee, I want to address this question and line of questioning to you. One of the challenges that I see in the production of affordable housing is that there has been very limited research and development and innovation in the construction of housing over the last 70 years. If we built cars the way that we build housing today, it would mean standing in your driveway and hiring a general contractor, ordering 30,000 parts for the car, and assembling it in your driveway over the course of a year, and the car would probably cost half a million dollars and not drive particularly well. But we are still stuck in that mindset with housing. I wonder if you have seen models of vertically-integrated, factory-built housing, for multifamily, in particular, that, in conjunction with nonprofits, have been able to provide housing at a much lower cost per key and done at scale.

Mr. MCAFEE. Yes. I serve on the board of Bridge Housing based in San Francisco, and the reality is this is an area where more research is needed, but there are some positive signs of being able to produce manufactured housing that is affordable, that is decent, and that is safe. There are some projects going on actually in San Francisco right now that are using union wage jobs.

But when I talk about the redesign of the nation, this is a perfect example where more is needed. We are not fully in alignment with unions, with the developers, with the builders, whether they are for profit or not. And so the answer is, yes, I am seeing it work. I am seeing organizations, like Enterprise and Bridge and others, begin to try to figure out how to do this. And in my own experience, I personally witnessed it with Bridge Housing, and we are watching a development in San Francisco. But the issues of whether you can keep the costs down, whether it is on the construction side or with labor, it is essential for us to find a path forward. And I think when we make these types of investments, these are some of the learning agendas and the research opportunities that we should be focused on.

Mr. AUCHINCLOSS. Dr. McAfee, I appreciate that. And to build on that, I would add on my own, too, that it is important not only that we have equity of opportunity in the jobs of constructing the factory-built housing, but also in the development of it. Some companies I know are starting to try to create programs for nascent developers to go out and try to plant some of these development projects throughout because too often, being a real estate developer has been sort of an old boys network, and this is a way to crack through that. So, I think there are promising roads ahead here.

Mr. MCAFEE. That is right.

Mr. AUCHINCLOSS. My final question is for Professor Omarova, and it is about the National Investment Authority, and it is building on the vertically-integrated, factory-scale housing. Is there a role for an NIA in a public-private partnership to spur production at scale of this type of housing, because a lot of times what is necessary to get lower cost-per-key for factory-built housing is an order of size on the thousands as opposed to hundreds or dozens.

Ms. OMAROVA. That is absolutely correct. That is exactly the type of project that an institution like the NIA, with the scale and flexibility that it will have, will really play a great role in. And my one little point here would be that this would be a new kind of public-private partnership, not the old kind when there is just public money and private actors basically manage it, mostly to their own advantage. It will be a true partnership in which the public will lead.

Mr. AUCHINCLOSS. I appreciate that, Professor. And I yield back.

Mr. GREEN. The gentleman yields back. The gentlewoman from New York, Ms. Ocasio-Cortez, is recognized for 5 minutes.

Ms. OCASIO-CORTEZ. Thank you so much, Mr. Chairman, and I am so glad that we are at a point where we are truly starting to not just acknowledge, but really incorporate the opportunities available to us of decarbonization and addressing climate change with infrastructure investment, especially when it comes to housing. When people think, and if you ask the average person what are some of the largest sources of carbon emissions, a lot of people may tell you cars and transportation. But an area that a lot of people don't tell you is housing construction and buildings, which is one of the largest sources of carbon emissions in the country.

And where I come from, New York City, one of the largest sources of housing stock in New York City is public housing. Our public housing has been starved for a very long time period of time, and we have an opportunity right now to leapfrog, to not just catch up and patch up holes in walls and update boiler systems, but to actually actively retrofit our buildings and make them world class in both decarbonization and dignity.

This isn't a coincidence, because what we are starting to see and what we know is that the climate crisis does not impact all communities equally. We are seeing that communities that are most prone to flooding and other environmental risks also, unsurprisingly, happen to be the most vulnerable, the poorest, the Blackest, and the Brownest. And it is important that our housing stock is resilient in the face of a changing climate, and we need to make sure that we are being as ambitious as possible. And if we want to be the greatest country in the world when it comes to investment in our housing infrastructure, dignity for all people, and the guarantee of housing healthcare and more, we actually need to do it. And so, I am really excited that we have introduced the Green New Deal for Public Housing, which actually does that, and it is a proposal that retrofits, rehabilitates, and decarbonizes the entire nation's housing stock, while creating good-paying new jobs in the process.

So anyway, plug aside. Ms. Waggoner, aside from the need to increase the sheer number of housing units in this country, can you explain why Congress should also be committed to ensuring that those units are resilient, sustainably built, and also sited strategically, located in strategic places?

Ms. WAGGONER. Thank you for that question. First and foremost, we either pay for not investing later, or we pay for it now. We have invested $96 billion from most recent disasters. We know that we will expect more. So why not invest, like you said, in these buildings to get ahead so there is better preparedness, communities can stay housed, low-income people and people of color are not at risk of being displaced, the turnaround time is less, the recovery is faster, people can get back to work, and they can get back to doing the things that help them thrive? I think it is good business sense to do it before you need to do it, so preparedness in advance of a disaster is critical here. I am excited that this bill is talking about it, and I am hoping that everything that we build new, that is our strategy moving forward.

Ms. OCASIO-CORTEZ. Absolutely. And I think that this is something we really need to talk about, that when it comes to homelessness in this country, it is a climate issue. In fact, right now, the top five States with the highest share of the homeless population in this country are also all in the top six States that are climate disaster-prone in the United States. When we see wildfires, when we see floods, when we see natural disasters like this happen, they result in destroyed homes. And so many of us in this country are one disaster away from being homeless, and the vast majority of us are closer to that than to having three or four homes, like the select few who are living in in luxury.

But moving on, it is not just about those big retrofits. It is also about these smaller changes, too. Studies have shown that energy efficient home upgrades can save households an average of 11 percent on annual utility bills. Ms. Waggoner, I was wondering what can you offer and what insight can you offer around, even with that existing public housing stock that we have or even in upcoming housing stock, what some of those internal technology changes could mean for communities and families that are also living inside them?

Mr. GREEN. The gentlelady's time has expired. We will ask the witness to respond for the record.

Ms. WAGGONER. I will do that.

Mr. GREEN. The Chair now recognizes the gentlewoman from Michigan, Ms. Tlaib, for 5 minutes.

Ms. TLAIB. Thank you so much, Chairman Green, and thank you all so much for holding this hearing. We all truly believe housing is infrastructure.

During the Great Recession, top-down programs intended to revitalize struggling neighborhoods didn't reach residents in communities like Detroit or Toledo, and instead went towards tearing down homes. We can't demolish our way out of the housing affordability crisis if we are going to build back better. We have to direct housing money where it is most needed. That is why I am so incredibly proud of the work I am doing with Congresswoman Marcy Kaptur on the Restoring Communities Left Behind Act. We are very grateful that national organizations, including Habitat for Humanity, the National League of Cities, and the U.S. Conference of Mayors, have called for this bill to be included in the upcoming infrastructure package. And I thank Chairwoman Waters and the Financial Services Committee for including it in today's hearing.

The bipartisan bill would provide $5 billion to distressed communities to carry out our neighborhood revitalization activities like rehabbing homes, improved accessibility for seniors and those living with disabilities, increasing home ownership as well, and also combating this really huge crisis of tax foreclosures in my district. Unlike existing programs, this bill creates a grant program with the flexibility to respond to the needs of the communities we serve. For example, we know that low-income people of color pay 27 percent more for energy costs compared to low-income White households. The funds in this bill can be used towards weatherization and home repair.

And, Mr. Chairman, since 2011, the Wayne County treasurer has foreclosed on more than 100,000 homes in Detroit, and you saw that firsthand. Even though more than 90 percent of Detroit homes were over-assessed and over-taxed, those foreclosures continued to happen. The funds in this bill can be used towards property tax relief. These funds could also go towards purchasing and redeveloping vacant and distressed properties, creating opportunities for affordable rental housing, homeownership, and shared equity homeownership as well.

So, Ms. Waggoner, can you briefly describe how rehabbing existing housing stock in neglected communities can help stabilize neighborhoods and put our families on a path of home ownership?

Ms. WAGGONER. Thank you for that question. Yes, of course, we need to invest in the infrastructure we already have. It is hard, it is existing, and people live there, and as was shared earlier, 2 million Americans live in this type of housing stock. We need to invest in it and make sure it is healthy and clean and safe. We talked about such things as addressing lead-based piping, paint, and other things. This is a critical thing that we must follow, we must do. We don't build housing not to invest in the upkeep of it. We must continue to do that while we are building more housing that people can afford.

Ms. TLAIB. Thank you so much for Enterprise's support for restoring communities left behind, and thank you for your work in the Wayne County, Michigan, community. We sincerely appreciate it. I also invite my colleagues to please join me in co-sponsoring this vital legislation, and, again, thank you, Chairwoman Waters, for including it in today's hearing. Thank you, and I yield back.

Mr. GREEN. The gentlelady yields back. I would like to, at this time, thank the witnesses for their testimony today.

The Chair notes that some Members may have additional questions for this panel, which they may wish to submit in writing.

Without objection, the hearing record will remain open for 5 legislative days for Members to submit written questions to these witnesses and to place their responses in the record. Also, without objection, Members will have 5 legislative days to submit extraneous materials to the Chair for inclusion in the record.

This hearing is now adjourned. Thank you very much, everybody. Please have a great day.

[Whereupon, at 3:08 p.m., the hearing was adjourned.]

A P P E N D I X

April 14, 2021

"Building Back Better: Examining the Need for Investments in America's Housing and Financial Infrastructure"

Wednesday April 14, 2021

Written Testimony Submitted By
Michael McAfee, Ed.D.
President and CEO, PolicyLink

To the U.S. House Committee on Financial Services

Introduction

Thank you, Chairwoman Waters, Ranking Member McHenry, and members of the Committee for the opportunity to offer testimony on the need for investments in America's housing and financial infrastructure. My name is Dr. Michael McAfee. I'm the President and CEO of PolicyLink, a racial equity research and action institute operating nationwide with our network of thousands of community-based partners.

Our North Star at PolicyLink is to bring about a world that promotes equity, defined as the just and fair inclusion into a society in which all can participate, prosper, and reach their full potential.

Opportunity should not be random in America. That is why we advance policies to enable everyone to participate in an equitable economy, live in a healthy community of opportunity, and thrive in a just society. Equity aims to equip everyone, especially those who have been left behind, with the resources that allow them to contribute and prosper. It is a pragmatic approach to solve the nation's greatest problems and sources of tension: economic inequality and racial exclusion. Equity addresses race forthrightly and productively, but it is not about benefiting one group at the expense of another. When smart, sustainable strategies are tailored to the needs of those who've been excluded, our communities and our economy become stronger for everyone. This is especially true as the United States undergoes demographic shifts in which people of color are becoming the majority.

Our Generation's Biggest Challenge: Winning on Equity

Centuries of racism, exclusion, and exploitation have left over 100 million people in America – including 55 million people of color – struggling to make ends meet and are preventing generations of children from realizing their potential. ***That is one in three***

Americans.[1] Our generation's challenge is to reimagine the nation's laws, policies, regulations, and programs so they effectively serve people of color, and ultimately all, in a multiracial democracy. At PolicyLink, we call the pursuit of that goal *"Winning on Equity."*

To Win on Equity, our country must focus on achieving racial equity at scale. That demands transforming the oppressive systems and institutions that have compromised our democracy and economy; and which hinder equity-focused policies from unleashing their intended impact.

Infrastructure is one of the most important places we can start. Infrastructure demonstrates some of America's greatest promise and potential when we combine our collective resources, ingenuity, and political will to do big things for our society and our economy. At the same time, our infrastructure, in its current form, is a living monument to exclusionary, deliberate, anti-Black and anti-Indigenous policies that have for generations robbed wealth from communities of color. Our infrastructure policies have deprived Black and Brown people of opportunity; exposed far too many to harmful pollution; and literally shaved decades off average life expectancies for people of color. In fact, your zip code has a greater impact on your life expectancy than your genetic code. A child growing up in the Barry Farms neighborhood of Southeast DC can expect to live **30 years less** than a child growing up in Friendship Heights, just 10 miles away.[2] Sit with this for a moment. Three decades of life taken from a child – just because of where she was born. This has to end.

Centering Racial Equity: The Federal Government's New Mandate

The federal government, as the author and enforcer of many of these barriers, must play a leading role in their remedy and our national renewal – particularly by centering racial equity in the nation's laws, policies, regulations, and programs moving forward. The federal government is uniquely positioned to ensure that opportunity is not random

[1] See National Equity Atlas, Poverty: 200% https://nationalequityatlas.org/indicators/poverty#/?breakdown=2&povlev01=99, PolicyLink and the University of Southern California (USC) Equity Research Institute; and *100 Million and Counting: A Portrait of Economic Insecurity in the United States*, PolicyLink and the USC Equity Research Institute, https://nationalequityatlas.org/resources-tools/100-million.

[2] People living in low-income, disinvested communities have higher levels of stress, because our systems fail them — transportation, housing, water, criminal justice, jobs, education, etc. This creates chronic stress, which changes human physiology and adversely impacts health. For more information see: https://www.buildinghealthycommunities.org/tell-me-your-zip-code-and-i-will-tell-you-how-long-you-will-live/

In another study, researchers at the Virginia Commonwealth University Center on Society and Health have mapped the variation in life expectancy by neighborhood for over 20 cities and states using vital statistics obtained from state and local health agencies and population data from the U.S. Census Bureau and the U.S. Centers for Disease Control and Prevention. See: https://societyhealth.vcu.edu/work/the-projects/mapping-life-expectancy.html.

in America. And, policymakers must embrace that cause as a core tenet of our nation's foundational purpose.

We have not seen the kind of vision and resource commitment needed to address our intersectional challenges since the Obama years, when Chairwoman Waters and other Committee Members played such a critical role in initiatives like Choice Neighborhoods, Promise Neighborhoods, and the Sustainable Communities Initiative. PolicyLink is proud to have led the Promise Neighborhoods Institute, which supported over 50 communities developing results-driven, data-informed Promise Neighborhoods across the country.

We also co-designed and served as a technical assistance provider for the Sustainable Communities Initiative, working with 143 regional and municipal HUD-DOT-EPA grantees to incorporate social equity outcomes into their work. Through this initiative, PolicyLink helped design the AFFH data tool and Assessment of Fair Housing pilot programs. Since this time, we have collectively built a strong community of practice and have drawn lessons and insights that we can apply to the infrastructure package. First, those programs – which took the form of early pilot investments to test new approaches – demonstrated that **comprehensive solutions were required for infrastructure development**, including equitable education, housing, and even the physical design of communities to better promote health and prosperity for all. **The scale of these and similar efforts must now grow dramatically.** Second, as these programs have been expanded and iterated in partnership with local communities, philanthropy, and the private sector, we have repeatedly seen that the most successful and durable investments are the ones that **align with, support, and center community-designed and community-led solutions**.

To win on equity, the federal government must adopt a **new way of being** through which it designs, targets, and funds programs. At every turn we must:

- **Require a focus on justice and fairness for all that centers racial equity, particularly in resource allocation decisions**. Our investments in infrastructure must directly and substantially benefit the communities that have been hardest-hit by the pandemic; are subject to racism and oppression; suffered from deindustrialization, disinvestment, and underbanking; and borne the brunt of environmental degradation and climate disasters. These communities are full of hope and possibility. They will be the source of the next generation of America's doctors, investors, and elected officials if we prioritize racial equity.
- **Federal investments must be directed through set asides, competitive scoring, and alignment of resources** from multiple programs and agencies to address the infrastructure needs these disadvantaged communities face. This

will require agencies to not only better orient their funding around the expressed priorities of these communities, but also actively align and streamline processes for deploying those funds so that communities can more nimbly and flexibly access and use them.

- **Create and require agencies to utilize community mapping and screening tools to assess environmental impacts, segregation, concentrated poverty, and access to opportunity.** Having access to socio-economic data disaggregated by race, ethnicity, and income is critical to making informed decisions about how resources can be deployed equitably. Agencies should leverage and build from existing and reinstated tools, such as those created to enforce the Affirmatively Furthering Fair Housing rule[3] and the Environmental Justice Screening and Mapping Tool, to ensure that assessments and plans for investment consider a range of indicators impacting the health and well-being of historically disinvested communities. Such indicia would include housing burden, neighborhood poverty, pollution exposures, utility burden and shut-off rates, drought, and sea-level rise.
- **Expand economic opportunity and support an equitable economy.** The building of the infrastructure must deliver jobs and economic opportunities to those same communities via targeted hiring and inclusive contracting to help grow and sustain local and minority-owned businesses.[4] We should prioritize building the human, civic, and physical infrastructure that ensures a just transition away from carbon-intensive, polluting industries and builds an economy that works for all people and protects our planet.[5]
- **Promote open and inclusive processes.** Our public investments in infrastructure should produce lasting public benefits and strengthen our public sector to benefit those least well off instead of enriching consulting firms and corporations. This requires open, inclusive budgeting processes that meaningfully engage diverse community stakeholders; promote transparency in

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[3] While the Trump Administration suspended use of the AFFH tool and requirement, many jurisdictions elected to continue utilizing the methods. The Urban Institute downloaded the raw data in 2020 from the HUD site. See: https://datacatalog.urban.org/dataset/data-and-tools-fair-housing-planning

[4] See *Inclusive Procurement and Contracting: Building a Field of Policy and Practice,* Denise Fairchild and Kalima Rose, PolicyLink, 2018. See: https://nmcdn.io/e186d21f8c7946a19faed23c3da2f0da/9bb11a106d6f43d5ae8118a05a071e96/files/media/news/Inclusive_procurement_report_03.28.18.pdf

[5] For example, with younger workers being majority people of color, the water sector creates a unique opportunity to tackle both the legacy of racial and gender discrimination and exclusion in the water construction industry. Some of the most effective economic inclusion programs for BIPOC and low-income communities were designed for them. One program brings together HBCUs, NGOs and unions (i.e., steelworkers, laborers, and carpenters' unions), and the Department of Energy, who draw from an annual appropriation under the National Institute of Environmental Health Sciences *Environmental Career Worker Training Program* to place young, disadvantaged workers into water and brownfields remediation projects. For more information see: https://www.niehs.nih.gov/careers/hazmat/training_program_areas/ecwtp/index.cfm.

the allocation and disbursement of infrastructure funds; and engage a broad range of expertise in the development of infrastructure policy, planning, and investments. These processes should be seen as equally critical to the successful disbursement of funds as the expenditure levels themselves. Interagency alignment around these processes, anchored by core requirements around racially equitable resource allocation, must be required by the Congress as well as the current and future administrations.

Housing Infrastructure Priorities to Ensure Opportunity Is Not Random in America

This leadership moment not only requires the federal government to view its investments through its core commitment to racial equity. It is about **building a new infrastructure** for our 21st century multiracial democracy – one that centers the 100 million economically insecure Americans and ensures every person is securely housed. We have to build this new infrastructure in a different way. **Housing is at the heart of this, because housing is one of the biggest drivers of the racial wealth gap.** Housing shapes the physical landscape of inequity: segregation, disinvestment, and exclusion.

A Physical Landscape of Inequity and Segregation

It is critical to remember that seven in 10 White families own their homes while the majority of Black, Latinx, and Pacific Islander families are renters and do not have the opportunity to build wealth through homeownership. Even before the pandemic made things worse, half of all renters were paying more than they could afford on housing, and three out of five Black and Latinx women renters were housing cost burdened. Throughout the pandemic, renters have struggled to make rent and have been forced to make choices between paying rent and meeting basic needs for food, health care, and more. Our National Equity Atlas, based on data from the Census *Household Pulse Survey*, finds that millions of households have fallen behind on rent. This is one of our biggest equity issues today: Black and Latinx workers are more likely to have lost employment income during the pandemic and disproportionately owe back rent and thus at risk of eviction if not covered by a moratorium.

Seven million adults live in renter households that are behind on rent due to pandemic-related job and income losses and face eviction and homelessness when the national eviction moratorium is lifted in July (if not sooner).[6] During the pandemic, renters, and disproportionately renters of color who lost employment income due to the pandemic, have accumulated **billions in debt,** while predominantly White homeowners

[6] Census Household Pulse Survey, Week 27 (March 17-29) Housing Table 1b. https://www.census.gov/data/tables/2021/demo/hhp/hhp27.html#tables

and property owners have gained **billions in wealth** from low interest rates and increased home value.

We can no longer deny that *racial inequity is a feature, not a market failure,* of the current housing system, which compounds the economic insecurity of renters of color and confines lower-income renters to neighborhoods that have been starved for decades of investment, good schools, clean water, healthy foods, and other amenities.

Housing Investments to Make Every Community a Community of Opportunity

To end this nation's housing affordability crisis, we need to invest **at least $200 billion for housing acquisition** through the National Housing Trust Fund or a new Housing Infrastructure Bank. These investments should expand community control and ownership; and the funds should be used to fully finance the purchase and rehabilitation of private rental properties by tenants, nonprofit organizations, public housing authorities, cooperatives, community land trusts, and state or local governments in order to increase the availability of permanently affordable housing. This funding should also be coupled with funds to provide technical assistance that facilitates peer learning for local organizations working on the ground in communities. **In addition to this Housing Trust Fund, Congress must invest $70 billion in capital improvements to public housing** for maintenance, greening, operations, and to end the current backlog in repair needs.

We must also advance the Homes for All Act and invest in the development of permanently affordable housing.[7] Learning from the scale of large social housing programs around the world, the federal government should reverse the nearly 50-year long downward trend of reducing federal spending on public housing, and prioritize the creation of **12 million new housing units over the next 10 years** with an **investment of $1 trillion**, prioritizing low-income communities and communities of color particularly on public land near transit. While there are several ways to target these resources, our view is that these units must be made available for people earning 30 percent of their Area Median Income (AMI) or less.

The federal government must Issue enough vouchers to make wait lists a relic of the past, and ensure universal access for all who qualify, with strong guidance to direct these vouchers towards community-owned, permanently affordable housing**.** Vouchers are not enough without strengthening protections that mainstream their use. For instance, Congress should establish and enforce a source of income protection[8] as

[7] The Homes For All Act of 2019, H.R. 5244, was introduced by Rep. Ilhan Omar in the 116th Congress.
[8] Source-of-income non-discrimination laws prohibit discrimination based on source of income. These laws are critical to preventing discrimination against housing voucher holders, young people whose

a federal standard nationally. Vouchers combined with infrastructure investments of new construction and acquisition and rehabilitation will provide immediate support to those struggling to pay for housing and will ensure community-controlled properties are financed well into the future.

Congress must also establish a national requirement for rent stabilization to accompany any housing infrastructure investments. This is critical for ensuring rent increases are predictable and do not push people out of their homes.[9]

I want to applaud you in particular, Chairwoman Waters, for laying down a crucial marker with the *Housing is Infrastructure Act*. PolicyLink is proud to endorse this legislation as a starting point to dramatically scale up **affordable housing investments, including CDBG, HOME, the Native American Block Grant program, and other critical programs in disinvested places.** We also believe it is critical for the federal government to create interagency investments with EPA and DOT to ensure all resources are fully leveraged to create health equity outcomes, healthy communities of opportunity, and climate resilient places. Finally, all housing infrastructure investments going forward must include Increased funding for community-driven, long-term planning that also supports **anti-displacement protections and builds climate resilience**.

Ending Discrimination in the Housing Market

I also want to urge the Congress to **pass a national Tenants' Bill of Rights** with just cause eviction protections, a right to organize, a right to counsel. This new Bill of Rights would end ongoing discrimination in housing by enshrining a source-of-income non-discrimination requirement; fair chance housing; and protections for undocumented and mixed-status households as well as people living with disabilities.

And I'm heartened to see the Biden administration's commitment to **strengthen the AFFH rule** after the previous administration's inexcusable attack on non-discrimination protections in our nation's housing laws. AFFH is a critical tool to ensure every HUD grant jurisdiction conducts a fair housing analysis and directs federal investments to improve high-poverty neighborhoods and ensure that low-income renters of color can live in neighborhoods with good schools, clean air, transit and other critical ingredients of economic success, health, and well-being.

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parents pay their rent, domestic violence survivors who may be receiving housing assistance, or anyone else who has another institution or individual paying their rent. These laws are particularly important for voucher holders in communities with high housing costs where landlords are less likely to rent to voucher holders.

[9] If rent control were adopted nationwide, 42 million households could be stabilized. For more information, see: "Our Homes, Our Future: How Rent Control Can Build Stable, Healthy Communities," https://www.policylink.org/resources-tools/our-homes-our-future.

Financial Infrastructure Priorities to Ensure Opportunity Is Not Random in America

As I noted, along with PolicyLink's Founder in Residence, Angela Glover Blackwell, in a *New York Times* piece last summer: banks have been underwriters of American racism – no industry has played a bigger or more enduring role in Black oppression, exploitation, and exclusion. That is why our community is so wary of the many statements and gestures that financial institutions made last summer in the wake of Mr. Floyd's murder. **Banks themselves have real work to do in the months and years ahead to make their newfound stated commitment to racial justice real.** And the Congress has an important role to play in **reshaping our financial institutions to be community serving**.

Congress can start by working to curb Wall Street discrimination and speculation. Banks and financial institutions continue to undervalue Black-owned property, steer people of color into predatory financial products, and deny loans to people of color. This kind of **de facto redlining** leads to dramatic undervaluation, underinvestments, and underbanking in Black and Brown communities. Private equity companies flush with investor funds have bought up homes in low-income communities, seeking to profit from eviction, displacement, and gentrification. This has led to deteriorating conditions and rising housing costs for low-income and working-class tenants who live in multifamily buildings. More robust financial regulations will protect both tenants and homebuyers by limiting the role that private equity can play. In particular:

- Enforce stronger regulation, including transparency and fair taxation, of real-estate development and investment corporations.
- Provide funding and policy preference for nonprofit and cooperative ownership, community land trusts, and other models that facilitate public and resident ownership.
- Limit the ability of banks to offer loans on property purchases that would require significant rent increases in order to meet mortgage obligations.[10]

Another critical way to strengthen our nation's financial infrastructure is to **invest substantially more resources in the CDFIs, local credit unions, and business support organizations** that have deep relationships in low-income communities of color and provide crucial financial and technical support to help businesses owned by people of color start and grow. As we invest in housing and infrastructure development, we must ensure that developers and entrepreneurs of color can participate in rebuilding their communities, creating new, good jobs for residents, and scaling their businesses to

[10] For more information on how to advance housing justice and limit the outsized influence of corporate landlords, see the Housing Justice National Platform, supported by a nationwide movement of tenants, homeowners, and their allies: https://www.housingjusticeplatform.org/our-platform.

shrink the racial wealth gap. Congress should also consider new programs and incentives to support the development of worker-owned cooperatives in communities of color. In addition to expanding workers' voice and ownership, worker-owned cooperatives tend to be more productive, pay better wages, offer longer-term employment that lasts through shocks to the economy, provide greater career mobility, and keep profits in the community.[11]

Finally, to invest in our financial infrastructure, which includes both our physical and care infrastructure in the most disinvested communities, **Congress should enact a Federal Job Guarantee** with permanent public financing that expands and contracts based on need and would ensure that everyone has access to family-supporting jobs. I want to particularly acknowledge and thank Representative Pressley for her leadership in introducing a resolution to accomplish this,[12] which PolicyLink was proud to work in partnership with her office to advance. A Federal Job Guarantee would act as an automatic stabilizer, maintaining stable employment and income during downturns, thus making our economy more resilient as well as more equitable. This guarantee is crucial to build an equitable economy and deliver on essential community infrastructure needs.

Conclusion

I want to take this opportunity to thank you, Chairwoman Waters, and the other members of this committee who have demonstrated such a strong commitment to centering racial equity in the unfolding debate around the nation's infrastructure needs. I also want to make PolicyLink available as a resource to you moving forward. **The National Equity Atlas**, produced by PolicyLink and the USC Equity Research Institute, is America's most detailed report card on racial and economic equity. Our database includes unique, deeply disaggregated data by race, gender, nativity, ancestry, and more – for the largest 100 cities, largest 150 regions, all 50 states, and the United States as a whole. We use it to equip movement leaders and policymakers with actionable data and strategies to advance racial equity and shared prosperity. We are happy to work with the Congress to provide detailed analyses to support your racial equity work.

American democracy is a perpetual work in progress – it is never guaranteed. 2020 laid bare the structural failures of a nation that was never designed to work for everyone, mostly due to the toxic and compounding forces of racism. Now, we have a

[11] See the Democracy at Work report, *How Economic Democracy Impacts Workers, Firms, and Communities* https://institute.coop/resources/how-economic-democracy-impacts-workers-firms-and-communities.

[12] H.Res.145 - Recognizing the duty of the Federal Government to create a Federal job guarantee. https://www.congress.gov/bill/117th-congress/house-resolution/145/cosponsors?r=18&s=3&searchResultViewType=expanded.

once-in-a-lifetime opening for structural transformation, and to finally achieve just and fair inclusion into a society in which all can participate, prosper, and reach their full potential.

Our nation is at a crossroads. If we do not invest in housing and financial infrastructure, we will forfeit the opportunity to significantly improve the social and economic outcomes for the 100 million Americans struggling to make ends meet, and for the future generations who depend on us making the right choice. An equitable, prosperous nation for all will only be achieved when our actions are commensurate with the scale of the challenge.

This is our moment to not only Win on Equity but to ensure that in America, opportunity is not random. We must redesign oppressive systems, especially in housing, to create an America that serves all people, starting with people of color. This is the greatest challenge of and highest priority for the racial equity movement – we owe it to our ancestors, each other, and future generations. This is how we deliver on the promise of a multiracial democracy.

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Written Statement of

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Before the United States House of Representatives Committee on Financial Services

"BUILD BACK BETTER: INVESTING IN EQUITABLE AND AFFORDABLE HOUSING INFRASTRUCTURE"

April 14, 2021
10:00 am

Dear Chairwoman Waters, Ranking Member McHenry, Members of the Committee:

Thank you for inviting me to testify at this hearing. My name is Saule Omarova. I am the Beth and Marc Goldberg Professor of Law and Director of the Jack Clarke Program on the Law and Regulation of Financial Institutions and Markets at Cornell University, where I teach subjects related to corporate finance and regulation of financial services. Since entering the legal academy in 2007, I have written numerous articles examining various aspects of U.S. financial sector regulation, with a special focus on systemic risk and dynamics in the U.S. financial sector and the practical interaction between finance and the broader economy. Prior to becoming a law professor, I practiced law in the Financial Institutions Group of Davis Polk & Wardwell. I also served in the George W. Bush Administration as a Special Advisor on Regulatory Policy to the U.S. Treasury's Under Secretary for Domestic Finance. I am here today solely in my academic capacity and am not testifying on behalf of any entity. I have not received any federal grants or any compensation in connection with my testimony, and the views expressed here are entirely my own.

The purpose of my testimony is to describe a proposal for the creation of a National Investment Authority (NIA), a new federal entity tasked with designing, financing, and implementing a cohesive program of the U.S. economic growth and development. The proposed NIA will fill the crucial institutional space between fiscal policy, conducted by the U.S. Treasury, and monetary policy, conducted by the Federal Reserve. Acting directly inside financial markets, the NIA will mobilize and channel the flow of public and private capital to rebuild our nation's deeply inadequate physical and social infrastructure, which includes affordable and environmentally sustainable housing. Updating the successful Reconstruction Finance Corporation (RFC) model to meet the unique challenges of the 21st century, the NIA will restore the healthy functioning of the U.S. financial system, so it more effectively serves the long-term interests of the American people.

More comprehensive summaries of the NIA proposal are provided in (1) the report entitled "The Climate Case for a National Investment Authority," attached as **Appendix A**; (2) the memorandum entitled "A National Investment Authority: Financing America's Future," attached as **Appendix B**; and (3) the issue brief entitled "Why We Need a National Investment Authority," attached as **Appendix C** hereto.

In this written statement, I will take a broader look at a few overarching themes that deserve the Committee's special attention. For reasons presented below, I urge the Committee to take the lead in establishing the NIA as the core institutional tool for guiding and managing the process of post-pandemic economic recovery and transformation.

I. WHY WE NEED A NATIONAL INVESTMENT AUTHORITY: THE MISSING ELEMENT IN THE U.S. FINANCIAL INFRASTRUCTURE

Affordable housing is a vital, indeed indispensable, component of the national infrastructure.[1] Investment in affordable housing is therefore a key component of the nationwide infrastructure investment program. This is particularly evident and urgent in the context of the post-pandemic economic recovery and reconstruction challenges we are facing today. The COVID pandemic has aptly demonstrated both how critical housing access and conditions are to human health and safety and how deeply these issues are intertwined with the broader problems of racial and socioeconomic inequality in the United States.[2] Unsurprisingly, the most vulnerable segments of the U.S. population—especially low-income racial and ethnic minority households—shouldered the disproportionately high share of crisis-induced evictions, foreclosures, and other housing hardships.[3] As the country is beginning its post-COVID rebuilding process, remedying these long-standing structural problems in the housing sector must be one of our core political and economic priorities.

Financing is at the core of these problems. Recognizing this fact, the Biden Administration called on Congress to invest $213 billion to build, preserve, and retrofit more than a million affordable, accessible, and energy-efficient housing units.[4] As part of a sweeping package of infrastructure-finance measures, proposed in "The American Jobs Plan," this type of investment commitment would be a powerful start of a much-needed program of economic recovery and growth.[5]

It is critically important, however, to supplement this broad commitment with a concrete plan to build an institutional platform for implementing the program on an ongoing basis and in a manner that truly serves the interests of the American people. Without such a dedicated public platform, there is a very real danger that large financial intermediaries—Wall Street banks, private equity funds, investment consultants, etc.—would hijack the process, subverting the federal resources toward uses disproportionally benefitting them and their powerful clients.[6] Given the unprecedented cluster of challenges facing the United States today—global pandemics, climate change, extreme socio-economic and racial inequality, erosion of domestic industrial capacity and global competitiveness, to name a few—allowing this to happen is simply not an option.

This is not an ideological issue; it is a practical imperative. A massive nationwide shift towards a sustainable, inclusive, and dynamic 21st-century economy requires not only tremendous commitment of public resources but, just as importantly, public leadership and coordination.[7] It is a fundamentally political undertaking, which involves making explicit distributional choices and using governmental powers to turn them into reality. To do it right, we need a well-designed institutional base: a federal entity with democratic accountability, broad legal authority, and in-house capacity to identify long-term economic development goals, translate them into specific investment priorities, and finance and actively implement these priorities in practice.[8]

We currently don't have such an institution. The last entity of this kind in the last hundred years of American history was the New Deal era's Reconstruction Finance Corporation (RFC).[9] Established in 1932, the RFC played a pivotal role in leading the country out of the Great Depression. As the federal government's principal financing arm, the RFC systematically supplied massive amounts of credit and equity capital to banks, big and small businesses, and public agencies at a time when private credit was scarce. Among other things, the RFC was the parent-institution that established the Federal National Mortgage Association (Fannie Mae), effectively creating the national market for home mortgage loans we have to this day.[10] During World War II, the RFC also operated multiple subsidiary-corporations that funded the development and production of strategic materials and military goods essential to the war effort. The RFC was terminated in 1953, but many of its former subsidiaries—including Fannie Mae, the Small Business Administration, the Export-Import Bank, and the Commodity Credit Corporation—continue to play an important role in the U.S. economy.[11]

For many decades, the RFC legacy was largely forgotten, as American policy discourse grew increasingly myopic in its denial of public actors' catalytic role in ostensibly private financial markets. The traumatic experience of the COVID-19 pandemic, however, has led various scholars and public intellectuals to call for the creation of a "modern RFC."[12] The National Investment Authority (NIA) proposal I have been working on for the past several years is by far the most advanced institutional proposal that answers this call.[13]

The NIA is envisioned as a revised and updated version of the RFC, a permanent federal financial institution with an explicit mandate to mobilize and channel public and private capital into a coordinated program of America's economic recovery and growth. Like the RFC, the NIA would act directly within financial markets—only, this time, it would deliberately and systematically seek to correct the deep structural roots of racial, economic, and environmental injustice and inequality.

Neither the U.S. Department of the Treasury (the Treasury) nor the Federal Reserve System (the Federal Reserve, or the Fed)—the two principal pillars of our country's public finance system—are properly equipped or able to perform this task.[14] This void in our federal institutional structure is particularly visible during systemic financial or economic crises, when the Treasury and the Fed are forced to take actions that are either inconsistent with their legal mandates or exceed their institutional capabilities, or both.[15] An abrupt, emergency-driven obliteration of established policy boundaries and agency roles, in turn, fundamentally undermines the efficacy and political legitimacy of the federal crisis response. Thus, both in the financial crisis of 2008 and during the recent COVID-19 pandemic, the Treasury and the Fed, charged with administering emergency financial assistance programs (often colloquially referred to as "bailouts"), outsourced the actual management of federal funds to large private asset managers like Blackrock and State Street.[16] This deeply problematic pattern, with its built-in conflicts of interest, creates ample opportunities for the systematic misallocation of public funds to the disproportionate benefit of certain special interests.[17] In the long run, the recurring use of this "solution" is bound to undermine public trust in the federal government.

Having an independent but democratically accountable public agency with the technical expertise to perform these core investment management functions would help to avoid these problems. The NIA is proposed as precisely this kind of an expert public investment manager, with a broad range of tools for mobilizing and directing financial resources into the real, i.e., non-financial, economy. The NIA would be the strong institutional "muscle" that the U.S. government needs not only to respond to crises, but also to support the balanced growth and structural resiliency of the national economy on an ongoing basis. The NIA's financial-market operations would supplement both the Treasury's and the Fed's policies and actions, thus critically enhancing the efficiency of the federal system of public finance. Accordingly, the NIA's operations would fall directly within the oversight jurisdiction of the U.S. House of Representatives Committee on Financial Services.

II. The National Investment Authority: An Overview of the Proposal

The NIA proposal is described in greater detail in the materials attached to this written statement as Appendices A-C. Below is a brief summary highlighting the NIA's key design features.

A. Core Mandate

The NIA's core mandate would be to formulate and implement a cohesive national strategy of long-term economic reconstruction and development. As stated above, there is currently no federal entity with the legal mandate, expertise, and resources to carry out this crucial task.

The NIA would operate directly in financial markets. Functionally situated between the Treasury and the Federal Reserve, the NIA would be the primary federal authority in charge of coordinating and overseeing ongoing investments in critical public infrastructure and socially inclusive and environmentally sustainable economic growth. It would serve as a separate institutional base from which to conduct a more targeted allocation of "patient" public and private capital toward specific economic activities and projects likely to strengthen the U.S. domestic manufacturing base and technological capacity, create well-paying and stable American jobs, accelerate the economy-wide shift to clean energy, revitalize and rebuild disadvantaged communities and neighborhoods, and produce many other public benefits that are not currently produced at the scale America needs.

B. Organizational Structure

The NIA would be structured as a 3-tier ecosystem (structurally somewhat similar to the Federal Reserve System), comprising—

1) NIA Governing Board;
2) NIA operating subsidiaries (the NIB and the NCMC); and
3) NIA regional offices.

The NIA Governing Board (the NIA Board) would be an independent federal agency, whose members are appointed by the President with Congressional approval for sufficiently long terms and guaranteed a high degree of decision-making autonomy. The NIA Board members would be selected based on their experience and expertise in finance, environmental science, engineering, urban planning, labor relations, law, community organizing, and so forth. The NIA Board would be the democratically accountable body in charge of (i) identifying and continuously updating key national economic priorities; and (ii) formulating a cohesive economy-wide investment strategy—the National Investment Strategy—in line with those priorities.

The NIA Board would oversee and supervise the NIA operating subsidiaries—the National Infrastructure Bank (NIB) and the National Capital Management Corporation (NCMC, or "Nicky Mac")—federally-chartered government-owned corporations, through which the NIA would conduct all of its financial market operations.

Initially financed through Congressional appropriation, these NIA operating subsidiaries would implement the National Investment Strategy, by mobilizing and channeling public and private finance into large-scale critical public infrastructure projects. These would include not only traditional physical infrastructure (like roads and bridges) but also affordable housing, public transit and broadband systems, cutting-edge clean energy and manufacturing facilities, climate change mitigation solutions, and so on.

The NIA's regional offices would function as local hubs of the NIA system. They would play a critical role in ensuring continuous community input in, and democratic bottom-up support for, the NIA's National Investment Strategy. The NIA's regional offices would work closely with local communities, businesses, and public authorities on region-specific infrastructural needs and plans. They would also coordinate their activities with the corresponding regional Federal Reserve Banks, in order to guarantee geographically balanced and equitable distribution of financial flows necessary to support clean economic growth throughout the country.

It would be important to ensure that the NIA's regional offices are established in such numbers and in such locations as necessary and appropriate in order to connect the NIA's decisions and actions to every community across America, in a direct and meaningful way. To fulfill its mandate, the NIA would need to be structured and run as a truly democratic, broadly representative, publicly accessible and accountable body. The NIA's regional offices would be the direct embodiments of these principles.

C. Principal Functions

The NIA is not meant to replace direct fiscal spending on public infrastructure; nor is it intended to compete in private markets for investment opportunities that already attract sufficient private funding. The NIA would target investments in publicly beneficial projects that do not typically get funded at the necessary scale, either in private markets or through the existing fiscal channels. While there is plenty of private capital eager to invest in "hard" assets like toll roads in heavily trafficked areas, private investors are rationally averse to funding inherently risky transformative projects that take a long time to become profitable in any commercial sense. Public investment, in turn, is often constrained as a result of political and budgetary limitations, jurisdictional conflicts, and lack of internal coordination.

The NIB and Nicky Mac—the NIA's operating subsidiaries—would step into this persistent funding gap. The NIB will focus on traditional credit financing, while Nicky Mac will supply more risk-tolerant equity capital necessary for many transformative and innovative public infrastructure projects.

1. Credit Mobilization

The NIB would be the NIA's lender arm. Its primary mission will be to amplify and optimize the currently sub-optimal system of public-private cooperation in the arena of infrastructure finance.

The NIB would focus on credit-based financing of large-scale public infrastructure through loans, guarantees, insurance, securitization, and secondary market-making. It would purchase and pool revenue bonds and project bonds issued by municipalities, public utilities, state "green" banks, and other government instrumentalities, as well as qualifying private-sector bonds supporting publicly beneficial projects.

The NIB would finance its operations by issuing its own bonds, backed by their pooled assets and eligible for the Federal Reserve's purchases (much like Treasury and Agency securities are today). As discussed below, the Fed's provision of secondary-market liquidity for the NIB bonds would play a crucial role in making them an attractive "safe asset" for large swaths of institutional investors.

In essence, the NIB would operate along the historically familiar lines of the RFC and its surviving offspring, the home finance government-sponsored enterprises (GSEs). Currently, many infrastructure projects are deemed not economically viable mainly because private creditors are not willing to take on the complex task of valuing, tracking, and managing risks of multiple geographically dispersed and relatively small-scale projects. The illiquid and fragmented nature of the existing market for municipal bonds, in turn, hinders the ability of local and state governments to access affordable financing for these much-needed projects. The NIB would specifically target these scale inefficiencies by creating and maintaining a nationwide market for these traditional forms of infrastructure finance.

2. Public Equity Investment and Asset Management

Nicky Mac would be the NIA's equity investment and asset management arm. It would focus on equity-based finance, more appropriate for truly transformative public and social infrastructure that bond investors consider too risky.

Nicky Mac would set up a series of investment funds and solicit pension funds, endowments, and similar institutional investors to purchase passive equity stakes ("limited partner" interests) in its funds. Wall Street banks, private equity, and hedge funds would not be eligible participants. As the sole manager (or "general partner"), Nicky Mac would control each fund's investment decisions. Its in-house professional teams would select and manage, with appropriate public input and oversight, individual funds' portfolios of assets: nationwide clean energy and high-speed rail networks, regional air and water cleaning and preservation programs, new affordable housing developments, community healthcare facilities, and so on.

By taking equity stakes in multiple operating companies, Nicky Mac's funds would be able to finance a wide range of innovative projects that can potentially leapfrog the U.S. economy, in accordance with the NIA's long-term developmental goals. Creating this permanent base for large-scale financing of forward-looking, technologically innovative enterprise would also critically strengthen the United States' global competitiveness and leadership, especially vis-à-vis China.[18] From this perspective, Nicky Mac's ability to build new domestic manufacturing capacity and supply chains has an added strategic significance.

Importantly, these projects need not all be commercially profitable in the conventional market sense or within a conventional timeframe. Unlike private fund managers, Nicky Mac would not have to squeeze cash revenues out of its portfolio assets to repay investors in its individual funds at the end of the typical 10-year term. This is because (1) its investments are driven not by short-term profits but by long-term public policy considerations, and (2) if and when necessary, it can leverage its direct access to the federal government's financial resources (discussed below).

Both of these factors are fundamental to Nicky Mac's ability to fulfill its core mission. To attract significant inflows of private capital into its infrastructure funds, Nicky Mac would need to be able to reward fund investors for their participation in financing long-term publicly beneficial projects, even where such projects may not generate revenues that are easily captured by private interests.

Thus, Nicky Mac could guarantee return of the principal investment to those investing in funds prioritizing commercially unprofitable projects like toll-free roads, adult education centers, or various urgently needed improvements in low-income minority neighborhoods. Nicky Mac could also offer equity-like additional returns that reflect the current estimates of long-term local, regional, or national macroeconomic impacts of these funds' projects. If, for example, experts calculate that a particular fund's investments would generate an additional 5% in regional or national economic growth over a certain period of time, Nicky Mac would translate that projected public gain into a corresponding added return for the investors in the fund.

Of course, Nicky Mac would not manage all of its funds in a way necessitating the use of this option. The scale and diversification of the portfolio of assets under Nicky Mac's management are the key to its ability to generate sufficiently attractive returns through traditional means (operating revenues, profitable "exit" sales, etc.). Having this option, however, would critically augment Nicky Mac's freedom to channel large amounts of currently abundant private capital where the need for it is particularly urgent or its impact is particularly meaningful.

Nicky Mac's unique ability to synthesize additional payouts would make the NIA funds a potentially highly attractive new "safe asset" class for large institutional investors—especially, public pension funds and mission-driven green-economy investors searching for yield that is also compatible with their core missions. Currently, public pension funds are among the largest investors in private equity funds, which means they are indirectly financing the industry known for breaking up American companies and laying off workers in the name of maximizing short-term shareholder returns.[19] Investing in NIA instruments, by contrast, would enable America's pension funds to generate healthy, reliable returns by investing in publicly beneficial, employment-boosting projects.[20]

D. Funding

Initially, the NIA's operations would need to be funded through Congressional appropriation. After an initial take-off period, the NIA would raise the bulk of its financing in capital markets, primarily through bond issuances and sales of passive equity interests in its investment funds, as described above. The expectation is that the NIA's total assets would be generating interest, dividends, and other revenues sufficient to cover its ongoing expenses. The larger and more diverse its project portfolio, the more flexibility the NIA will have in utilizing various streams of operating revenues to fulfil its current obligations.

To augment the NIA's practical capacity to finance what needs to be built, rather than what generates short-term profits, it is critical to grant the NIA operating subsidiaries direct access to liquidity support from the Federal Reserve. By maintaining a liquid secondary market for NIB bonds and a dedicated borrowing line for Nicky Mac, the Federal Reserve would effectively free the NIA from the debilitating constraints of "commercial viability." It would also give the NIA the flexibility to scale up its investments if and when necessary to sustain momentum in the economy.

In an emergency, the NIA's operating subsidiaries would have the right to borrow directly from the Treasury, at cost. As a practical matter, the NIA should not ever need to utilize this credit line: its own large portfolio of assets and the Federal Reserve liquidity facilities should obviate that need. It is nevertheless important to provide for this option, to signal to the market the Federal government's resolve to stand behind the NIA's obligations.

While the NIA issuances would not be direct obligations of the United States, the federal backstop would help to keep the NIA's cost of capital low.

E. Crisis Response and "Bailout" Management Functions

In a crisis, the NIA would manage federal funds appropriated by Congress to provide financial assistance to private and public entities in distress. It would allocate emergency credit to specific entities, negotiate and enforce applicable conditions, and take and manage the Federal government's equity stakes in firms receiving bailouts—in compliance with clear guidelines and strictly with a view to maximizing the public's overall welfare. The NIA's guidelines would explicitly mandate maximizing payroll retention and uninterrupted provision of social services to employees and communities as part of any emergency assistance package. For large corporations, they would also condition bailouts on specific changes to their dividend and stock buyback policies and executive compensation.[21] The NIA's policies and procedures would ban conflicts of interest, favoritism, and outside interference in the allocation process.

In effect, the NIA would be a designated public entity performing functions currently divided among the Treasury and the Federal Reserve—and outsourced to private asset managers like Blackrock and State Street. This would remove the need for complex arrangements and subsequent political frictions between the Treasury and the Federal Reserve, eliminate the inevitable conflicts of interest on the part of private asset managers, and increase the transparency of the bailout process. The NIA's institutional expertise and operational efficiency would also make future crisis responses much faster and more effective.

In the absence of a systemic crisis, the NIA could potentially perform the same functions with respect to financially distressed firms in specific sectors that (a) require large-scale financial support and restructuring while (b) preserving their workforce and their economic role in the community. Rather than compete with private distressed-debt investors, the NIA would assist only those companies that would otherwise not be able to access sufficiently plentiful and affordable financing for this type of a socially optimal corporate restructuring. Heavily indebted companies in the fossil fuel industry and commercial real estate (CRE) sectors might be potential beneficiaries of this approach. The NIA could help to recapitalize struggling oil and gas or coal companies, redeploy their resources for remediation of old wells and mines, and then gradually transition them either to renewable energy production or, in some cases, to a different line of business. With CRE entities, the NIA could repurpose the land to build affordable housing.

F. Public Accountability

Portfolio Selection Process. The NIB and Nicky Mac would be subject to robust procedural rules for making and vetting investment decisions, to ensure that their business activities are properly insulated from undue influence both by private sector interests and by political incumbents. The NIB and Nicky Mac would select the bulk of individual projects for inclusion in their asset portfolios through public auctions. Any public or private entity with an economically viable plan for providing currently under-provided collective goods would have a fair and equal opportunity to apply for NIA funding. The NIA's regional offices would play a particularly important role in this process. A specially designated committee of the NCMC or the NIB, as appropriate, would conduct a thorough analysis of each proposed project and choose the ones that meet their—formalized and transparent—internal requirements.

Public Interest Council. To enhance the NIA's democratic accountability, it would be important to establish a special Public Interest Council (the Council). The Council would comprise academic experts and public interest advocates, all of whom are independent of both the industry and the government. It would perform an advisory and evaluative role, by providing an independent intellectual perspective on substantive policy issues faced, and strategic decisions made, by the NIA in the course of fulfilling its mandate. The Council would submit mandatory annual reports to Congress, containing its assessments, criticisms, and non-binding recommendations for improvement of the NIA's performance.

Establishing this new institutional channel for inserting public interest into the NIA's political accountability structure would serve as a powerful check against the strong pull of industry influence. More broadly, it would create a democratic forum for more transparent and inclusive discussions of the NIA's investment choices and their impact on communities and businesses.

Congressional Reports and Audits. The NIA Board would be required to submit annual reports to Congress, outlining the basic principles of the NIA's National Investment Strategy, explaining significant changes in its objectives over various time horizons, and discussing the NIA's actions in the process of accomplishing these objectives. The Chair of the NIA Board, along with the heads of the NIB and Nicky Mac, would also provide annual Congressional testimony on these matters.

The NIA Board would be subject to annual audit by the Government Accountability Office (GAO). The NIB and Nicky Mac would be subject to annual independent audits of their financial performance and operations by a special audit panel comprising representatives of the GAO and major public accounting firms.

III. THE BENEFITS OF THE NIA MODEL: SCALE, FLEXIBILITY, SYSTEMIC IMPACT

As this overview shows, the NIA proposal seeks to establish a core platform for coordinating and amplifying the flow of public and private capital into the nationwide construction and modernization of critical physical and social infrastructure. The NIA is designed as an ambitious but flexible institution of public finance, a market actor with the technical expertise and policy tools necessary to lead the process of rebuilding the U.S. economy. In this sense, the NIA would be a more robust version of the old RFC.

The scale and scope of the NIA's mission and operations, built into its design, also distinguish the NIA model from most typical "infrastructure bank" proposals.[22] The NIA proposal includes a more flexible and capacious version of an infrastructure bank—the NIB, focused on lending and making markets in infrastructure bonds—and adds to it a separate public platform for equity-based infrastructure finance and asset management. This is a crucial addition. By actively participating in both credit and equity markets, the NIA would be able to mobilize far greater quantities of private capital with a broader range of risk appetites and, accordingly, finance more ambitious and transformative public infrastructure projects on a much larger scale.

Bringing more private investment into clean energy and transit, affordable housing, domestic manufacturing, and other types of public infrastructure—especially in low-income areas and disadvantaged communities—is a fundamentally efficient public policy. It would amplify the impact of, and reduce the pressure on, direct federal spending. It would also allow the NIA to pursue a bolder and more assertive agenda, without being hamstrung by jurisdictional constraints and bureaucratic red tape.

It is critical to emphasize, however, that the NIA model is the exact opposite of traditional "public-private partnerships" (PPPs). In contrast to the largely discredited PPP model, in which private actors manage public funds, the NIA would manage the deployment of private money in the public interest. Private investors would not have control over the NIA's investment decisions, which would be driven by the goals and priorities defined in the National Investment Strategy.

In short, as a public market actor, the NIA would be able to build more of what America needs. It would strategically and continuously channel capital toward critical infrastructure projects that advance multiple public policy goals: decarbonization and sustainability, racial and economic justice, domestic job-creation, and many others. The NIA's extensive and flexible toolkit would allow it to tackle these overlapping problems in an integrated manner.

For example, many low-income rural communities and racially segregated urban areas, where the demand for affordable housing is especially high, also urgently need clean water and air, public transit, better schools, broadband services, street lighting, and other basic public infrastructure goods. The NIA would be well-situated to address these multiple needs, either on its own or in partnership with other federal, state, or local authorities. The NIA would not only help to finance the construction of high-quality, climate-resilient housing units—it would also provide credit for, or make equity investments in, specific infrastructural improvements supporting the new housing growth. Moreover, the NIA's investments in new manufacturing facilities, inter-city or regional public transit systems, environmental cleanup, and other projects in the greater geographic area around new housing developments would likely spur local economic growth and, ultimately, reduce the overall level of poverty in the target communities.

This is, of course, only a general sketch of how the NIA can "build back better" by taking an integrated approach to complex socio-economic problems that require coordinated large-scale solutions. The existing patchwork of public entities and private actors, operating under different institutional and financial constraints, are often unable to provide such systemic solutions. The NIA's broad mandate and flexible financing tools are key to its ability to step into these structural gaps, coordinate multiple capital streams, and effectively manage the collective effort to generate catalytic change.

A strong and nimble NIA would also be a formidable competitor to private equity (PE) firms that continue to accumulate and concentrate ownership and control of American companies and real estate assets. The COVID pandemic could potentially accelerate this trend, with many distressed businesses presenting cheap investment opportunities for large PE funds.[23] This is a deeply troubling prospect, given PE's strategic focus on maximizing short-term profits through high leverage, asset stripping, massive layoffs at portfolio companies, and other exploitative actions.[24] In the aftermath of the 2008 financial crisis, for example, large PE firms reaped huge profits from buying up foreclosed residential properties at deeply discounted prices, increasing rents, evicting tenants, and ultimately destroying many working-class communities and communities of color. That is how Blackstone and other PE giants became the largest landlords in Atlanta, Chicago, Phoenix, Los Angeles, and other American cities.[25] There are reasons to be concerned that post-

COVID foreclosures and evictions could lead to yet another repeat of this pattern, with even more devastating consequences for the most vulnerable Americans.[26]

The NIA could prevent this outcome. Nicky Mac, for example, could purchase distressed real estate assets and manage them in ways that increase the well-being of affected communities. Depending on the circumstances, it could restore, rebuild, or repurpose various properties—again, in an integrated fashion, as part of its broader investment strategy. With good management, these assets could generate solid long-term returns for Nicky Mac funds, while also preserving and strengthening communities hit hard by the COVID crisis.

The NIA would also compete with PE firms by attracting pension funds and other institutional investors that currently supply the bulk of PE funds' capital.[27] This is an uneasy tradeoff for pension funds, struggling to generate sufficient returns to cover their long-term liabilities. The NIA would give pension funds a new productive (rather than extractive) outlet for their capital: low-risk debt and equity instruments issued by a large public entity and backed by long-term infrastructure assets.

In effect, by offering this attractive new "safe" asset class to institutional investors, the NIA would help to solve presently intractable problems with the persistent misallocation of capital and excessive accumulation of risk and leverage in the financial system. By draining large institutional investors' demand away from speculative short-term assets, the NIA would enhance systemic financial stability and create currently scarce "patient" capital dedicated to social, racial, and environmental justice. This would fundamentally change the core balance of public and private power in our finance and in our economy.

* * *

In the face of global pandemics, climate change, increasing inequality, and a host of other challenges, it is critical to recognize—explicitly and unequivocally—that economic recovery and renewal are not "one-off" projects but forward-looking, enduring processes in need of continuous coordination and financing. Rebuilding America's economic and political strength requires a deliberate effort to channel capital toward structurally balanced, inclusive, equitable, and sustainable growth and development of its real economy. The National Investment Authority is proposed as a permanent federal institution that would lead, coordinate, and manage that effort on an ongoing basis. It is critical that Congress establish such an institution and put it to work on behalf of the American people.

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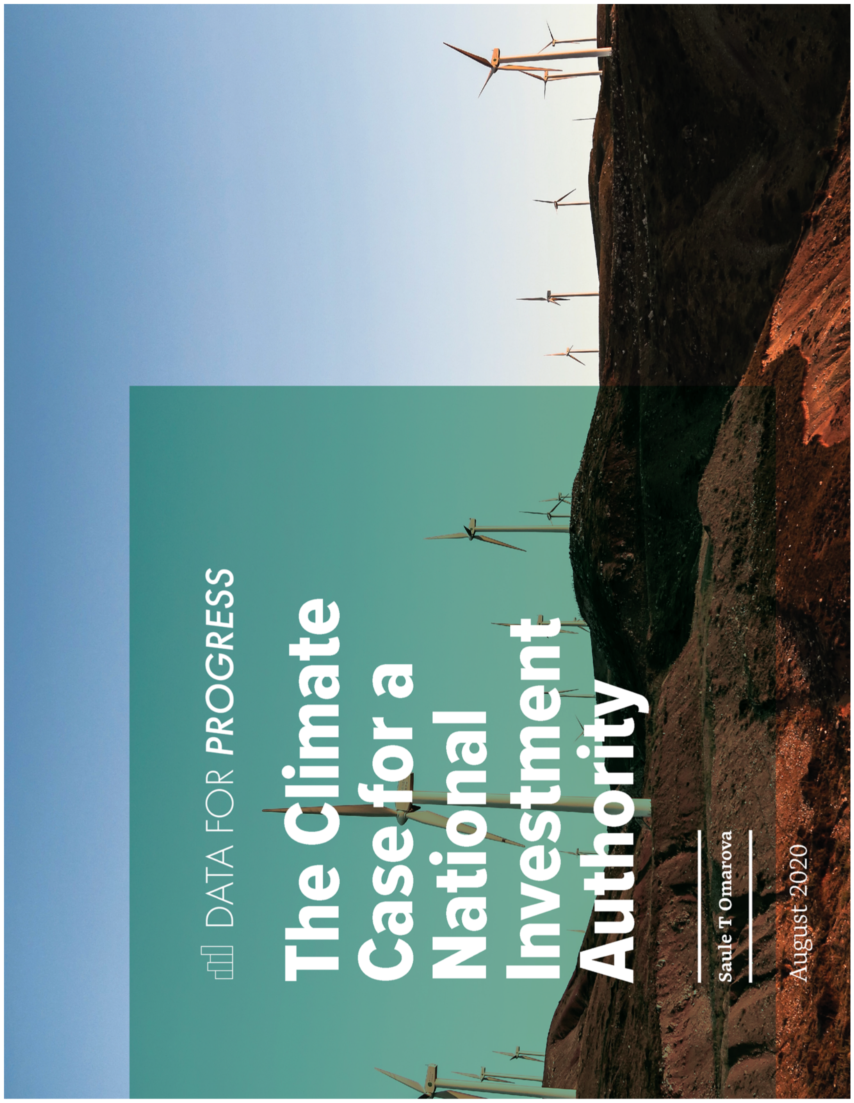
Appendix A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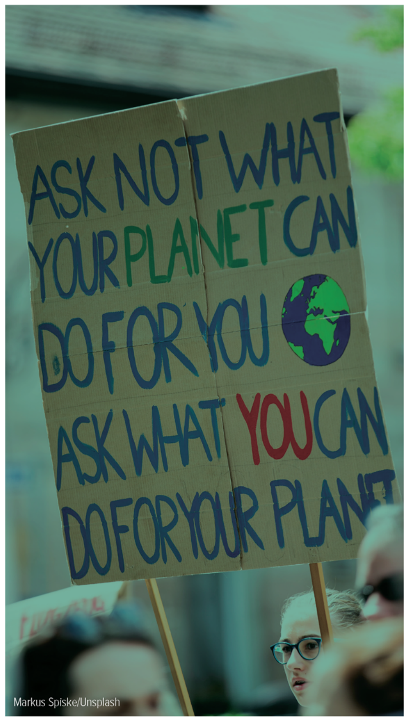
The Climate Case for a National Investment Authority
Saule T Omarova
August 2020



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Introduction

The economic devastation caused by the coronavirus pandemic creates a crucial opening for a speedy and deliberate move to a massive infrastructure-led rebuilding and "greening" of the U.S. economy. In the wake of the worst health crisis in over a century, potentially followed by the worst economic depression in nearly as long a time, the political mood in the U.S. is increasingly open to big and bold solutions. As polls show, demand for comprehensive strategic solutions is especially strong in the context of addressing global climate change.[1]

This is no coincidence. The pandemic has exposed the degree of our global interconnectedness and collective vulnerability to health and environmental crises that spread with an unprecedented speed and disproportionally harm disadvantaged segments of the population. The fact that the oil and gas sector is experiencing significant economic turmoil amidst consistently falling oil prices further strengthens the case for an immediate structural shift to sustainable, clean energy-based economy.[2]

This economy-wide shift must be conceived, planned, and implemented in a way that produces tangible and equitably distributed public benefits, instead of underwriting further socio-economic and racial disparities and concentrating economic power in private hands. The Green New Deal (GND) movement has successfully propelled this programmatic vision of an environmentally clean, just, and equitable future to the top of the national policy agenda. The Democratic Party is responding to this enthusiasm accordingly. Thus, both the recent report of the House Select Committee on the Climate Crisis and the House's Moving Forward Act explicitly endorsed the idea of a clean economy based on justice and equity.[3] In July 2020, Joe Biden publicly unveiled new climate and environmental justice plans that far surpass any prior Democratic campaign platform in scope and ambition—and further signal his intention to advance an FDR-style presidency.[4]

To carry out these ambitious plans, the United States needs an equally ambitious program for augmenting and aligning the nation's financial resources with the long-term goals of sustainability and decarbonization. This complex undertaking, in turn, requires an organizational focal point: a federal-level institutional platform for coordinating and amplifying climate-targeting action on multiple fronts. This White Paper discusses the creation of a National Investment Authority (NIA) as precisely this kind of a federal institution: a public entity that would design, execute, and finance a comprehensive nationwide program of environmentally sustainable and socially inclusive growth and revival.[5]

Drawing on the experience of the New Deal era's Reconstruction Finance Corporation (RFC), the NIA offers a novel institutional solution to multiple organizational, financial, and operational challenges associated with an ambitious national project to combat climate change. Strategically, the NIA will focus on a comprehensive overhaul of America's critical public infrastructure, the foundation of a clean economy. The woeful inadequacy of our country's existing physical infrastructure, still fundamentally dependent on fossil fuels, is as familiar as it is unjustifiable. Political rhetoric notwithstanding, the U.S. continues to suffer from persistent under-investment in technologically advanced, environmentally efficient and resilient public infrastructure.[6]

In recent years, total U.S. investment in clean energy has been hovering around $56 billion annually.[7] This is at least an order of magnitude below what is needed for the United States to shoulder its share of the decarbonization load, and far below any reasonable notion of what global leadership might look like. Estimates of the amount of global investment in clean energy required to meet climate targets between now and 2050 range from about $1 trillion to over $3 trillion annually.[8]

The NIA will step into this gap and use innovative financing tools to mobilize and boost the flow of public and private capital into socially beneficial "green" infrastructures. In doing so, the NIA will help to solve the climate crisis, create well-paying domestic jobs, enhance the resiliency and productivity of the American economy, and systematically translate the vision of a clean future into tangible socio-economic and political change.

I. Infrastructure Finance in Institutional Context: Why We Need A Better Solution

Combating climate change is the biggest economic, political, and social challenge of our time. The ongoing environmental damage is causing rising temperatures and sea levels, intensified hurricanes, and epic droughts. To slow down, remedy, or reverse the devastating effects of these climate phenomena, the United States urgently needs to rebuild its entire economy around new, environmentally safe methods of production, distribution, and consumption of goods and services.

Technologically advanced "clean" infrastructure—including electric- and hydrogen-fueled public transportation, energy-efficient and affordable housing, "smart" power grids and broadband internet networks—is the key to this effort. Building this new public infrastructure on a massive scale requires a programmatic vision and a coordinated nation-wide approach that combines local action with federal financing. The United States is currently lacking along all three of these dimensions. Despite the obviously pressing need, we still have no unified official program of infrastructural overhaul. There is no mechanism for coordinating the reconstruction process on a national scale, nor is there an institutional platform for federal financing of such efforts.

The usual approach to infrastructure finance in the U.S. is dysfunctionally bipolar. The default preference is to allow private markets to decide which projects are worthy of funding. Thus, the United States has effectively empowered individual investors, presumably enjoying superior access to information on the ground, to pick the most efficient outlets for their capital. Anything that does not get funded in private markets, and is deemed to constitute a "public good," becomes an expense item on fiscal policy agenda. Federal, state, and local governments are expected to use their tax revenues to pay for the construction of such publicly beneficial infrastructures.

While plausible in theory, this system has not been working well in practice, even with respect to the traditional physical infrastructure: roads, bridges, and so forth. When it comes to the kinds of new, technologically advanced, and truly transformative infrastructure needed for the transition to a clean economy, however, these standard "solutions" are even more obviously limited and inefficient.[9]

Private investors are unwilling to foot the bill for new infrastructure, because these projects tend to be highly capital-intensive and risky undertakings. From the private investors' perspective, these projects are exceptionally risky because of their long timeframes as well as the inherent uncertainty of their commercial viability, which may depend on larger structural changes in the economy. Individual investors fundamentally lack the capacity to control the broader macro-environment, and their risk-return calculations are driven by their expectations of private profit. Their short-termism is, therefore, fundamentally individually rational. Yet, the cumulative result is collectively irrational and tragically ironic: many potentially beneficial infrastructure projects simply do not get funded in private markets, while abundant private capital is desperately searching for profitable deployment.

Public authorities, in turn, have been notoriously strained in their practical ability to finance large-scale infrastructure projects. Highly politicized budget decisions have led to an effective hollowing out of federal fiscal policy. Congressional paralysis and partisan battles over federal budget deficits render the U.S. Treasury incapable of leading a real infrastructure reconstruction program. The Federal Reserve has not been able to step into the resulting institutional gap, primarily because of its limited legal mandate focused on conducting monetary policy as well as the lack of an institutional apparatus to direct capital.

The establishment of a dedicated public investment authority—the National Investment Authority (the NIA)—is a pragmatic structural solution to this seemingly intractable policy dilemma. The two institutional pillars of treasury and central bank are simply insufficient to support sustained and inclusive economic development. There is a critical policy gap between their two mandates, and neither existing institution can fill this gap without compromising its core mission. An NIA can step into this void, publicly marshalling private funds to supply systemically important infrastructural goods that are not supplied by private actors.

A successful NIA will accordingly relieve current pressures on the Federal Reserve and the Treasury, making their jobs significantly easier. It will enable the Federal Reserve to engage in traditional monetary policy without risking an under- or over-issuance of credit-money economy-wide. It will also enable the Treasury to sidestep needlessly contentious budgetary decisions by making and executing these decisions itself with assistance from private investors.

The NIA will also help to recharge and amplify state- and local efforts to combat climate change. In the absence of a concerted federal leadership strategy and support, cash-strapped state and local governments are struggling to fund clean infrastructure projects. Many states have "balanced budget" requirements; and the currently existing municipal bond market is notoriously fragmented and illiquid. Despite these challenges, several states have established "green banks" to help finance various projects within their jurisdictions. Putting the full faith and credit of the United States behind state green banks, as well as other state and local climate-related initiatives, will dramatically scale up their financial footprint and unlock their full potential to catalyze real change in their communities.

While some might deem it radical, the concept of an NIA draws on important precedent in the U.S. history. In times of major national crises, the U.S. federal government has repeatedly taken an active role in directly allocating capital to where it was most urgently needed. During the World War I, for example, President Wilson's War Finance Corporation (WFC) was instrumental in mobilizing and funding the nation's war effort.[10] In 1932, in the midst of the Great Depression, President Hoover used the WFC blueprint to create the Reconstruction Finance Corporation (RFC), which later became the "capital bank" for President Roosevelt's New Deal.[11]

The RFC acted directly in financial markets, organizing and managing massive flows of capital into every sector of America's ailing economy. It extended loans to banks, railroads, utilities, commercial and agricultural enterprises, municipalities, and other federal agencies at a time when private credit was scarce. It also took direct equity stakes in financial institutions and commercial firms in need of capital—and used its power as stockholder to shape these firms' management and dividend policies.

One of the most powerful New Deal institutions, the RFC operated multiple specialized subsidiaries and had 33 regional offices spread across the country. At its peak, the RFC's assets dwarfed the combined balance sheets of all Wall Street banks.[12] Consistently profitable, it recycled its profits back into productive investment. In effect, Roosevelt's RFC functioned as an active public-private development-finance institution.[13]

The NIA proposal expands and updates the RFC model, adapting it to the challenges and conditions of the 21st century. Just like the RFC financed and guided America's recovery from the Great Depression, so will the NIA finance and lead the nation's war against climate change, pandemics, de-industrialization, poverty, and inequality. The NIA will operate as a permanent "capital bank" for the GND.

II. The NIA's Institutional Design: An Overview

Establishing a new federal entity like the NIA will require an Act of Congress. The enabling statute will define the NIA's legal mandate and authority, its organizational and internal governance structure, the basic modes in which the NIA will conduct and finance its ongoing operations, and the mechanisms for ensuring sufficient transparency of and public accountability for its decisions.

A. MANDATE AND MISSION

The NIA will be a stand-alone federal entity with an explicit mandate to formulate and implement a cohesive national strategy of long-term economic reconstruction and development. Functionally situated between the Treasury and the Federal Reserve, the NIA will be the primary federal authority in charge of coordinating and overseeing ongoing investments in critical public infrastructure and socially inclusive and environmentally sustainable economic growth. It will serve as a separate institutional base from which to conduct a more targeted allocation of patient public and private capital toward specific economic activities likely to accelerate the structural shift to a clean-energy-powered economy.

Inspired by Roosevelt's RFC and drawing in part on modern-day sovereign wealth fund models, the NIA will act directly within markets as a lender, guarantor, market-maker, venture capital investor, and asset manager. At the same time, it will use these modalities of finance in a far more assertive and creative manner, as may be necessary to maximize the successful completion of its public policy objectives. The NIA will actively utilize the federal government's unique advantages as a market actor—its high risk tolerance, vast scale, lengthy investment horizons, and direct backing by the full faith and credit of the United States—to resolve presently pervasive structural inefficiencies that hinder both private and public investment in ambitious clean infrastructure projects.

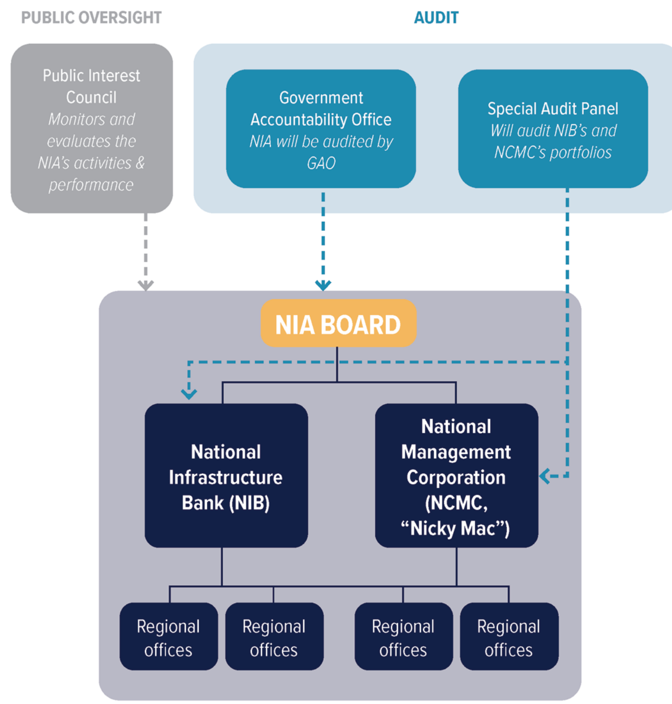
By channeling greater amounts of private capital into transformative public infrastructure projects, the NIA will significantly relieve the immediate pressures on the public and sidestep debilitating political battles over the federal budget. In effect, the NIA will operate as an economy-wide public-private partnership, with one critical difference. In contrast to the typical model of public-private partnerships, in which private actors manage (and frequently mismanage) public money, the NIA will reverse the levers of control and place freely invested private money under public management. This reversal of roles will avoid a dysfunctional pattern whereby the public bears disproportionately high implicit costs in financing projects without capturing their maximum long-term benefits.

The NIA's intentionally broad mandate will enable it to target a range of public infrastructure that will directly or indirectly facilitate a massive shift to clean economy and sustainable growth. It will also allow the NIA to deploy a wide variety of specific tools in pursuit of its overall strategy. Having flexibility along both of these dimensions is the key to the NIA's ability to fulfill its mission.

B. ORGANIZATIONAL STRUCTURE

Reflecting its hybrid nature as a government entity acting directly in private markets, the NIA's organizational structure will largely mimic that of the Federal Reserve System.[14] As a system, the NIA will have three functional layers: (1) an independent federal agency—the NIA Governing Board (the NIA Board) —at the top of the structure; (2) two special government corporations through which the NIA will conduct its actual operations; and (3) a broad network of regional NIA offices evenly spread around the United States.

The five or seven-member bi-partisan NIA Board will be appointed by the President, with the Chair and the Vice-Chair also confirmed by the Senate. All of the NIA Board members will have to meet certain statutory qualifications relating to their professional expertise in finance, law, economics, environmental sciences, civil engineering, and other areas relevant to the NIA's core mission. NIA Board members will be appointed for staggered 10- or 12-year terms, to ensure an important degree of autonomy and strategic continuity in their decision-making. The NIA Board members would be removable by the President only for good cause, which would further enhance the NIA's



operational independence from the incumbent administration.

The NIA Board will formulate a coherent strategy of national economic development and identify specific developmental priorities over various time horizons. The practical implementation of this strategy will be delegated to the NIA's principal operating arms: The National Infrastructure Bank (NIB) and the National Capital Management Corporation (NCMC, or "Nicky Mac").

The NIA Board would directly regulate and supervise the activities of both NIB and NCMC, organized as special federally-chartered, government-owned corporations. This organizational choice will give each of these entities a significant degree of financial flexibility and operational freedom.[15] Each of the NIB and NCMC would be governed by its own Executive Board in accordance with the specially tailored principles laid out in their respective corporation charters. They will be able to pay their employees salaries exceeding federal-employee compensation limits, which is key to their ability to attract and retain highly qualified personnel. And they will be better insulated from excessive bureaucratic interference and direct political pressure.

The final, third layer of the NIA system will comprise a vast network of regional offices. These offices will play a critical role in ensuring continuous community input in, and democratic bottom-up support for, the NIA's national investment strategy. The NIA's regional offices will work closely with local communities, businesses, and public authorities on region-specific infrastructural needs and plans. They will also coordinate their activities with the corresponding regional Federal Reserve Banks, in order to guarantee geographically balanced and equitable distribution of financial flows necessary to support clean economic growth throughout the country.

C. OPERATIONS AND FINANCING

The NIA's principal mode of operation will be the systematic channeling of public and private capital into long-term public infrastructure projects that are both (a) critical to the growth of a clean economy, and (b) currently under-funded by risk-averse private investors. The NIB will focus on traditional credit financing, while the NCMC will supply more risk-tolerant equity capital necessary for many transformational clean infrastructure projects. The differences in the strategic focus and core business models of the NIB and NCMC will determine important differences in how they organize and fund their operations.

1. National Infrastructure Bank (NIB): The Credit Mobilizer

As the credit-mobilization arm of the NIA, the NIB would seek to leverage private capital by pledging the public's superior risk-absorbing capacity to support investment in critical public infrastructure goods. Currently, many clean infrastructure projects are deemed not economically viable mainly because private creditors are not willing to take on the inherently complex task of valuing, tracking, and managing risks of multiple geographically dispersed and relatively small-scale projects. The illiquid and fragmented nature of the existing market for municipal bonds, in turn, hinders the ability of

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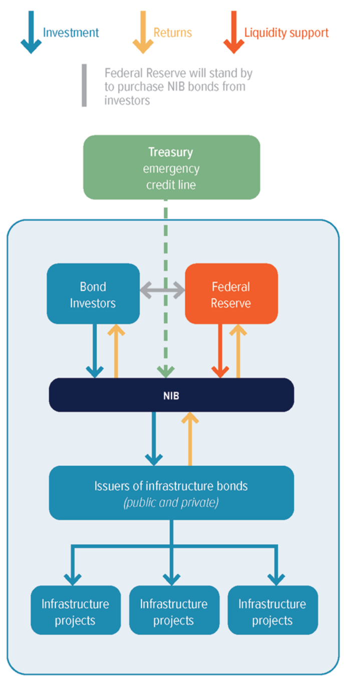


local and state governments to access affordable financing for these much-needed projects.

The NIB will specifically target these scale inefficiencies by creating and maintaining a nation-wide market for infrastructure finance, backed by the full faith and credit of the United States. It will do so through a combination of well-established means, including direct federal grants, loans, guarantees, insurance, securitization, and secondary market-making. For example, the NIB will continuously purchase and pool municipal bonds, state-level "green" banks' bonds, and other qualifying public and private debt instruments issued to fund clean infrastructure projects. To finance these portfolios, the NIB will issue its own medium to long-term bonds backed by (1) user fees and dedicated revenues; (2) dedicated pools of collateral, and (3) the ultimate full faith and credit of the United States.

The federal government's full faith and credit backup is a particularly potent factor in this connection. Explicitly backed by the U.S. government, the NIB will be a much larger and more powerful market actor than any private municipal-bond-pooling entity could be. NIB bonds will attract great interest from large institutional investors—including pension funds, investment companies, insurance companies, foreign central banks—who will

The NIB will focus on traditional credit financing, while the NCMC will supply more risk-tolerant equity capital necessary for many transformational clean infrastructure projects.

view them as close substitutes for U.S. Treasury securities. Explicitly granting NIB bonds preferential tax and regulatory treatment (for example, under U.S. bank regulations) will further enhance the appeal of this new asset class to institutional investors. In particular, committing the Federal Reserve to purchasing NIB bonds, in the same way it currently purchases U.S. Treasury bonds and other federally-backed debt, will crucially augment the liquidity and perceived safety—and thus market value—of these bonds.

As a credit-mobilization vehicle, the NIB will operate along the historically familiar lines of the RFC and its surviving offspring, the home finance government-sponsored enterprises

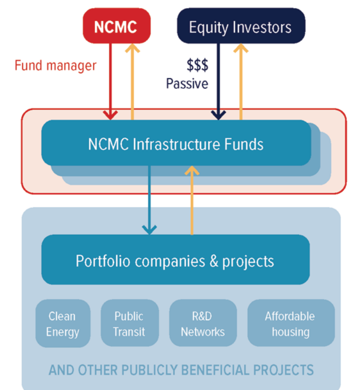
(GSEs). Its primary mission will be to amplify and optimize the currently sub-optimal system of public-private cooperation in the arena of infrastructure finance. In this sense, the NIB may be viewed as a scaled-up federal-level version of the existing "green bank" model.[16] By creating a federally-backed national market for state or regional green banks' bond issuances, the NIB will dramatically amplify these important institutions' balance sheet capacities and economic impact.[17]

2. National Capital Management Corporation (NCMC): The Asset Manager

An even more ambitious operating arm of the NIA, the NCMC will operate as a hybrid between a sovereign wealth fund (SWF) and a large private equity or venture capital firm. Just like a typical SWF, the NCMC will be a very large and high-profile publicly-owned asset manager. Unlike a SWF, however, it would not simply invest public money in stocks and bonds traded in secondary markets in search of capital appreciation. Instead, the NCMC will follow the business model of a typical Wall Street asset management firm by setting up a series of investment funds (structured similarly to traditional private equity funds) and actively soliciting private investors—pension funds, insurance companies, university endowments, foreign sovereign wealth funds, and so on—to purchase passive equity stakes in its funds.

Unlike a typical private equity or venture capital firm, however, the NCMC's fund management strategy will focus not on short- to medium-term turn-around profits, but on taking long-term equity stakes in environmentally safe, socially beneficial public and private projects. The NCMC's dedicated professional teams will select and manage diversified portfolios of public infrastructure assets: nationwide clean energy networks, high-speed railroads and broadband, regional air and water cleaning and preservation programs, environmentally smart and affordable housing programs, systems of job-retraining, networks of public-private R&D hubs, and so on. By financing and managing these transformative projects, the NIA would be effectively coordinating and overseeing the process of implementing the nationwide structural shift to a clean, smart 21st century economy.

NCMC would employ advanced financial engineering methods to reward private investors for their participation in financing these long-term publicly beneficial projects, even where such projects would not generate revenues that are easily captured by private interests. To entice particularly risk-averse investors to finance riskier types of long-term infrastructure, the



NCMC could guarantee return of their principal investment at the end of the fund's term. In addition, it would offer its private partners "synthetic"—that is, legally constructed—equity-like returns that vary depending on the estimates of local, regional, or national macroeconomic impacts of the individual funds' projects. If, for example, experts calculate that a particular fund's investments would generate an additional 5% in local or regional economic growth over a specified period of time, the NCMC would translate that projected gain into a corresponding added return for the investors in the fund.[18]

This unique ability to synthesize additional payouts, combined with direct access to the full faith and credit of the United States, will make NCMC funds a potentially highly attractive "safe asset" class for large institutional investors—especially, public pension funds and mission-driven green-economy investors searching for yield that is also compatible with their core missions. Currently, public pension funds are among the largest investors in private equity funds, which means they are indirectly financing the industry known for breaking up American companies and laying off workers in the name of maximizing short-term shareholder returns. Investing in NIA instruments, by contrast, will enable pension funds to generate healthy, reliable returns by investing in publicly beneficial, employment-boosting projects.

The sources of repayment to private investors in NCMC funds will differ, depending on the composition of individual funds' portfolios of projects. For example, many start-up companies that use NCMC funding to develop new commercially viable clean technologies or products could, in time, either repurchase the NCMC fund's stake, or be sold off in initial public offerings (IPOs) or via negotiated sales to private venture capital funds. Where an IPO or private buy-out are either impractical or undesirable from a public policy viewpoint, the relevant projects could be spun off into separate public authorities, like the RFC-era Tennessee Valley Authority, or into regulated privately-owned utilities.[19] Yet another option would be to roll some investments over into successor NCMC funds, thus allowing initial private investors to exit them and new ones to enter. This roll-over option would be particularly effective in connection with projects whose timeframe for generating steady returns exceeds the normal lifespan of a single fund.

3. Backup Funding Sources

Both the NIB's and NCMC's business models, described above, explicitly utilize these entities' unique advantages as sovereign-backed market actors to channel vast amounts of private capital into public infrastructure projects. In some cases, however, the NIA's current payment obligations may require additional public funding.

Initially, the NIA will be funded through one-time Congressional appropriation. Once the NIA builds a portfolio of assets generating interest, dividend, and fee revenues, it should earn sufficient profits to cover its ongoing expenses. The scale and scope of the NIA's investment operations are key in this respect. The larger and more diverse its overall project portfolio, the more flexibility the NIA will have in utilizing various streams of operating revenues to fulfil its obligations to private investors. Accordingly, a larger and more visionary NIA is also more likely to be self-funding.

Consolidating some of the existing federal agencies performing specialized market-actor functions—including the Small Business Administration (SBA) and housing finance GSEs—under the NIA's umbrella would further enhance its self-funding capacity. These entities' well-established revenue streams would then be levered to finance systemically important public goods.[20]

It is nevertheless critical to provide federal backup funding for the NIA's operations, either as a temporary bridge-gap measure or as a recurring variable supplement to the institution's own resources. This will increase the NIA's capacity to invest in important infrastructure projects whose full public benefits cannot be reduced to, and therefore expressed as, pure monetary value. In that sense, it will critically augment the NIA's ability to perform its core public mission.

Committing the Federal Reserve to provide continuous liquidity support to the NIA is the most readily available and important source of public backup funding. As discussed above, the Federal Reserve would stand by to purchase NIB bonds, both from the NIB upon issuance and from private investors in secondary trading, much like it presently does with Treasury bonds and GSE securities. The NCMC, for its part, would be able to borrow directly (and on favorable terms) from the Federal Reserve, in a manner similar to present "discount window" borrowing privileges of private banks. In effect, putting the Federal Reserve's balance sheet behind the NIA instruments will make them highly desirable "safe" assets for institutional investors.[21]

Designating a certain portion of the Federal Reserve's annual profits for contribution to the NIA's budget would be another effective backstop to the NIA's self-funding. Currently, the Federal Reserve turns over significant amounts of its annual profits to the Treasury. Diverting a portion of these regular remittances to the NIA would serve both to smooth potential fluctuations in the NIA's internally generated returns and to amplify its ability to continue financing publicly beneficial ventures even during times of economic slowdown.

To further bolster liquidity support for the NIA, it may be desirable to grant it the right to borrow directly from the Treasury, if necessary. Finally, federal appropriations or earmarking of specific tax revenues should be reserved as last-resort measures, with the expectation that these would not be needed after the initial period of the NIA's operation. The real goal here is to shape market expectations: by effectively signaling to the market its commitment to backstop the NIA's obligations, the federal government will significantly reduce the likelihood of ever having to honor that commitment in practice.

D. TRANSPARENCY AND ACCOUNTABILITY

The NIA's hybrid mode of operation heightens the risk of it being captured by powerful private industry interests. It also makes the NIA potentially vulnerable to overreach and abuse of political power by incumbent government officials. Both of these ever-present possibilities of corruption endanger the NIA's public mission. Accordingly, democratic accountability is a critical factor in ensuring the NIA's political legitimacy and long-term success. Clear lines of internal and external communication, reporting, and auditing are key to accountability and transparency of the NIA's operations.

CONGRESSIONAL REPORTS. The NIA Board will be required to submit annual reports to Congress, outlining the basic principles of its developmental program, explaining any changes in or adjustments to its objectives over various time horizons, and describing and analyzing specific actions the NIA was taking to implement its strategic objectives. The Chair of the NIA Board, along with the Chairs of the NIB's and NCMC's respective Executive Boards, will also provide annual Congressional testimony on the national development policy.

AUDITS. The NIA Board would be subject to annual audit by the Government Accountability Office (GAO), which conducts audits of federal agencies.[22] The NIB and the NCMC would be subject to annual independent audits of their financial performance and operations by a special audit panel comprising representatives of the GAO and of all major public accounting firms.

PORTFOLIO SELECTION PROCESS. It is critical that both NIB and NCMC have robust procedural rules for making and vetting investment decisions along the entire organizational chain of command. These rules would help to ensure that these entities' business activities are properly insulated from undue influence both by private sector interests and by political incumbents. To this end, the NIB and especially the NCMC will be required to select individual projects for inclusion in their asset portfolios through public auctions. Any public or private entity with an economically viable plan for providing currently under-provided collective goods would have a fair and equal opportunity to apply for the NIA funding. Regional NIA offices will play a particularly important role in this process. A specially designated committee of the NCMC or the NIB, as appropriate, would conduct a thorough analysis of each proposed project and choose the ones that meet their—formalized and transparent—internal requirements.

PUBLIC INTEREST COUNCIL. To enhance the NIA's democratic accountability, Congress should establish a special Public Interest Council (the Council). The Council will comprise academic experts and public interest advocates, all of whom are independent of both the industry and the government.[23] It will perform primarily an advisory and evaluative role, by providing an independent intellectual perspective on substantive policy issues faced, and strategic decisions made, by the NIA in the course of fulfilling its mandate. The Council would submit mandatory annual reports to Congress, containing its assessments and criticisms—and non-binding recommendations for improvement—of the NIA's performance. Importantly, establishing this type of an institutional channel for inserting public interest into the NIA's political accountability and decision-making structure would serve as a powerful check against the strong pull of industry influence.

E. SUMMARY: THE NIA AS AN INSTITUTIONAL LEVER FOR CHANGE

The proposed NIA is envisioned as a highly capacious federal instrumentality, operating alongside the Treasury and the Federal Reserve, and directly allocating both public and private capital to enable the economy-wide shift to clean energy and sustainable growth. It will serve as a permanent institutional platform for mobilizing and directing the nation's financial, technological, and human resources to where they are needed the most in our battle against global climate change.

In fulfilling this mandate, the NIA will act directly in private markets, not only as a public lender and guarantor, but also as a public asset manager and venture capital fund. In that latter capacity, the NIA will systematically channel private investors' money into public infrastructure projects that currently do not get financed in private markets.

Bringing private investment into clean energy and environmentally safer public infrastructure is a fundamentally efficient public policy. It will dramatically amplify the impact of federal funding and reduce the cost to the public of financing the massive shift to a clean economy.[24]

From the public policy perspective, moreover, this hybrid business model of "public management / private funds" offers several additional benefits:

1) A hybrid, market-actor NIA will not be directly subject to politically determined federal budget constraints. Not having its activities hamstrung by Congressional politics is a critical advantage in light of the NIA's ambitious mandate.

2) By offering an attractive new "safe" asset class to institutional investors, the NIA will help to solve presently intractable problems with persistent misallocation of capital and excessive accumulation of risk and leverage in the financial system. By draining large institutional investors' demand away from speculative short-term or riskier private equity assets, the NIA would function as an important market mechanism for creating currently scarce "patient" capital and enhancing systemic financial stability.

3) Raising money from pension funds, insurance companies, and other institutional investors will provide the NIA with an important market feedback and signaling mechanism. If the NIA's performance is consistently poor or inefficient, private firms will either refuse to invest in NIA

issuances or price these inefficiencies into their investment decisions. These dynamics of market competition will serve as an important safeguard against cronyism and excessive political interference in the NIA's operations.

4) By inviting public pension funds, "green" funds, and other mission-driven institutions to partner with the NIA, the NIA will strengthen these entities' abilities to pursue their financial strategies more successfully and assertively. Having a ready source of patient capital dedicated to environmental and social justice may also encourage the emergence of new forms of mutual and employee-owned investment vehicles, thus democratizing ownership of financial assets.

5) Finally, the NIA will offer many Americans a chance to invest more of their personal savings in clean infrastructure and economic revitalization, combining the financial benefit of adding a "safe" asset to their portfolios with the sense of moral satisfaction and individual empowerment. This will give a concrete expression to a new understanding of finance as a fundamentally public resource and a legitimate arena of direct public action—a critical step toward a deeper democratization of finance.

Conclusion

The coronavirus pandemic presents a rare window of opportunity for a nationwide shift to a clean economy. Large-scale rebuilding and "greening" of America's public infrastructure is the core element of this shift. Over the past few months, Democrats in Congress have been working on an infrastructure-based stimulus package that would address the compounding effects of climate change and the pandemic-induced economic crisis. An increasingly strong emphasis on clean infrastructure building is also indicative of the broader climate policy priorities that the next Democratic Administration and Congress are likely to pursue in the coming years. As shown in a recent report published by the House Select Committee on the Climate Crisis and Joe Biden's new climate plans, there is significant political momentum behind an economic recovery program that would bring together domestic job creation, infrastructure development, and clean energy.

To seize this momentum, we need an effective institutional mechanism for scaling up and directing massive amounts of public and private investments into an environmentally sustainable, equitable, and inclusive economic growth and recovery. The NIA is proposed as precisely this kind of an institution. The NIA would take on the critical task of coordinating and financing a wide range of climate-related infrastructure projects. It would invest in the nationwide construction, modernization, and expansion of clean water and wastewater management systems, offshore wind and solar energy farms, high-speed rail and broadband networks, power transmission lines, and clean car manufacturing. These are only a few examples of vitally important clean infrastructure projects that U.S. capital markets do not currently fund at the levels necessary to meet science-based demands. The NIA would fill this funding gap and put the necessary financial resources behind the strategic "greening" of the U.S. economy.

The need for the NIA is especially urgent today. In the wake of a major public health crisis, we are standing on the brink of another Great Depression, with millions of Americans out of work, businesses out of cash, and stock markets out of touch with reality. So far, our existing financial ecosystem has failed to respond to these pressures effectively. It is even less prepared to meet the far greater challenge of averting the looming climate catastrophe. Now, as the political tides turn toward post-pandemic recovery and clean energy-based economy, we need to keep a razor-like focus and think creatively about what kind of institutions would sustain the fundamental transformation we seek. Creating an NIA would give us an invaluable tool in our fight against climate change and for a better, more prosperous and just, future. It has to be a part of our political agenda.

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Appendix B


DATA FOR PROGRESS
THE JUSTICE COLLABORATIVE INSTITUTE
A NATIONAL INVESTMENT AUTHORITY: FINANCING AMERICA'S FUTURE
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July 2020

EXECUTIVE SUMMARY

The coronavirus pandemic has exposed deep structural flaws in the design and operation of the U.S. economic and political systems. At the same time, it presents a rare opportunity for innovative rethinking and remaking of both our private markets and our public institutions, so that they better serve the needs of the American people.

A National Investment Authority (NIA) could be the institutional platform for pursuing this goal. The NIA would mobilize private capital to rebuild America's obsolete public infrastructure. It would do this by acting directly inside financial markets—through a lending subsidiary and a separate venture capital arm. The NIA would identify infrastructure projects important to the country's long-term stability and growth, and create mechanisms to align the individual incentives of private investors with the social imperatives of inclusive and sustainable long-term development.

The NIA proposal draws on the long-standing American tradition of hybrid public-private finance. It is the 21st-century update of the Reconstruction Finance Corporation (RFC), created by Herbert Hoover and later successfully used by Franklin Roosevelt to finance the nation's epic recovery from the Great Depression.

During economic crises, such as the current one, the NIA would perform an additional function as the entity responsible for managing federal bailouts of private businesses. In this role, the NIA would act in the best interests of the American people and ensure that emergency relief funds are distributed efficiently, fairly, and transparently.

Voters recognize the NIA's potential to improve our physical and social infrastructure and help local and state governments in a time of financial need. A majority of respondents (54%) support the creation of a National Investment Authority. Less than a quarter of respondents (22%) oppose it.

THE PROBLEM: THE FINANCING "GAP"

The coronavirus pandemic has exposed some of the deepest economic, political, and social problems in America. It laid bare the extent to which our healthcare system was not ready to handle a major public health emergency, our industrial giants could not ramp up production of urgently needed protective equipment, and our state and local governments lacked financial means to keep our communities afloat when disaster hit. With businesses across the country struggling to survive the lockdown and skyrocketing unemployment, the pandemic has turned into an economic crisis. To avoid a total economic collapse, Congress appropriated trillions of dollars in emergency relief for individuals, companies, and municipalities. The process of distributing federal relief funds, however, has been plagued with inefficiency and misallocation, with no effective public oversight in place. With stock markets rallying despite continuing economic woes, the coronavirus crisis led to a massive transfer of wealth from ordinary Americans to big corporations and high-rolling investors. If left uncorrected, these dynamics threaten to push the country into the second Great Depression.

To avoid this calamity, the United States urgently needs a strong program of post-pandemic economic recovery, which would create jobs, restore our domestic industrial capacity, and strengthen our communities. Rebuilding and modernizing our public infrastructure, the very foundation of the national economy, must be at the center of such a recovery program. For decades, America's basic physical infrastructure—roads, bridges, power grids, water cleaning facilities—has been in a chronic state of disrepair, mainly because of the lack of sufficient financing. And if there is not enough money to fix what we already have, there is even less hope for finding money to build new, environmentally clean and technologically "smart," infrastructure necessary for a sustainable and inclusive 21st-century economy.

It is no secret why financing for a much needed overhaul of America's infrastructure has been difficult to come by. On the one hand, a national project of this scale requires funding far in excess of what over-stretched public budgets can provide, especially now. On the other hand, while there is plenty of private capital eager to invest in "hard" infrastructure assets, private investors are inherently averse to funding big-ticket projects that take a long time to become commercially profitable. They prefer instead to invest only in those infrastructure projects that are certain to generate healthy cash flows within a short period of time. The result is that lucrative projects like modernizing busy toll roads and power plants in major metropolitan areas attract plenty of private capital, while things like construction of fast broadband or energy-efficient public transportation networks in underserved rural areas do not get funded in private markets.

In essence, the current financing gap is a structural problem: There is too much private capital looking for infrastructure investment opportunities, while at the same time too many urgently needed public infrastructure projects never get off the ground. Closing this gap in infrastructure finance accordingly requires a structural solution: the creation of a National Investment Authority (NIA).

THE SOLUTION: A NATIONAL INVESTMENT AUTHORITY

The NIA would be a federal entity created by an Act of Congress. It would design, finance, and implement a national strategy of economic development with an emphasis on long-term sustainability and social inclusion. It would act as a direct financial market participant, channeling both public and private money into large-scale infrastructure projects that typically do not get funded in private capital markets. Such projects would include both physical infrastructure (such as energy, transport, broadband internet, water management) and critical social infrastructure (such as public education, affordable housing, and healthcare). The NIA would utilize the federal government's unique advantages—its size, resources, long-term investment horizons, and focus on public interest—to make it less risky and more attractive for private investors to participate in financing these publicly beneficial projects.

The NIA would be governed by a Governing Board (the NIA Board), with 5-7 members appointed by the President with Congressional approval for staggered 10- or 12-year terms and guaranteed a high degree of decision-making autonomy. The NIA Board would identify key national economic priorities and formulate a public investment strategy in line with those priorities. It would then oversee the implementation of this strategy by the NIA's two principal operating arms, chartered as government-owned corporations: the National Infrastructure Bank and the National Capital Management Corporation.

National Infrastructure Bank (NIB). The NIB would be the NIA's lender arm. It would focus on credit-based infrastructure finance, along the lines of the established "government-sponsored enterprise" (GSE) model. It would support and amplify the flow of credit into infrastructure projects through a combination of direct federal grants, loans, guarantees, insurance, securitization, and secondary market-making. For example, the NIB would purchase and pool revenue bonds and project bonds issued by municipalities, public utilities, and other government instrumentalities, as well as qualifying bonds issued by private entities for the purposes of financing publicly beneficial infrastructure projects.

National Capital Management Corporation (NCMC, or "Nicky Mac"). Nicky Mac would be the NIA's venture capital arm. It would focus on equity-based infrastructure finance, more appropriate for truly transformative projects. Following the business model of a traditional Wall Street asset manager, Nicky Mac would set up a series of "infrastructure investment funds" and actively solicit pension funds, insurance companies, university endowments, foreign sovereign wealth funds, and other institutional investors to purchase passive equity stakes in its funds. Nicky Mac will act as the sole manager of each fund, making all investment decisions in accordance with the NIA's strategic objectives. Nicky Mac's in-house professional teams would select and manage diversified portfolios of public infrastructure assets: nationwide clean energy and transportation networks, regional air and water cleaning and preservation programs, systems of ongoing adult education and technical training, networks of mixed public-private "startup" finance funds, and so on.

Nicky Mac's role as an active asset manager would enable it to finance high-impact innovative projects that can potentially leapfrog the U.S. economy. For example, instead of building new or improved oil and gas pipelines, Nicky Mac would systematically convert the national energy system from petroleum-based to renewable- and hydrogen-based. And instead of merely repairing existing roads, it would build new high-speed rail networks connecting and integrating multiple small towns and cities into thriving regional economic zones.

To reward private investors for their participation in financing these long-term publicly beneficial projects—even where such projects do not generate easily privately "capturable" revenues—Nicky Mac would use advanced financial engineering, backed by the full faith and credit of the United States. For example, it could guarantee the return of the principal investment to passive investors in funds that prioritize commercially unprofitable projects like toll-free roads, adult education centers, or public parks. It would also offer equity-like additional returns that reflect the current estimates of future local, regional, or national macroeconomic impacts of the individual funds' projects. If, for example, experts calculate that, upon completion, a particular fund's investments would generate an additional 5% in local or regional economic growth over a certain period of time, Nicky Mac would translate that projected public gain into a corresponding added return for the investors in the fund.

In short, the NIA would operate as a principally new form of public-private partnership, in which the public leads and private capital follows. To keep it from potential abuse and corruption by political incumbents and powerful private interests, the NIA would be subject to multiple layers of public oversight. Most importantly, its project selection process would be conducted via transparent public auctions, following strict procedural rules and investment guidelines. The NIA would be regularly audited by the Government Accountability Office, and its top leadership would regularly report to Congress on all of its activities. Congress should also establish a new Public Interest Council to strengthen oversight of the NIA's performance.

THE NIA'S ROLE IN A CRISIS

The NIA's investment expertise and public accountability make it an ideal institution to take on the task of mobilizing the nation's financial resources in response to economic crises. During a crisis, the NIA would manage the distribution and allocation of the federal emergency relief ("bailout") or economic stimulus funds to qualifying private businesses. This would ensure far greater transparency, efficiency, and democratic oversight of the process than is possible under the current system of outsourcing bailout management tasks to giant private asset managers like BlackRock. Unlike BlackRock, the NIA would not have any conflicts of interest. It would follow clear guidelines and use its in-house expertise to direct emergency funds to productive enterprises that need it most. Because this would be a natural extension of its non-crisis functions, the NIA would be able to run this process far more effectively and fairly than it is done today.

THE CONTEXT: PAST AND PRESENT

Currently, there is no federal agency similar to the NIA. The two pillars of public finance are the Treasury Department and the Federal Reserve. The Treasury is in charge of the federal fiscal policy, while the Federal Reserve conducts monetary policy. Neither agency is explicitly charged with, or has in-house expertise in, direct financing of economic reconstruction and development. Functionally situated between the Treasury and the Federal Reserve, the NIA would fill this institutional gap and supplement both of these agencies' activities.

Since 2008, multiple legislative proposals have called for establishing some type of a federal "infrastructure bank" that would provide government-backed credit financing mainly for traditional physical infrastructure projects. While specific proposals may differ, the basic "infrastructure bank" model is significantly limited in the scope and scale of its activities. A typical federal "infrastructure bank" would be funded by Congress up to a certain amount, and use these funds to make low-cost loans to public and private entities with revenue-generating infrastructure projects. In contrast to the NIA, it would not be able to manage a huge diversified portfolio of both credit and equity investments in various physical and social infrastructure projects, including those that do not generate cash flows through toll and other user charges.

The coronavirus crisis has reignited the interest in the New Deal-era's Reconstruction Finance Corporation (RFC). Established in 1932 and initially funded by Congress, the RFC played the central role in leading the nation out of the Great Depression. It extended loans to banks, railroads, utilities, commercial and agricultural enterprises, municipalities, and other federal agencies at a time when private credit was scarce. It also took direct equity stakes in banks, insurance companies, and commercial firms in need of capital. Hugely powerful, the RFC effectively functioned as the New Deal's "capital bank."

The NIA builds on, updates, and expands the RFC's business model. Much like the RFC, the NIA would be a hybrid public-private entity. It would create publicly beneficial investment opportunities for private capital, which simply do not exist in today's market, and "crowd in" (rather than "crowd out") private investors currently reluctant to finance long-term public infrastructure projects. This is especially easy to see in the NIA's role as a venture capital fund manager. In effect, the NIA may be thought of as an "RFC meet BlackRock" type of market actor.

Of course, some might object to the NIA proposal as an unnecessary "subsidy" for private investors. This criticism reflects justified mistrust and fear of effective privatization of public infrastructure. However, these objections miss the critical public benefits of using private capital for rebuilding America's infrastructure:

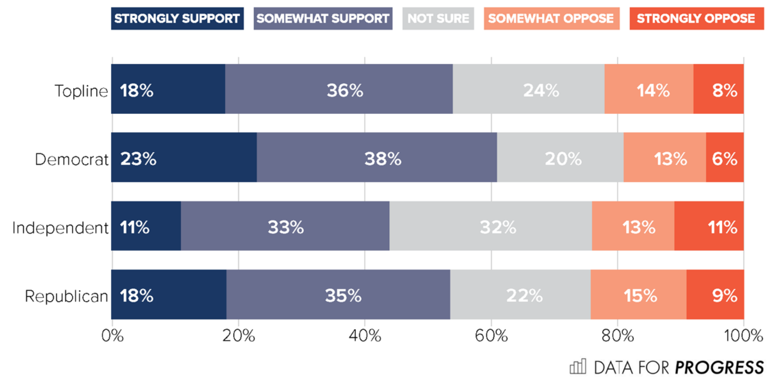
- It will allow the NIA to pursue a potentially bolder economic agenda. As a hybrid market actor, the NIA need not be hostage to annual Congressional infighting over the federal budget, and therefore would not be unnecessarily hamstrung in its activities.
- It will make the financial system more stable and reduce the risk of another major financial crisis. By partnering with private investors, the NIA will drain private capital away from speculative trading and other socially unproductive investments. Direct federal financing of infrastructure projects alone could not have this important effect on financial markets.
- It can safeguard against political cronyism and corruption of the NIA's investment decisions. Raising money from pension funds, insurance companies, and other institutional investors will create an important external signaling mechanism for the NIA. If the NIA is not doing a good job of selecting specific infrastructure projects, investors will either price this information in or take their money elsewhere.

Most importantly, the core element of the NIA model is public control over the flow of money into long-term projects of high public, as opposed to private commercial, value. The NIA is a public institution acting inside private markets and using market tools to generate massive public benefits.

PUBLIC SUPPORT

The National Investment Authority would be an innovative structural solution to a host of America's most persistent structural problems. Voters recognize this. A new national poll from Data for Progress and the Justice Collaborative Institute found that, when voters learn how the NIA would facilitate investment in vital infrastructure, 54% of likely voters support the creation of a National Investment Authority. This support crosses party lines: 53% of Republicans express support for the idea, along with 61% of Democrats. Only 22% of respondents, less than a quarter, express opposition and fewer than 1 in 10 (8%) express strong opposition.

Do you support or oppose the creation of a National Investment Authority that would identify publicly beneficial infrastructure projects that need financing, enable greater private and public investment in these projects, and lead the nationwide effort to rebuild America's infrastructure?



CONCLUSION

The United States urgently needs a well-defined national strategy of sustainable and inclusive long-term economic growth and development. Planning and implementing this strategy is an extraordinarily difficult task that requires strong but flexible public institutions to carry it out. The NIA is proposed as precisely that kind of an institution: a public entity acting directly in financial markets and mobilizing private capital to rebuild America's physical and social infrastructure. As a hybrid market actor, the NIA would use sophisticated tools of private finance to generate public benefits on the scale far greater than what we can imagine in today's world. While no government entity is currently equipped to perform this task, the NIA idea has deep roots in American history. The NIA would be the 21st-century version of the RFC. Just like the RFC helped to finance the nation's economic recovery from the Great Depression, the NIA will help us to prepare for and manage new challenges we face as a nation, both in crises and beyond.

POLLING METHODOLOGY

From 6/21/2020 to 6/22/2020 Data for Progress conducted a survey of 1,353 likely voters nationally using web panel respondents. The sample was weighted to be representative of likely voters by age, gender, education, race, and voting history. The survey was conducted in English. The margin of error is Â± 2.7 percent.

COVER PHOTO
Jules Marvin Eguilos/UNSPLASH

Appendix C

Why We Need a National Investment Authority

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Cornell Law School research paper No. 20-34

WHY WE NEED A NATIONAL INVESTMENT AUTHORITY

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In today's globalized world, the U.S. faces a broadening array of potentially increasingly severe physical, economic, and financial crises. An effective response to such crises requires the federal government to be able to mobilize economic resources on a fully national scale and in a well-coordinated manner. Currently, however, the U.S. lacks an institutional mechanism for large-scale economic mobilization of the type it undertook during the Great Depression and both World Wars of the last century. There is presently no institutional analogue to the New Deal-era Reconstruction Finance Corporation (RFC), which enabled U.S. government to organize and manage massive flows of much-needed public and private capital into every sector of America's economy.

In the absence of a permanent institution specializing in capital allocation and management, the American public is forced to rely on *ad hoc* crisis-containment measures that are notoriously politicized, messy, and prone to corrupt influence by private interests. The task of national economic mobilization falls mainly on the U.S. Treasury and the Federal Reserve, whose modus operandi relies heavily on direct injections of public funds into—i.e., bailouts of—financial institutions and other private firms. As the 2008 experience shows, however, bailouts are difficult to execute without reinforcing the economically and politically damaging pattern of "privatizing gains and socializing losses." Having a permanent federal agency with the authority and expertise to manage emergency bailouts would help to ensure that this process is handled in a transparent, democratically accountable, economically efficient, and distributionally just manner.

In short, to meet present and future challenges without repeating past mistakes, we need to create a new RFC-like institutional platform for coordinating and mobilizing the nation's financial, physical, technological, and human capital, to ensure the structural health and resilience of the U.S. economy—both in crisis times and beyond. We need a National Investment Authority (NIA).

This brief memorandum outlines the core elements of the NIA proposal. **Part I** provides a short overview of the NIA's general mandate and structure. **Part II** focuses on the NIA's role as the national crisis response coordinator. It describes the benefits of putting the NIA in charge of managing both (1) the emergency bailout process, and (2) post-bailout management of public stakes in bailed-out companies. **Part III** outlines the NIA's broader ongoing mission of financing long-term public infrastructure projects in order to facilitate structurally balanced, inclusive, and environmentally sustainable long-term growth of the American economy—a set of goals associated with the Green New Deal (GND) initiative. **Part IV** proposes creation of a special Public Interest Council as a mechanism of enhancing the NIA's democratic accountability, both during national crises and as part of its ongoing economic development mission.

I. WHAT IS NIA? BRIEF INTRODUCTION

The NIA would be a new federal instrumentality occupying the crucial (and currently empty) institutional space between the U.S. Treasury and the Federal Reserve. Its core mandate would be to formulate and implement a cohesive national strategy of long-term economic development, which encompasses:

- organizing and mobilizing the nation's economic resources in response to systemic crises; and
- coordinating and financing ongoing investment in critical public infrastructure and socially inclusive and sustainable economic growth.

The NIA's principal mode of action would be direct market participation. Depending on the circumstances, it would operate as a sovereign asset manager, venture capitalist, lender, insurer, equity holder, or business partner to private firms and public entities engaged in socially beneficial productive activities. The NIA would use traditional tools of modern finance to align private economic actors' goals with the public interest. It would utilize the federal government's unique advantages—its size, resources, long-term investment horizons, and direct backing by the full faith and credit of the United States—to solve currently insurmountable collective action problems that hinder both private investment in long-term public infrastructure and large-scale market-stabilization and production-mobilization efforts.

The NIA's organizational structure would reflect its hybrid role as a public instrumentality acting directly in private markets. Mimicking the structure of the Federal Reserve System, the NIA would constitute a "system" governed by an independent federal agency, the NIA Governing Board (the NIA Board). The five- or seven-member NIA Board would be appointed by the President for staggered 10- or 12-year terms, to ensure a nontrivial degree of autonomy and strategic continuity in decision-making.

The NIA Board would have the statutory authority and duty to identify key national development priorities and to formulate a public investment strategy in accordance with those priorities. It would then monitor the implementation of that strategy by its principal operating arms—National Infrastructure Bank (NIB) and National Capital Management Corporation (NCMC, or "Nicky Mac")—chartered as special government-owned corporations:

- NIB would follow the familiar GSE model and support private investment in public infrastructure through a combination of direct federal grants, loans, guarantees, insurance, securitization, and secondary market-making.
- Nicky Mac would function as an asset manager along the lines of a traditional private equity firm. It would use direct backing by the full faith and credit of the U.S. to attract yield-hungry private investors into infrastructure investment funds under its management.

To ensure a geographically balanced and inclusive deployment of economic and human resources, the NIA would run a network of regional offices, which would work closely with local communities, businesses, and public authorities on region-specific needs. They would also coordinate their activities with the corresponding regional Federal Reserve Banks.

The NIA's organizational capacity and flexibility should enable it to perform its critical economy-wide coordination functions and adjust its strategic focus in accordance with the nation's needs.

II. NIA AS A CRISIS RESPONSE AND BAILOUT COORDINATOR

If the NIA is established in response to the current COVID-19 or any future systemic crisis, its initial mission would be focused on coordinating and executing a nationwide strategy of emergency production mobilization and public capital assistance to private businesses (bailouts).

A. Production Mobilization

In crises, Congress would designate the NIA as the principal manager of federally appropriated funds for purposes of organizing the crisis response on the national scale. The NIA's dedicated asset-management teams would work with other federal, regional, and local authorities, professional experts, and other relevant parties to identify specific bottlenecks in the supply chain of critically needed products, prioritize and formulate concrete action items, and organize the requisite financial and other resources to scale up or repurpose individual facilities' productive capacity. In effect, this emergency production ramp-up would amount to a temporary and targeted mobilization by the NIA of individual business entities and utilities.

Putting the NIA at the center of this mobilization campaign would (1) facilitate and optimize an otherwise impossibly difficult process; and (2) concentrate key resources and decision-making powers in the hands of an agency specifically designed to conduct business in a manner approximating that of a private equity firm. Neither the U.S. Treasury nor Federal Reserve are able to act *inside* private firms and markets in a similarly direct way—a critically important ability in this context.

B. Bailout Process and Oversight

While direct public financing of private business entities is often a necessary part of crisis response, neither the Federal Reserve nor the Treasury are equipped to manage that process directly and effectively. Outsourcing management of the Treasury's and Federal Reserve's bailout-related assets to Blackrock, the world's largest private asset manager, is a stark reminder of that institutional gap.

The NIA would be a publicly-owned Blackrock equivalent. Working with the Treasury and the Federal Reserve, it would coordinate emergency public assistance to, and then manage public investments in, private companies. The NIA's professional asset-management teams would allocate funds to individual recipients, negotiate the terms of assistance, and run the portfolio of public assets—strictly with a view toward maximizing the public's overall welfare.

To avoid the pernicious pattern of socializing private firms' extraordinary losses while allowing privatization of their extraordinary gains, the process of allocating emergency assistance to individual firms must be fair, transparent, and conducted in accordance with clearly articulated policy priorities.

A few key elements of the NIA's bailout management regime would include the following:

- The NIA would leverage its regional offices and sectoral expert teams to work closely with the authorities, businesses, and communities on the ground to conduct simultaneous emergency public investment auctions across the country (though the aggregate amounts of assistance awarded through these auctions may differ depending on the degree to which any particular locality is affected by the emergency at hand).

- The NIA Board would set transparent and uniform guidelines for choosing individual recipients of public investment, determining the amount and structure of each such investment (including future profit participation), and imposing specific conditions on each recipient. The NIA's overarching goal would be to provide support to businesses and organizations of all sizes and types, specifically to stimulate economic activity and to prevent/minimize loss of jobs and income in all communities.

- To this end, the NIA guidelines would explicitly mandate maximizing payroll retention and uninterrupted provision of social services to employees and communities as part of any capital assistance package. With respect to large corporations, the NIA would also condition emergency assistance on specific changes to their dividend and stock buyback policies, executive compensation structure, and corporate governance—all with a view toward correcting systemically destabilizing structural imbalances in the U.S. economy.

- The NIA's auction policies and procedures would specifically seek to eliminate any potential conflicts of interest, favoritism, outside interference, etc. Congress can impose additional procedural and substantive requirements on the NIA's decision-making process.

- The NIA teams would work closely with the Treasury and the Federal Reserve, to coordinate their public assistance program with the broader financial and monetary stability goals. This would also provide a helpful checks-and-balances mechanism.

- The NIA's assistance award decisions would be fully documented and subject to audit by the Government Accountability Office (GAO) or specially designated federal audit panels.

- The NIA Board would be under statutory duty to provide regular public reports to Congress and the Treasury on the status of its public capital support programs. If necessary, Congress can mandate additional public oversight the NIA's bailout management process.

In theory, the Treasury or the Federal Reserve can structure their emergency bailout efforts in a similar fashion. In practice, however, it is extremely difficult to ensure the necessary degree of uniformity, transparency, and integrity across multiple bespoke bailout facilities, managed by multiple public and private agents with different mandates and motivations. The NIA's strong statutory mandate, specialized expertise, and organizational accountability would render the entire process inherently more transparent, fair, and susceptible to effective public oversight and input (see Part IV below).

C. Managing Public Equity Stakes: The "Golden Share" Option

The specific form of emergency public investment—whether it is an outright grant, a loan, guarantee, or purchase of a particular type of preferred or common stock—will likely vary on a case-by-case basis.

However, in certain categories of cases—for example, where public capital injections are particularly substantial (either on an individual or an aggregate industry basis), or where the recipient-firms provide critical public goods or services (finance, transportation, energy, healthcare, etc.)—it may be desirable for Congress to mandate that the NIA receive and hold, on a permanent basis, a special "golden share" in each such firm.

In the 1980-90s, golden shares were widely used by governments around the world—including the UK government under Margaret Thatcher—to reserve exclusive rights to control key business decisions by the newly privatized companies that either operated in strategically significant industries or provided basic social services. This instrument's potency and malleability make it equally well-suited for purposes of structuring emergency public investment in private firms (especially, financial firms).

The proposed "golden share" would entitle the federal government, represented by the NIA, to receive a specified economic interest in the firm (under the terms negotiated by the NIA as part of the bailout). It would also grant the NIA, as the sole holder of the federal government's golden share, special, exclusive, and nontransferable corporate-governance rights in the relevant firms. The golden share could not be redeemed or eliminated other than by an Act of Congress.

As the designated golden share holder, the NIA would occupy a permanent seat on the firm's board of directors, with a unique set of duties and powers. Unlike other corporate directors, the NIA would owe fiduciary duty directly to the American public.

In this role, the NIA would have two distinct modes of operation:

- Under normal circumstances, the NIA would perform mainly observational and monitoring functions. While not interfering with the company's routine business operations, the NIA would actively monitor corporate actions with a view to preventing the company or its shareholders from circumventing the conditions of, or frustrating the public's expectations in connection with, the bailout funding. The NIA's affirmative vote would be required for corporate decisions authorizing significant stock buybacks or dividend distributions, outsourcing or elimination of jobs, setting executive compensation, adopting aggressive tax-planning strategies, and other actions potentially inconsistent with public capital support.

- Upon the occurrence of specified triggering events—including, e.g., corporate actions inconsistent with the conditions of public assistance, significant deterioration in the firm's financial condition, or signs of a systemic crisis—the golden share would be "activated," and the NIA would effectively assume the role of the firm's "manager of last resort." From this position of corporate control, it would be able to take fast and direct action necessary to protect public interest: make concrete operational changes, redeploy resources, and so forth. Once the systemic danger subsides, the golden share would revert to its (relatively) passive state.

In theory, it may be possible to structure the public stake in bailed-out firms as a special class of common or preferred shares that carries some of the rights and powers described above. That approach would be less "radical" and thus presumably easier to implement. In practice, however, individually negotiating the terms of public investment in each firm may be too unwieldy—especially in the context of a multi-trillion-dollar emergency relief program—and thus likely to follow the path of least resistance. It is easy to imagine the Treasury pragmatically focusing on negotiations with a handful of the largest corporations that would push hard against any "interference" in their internal governance. Meanwhile, the vast majority of corporate bailout beneficiaries would potentially be able to fly under the government's radar. Even if certain conditions—such as temporary limits on stock buybacks or executive compensation—are mandated by Congress as part of the crisis relief legislation, traditional financial instruments are simply not suited for effective monitoring and enforcement of corporations' compliance with these extraordinary, exogenously imposed conditions.

The proposed "golden share" mechanism would avoid these problems. It would offer the federal government a streamlined and flexible tool of corporate control, which can be quickly scaled up to enforce compliance with bailout conditions—and to ensure that private firms benefitting from public support do not abuse that advantage going forward.

Importantly, in a systemic crisis situation similar to the COVID-19 pandemic, the NIA would be able to use the golden share trigger to assume its production-mobilization role, discussed above.

III. NIA's Role in Coordinating Public Infrastructure / GND Financing

Outside of the national emergency context, the NIA would pursue its core mission of formulating, financing, and executing a coordinated strategy of sustainable and socially inclusive economic development. The core element of this strategy would be systematic channeling of public and private capital into long-term public infrastructure projects that currently do not get funded by risk-averse private investors.

As discussed above, the NIB would generally follow the traditional GSE business model to scale up and amplify existing infrastructure finance flows. It would use proceeds of its bond issuances to purchase and pool revenue bonds and project bonds issued by municipalities, public utilities, and other government instrumentalities seeking financing to fund infrastructure projects. The NIB can also purchase and pool qualifying bonds issued by private entities for the purposes of financing publicly beneficial infrastructure projects. To ensure the commercial viability of its core business model, the NIB would impose strict eligibility criteria on prospective securities.

Nicky Mac would function as a hybrid of a sovereign wealth fund and a private equity firm. Following the business model of a typical Wall Street asset manager, Nicky Mac would set up a series of investment funds (structured similarly to traditional private equity funds) and actively solicit private investors—pension funds, insurance companies, university endowments, foreign sovereign wealth funds, and so on—to purchase passive equity stakes in its funds.

Nicky Mac's dedicated professional teams would select and manage diversified portfolios of public infrastructure assets: nationwide clean energy networks and high-speed railroads, regional air and water cleaning and preservation programs, systems of ongoing adult education and technical training, networks of mixed public-private "startup" finance funds, and so on. By financing and managing these transformative projects, the NIA would be effectively coordinating and overseeing the process of nationwide implementation of the GND program.

Nicky Mac would employ advanced financial engineering methods to reward private investors for their participation in financing these long-term publicly beneficial projects—even where such projects do not generate easily privately "capturable" revenues. It would "synthesize" equity-like returns that vary depending on the estimates of local, regional, or national macroeconomic impacts of the individual funds' projects. If, for example, experts calculate that a particular fund's investments would generate an additional 3% in local or regional economic growth over a specified period of time, Nicky Mac would translate that projected gain into a corresponding added return for the investors in the fund.

This ability to synthesize additional payouts, combined with direct access to the full faith and credit of the U.S., render NIA issuances a potentially highly attractive "safe asset" class for large institutional investors—especially, public pension funds and "socially responsible"/"green" investors searching for yield compatible with their core missions. Thus, instead of financing private equity funds that offer higher yields by laying off workers and breaking up companies they acquire, pension funds would be able to generate healthy, reliable returns by investing in publicly beneficial, employment-boosting projects.

The availability of this new asset class can significantly alter the dynamics of contemporary financial markets. By draining large institutional investors' demand away from speculative short-term or riskier private equity assets, the NIA would function as an important market mechanism for creating currently woefully scarce "patient" capital and enhancing systemic financial stability.

IV. PUBLIC ACCOUNTABILITY AND TRANSPARENCY

Democratic accountability is a critical factor in ensuring the NIA's political legitimacy and long-term success. To ensure that the NIA is publicly accountable for its actions, it is important to establish clear lines of internal and external communication, reporting, and auditing. These measures would help to enhance the overall transparency of the NIA's operations.

A. Procedural Transparency

The NIA Board would be required to submit annual reports to Congress, outlining the basic principles of its developmental program, explaining any changes in or adjustments to its objectives over various time horizons, and describing and analyzing specific actions the NIA was taking to implement its strategic objectives. The Chair of the NIA Board would also be required to provide annual Congressional testimony on the national development policy.

The NIA Board would be subject to annual audit by the GAO. Nicky Mac and NIB would be subject to annual independent audits of their financial performance and operations by a special audit panel of representatives of the GAO and of all major public accounting firms.

To ensure the full transparency and integrity of investment decisions—and to avoid corruption, cronyism, and misuse of funds—both Nicky Mac and the NIB would be required to select individual projects for inclusion in their asset portfolios through public auctions. Any public or private entity with an economically viable plan for providing currently under-provided public goods would have a fair and equal opportunity to apply for NIA funding. A specially designated committee of Nicky Mac or NIB, as appropriate, would thoroughly analyze each proposed project and choose the ones that meet their—formalized and transparent—internal requirements.

These basic accountability mechanisms are easily scalable in times of national emergency, with additional procedural safeguards imposed on the NIA in its role as the bailout manager (see Part II above).

B. Public Interest Council

To strengthen the NIA's external accountability, Congress should establish a special Public Interest Council (the Council) charged with representing an explicitly public interest-oriented perspective in matters within the NIA's ambit.

The Council would comprise individuals who are (1) independent of both the financial services industry and regulators; and (2) possess relevant expertise. This group would include both academic/technical experts and public interest advocates. Members of the Council would be appointed by Congress for staggered terms, based on publicly solicited nominations.

The Council would play primarily an advisory and evaluative role, providing an independent perspective on substantive policy issues faced, and strategic decisions made, by the NIA in the course of fulfilling its mandate. The Council would submit mandatory quarterly and annual reports to Congress, containing its assessments and criticisms—and non-binding recommendations for improvement—of the NIA's articulation and performance of national development and/or crisis management policies.

* * * * *

The NIA outlined above is an urgently needed institutional mechanism for organizing and mobilizing the nation's economic resources in response to systemic challenges facing us in the 21st century. We need the NIA to ensure that the American public is protected both from direct existential threat posed by pandemics and climate change, and from continuing erosion of democratic control over allocation of the nation's economic resources.

FURTHER READINGS:

Robert C. Hockett & Saule T. Omarova, *Private Wealth and Public Goods: A Case for a National Investment Authority*, 43 J. CORP. L. 437 (2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2939309

Robert C. Hockett & Saule T. Omarova, *White Paper: A National Investment Authority* (2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3125533

Saule T. Omarova, *Bank Governance and Systemic Stability: The "Golden Share" Approach,* 68 ALA. L. REV. 1029 (2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2947208

Saule T. Omarova, *Bankers, Bureaucrats, and Guardians: Toward Tripartism In Financial Services Regulation,* 37 J. CORP. L. 621 (2012), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1924546

Reform Infrastructure Policy First, and Limit Corporate Welfare

Testimony before the
Committee on Financial Services
United States House of Representatives

April 14, 2021

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The Manhattan Institute for Policy Research

Good morning Chairwoman Waters, Ranking Member McHenry, and Members of the Committee. Thank you for inviting me to participate in today's hearing.

My name is Brian Riedl. I am a Senior Fellow in Budget, Tax, & Economic Policy at the Manhattan Institute for Policy Research. The views I express in this testimony are my own, and should not be construed as representing any official position of The Manhattan Institute.

My testimony today will critique President Biden's American Jobs Plan proposal with four main points:[1]

1) The $2.6 trillion cost – what would be the most expensive non-emergency law in half of a century – is fiscally irresponsible given America's daunting federal budget outlook.

2) America's main infrastructure policy challenge is not funding, but rather the slow, bureaucratic, high-cost implementation of the policies. Spending another $1 trillion without making these programs more effective is a poor use of taxpayer dollars.

3) Despite the title of "American *Jobs* Plan," there is a broad economic consensus that infrastructure policies do not provide short-term stimulus, and most new construction jobs are redistributed from other jobs.

4) The American Jobs Plan includes a historic expansion of corporate grants, loans, and contracts with little-to-no Congressional oversight. Federal micromanagement of innovation and research is the wrong approach.

The Daunting Federal Budget Outlook

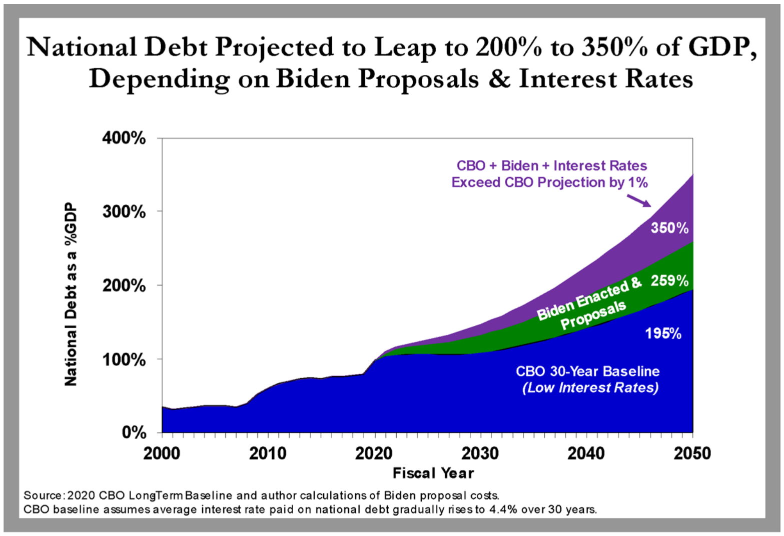
First, we must address the sheer enormity of the President's proposal in the context of Washington's deteriorating fiscal outlook. The cost of the American Jobs Plan – $2.6 trillion over 8 years, an average of 1.25 percent of GDP – would represent the most expensive non-emergency spending bill in at least 50 years.[2] And it follows Washington enacting $5.4 trillion in (mostly-necessary) pandemic spending over the past 12 months – a total that comprises one-fifth of the entire national debt.

The underlying fiscal outlook is unsustainable. The national debt held by the public is already projected to double from $17 trillion to $35 trillion between the end of 2019 and 2030.[3] If President Biden's entire campaign agenda is enacted, it would mean the national debt rising from $17 trillion to $42 trillion over that period.[4] This would leave the national debt at 130 percent of GDP, or one-quarter higher than at the end of World War II.

And it only gets worse thereafter. The Congressional Budget Office projects that – due overwhelmingly to escalating Social Security and Medicare shortfalls – Washington will run $100 trillion in baseline budget deficits over the next 30 years. This would leave the national debt at nearly 200 percent of GDP. At the end of that period, government interest payments will consume half of all tax revenues.[5]

That is the *rosy* scenario that assumes no new legislation is enacted, the 2017 tax cuts expire, no new recessions, and low interest rates. If interest rates exceed the CBO baseline assumption by even one percentage point, it would add $30 trillion in interest costs over three decades. Deficits would reach 18 percent of GDP, the debt would hit 264 percent of GDP, and two-thirds of all tax revenues would merely pay the interest on the debt.[6]

That is simply the CBO baseline, with interest rates rising by an additional percentage point.



And that is why it is shortsighted to assert that low interest rates make this the right time to borrow. Washington is behaving like a subprime homeowner and making long-term debt commitments based on short-term interest rates. The average maturity of the U.S. debt is five years and declining, which means most of the national debt would quickly roll over into any future interest rate increase.

In short, the federal government is essentially gambling our fiscal future on the hope that interest rates never again exceed four percent. Because if they do, simple math shows that combining rising interest rates with a debt approaching 200 or 300 percent of GDP risks a catastrophic debt crisis.

In that context, Washington should focus on paying for our current escalating commitments before undertaking the most expensive non-emergency spending bill in half a century.

Some suggest that fully financing this infrastructure bill with new taxes would make it fiscally responsible. That is not the case. If a family facing a $100,000 credit card debt suddenly finds a $20,000 windfall, spending it all on expensive new furniture would not be a responsible use of that money simply because it is "fully paid for" by the windfall. Similarly, there is a limited universe of plausible tax increases on families and businesses.[7]

Table 1
Leading Progressive Tax Proposals Cannot Even Finance Washington's Current Spending Promises, Much Less Any New Programs

Progressive Tax Proposal & 10-Year Savings ($Billions)	
$1,750	Biden Business Tax Proposals - Infrastructure Proposal
455	Repeal Entire TCJA, Including Low-Income Provisions
189	Impose 70% Tax Rate for Income over $10 Million
224	Cap Deductions at 28% Value Above $400k AGI
2,180	Eliminate Wage Cap for 12.4% Social Security Tax (No Credit for Benefits)
2,000	Tax Capital Gains as Ordinary Income plus Implement Mark-to-Market
1,000	Aggressively Reduce Domestic Corporate Tax Preferences
752	Financial Transactions Tax of 0.1%
103	"Bank Tax" of 0.15% on Large Financial Institutions
2,263	Sanders 8% Wealth Tax
383	Sanders Estate Tax Rate as High as 77%
1,033	Carbon Tax at $25/Metric Ton - No Rebate for Low-Income Households
12,331	**Total Tax Increases (4.6% of GDP)**

Sources: CBO, Tax Policy Center, Tax Foundation, Social Security Administration, and Committee For a Responsible Federal Budget. Net interest savings would approximately offset lost revenue from interactive effects.

Enacting all of these taxes would not even close the current 10-year projected budget deficit of $14.3 trillion, much less finance the President's new spending proposals.[8] And even if they did, the escalating spending levels projected by CBO would re-open large budget deficits in the 2030s and 2040s.

In short, it will take aggressive tax increases – or drastic and painful spending cuts – just to finance Washington's current commitments. Applying the easiest $2 trillion in taxes to a historic spending expansion simply leaves fewer options to close the remaining deficits. The only people left to pay the remaining taxes will be the middle class.

And we still have not even got to the forthcoming release of the "human infrastructure" portion of the that is expected to push the total price tag as high as $4 trillion.[9]

Large spending increases create the difficult financing choice between using up our limited plausible tax increases, and going deeper into debt. The American Jobs Plan includes approximately $1.8 trillion in new corporate taxes that dwarf the $300 billion in net corporate tax cuts (over ten years) enacted in the 2017 Tax Cuts and Jobs Act. That law reduced the corporate tax rate from 35 percent to 21 percent, but offset most of those savings by curtailing key business tax preferences. The president would raise the corporate rate back to 28 percent (33 percent including state taxes) – restoring America to the highest rate in the OECD – while also raising international taxes and retaining the lost 2017 tax deductions. Moreover, the president would severely weaken the 2017 tax reforms that finally gave U.S. multinational corporations a more level playing field when competing internationally. Now, once again, American companies abroad may face higher tax rates than our global competitors.

Additionally, the Tax Foundation estimates that:
"*An increase in the federal corporate tax rate to 28 percent would raise the U.S. federal-state combined tax rate to 32.34 percent, highest in the OECD and among Group of Seven (G7) countries, harming U.S. economic competitiveness and increasing the cost of investment in America. We estimate that this would reduce long-run economic output by 0.8 percent, eliminate 159,000 jobs, and reduce wages by 0.7 percent. Workers across the income scale would bear much of the tax increase. For example, the bottom 20 percent of earners would on average see a 1.45 percent drop in after-tax income in the long run.*"[10]

Infrastructure: Throwing $1 Trillion at an Unreformed, Broken System

Our infrastructure can certainly use some upgrades, particularly its roads and electrical grid. That said, the crumbling state of American infrastructure has been overstated. A 2019 report of the World Economic Forum ranked the United States' infrastructure ***first*** among the 10 geographically largest countries (i.e., the countries that likely have the most extensive infrastructure needs).[11]

Similarly, last year a Congressional Research Service report titled "*The Condition of Highway Bridges Continues to Improve*" noted that "the number and share of bridges in poor condition have dropped significantly over the past 20 years. Furthermore, repairing every deficient bridge in just a few years is unrealistic, and not every bridge repair is likely to be justified when considering both the economic benefits and costs. FHWA's own analysis of bridge data suggests a relatively modest increase in spending could substantially reduce or eliminate the backlog of economically justifiable investments if sustained over a 20-year period."[12]

Spending levels remain healthy. Transportation infrastructure spending (adjusted for inflation) rose from $332 to $371 billion between 2008 and 2018.[13] Government spending on transportation and water infrastructure at all levels is 2.3 percent of the GDP ($440 billion), just slightly below the 30-year average of 2.5 percent.[14] That said, there has been a modest shift from capital spending to operations and maintenance. Spending on energy and the electrical grid continues to rise, although challenges remain.[15]

America's main infrastructure challenge is not spending levels, but rather its general ineffectiveness per dollar spent. In 2016, CBO released a report entitled "*The Macroeconomic and Budgetary Effects of Federal Investment*." Economist Scott Hodge succinctly summarizes the reports three leading conclusions:[16]

1. "Federal investments deliver only half the economic returns as private sector investments, 5 percent versus 10 percent.
2. A dollar of federal spending results in only $0.67 worth of actual investment because state, local, and private sector entities reduce their spending in response to the federal dollars.
3. Federal investment financed by debt or taxes could do more economic harm than good because federal borrowing and taxes crowd out private investment. To avoid harming the economy, federal investments should be financed by cuts in other discretionary programs."

Diving deeper, America's transportation infrastructure is among the most expensive, bureaucratic, and slowly built in the world.[17] Consider that:

- The cost of interstate construction spending per mile quadrupled from 1960 through 1990, and has continued to grow since then (adjusted for inflation).[18]
- Labor costs are higher in part because the Davis-Bacon Act, which mandates that those awarded government contracts pay a "prevailing wage," raises wage costs by as much as 22 percent.[19]
- America requires many more workers to do the same construction work as Europe.[20]
- Most U.S. construction projects are performed only during the workday, while much of Europe has round-the-clock shifts.[21]
- U.S. subway systems are by far the most expensive to build in the world, and in New York City cost quadruple the world average to build. The difference is high labor costs, poor contractor work, poor oversight, and defensive designs meant to avoid a cascade of stakeholder lawsuits related to environmental and historical artifact protection.[22]
- Coordination between various local governments and stakeholders – while often necessary – brings endless delays and veto points, particularly for transportation projects.
- Nearly a century ago, the Empire State Building was built in 410 days. More recently, Boston's Big Dig took 25 years from planning to completion. Today, California's high-speed rail is expected to take nearly 40 years from planning to completion. Some delays are helpful – we want to ensure safety and environmental protection – but the U.S. has become a global outlier.

A major cause of delays are the necessary-but-slow Environmental Impact Statements and Historical Artifact Reviews. Consider that:

- Environmental reviews commonly exceed 1,000 pages and require on average seven years to complete (compared to no more than one to two years in Canada and 3.5 years in the European Union).[23]
- Several environmental impact statements now take more than 17 years to complete – and no ground can be broken until the project has survived the legal process, including appeals by any litigant.[24]
- In America – unlike many other countries – environmental and historical reviews can be challenged in court by a wide range of stakeholders, and these challenges can take years or even decades to be decided. Other countries use faster, non-judicial options to enforce these regulations, rather than expensive and time-consuming lawsuits that essentially become a project veto.[25]
- Citing one particularly egregious example, columnist Megan McArdle notes that "The Southeastern High Speed Rail Corridor was proposed in 1992. You will be thrilled to learn that in September 2017, the Department of Transportation announced the completion of the project's Tier II Draft Environmental Impact Statement."[26]

President Biden's physical infrastructure component throws $1 trillion at this broken system. In fact, it would raise costs further by tightening higher-wage requirements and imposing stricter "Buy America" requirements that limit trade and lower-cost options. And it allocates more funding to transit and high-speed rail ($165 billion) than highways, roads, and bridges ($115 billion) despite the surging costs[27] and declining public interest[28] in the former.

There is certainly a case for increasing infrastructure investment. But any new funding should be accompanied by reforms to spend that money more effectively.

The $213 billion proposal to build, rehabilitate, and retrofit millions of homes is expensive and vaguely defined. While public housing should obviously not be left in disrepair, lawmakers should focus more on housing vouchers that provide low-income families with more options to escape public housing if they so choose. Thus, building more private housing and addressing zoning restrictions would be more helpful. That said, local communities must play a lead role. Additionally, the proposal to "build, preserve, and retrofit homes" is vaguely defined, and it is unclear if tax credits will be sufficient to bring such expensive projects – especially given the push for more expensive unionized workers in an industry that is only 13 percent unionized.[29]

A more effective infrastructure initiative would not require such extreme federal micromanagement – or as much new funding. State and local governments are sitting on $350 billion in recent stimulus grants to close budget deficits that in many states no longer exist.[30] Infrastructure investment would be a perfect use of this one-time cash infusion. Additionally, The President's call for $50 billion in direct funding for public school building upgrades and construction is not necessary when states are flush with $180 billion in K-12 capital grants from earlier stimulus bills.[31]

Historic Expansion of Corporate Welfare – With Seemingly No Congressional Oversight

Yet only half of this proposal is truly about infrastructure. The largest single proposal is $400 billion for long-term care for the elderly and disabled. The rest of the American Jobs Plan largely consists of one of the largest corporate welfare proposals in history.

Specifically, the Biden administration is trying to position itself as the center of scientific innovation. Instead of merely encouraging research, development, and commercialization by providing tax incentives for investment and R&D, and tightening intellectual property and patent laws, Washington would micromanage the innovation process by steeply raising corporate tax rates, and then returning hundreds of billions of dollars in federal grants to companies that undertake government-approved projects. Advocates point to past federal loans to Tesla that were fully repaid by the flourishing company. However, today's promising companies have no problem securing loans and equity from a financial system awash in capital and low interest rates.

The administration's almost limitless discretion in dispensing hundreds of billions of dollars risks becoming a budget-busting slush fund for favored industries, businesses, and allies. The electric vehicle industry would receive $174 billion. Broadband subsidies would total $100 billion, even as the broadband industry already invests more than $50 billion annually in infrastructure.[32] There is a $25 billion "ambitious projects" fund in transportation, $52 billion domestic manufacturing fund, $31 billion venture capital fund, $27 billion "Clean Energy and Sustainability Accelerator," $14 billion commerce competitiveness fund, $35 billion climate innovation fund, and $30 billion "innovation and job creation" fund.

Central planning is labor intensive, and distributing all these grants would require a staggering number of new federal offices, boards, and agencies. The Department of Commerce would create a $50 billion office "dedicated to monitoring domestic industrial capacity and funding investments to support production of critical goods." The proposal would also spend "$20 billion in regional innovation hubs and a Community Revitalization Fund." A "technology directorate" would coordinate countless new initiatives lavishing money on the computing, communications, energy, and biotech sectors. Another program would "bring together industry, academia, and government to advance technologies and capabilities critical to future competitiveness."

But when Washington chooses the wrong winners and losers, the taxpayers pay. The last similar corporate welfare push was in the 2009 stimulus. Back then, a *Washington Post* investigation revealed that President Obama's energy grant programs were so "infused with politics at every level" that the White House reportedly ignored red flags and expedited approval of a questionable $535 million loan guarantee to the well-connected clean energy company Solyndra.[33] It was later revealed that the company brazenly misled the administration on its application, and its subsequent bankruptcy left taxpayers holding the bag for the loan.[34]

More examples abound. The Advanced Technology Program (ATP) was a longstanding Department of Commerce program intended to provide last-resort corporate financing to bring their newest technologies to the market.[35] Several scathing GAO investigations revealed that ATP eventually became a slush fund for Fortune 500 companies, in which federal grant reviewers lacked expertise in the fields they reviewed, and were easily (and purposely) misled by grant applicants seeking easy federal cash with few strings attached.[36]

Consequently, just one-third of ATP grants successfully brought a product to market despite the technologies supposedly being ready to commercialize.[37] Both parties terminated the ATP in 2005 as well as its flawed successor program in 2011. The American Jobs Plan would resuscitate and expand the same failed approach, and give agencies even more money to hand out.

The idea that Washington can successfully pick innovation winners and losers competently and with no political interference reflects the triumph of hope over experience. Yet central planning is popular with those who aspire to do the planning, and with the well-connected industries hoping to cash in on the government spending gold rush.

Economists Agree: Infrastructure is *not* "Stimulus" or Job Creation

Finally, let's address the "jobs" portion of the American Jobs Plan. The Biden Administration and other advocates assert that massive infrastructure spending will stimulate short-term economic growth and create jobs.

Economists across the political spectrum have debunked this myth for the obvious reason that infrastructure projects require several years of planning and regulatory reviews before they begin – at which point the economy has already recovered. In fact, as stated above, environmental impact statements typically take seven years to complete. After allocating $94 billion for mostly "shovel-ready" stimulus projects in 2009, President Obama later joked that "Shovel-ready was not as … shovel-ready as we expected."

Former Obama White House chief economist Jason Furman and former Congressional Budget Office director Doug Elmendorf added that "In the past, infrastructure projects that were initiated as the economy started to weaken did not involve substantial amounts of spending until after the economy had recovered."[38]

Delays are not the only stimulus barrier. Stanford economists John Cogan and John Taylor observed that state and local governments receiving 2009 federal stimulus infrastructure grants simply cut back on their own spending and borrowing almost dollar-for-dollar, completely negating the impact of the federal spending.[39]

The stimulus case is also undermined by Washington distributing spending largely based on politics rather than local economic needs. Harvard economist Edward Glaeser revealed that 2009 stimulus dollars were disproportionately distributed to regions with lower unemployment rates that did not need stimulus. On one level, this makes sense -- many high unemployment regions are rural or losing population, and are thus not the best candidates for widening local highways or adding high-speed rail. However, this approach exposes the disconnect between the goals of infrastructure and job creation. Glaeser also writes that, unlike the past infrastructure projects that relied more on manual labor, today's "big infrastructure requires fancy equipment and skilled engineers, who aren't likely to be unemployed."[40]

Because of these factors, a review of 2009 stimulus highway projects shows no sustained effect on county-level employment.[41] Another study found that half of all new employees hired at firms that received stimulus dollars had peen poached from other firms (rather than coming from the ranks of the unemployed), and many of these companies were forced to turn down other construction projects to accommodate the new "stimulus" projects.[42]

Overall, CRS examined highway spending and concluded that "to the extent that financing new highways [comes from] reducing expenditures on other programs or by deficit finance . . . the net impact on the economy of highway construction in terms of both output and employment could be nullified or even negative."[43]

Adherents to the infrastructure stimulus argument should consider the case of Japan, which responded to a sustained economic downturn with $6.3 trillion in infrastructure investment between 1991 and 2008.[44] One of the largest investments in airports, trains, highways, and tunnels in world history helped push Japan's national debt from 38 percent to 140 percent of GDP, yet its per-capita GDP was roughly the same in 2008 as in 1994.

Third, political considerations can limit the stimulative effect of infrastructure. The geographic distribution of infrastructure spending has historically been driven by the political leverage of lawmakers, as well as political considerations within federal agencies. It is naïve to expect politics remove to be removed from the allocations.

Consequently, Washington has historically over-invested in large vanity projects that provide ribbon-cutting ceremonies. such as high-speed rail, the expansion of interstate highways, and the famous (and eventually cancelled) $223 million "Bridge to Nowhere." However, economist Aaron Renn has shown that "America's infrastructure crisis is local," and repairing local streets, bridges, and potholes is a much higher and more affordable priority. These locally managed projects are often ineligible for federal funding.[45]

State governments face their own mis-aligned incentives with federal dollars. A state funding a $100 million project with its own transportation revenues must convince its taxpayers that the project will provide $100 million in value. By contrast, if the state is required to put up just $20 million of its own funds -- and can use a federal infrastructure grant for the remaining $80 million -- it need only convince its citizens that the project is worth $20 million. In other words, the ability to offload the costs on the federal government makes states more cavalier with how the funds are spent.

Consequently, past infrastructure stimulus bills and reauthorizations have not sufficiently relieved traffic congestion, repaired bridges and roads, or improved waterways. Instead, they brought unfinished high-speed rail projects, cost overruns, a $3.4 million "eco-passage"[46] to help turtles cross a highway in Tallahassee, Fla., and a $54 million "Napa Valley Wine Train."[47] Better to eliminate the federal middleman and empower state and local governments to more easily raise the funds to finance local projects based on local priorities.

Conclusion: Fix the System First, and Be Fiscally Responsible

The laws of economics have not been repealed. Budget constraints still exist. Doubling or tripling the national debt is extraordinarily reckless. There is no guarantee that interest rates will never rise again – indeed such a result is overwhelmingly likely. There are no plausible taxes that can finance the projected spending levels, and counting on the Federal Reserve to monetize much of this debt is a recipe for economic chaos.

More specifically, a $400 billion long-term care expansion – whatever its merits – has no place in an infrastructure bill. Spending $1 trillion on infrastructure without fixing the underlying waste, inefficiencies, and delays in our system represents an extraordinary missed opportunity, and confuses spending levels with outcomes. Giving the administration carte blanche to hand out hundreds of billions of dollars in corporate welfare simply doubles down on past policy mistakes. Lawmakers should first reform the infrastructure costs and delays, and encourage states to use their $530 billion in federal aid to address local infrastructure priorities.

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[1] White House, "Fact Sheet: The American Jobs Plan," March 31, 2021, at https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/31/fact-sheet-the-american-jobs-plan/.

[2] Preliminary cost estimate from "What's in President Biden's American Jobs Plan?" Committee for a Responsible Federal Budget, April 2, 2021 at https://www.crfb.org/blogs/whats-president-bidens-american-jobs-plan.

[3] Congressional Budget Office, The Budget and Economic Outlook: 2021 to 2031," February 11, 2021, at https://www.cbo.gov/publication/56970. CBO projected a debt held by the public of $33.3 trillion at the end of FY 2030, before the latest stimulus bill added $2 trillion.

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Enterprise

U.S. House of Representatives, Committee on Financial Services

"Building Back Better: Examining the Need for Investments in America's Housing and Financial Infrastructure"

Testimony of Jacqueline Waggoner

President, Solutions Division, Enterprise Community Partners, Inc.

April 14, 2021

Chairwoman Waters, Ranking Member McHenry, and members of the Committee, thank you for the opportunity to provide testimony on the need for robust investment in America's housing infrastructure. I commend the Committee for its commitment to housing as a critical component of community infrastructure, jobs, and individual success in life.

We are just beginning to emerge from this pandemic in which 22 million people lost their jobs and livelihoods between February and April 2020 and are still struggling with 8.4 million fewer jobs than before the pandemic hit. Recovery should focus on what people need: they need stable homes and good paying jobs to sustain their families. Prioritizing housing that's affordable for Americans as an infrastructure investment allows us to do both.

I am President of the Solutions Division of Enterprise Community Partners, a national nonprofit on a mission to make home and community places of pride, power and belonging for all. To make that possible, we listen to what our communities need and bring everything under one roof to deliver it to them. That means we advocate on a nonpartisan basis for sound public policy at every level of government; we develop and deploy programs and support community organizations on the ground nationwide; we invest capital to build and preserve rental homes; and we own and operate 13,000 apartments and provide resident services for 22,000 people. All so that people not only make rent, they build futures. This end-to-end approach, combined with 40 years of experience and thousands of local partners, has enabled Enterprise to build and preserve 793,000 affordable homes, invest $61 billion in communities and improve millions of lives. Our strategic priorities are advancing racial equity, building climate resilience and upward mobility, and creating and preserving affordable housing.

At Enterprise, we are working urgently to provide housing and to advance racial equity on multiple fronts, including working to create equitable access to capital so that Black, Indigenous, and other People of Color and others who have been denied access can participate in the development of affordable housing. Our Equitable Path Forward is a five-year, $3.5 billion nationwide initiative to help dismantle the deeply-rooted legacy of racism in housing – from the types of homes that are built, where they're built, who builds them, and the wealth that is generated from them. The multipronged initiative establishes an equitable path forward for Black, Indigenous, and People of Color and other historically marginalized housing providers by filling the gaping capital gap from decades of systemic racism, strengthening providers through advisory services and other nonfinancial support, and creating new career pathways to diversify leadership in real estate.

Despite our progress, the need for more affordable homes is overwhelming. At this moment, we need to drive public financing toward what we want our cities and communities to look like, and toward what our people are telling us they need. This infrastructure package could be the largest investment in affordable housing for decades, so we need to prioritize the good that can come with it: jobs, livelihoods, homes that are more resilient to our new climate reality, and the chance to advance racial equity and economic mobility for Americans.

In this testimony, I will describe why the nation's affordable housing stock is equally important to build and maintain as roads, bridges, and other types of infrastructure. And how with adequate scale and scope of investment from the Federal Government, we can build an equitable path forward from Covid-19 - a future where home and community are steppingstones to more.

Equitable Recovery Starts with Rebuilding our Economy

Job Creation & Economic Mobility

A major infrastructure package must create the jobs and economic growth that Americans need, and research shows that investing in housing is an efficient way to do both. Housing programs can get people to work in every community and do it quickly, in fact, housing construction is the fastest way to create jobs for people who need them now. There are shovel-ready projects in every county across the country that could immediately bring construction jobs to people who need work, while creating affordable homes over the long term. Hundreds of thousands of housing units are currently in a state of disrepair, including an estimated capital backlog of more than $70 billion in the public housing stock alone, meaning there are thousands of projects just waiting to be funded.

In addition to creating job opportunities, investments in affordable housing serves as catalyst for local economies by attracting and leveraging public and private resources to increase tax revenue. A recent study from the National Association of Home Builders (NAHB) shows that building 1,000 average rental apartments generates 1,250 jobs and $55.91 million in taxes and revenue for local, state and federal government. There is also a carryover effect on local business who benefit from increased purchases from the affordable housing developers buying construction materials and the employees who serves as neighborhood customers. It is estimated that the shortage of affordable housing costs the American economy about $2 trillion a year in lower wages and productivity.[1] Additionally, an analysis from Enterprise Community Partners found that both the speed and impact of public investments in housing match or outpace those of other infrastructure investments, such as transportation. Our analysis emphasizes that investments in America's housing infrastructure pay dividends in a number of ways: more jobs, more growth, and more housing options.

Research from the Urban Institute also emphasizes that housing - including housing quality, affordability, and stability - can be an essential tool for upward mobility, giving families a strong

[1] Heather Voorman, "Housing Infrastructure: Why We Should Make the Case to Congress", Affordable Housing Finance, August 20, 2018.

foundation to move out of poverty.[2] These finding are supported by a report from Harvard's Raj Chetty, which confirms the relevance of housing location and stability for children's future prospects. His research found that each year a child spends in a high-poverty neighborhood – as opposed to a lower-poverty neighborhood– decreases that child's chances of going to college, increases their chances of becoming a single parent and decreases their expected earnings as an adult. [3]

These findings make current trends in our country all that much more concerning. Over the past 38 years, nearly 4,300 neighborhoods, inhabited by roughly 16 million Americans, crossed the high-poverty threshold.[4] As of 2018, there were a total of 6,400 high-poverty neighborhoods nationwide. The persistent shortage of affordable homes in well-resourced areas in America remains a barrier holding working families back from moving up the ladder and accessing greater economic opportunity. Not only can we help support and revitalize communities across the country through housing investment, we can create good paying jobs and spur economic mobility along the way.

Housing Affordability Challenges in America

Housing continues to be most Americans' greatest monthly expense, and the economic fallout brought on by the Covid-19 pandemic has only exacerbated our nations affordability challenges. Yet even before the pandemic struck, a long-time crisis in housing affordability was already putting housing stability at risk for millions of Americans. According to the U.S. Census Bureau's 2019 American Community Survey, 37 million households were spending above the federal affordability standard of 30 percent of income on their housing, including over 10.5 million households nationwide spending more than half of their income on rent.[5] Families living under these economic conditions are often forced to make painful choices between housing, food and medication. Feeding America estimates that 1 in 5 children experienced food insecurity in 2020. The growing mismatch between incomes and housing costs is making it harder and harder for families to make ends meet, let alone achieve their full potential

Racial Equity

Poverty alone does not explain our affordability challenges: after two decades of mostly stagnant wages and rapidly rising rents, more people than ever are competing for a limited supply of affordable rental homes, creating intense demand and affordability challenges. Between 2010 and 2019, more than 4 million new renter households entered the market, including a surge in the number of high-income renters. The fallout of the 2008 housing crisis also laid bare the disproportionate impacts of housing affordability challenges, with lower-income households of color significantly more affected by losses of

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[2] Pamela Blumenthal, John McGinty, "Housing Policy Levers to Promote Economic Mobility," The Urban Institute (September 2015): http://www. urban.org/research/publication/housing-policy-levers-promote-economic-mobility.

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home equity, foreclosures and evictions, and restricted access to future mortgage financing. The result was a dramatic decline in homeownership rates among households of color from which they have still not fully recovered, even as white homeownership rates have largely rebounded to pre-crisis levels. Currently, Black Americans have the lowest homeownership rates of any subset of our population by race or ethnicity.

Communities of color across the nation also bear the scars of our country's history of redlining and blockbusting. We can see their impact in the persistent segregation of Black and Brown neighborhoods, in the decades of disinvestment they have experienced, in the vacant or abandoned buildings, in the overcrowded homes, and in the disparate outcomes in health faced by communities of color throughout this nation. Long- standing racial inequities also continue to plague our rural communities. Communities of color in the rural South, along our nation's southern border and in Tribal areas see disproportionate amounts of poverty and inadequate housing as a reflection of systematic disinvestment. The impacts are clear: while Black households make up only 12% of the population, they make up nearly 46% of people in HUD-assisted housing and 40% of the people experiencing homelessness.

Our Changing Climate

Making matters worse, communities with low property values and residents of modest means bear the brunt of our changing climate. Research has shown, for example, that formerly redlined neighborhoods can run 5 to 20 degrees Fahrenheit hotter in the summer.[6] For those who do not have adequate access to air conditioning or the means to pay for cooling, this exposure can be dangerous, with every degree increasing the risk of death by 2.5 percent. In the city of Los Angeles, low income households have an energy burden, the percentage of one's income spent on energy bills, that is 3.7 times higher than non-low-income households. Data points like these show us that much of our nation's housing stock is not routinely designed, built, or retrofitted in a way that responds to this climate reality. In fact, buildings are themselves responsible for nearly 40% of US energy related greenhouse gas emissions today.

As a nation we are also underinvesting in preparing for the impacts of extreme weather events. Despite growing interest and commitment, regions are not mitigating or adapting at the necessary pace of change. In the extreme, the lack of physical infrastructure and natural systems necessary to withstand extreme weather conditions has led to displacement of entire communities of people, from Alaska to Louisiana to Puerto Rico. This lack of investment and forethought leaves our communities vulnerable. While disasters don't take into account whether a neighborhood is high or low income, low-income households and vulnerable communities generally pay the highest price when a major disaster strikes. Low-income populations and people of color are less likely to have the resources necessary to prepare for a storm and they are more likely to lack savings before disasters strike.

Federal Investment

Over the past decade as many of these trends accelerated, the Federal Government, as part of the Budget Control Act of 2011, enforced caps on non-defense discretionary programs. These budget caps have resulted in housing assistance programs falling to near their lowest levels in 40 years, relative to GDP. Public housing and the HOME Investment Partnership program saw some the deepest cuts. In fact,

[6] Brad Plumer, Nadja Popovich, "How Decades of Racist Housing Policy Left Neighborhoods Sweltering," The New York Times, August 24,2020.

funding for HOME between Fiscal Year 2011 and Fiscal Year 2017 was cut nearly in half, reducing the production of affordable homes by 69 percent on an annual basis.

Our deteriorating housing and neighborhood infrastructure are hyper-local challenges, but they require a Federal solution. Mayors and governors have stepped up, testing innovations and scaling up unique solutions to the affordable housing crisis, raising billions to build and preserve affordable housing, permanently house the homelessness and stabilize our citizens at greatest risk. Ballot proposals to fund affordable housing initiatives have passed at a historic pace – indeed, the American people are appealing to the federal government to solve the affordability crisis. Ask any mayor of any small town or large city in America, Democrat or Republican, and they will tell you lack of affordable housing is among their biggest concerns. So much more has to be done. State and local governments are bound by constitutional and statutory requirements to balance their budgets. Only the Federal Government has the resources to respond to the need at scale.

The 116th and 117th Congress astutely recognized the critical role that housing plays in Americans' lives, and further acknowledged the scale of the need, by approving close to $75 billion dollars in housing assistance in stimulus packages since the start of the pandemic. This historic investment demonstrates not only how badly every day Americans are suffering financially, but also that we have neglected this problem for too long. We applaud Congress for recognizing the role it can and must continue to play in scaling up proven housing solutions.

Housing Is Infrastructure

Affordable housing is fundamental to our national infrastructure and must be part of any federal infrastructure plan. Infrastructure is commonly understood as the underlying elements—buildings of all types, including residential; networks and other physical structures; and resources we collectively invest in and rely on—that are necessary for the economy to function. At the most basic level, in order for America's workers—our teachers, our nurses, our mechanics, our clerks—to stay productive, they need both a stable place to call home and a reliable way to get to their jobs. A home serves as the foundation for employment and financial independence and having a good-paying job is frequently a prerequisite for having a safe home that you can afford. These days in particular, it's so much more than a roof over our heads -- home is where some of us go to work, where our children go to school and where we stay to keep safe and healthy.

Power to Transform Communities Still Reeling from Foreclosure Crisis

A bold investment in our nation's housing infrastructure would finally advance local efforts to repair our hardest hit communities and unlock the supply of desperately needed affordable housing. Many of these places have made great progress in addressing the vacancy and blight brought on by the 2008 financial crisis, spending billions to demolish, rehabilitate and rebuild uninhabitable structures, but more needs to be done. The City of Detroit, for example, still has more than 22,000 vacant housing units to contend with despite having addressed more than 50,000 vacant housing units in the last decade. Still, there is hope. With an investment in housing infrastructure, we can fundamentally transform our aging housing stock, and with it, the lives of millions of Americans.

Reverse Past Injustices

While federal policies created the racially bifurcated and inequitable system of housing and community development that exists today, they also have the power to undo these wrongs. It is vital, therefore, that as we think and plan for housing as a component of any infrastructure package, we must also ensure such a package is designed to counter injustices created by past policies, to equitably allocate funds and programs to meet the needs of communities of color, and to remove barriers to accessing stable and affordable housing in neighborhoods of opportunity. Rather than being subjected to blight; the lack of transportation, grocery stores and quality health care; and under-valued and under-assessed homes, our communities of color deserve dignity. This necessitates that we rebuild our neighborhoods, preserve the rapidly expiring stock of subsidized affordable housing, secure the long-term affordability of unsubsidized rental homes, convert underutilized properties into affordable housing, and remediate hazards in the home, all while ensuring access to quality education, jobs, transportation, healthcare and economic mobility.

Centering racial equity in housing is not just good policy, it is also good business. When communities of color have better access to stable and affordable housing options, they experience less residential turnover, which saves housing operators the cost of carrying vacant units and searching for new tenants. Households with housing affordable to them also retain more of their income, which allows for more discretionary spending, investing in education and health, and saving for the future.

For too long we've let America's children, workers and retirees languish in unsafe or unaffordable housing that's disconnected from jobs, good schools, health care, and grocery stores. It's time to make the investments necessary to ensure that every American has access to the resources they need to realize their full potential. That means investing in our housing infrastructure.

Ensuring the Stability and Prosperity of our Next Generation through Investment in Resilience

Fighting Climate Change with New Construction and Modernization of Existing Housing

Housing stability extends beyond the costs of monthly rent payments. It is also vital that housing is stable during moments of stress, whether it be an unpredictable natural disaster or extreme temperatures in summer and winter. Housing built or renovated to green building standards reduces instability. It also leads to more predictable utility expenses, a daily benefit regardless of the weather outside. Green building allows residents to not have to choose between paying their utilities, rent or putting food on the table, and it responds better during climate crisis—ensuring a holistic affordability strategy that keeps residents on their feet. We must commit to green building standards to prepare our communities to be climate ready.

Green building standards address energy, water, location efficiency, health and wellness while ensuring that the affordable housing produces healthy living environments with affordable utility expenses. Homes that are certified to green building standards provide benefits to both residents and property owners while also improving health outcomes. A Southface Institute study demonstrated that green housing developments spent 12 percent less on energy (common areas) per square foot than non-green developments and residents used 14 percent less energy per square foot. These families saved nearly $8/month and $96/year, which can translate to the purchase of healthier, quality food. Additionally, seniors saved more than $10/month and $122/ year on energy costs. This savings can cover the cost of 1-2 medical prescriptions a month. [7]

Based on the benefits, it may be surprising that green building practices are not standard across the housing sector, especially the affordable housing sector. Where states require or provide incentives in order to receive financing from the LIHTC program, many subsidized affordable housing projects do meet green building standards. In fact, 30 state LIHTC programs include green building programs such as Enterprise Green Communities.

However, green building policy is not consistent across all states nor across all affordable housing funding streams. Where there are not incentives, developers face an uphill battle. Developers, investors, and other stakeholders involved in building affordable housing must ensure that each project is financially viable, and concern about additional front-end costs is a very real factor that can deter affordable housing developers from building to green standards, particularly as construction costs in general continue to trend upwards. In the current affordable housing financing structure, it is challenging, if not impossible, for developers to add on upfront costs, even if the savings and benefits are quickly realized by owners and residents.

Without a concerted and coordinated effort, housing around the country will continue to be built or renovated without green building standards and will be unprepared to meet the demands of a changing climate. It is essential for the Federal Government to lead the way, providing multi-pronged solutions that holistically address educational, capacity, policy, institutional and capital barriers in order to ensure that affordable housing does not exacerbate climate change and is prepared to withstand climate change.

Enterprise Green Communities launched in 2004 to help developers, investors, builders, policymakers, and other partners make the transition to a green future for affordable housing. Over the past 17 years, Green Communities has provided a range of services to accomplish this goal including: developing and updating the Green Communities Criteria and program platform to raise the standard of sustainable housing for low-income communities nationwide and help advance the field; working directly with the developer community to build capacity and understanding of a holistic approach to green building; and outreach to decision-makers at federal, state, and local levels to develop and promote policies that facilitate green affordable housing development.

Enterprise Green Communities is the nation's only national green building program designed explicitly with and for the affordable housing sector. Today, because of our efforts, more than half of the states in the nation require that affordable housing developments receiving public funds comply with our standard.

Our newest program version was developed to translate the collective expertise of leading housing and green building practitioners into a clear, cost-effective framework for all affordable housing types. The newest version includes a Path to Zero Energy, water quality standards, and a new approach to resilient affordable housing in rural areas. The benefits of green building are clear, attainable and

[7] Alex Trachtenberg, Sarah Hill, Dr. Andrew McCoy, Teni Lapido, "The Impact of Green Affordable Housing," Southface and the Virginia Center for Housing Research, January 2016. https://www.southface.org/wp-content/uploads/2016/07/impact-of-green-affordable-housing-report-1.pdf

significant, and will ensure that housing is not only built, but is stable, healthy, affordable and climate ready for many years to come.

We recommend setting green building as the minimum quality standard for all new construction and substantial rehabilitation projects built with funding from HUD, ensuring that federal funding supports climate-ready, affordable homes. These minimum standards must ensure that when we are rehabilitating and building affordable housing that we are making climate ready homes. These standards will ensure that whether a resident is facing the slow creep of rising temperatures or the sharp impact of a hurricane, that they are able to survive and thrive.

Some HUD programs such as the Choice Neighborhoods program and the Community Development Block Grant- Disaster Recovery program have implemented green building standards that address both climate change mitigation and adaptation. However, there are not common or consistent standards across all HUD programs, leading to grantee confusion. In order to facilitate the move to common green building standards, we recommend the inclusion of technical assistance to ensure local jurisdictions and their stakeholders have the technical expertise needed to implement and ensure compliance with applicable standards.

In addition to building standards, innovative state and regional programs have also shown the impact of investing in resilient community development that integrates housing and transportation in order to reduce greenhouse gas emissions and support sustainable, connected neighborhoods. In California, for example, the Affordable Housing and Sustainable Communities program creates affordable housing conveniently located near the places families need to go—such as jobs, grocery stores, and schools, while also investing in transportation infrastructure that help make walking, biking, and taking public transit safe and convenient options. Designed specifically to benefit low-income communities—disproportionately communities of color—that have been historically excluded from community-serving investments, local innovations like this demonstrate how we can integrate and advance our goals for housing, transportation, climate resilience, and addressing longstanding patterns of racialized disinvestment. Federal funding could scale programs like this, which through an integrated approach create transformational community and societal benefits larger than the sum of any one of its parts.

Disaster Recovery and Preparedness

In the past year, disasters across the U.S. caused nearly $95 billion in damage. The billions of dollars spent exemplify why preparedness is crucial. If we were able to spend more funding on mitigation rather than recovery efforts, communities would be in a much better place when an event does occur. The impacts of our changing climate put millions of households at risk of uninhabitable conditions, exacerbating the vulnerabilities of lower income households and communities of color. Investing in resilient infrastructure saves lives, reduces disaster costs, enables business continuity, creates jobs, and addresses social inequities.

Disasters uproot whole communities, damaging homes and infrastructure on a scale rarely experienced before, but the reality is that communities must expect and be prepared for similarly severe hurricanes, floods, and fires in coming years. The nation's infrastructure, including housing, needs to be brought to a state of repair, currently insufficient to meet growing current and future needs of communities. There is an interdependency between homes and infrastructure that needs to be elevated and amplified especially as shocks and stressors like climate change come forward.

The recent severe winter storms that swept across Texas resulted in power grid failures causing widespread blackouts, leading to uninhabitable homes that left millions of households in crisis. Similarly, in 2017, Hurricanes Maria and Irma destroyed Puerto Rico's electricity grid, which caused the longest power outage in US history and billions of dollars in damage. Puerto Rico's power grid was decimated, with 80 percent of long-distance transmission lines and all local distribution lines damaged. The damage and financial loss brought by the disaster-induced power failure in both cases underscores the urgent need for action that treats homes as essential components in our infrastructure systems.

A study by the Government Accountability Office (GAO) shows that climate change could "affect every aspect of the grid from generation, transmission, and distribution to demand for electricity" and cost billions of dollars a year. The fortification of the nation's energy grid is crucial: we need to invest in sustainable and resilient power grids (e.g., offshore wind, decentralized grids, microgrids, grid security, and solar batteries). Dependency on centralized water and energy grid distribution has grown cumbersome to manage and maintain in areas of extreme fire and flood risk. It will be critical to invest in decentralizing electrical grids where feasible to handle the changing conditions and habits of households, businesses and institutions in rural, tribal and island communities.

As the leader on climate resilience in the affordable housing industry, Enterprise aims to address these gaps to promote social and economic prosperity. We invest in disaster recovery and resilience work because people of modest means are most likely to be harmed by disasters and tend to be the slowest to recover. Through our Building Resilient Futures initiative, we are working to ensure that sustainable, resilient, affordable housing becomes the norm and that communities are equipped to withstand and recover from disasters. Despite growing interest and commitment, our housing, infrastructure, and regions are not mitigating or adapting at the necessary pace of change. It's time for America to invest in modern infrastructure that is built to last. We recommend that the infrastructure package:

- **Improve and harmonize federal infrastructure requirements**. We recommend increasing alignment and coordination between agencies at all levels of government to create the right incentives to develop resilient infrastructure, including affordable multifamily housing, as well as a federal framework for rating resilient infrastructure.
- **Ensure that all federally-funded infrastructure projects – including housing – are built to resilience standards**. These standards should be appropriate for the region, from earthquake to fire to flooding to extreme heat. Federal rebuilding grants, which are typically disbursed through HUD and FEMA, come with standards for resilient rebuilding, such as increased elevation of homes and critical facilities located in the 100-year flood plain. However, non-disaster-specific federal resources available for infrastructure projects, affordable housing and other public facilities do not always require resiliency standards. Therefore, we recommend to consistently require a consideration of flood risk and other foreseeable risks over the course of the useful life of infrastructure as well as encourage strong building codes through federal incentives and tax credits. A study released this November by FEMA, Building Codes Save: A Nationwide Study of Loss Prevention, shows that modern building codes continue to be one of the most cost-effective ways to safeguard against natural disasters and if all new construction adopts I-codes,

it could result in a $600 billion loss avoidance by 2060. Despite this, 65 percent of counties, cities, and towns across the country still have not adopted modern building codes.

- **Invest in resilient infrastructure through flexible predevelopment funding**. FEMA's Building Resilient Infrastructure and Communities (BRIC) program has allowed states to implement projects that will strengthen our collective resilience in the long term. However, state and local needs far exceed available funding. This exemplifies the need to expand predevelopment funding. Recent studies by the International Council of Sustainable Infrastructure and the Milken Institute emphasized that catalytic predevelopment capital has the potential to close the funding gap that prevents projects moving from concept to construction. The federal government should also assess whether or not the proposed project takes into consideration future risk prior to providing the funding. Prioritizing projects that incorporate resiliency criteria such as Enterprise Green Criteria would incentivize grantees to integrate resilience standards in order to receive the funding.
- **Create a National Infrastructure Bank to further private investments in resilience**. The need for resilient infrastructure finance is on the rise, as we continue to witness higher frequency and intensity of climate change-induced extreme weather events. However, state and local governments face challenges in funding resilient infrastructure, largely due to the inflexibility of federal systems in enabling state and local governments to leverage private financing for resilient infrastructure development. Enterprise encourages Congress to establish a National Infrastructure Bank (NIB) to enable states and cities to leverage private financing, such as private loans or loan guarantees, to rehabilitate and enhance the resilience of the U.S. infrastructure, including affordable housing. Revenues generated from resilient infrastructure projects would be used to repay these loans and recapitalize the NIB to fund new investments. To ensure that projects receiving NIB financing are meeting the resilience needs of cities, legislation creating a NIB should be designed with the following principles in mind: 1) provide funds to complement, not replace, existing federal programs such as the Highway Trust Fund and State Revolving Funds, and 2) provide financing options for a variety of infrastructure projects (e.g., energy, water, transportation, communications).
- **Implement temporary to permanent housing solutions post-disaster in rural and Native communities**. Far too often temporary FEMA housing provided in Native communities post disaster becomes *de facto* permanent housing due to replacement housing never being developed or due to extreme overcrowding in existing housing. Many families never recover or regain their housing post-disaster and are permanently displaced. Implementing solutions such as RAPIDO that enable quick installation of modular and stick-built housing that easily transition into permanent resilient housing will not only minimize the financial loss and disruption to communities, these innovations can provide cost saving in the delivery of disaster recovery programs.
- **Provide at least $10 billion in CDBG-Disaster Recovery funds** for communities harmed by the worst Presidentially declared disasters since 2019, including in California, Alabama, Florida, Iowa, Louisiana, Michigan, Oregon, and Puerto Rico. These disasters include wildfires, earthquakes, and Hurricanes Delta, Laura, and Sally, and the impacted communities require Federal assistance beyond the emergency aid provided by FEMA. Enterprise strongly supports

the permanent authorization of CDBG-DR. In the 116th Congress, the House voted on a bipartisan basis to permanently enact CDBG-DR through the Reforming Disaster Recovery Act of 2019 (HR 3702).

Overall, there is a wide variety of strategies that can be deployed to preserve the nation's infrastructure including the existing housing stock and keep housing and communities safe. These include retrofitting infrastructure, weatherizing buildings, upgrading homes, as well as modernizing the electricity grid. But most importantly, as we build resilience, we need to do so equitably and comprehensively with mitigation being a community-wide effort that benefits all parts of the community.

Production, Preservation, and Rehabilitation: Making Housing Safe, Healthy, and Connected

Low-Income Housing Tax Credit

The Low-Income Housing Tax Credit (Housing Credit) is responsible for the lion's share of affordable housing built and preserved across the country. A successful public-private partnership, the Housing Credit has financed nearly 3.5 million affordable homes since the program was authorized in the Tax Reform Act of 1986, providing approximately eight million low-income families, seniors, veterans, and people with disabilities homes they can afford. It has provided affordable housing in all 50 states, US territories, and the District of Columbia, as well as to all types of communities, including in urban, suburban, and rural areas.

As discussed above, there is a severe shortage of rental housing affordable for low-income families in the US, and the production of new affordable rental homes is not keeping pace with the rising demand. Strengthening and expanding the Housing Credit is the best way to increase the availability of affordable housing.

The Housing Credit is not only critical to the health and overall well-being of families across the country, but also has far-reaching economic benefits that strengthen local communities' infrastructure. In addition to promoting better health outcomes, improving children's school performance, and helping people gain employment, the Housing Credit has generated $617 billion in wages and business income and $214 billion in tax revenues. In a given year, there are approximately 90,000 to 100,000 people in jobs supported by the Housing Credit, including jobs in construction, manufacturing, wholesale and retail, finance, and property management.

By strengthening and expanding the Housing Credit program through the inclusion of the Affordable Housing Credit Improvement Act (AHCIA) in the infrastructure package, the Federal Government will harness private sector dollars to create jobs and fortify the nation's infrastructure, and therefore **Enterprise recommends the inclusion of the AHCIA in the infrastructure package**.

The AHCIA is bipartisan, bicameral legislation previously introduced in both the 115th and 116th Congress that would strengthen and expand the Housing Credit program. In the 116th Congress, the legislation gained widespread support and was cosponsored by 233 Representatives (including 69 percent of Ways and Means Committee Members) and 41 Senators (including 50 percent of Senate Finance Committee Members).

This updated legislation is estimated to result in the production of over 2 million additional affordable homes over the next decade, supporting the creation of nearly 3 million jobs and generating more than $346 billion in wages and business income and nearly $120 billion in additional tax revenue.

By strengthening and expanding the Housing Credit program through the passage of the AHCIA, the federal government will simultaneously be fortifying the country's infrastructure. In order to protect this critical work, Enterprise is advocating for the passage of an additional provision to reinforce the Housing Credit program: the provision to correct qualified contracts.

Under the qualified contract provision in Section 42 of the Internal Revenue Code, an owner of a Housing Credit property may, after Year 14, approach the Housing Credit allocating agency to request a qualified contract. This request begins a one-year period during which the allocating agency seeks a qualified buyer to purchase the property and maintain it as affordable for the duration of the extended use period. If the allocating agency fails to identify a qualified buyer within one year, the property is released from the affordability requirements of the Housing Credit program. At that point, the owner is free to either sell the property at market value without any deed restriction or continue to own and manage the property charging market rents.

While the original intent of this provision was to create a limited return and some liquidity for investors at a time when the Housing Credit was an unproven program, it has come to function as a nearly automatic affordability op-out after just 15 years of affordability. This is because the qualified contract formula price in nearly all cases significantly exceeds the market value of the property as affordable housing. As a result, it is extremely rare for the allocating agency to find a buyer willing to pay the qualified contract price. More owners are using a qualified contract as a strategy to flip Housing Credit properties to market—and thus capitalize on the differential between affordable and market rents—after only 15 years of affordability, a far shorter affordability period than Congress intended.

The qualified process is resulting in the premature loss of well over 10,000 low-income units annually. As of 2018, approximately 65,500 units nationwide have already been lost, and in that year alone, owners served notice to state allocating agencies that they wanted to begin the qualified contract process on additional properties comprising approximately 10,400 units. The need to correct the qualified contracts issue has become a top priority for Enterprise and other national partners. It is critical to protecting the strong infrastructure that the Housing Credit program helps to create for low-income families across the country.

State and Local Partnerships

Affordable, private market rental housing is disappearing rapidly as residents are priced and pushed out of their homes and communities. This country is currently facing a shrinking supply of this essential housing, often due to rising rents, eviction, and displacement. As a result, there are fewer and fewer affordable options for low-income residents, and new affordable housing production is not keeping pace with this loss. The acquisition of unsubsidized affordable housing and preservation as permanently affordable housing is a successful place-based strategy to keep households stabilized while growing the supply of deed-restricted affordable housing.

In many places, such as California, local leaders are working creatively to preserve the supply of this precious housing stock. City-led preservation funding programs, the regional Bay Area Preservation Pilot, and California's Project Homekey are all current examples of public-nonprofit partnerships that are taking on the challenge. The Bay Area Preservation Pilot provides low-cost loans for up to 10 years to nonprofit developers seeking to acquire and preserve existing market-rate affordable multifamily properties located in areas with high-frequency transit service. Project Homekey is California's $800 million program to purchase and convert underutilized buildings – including hotels, motels, vacant apartment buildings and other properties – into service-enriched interim and permanent housing for people experiencing or at risk of experiencing homelessness. Our Enterprise team in California is currently working with the State of California and philanthropic partners to deployed an additional $46 million to support operating costs and wraparound services as well as additional technical assistance and capacity building for local governments and trusted housing and homeless service providers.

Together, these initiatives accelerate acquisition, address the financing gap in preservation deals, provide fast-acting capital, help fund crucial resident services, and provide stable, affordable homes for our communities. Federal authorization of programs to deliver funding to support property acquisition, conversion, and preservation through an updated Neighborhood Stabilization Program or through allocations to Community Development Financial Institutions are needed to accelerate and scale these proven strategies.

Neighborhood Homes Investment Act

In hundreds of communities across the country, neighborhood revitalization is at standstill because of the so-called "value-gap" — where the cost of rehabilitating or building a home is greater than the post-construction value of that home. Where this value gap exists, investors have no economic incentive to provide capital and the infrastructure of these communities will only continue to deteriorate. This issue is more pressing than ever, particularly given the economic fallout of Covid-19.

The Neighborhood Homes Investment Act (NHIA) is a federal proposal to break this stalemate and we recommend its inclusion in the infrastructure package. Introduced in both the Senate and the House (S. 98 and H.R. 2143), the legislation would offer tax credits to attract private investment for building and rehabilitating owner-occupied homes, creating a pathway to neighborhood stability through sustainable homeownership.

The lack of capital for reinvestment in low- and moderate-income neighborhoods has exacerbated racial inequity, particularly the disparity between African American family wealth and the family wealth of every other ethnic and racial group in the country. As investment-starved neighborhoods continue to decline, so do the assets of the families that own property within them.

Modeled after the successful Housing Credit and NMTC programs, the NHIA would produce new equity investment dollars for the development and renovation of family housing in urban, suburban, and rural neighborhoods. It is estimated that each $1 billion in NHIA investment would result in 25,000 homes built or rehabilitated, $4.25 billion of total development activity, 33,393 jobs in construction and construction-related industries, $1.82 billion in wages and salaries, and $1.25 billion in federal, state, and local tax revenues and fees.

This tax credit would improve property values, increase family wealth, decrease blight and abandonment in distressed neighborhoods, and create more and better housing options, which all indirectly enhance multiple determinants of health and well-being for American families across the country. A currently non-existent financing tool, the NHIA would ultimately help revitalize and bolster our nation's infrastructure where it is needed most, especially for communities of color.

Public Housing

Housing in the 21st century shouldn't just be affordable. It must be safe and healthy, too. Unfortunately, the quality of our existing housing stock has been in decline for decades. Nowhere is this more visible than in public housing. The nation's 1.1 million units of public housing have not been sufficiently maintained, to say the least. Thousands are in need of basic repairs as well as major replacements like new roofs, elevators and water heaters. The shortfalls in funding and neglect of public housing have led to poor outcomes in the lives of low-income Americans. For example, children and adults develop respiratory issues when apartments are infested by pests and mold. Sometimes, this neglect can have dire consequences – carbon monoxide leaks have killed at least 13 public housing residents since 2003.[8]

The issues are so extensive that every year we lose an estimated 10,000 to 15,000 units of public housing simply because they become uninhabitable. This ongoing neglect has led to a capital backlog of $70 billion. This should be address through supplemental funding for the Public Housing Capital Fund. If we aren't able to ensure older affordable properties remain habitable, the pressure to raise rents on the remaining supply of unsubsidized affordable rental homes will increase. These units cannot be replaced at the rents they currently charge, so preservation is the most cost-effective strategy to maintain the existing supply of homes affordable to lower-income renters. Furthermore, following the American Recovery and Reinvestment Act (ARRA) that was passed in 2009, we saw Public Capital Fund dollars move into the economy faster than investments in highway infrastructure.

There are also local examples for how to rebuild and reimagine our public housing, if new resources are made available. The HOPE SF program in San Francisco program is rebuilding, with local dollars, new mixed income developments on former multi acre public housing sites, while ensuring that all current and historic residents have the opportunity to return to renovated units, if they choose. The hundreds of millions of improvements per project will address decades of institutional neglect and will allow for the redevelopment of 2,000 units of public housing with no displacement, plus new affordable and market rate units as well. The HOPE SF program is based in a reparations framework that acknowledges the isolation and marginalization of families of color in large public housing sites, several of which were built as temporary housing for World War II war effort workers, but still stand today. Making more federal funding available for initiatives like this across the country would allow us to scale this first-of-its kind redevelopment and anti-displacement approach for national impact. **We recommend addressing the $70 billion capital backlog in public housing.**

Lead Safe Homes

Exposure to lead, at even low levels, can damage a child's developing brain and cause lifelong problems. For children born in this year alone, lead exposure is estimated to cost the United States nearly $84 billion in reduced productivity, premature mortality, added costs in health care, education, criminal justice, and social assistance over their lifetimes.

Lead poisoning robs children of their potential and is, essentially, irreversible. Preventing lead poisoning before it occurs is imperative. In many of our legacy cities, lead-based paint and the dust that created by lead-based paint is the most common cause of lead exposure. Replacing lead water pipes is crucial, but

[8] Suzy Khimm, ""How Many More People Have to Die?' Carbon Monoxide Kills Two more in Hud Housing". NBC News, May 3, 2019.

we must also remediate homes with deteriorating lead-based paint, to prevent a child from ever being poisoned. In other words, lead poisoning is public health crisis with a housing solution.

In Cleveland, for example, lead poisoning rates are about four times the national average. The Lead Safe Cleveland Coalition is modeling the solution by creating lead safe homes by pairing proactive home inspection with public-private resources for property to remediate their properties. Investment into the creation of lead safe homes not only protects our future generations of children, but it makes a major down payment toward improving our aging housing stock.

Broadband

The pandemic has highlighted the extraordinary importance of bridging the digital divide and providing equitable access to fast, reliable broadband services. Technology has facilitated a shift toward online platforms – from banking to telemedicine – but many communities have been left behind. This is particular true in low-income, rural and Tribal communities where access to broadband can make or break economic growth development. Access can also determine whether residents can access some of their basic needs, whether that be education or healthcare. What's more, people of color, seniors and other low-income residents are significantly more likely to be unable to access internet connections.

More than twenty states have established their own offices to look at expanding access and supporting broadband networks in rural, suburban, urban, and Tribal communities, and to close the current digital divide affecting 18 million Americans based on race, zip code, and household income. Georgia, for example, created a groundbreaking map that identifies broadband dead zones at the address level and created plans to reach 80,000 homes and businesses in rural Georgia over the next 4 years. Virginia has invested $124 million to support connections to over 140,000 homes and businesses, with three times the cost efficiency and six times the build speed of comparable federal programs. And New York City's new "Broadband Where Feasible" program requires all projects receiving HPD new construction capital assistance to be designed, financed, and constructed to provide high-quality internet access and service as part of lease contracts at no additional cost to tenants. **We recommend the provision of additional federal funds with flexible conditions to permit more states and cities to achieve universal broadband access and bring this critical infrastructure to more households.**

Provide High Impact Investments for Proven Federal Affordable Housing Programs

America's existing housing supply is a long-term asset which must be maintained before its quality suffers further from years of financial neglect. Just like improving a municipal water system, investments made in affordable housing pay dividends for all members of the community, driving economic growth, providing access to opportunity, and reducing health care costs for individuals and the government. Appropriating additional money to protect that investment is effective policy and economically sensible asset management.

Partially as a result of constraints placed on policy makers as a result of the 2011 Budget Control Act, HUD's budget has steadily declined over the past decade, which has contributed to the discouraging trend of qualified Americans in need of assistance not receiving support. In fact, since the early 1980s

HUD assistance has failed to reach at least 70% of eligible households. Enterprise supported the proposals put forth in the 116th Congress that demonstrated a commitment to investment in housing such as the *Housing as Infrastructure Act* and the *Moving Forward Act*, as well the Biden-Harris Administration for the outline they provided for the American Jobs Plan. All three of these measures would provide critical federal resources to American families that would enable them to emerge from the other side of this pandemic stronger than ever.

Congress can smooth this recovery, create jobs, help businesses generate income, and keep families safe and thriving in the years to come by ensuring that there is adequate supplemental funding for the following affordable housing and community development programs:

- **The HOME Investment Partnership program (HOME)**. The impact of Covid-19 has been immediate and severe, on low-income residents and people of modest economic means and the mission-driven groups that develop and operate affordable housing for this population. The complexity and diversity of these challenges requires flexible solutions that are capable of meeting local needs as they arise. HOME is our country's most flexible and proven affordable housing program for delivering resources to communities of all sizes, and similar to the Public Housing Capital Fund, HOME was deployed in an effective and efficient manner following the passage of ARRA in 2009. **We recommend the inclusion of $35 billion for HOME.**
- **The Community Development Block Grant (CDBG) program**. CDBG is a critical resource for communities nationwide to invest in low- and moderate-income neighborhoods, producing and preserving homeowner and rental housing, providing fundamental infrastructure, vital public services and public improvements, and spurring economic development and public-private partnerships at the local level. The flexible nature of these funds also allows them to address a wide range of challenges faced by both small rural towns and major metropolitan areas, making it an effective tool for localities in their effort to stabilize and maintain affordable housing and vibrant communities. These funds are commonly also used for water and sewer, sidewalks, and other community infrastructure projects. **We recommend the appropriation of at least $10 billion for CDBG.**
- **The national Housing Trust Fund (HTF).** HTF is a valuable program that exclusively focuses on providing funding to help build, preserve, and renovate housing that is affordable to people with the lowest incomes, including people experiencing homelessness. **We recommend a one-time appropriation of at least $45 billion for the national Housing Trust Fund.** This money would supplement the annual funding that the HTF receives from Government Supported Enterprises (GSEs) and provide the HTF with the resources and certainty it needs to continue its important work.
- **The Section 4 Capacity Building for Community Development and Affordable Housing program**. The economic fallout from Covid-19 is causing financial strain for many local nonprofit affordable housing organizations throughout the country. Section 4 is the Federal Government's most important program for providing flexible operating resources to nonprofit affordable housing and community development organizations and has been used before to sustain local groups during times of economic distress. During the financial crisis, Section 4 received a special appropriation of $28 million in the Recovery Act, allowing high-performing nonprofit enterprises to stay operational until economic circumstances returned to normal. **Enterprise urges Congress**

to provide a supplemental round of funding of at least $40 million for the Section 4 Program to ensure these community development organizations can further expand their important work.

- **Native American Housing Block Grant program.** Our first Americans have extraordinarily high rates of overcrowding and homes that lack kitchens or plumbing. Our national infrastructure package must ensure that tribes and tribally designated housing entities receive resources for expanding the supply of housing and modernizing existing homes. **Enterprise is calling for $2 billion for the Native American Housing Block Grant program to provide them the opportunity and flexibility to design housing programs that fit their unique community needs.**
- **Supportive Housing for the Elderly program (Section 202).** The Section 202 program is the only programs that exclusively provides housing assistance and supportive services for seniors. As we emerge from a pandemic that has had a dramatic impact on our elderly population it is essential, we provide this community with the resources they need to remain stably housed during the recovery, **we recommend $2.5 billion for Section 202**.
- **Supportive Housing for Persons with Disabilities program (Section 811).** According to the Technical Assistance Collaborative, close to five million nonelderly adults with significant and long-term disabilities have Supplemental Security Income levels equal to only 20% of AMI and would be unable to afford housing with out federal assistance. **In order to provide this community with the assistance they deserve, Enterprise urges congress to provide $2.5 billion for Section 811.**
- **Monitoring and Fair Housing Enforcement.** In addition to providing substantial funding for HUD's housing programs listed above, **we recommend the inclusion of $5 billion of funding for HUD monitoring and fair housing enforcement**.
- **The Capital Magnet Fund (CMF)**. CMF grants support the preservation, rehabilitation, development or purchase of affordable housing for low-income communities, as well as related economic development and community service facilities such as day care centers, workforce development centers and health care clinics. The program provides funding that nonprofit developers and lenders cannot find elsewhere – funding to do predevelopment work, create revolving loan funds, establish loan loss reserves, and provide loan guarantees – all critical pieces of affordable housing and community development. **We recommend the inclusion of at least $12 billion for the Capital Magnet Fund**.
- **USDA's Rural Utilities Service (RUS) Programs**. RUS provides much-needed infrastructure to rural communities. These include water and waste treatment, electric power and telecommunications services. All of these services help to expand economic opportunities, improve the quality of life for rural residents and are critical for the provision of safe, sanitary housing. Through Rural Utilities Service Water and Environmental Programs (WEP), rural and tribal communities obtain the technical assistance and financing necessary to develop drinking water and waste disposal systems. The Electric Program provides leadership and capital to maintain, expand, upgrade, and modernize America's vast rural electric infrastructure. Loans to build broadband networks and deliver service to rural households and businesses, provide

capital for rural telecommunications companies and broadband providers. **We recommend the provision of additional funding to support the grant components of these programs to rapidly increase the development of much needed rural infrastructure.**

- **Multifamily Preservation and Revitalization (MPR)**. In many rural communities, the rental housing financed by USDA - mostly through its Section 515 Rural Rental Housing program - is the only affordable housing. According to a 2016 USDA report, the cost to preserve and maintain this portfolio of some 400,000 units over 20 years totals $5.6 billion. According to a recent report by the Housing Assistance Council, mortgage maturing projects between 2016-2027 total over 700 developments and close to 18,000 units per year. Over the next four to five years, maturities will accelerate averaging up to 3,000 developments and up to 92,000 units with that trend continuing through 2050. When these units enter the private market, rent for thousands of families will increase dramatically. **Enterprise recommends providing $1 billion for USDA's Multifamily Housing Preservation & Revitalization Demonstration program.**
- **Rural Community Development Initiative**. Rural low-income areas experience distinct capacity challenges in responding to local affordable housing and community development needs. It's often difficult for these communities to apply for and receive public and private resources due to capacity constraints, which typically include small, under-resourced local governments and fewer community development organizations. The USDA's Rural Community Development Initiative program is an important resource for funding nonprofit housing and community development organizations that invest in housing, community facilities, and community and economic development projects in rural areas. **Enterprise urges Congress to increase the Rural Community Development Initiative to $12 million.**

Ensuring Funds Are Used Strategically and Efficiently

As a matter of good government, all Federal funds come with requirements to ensure taxpayer dollars are used prudently. The magnitude of an infrastructure package invites opportunities to better support recipients through dedicated technical assistance resources. Technical assistance resources enable Federal agencies to support governmental and nonprofit recipients of funding to better plan for and administer their infrastructure programs and projects. The small investment of funds on the front end can set jurisdictions up to absorb supplemental funding quickly and deploy it strategically. Additionally, technical assistance provides support for recipients to better understand and comply with the myriad requirements that necessarily accompany government grants and contracts. **We recommend providing dedicated technical assistance resources for housing and community development programs with appropriations in the infrastructure package.**

Providing Training and Job Opportunities for American Workers

The United States has lagged behind our global competitors for decades in the amount we have invested in work force and labor market developments. The infrastructure package can accomplish multiple objectives, including opening new pathways for Americans looking to increase their skills. **We recommend the provision of dedicated resources for job training to ensure that the nation can have all hands-on deck for our recovery.** Job training allows workers to retool their skills for the modern economy and show up ready to work, no matter what skills are needed. When our workforce is better trained it builds out our capacity as a nation and has a carryover effect within our communities. Focusing on local residents with low incomes allows a meaningful opportunity to take advantage of new employment opportunities in trades with higher wages.

Tracking Results Uniformly Across Programs

The reality of Federal housing and community development programs is that they are scattered across multiple agencies and lack common reporting requirements. It is impossible to compare investments and results on an apples to apples basis. The creation of an historic investment in our nation's recovery should be designed with metrics and evaluation in mind, so that we can identify successes and challenges in order to make mid-course corrections. Common reporting on workers trained, jobs created, and homes rehabilitated or built from the ground up will enable careful study of the trade-offs of multiple approaches to recovery and allow Congress, the Executive Branch, and the public to evaluate how to improve expenditure of taxpayer funds going forward. **We recommend that Congress require common reporting so results can be carefully measured, and accountability is prioritized.**

Conclusion

On behalf of Enterprise Community Partners, I offer my thanks to Chairwoman Waters, Ranking Member McHenry, and the Committee for leadership on these issues and recognition of the need for bold action to move our country forward in a more promising and hopeful direction. On behalf of Enterprise, we look forward to partnering with you on ensuring this infrastructure package delivers jobs, enhanced resilience to our changing climate, increased racial equity, and economic mobility so hard-working American families can build and sustain wealth. Let's seize the opportunity to build back our country stronger than ever before.

Testimony of Diane Yentel
President and CEO of the National Low Income Housing Coalition
Before the House Financial Services Committee
"Building Back Better: Examining the Need for Investments in America's Housing and Financial Infrastructure"
April 14, 2021

Chairwoman Waters, Ranking Member McHenry, and members of the Committee, thank you for the opportunity to testify before this committee on the need for major investments in the nation's housing infrastructure. Thanks to the dedicated and effective leadership of Chairwoman Waters and others, Congress has provided unprecedented resources to address rent and utility arrears accrued during the pandemic, and to house up to 130,000 people experiencing homelessness. Now, significant and sustained investments like those proposed in Chairwoman Waters' "Housing is Infrastructure Act of 2021" are urgently needed to address the pre-pandemic, and continuing, underlying affordable housing crisis.

The National Low Income Housing Coalition (NLIHC) is solely dedicated to ensuring the lowest-income people in our country have safe, accessible, and affordable homes. NLIHC's members include residents of public and assisted housing, people experiencing homelessness and other low-income people in need of affordable homes, housing providers, homeless services providers, fair housing organizations, state and local housing coalitions, public housing agencies, faith-based organizations, and concerned citizens. While our members include the spectrum of housing interests, we do not represent any segment of the housing field. Rather, NLIHC works on behalf of and with people with low incomes who receive or need federal housing assistance, especially extremely low-income people and people who are homeless.

The COVID-19 pandemic and economic collapse of 2020 devastated millions of families; people with low incomes and people of color have been disproportionately impacted. As of early April 2021, more than 555,000 people have died from COVID-19.[1] Decades of structural racism in health, housing and other systems leave Black, Indigenous and other people of color disproportionately likely to contract the virus, be hospitalized, and die during the pandemic.[2]

Racial disparities in housing contribute to these inequitable health outcomes. Black, Native American, and Latino people are disproportionately likely to be renters, extremely low-income, and rent-burdened, and to experience homelessness. [3,4,5] People of color in homes are also more likely to live in overcrowded housing.[6] People experiencing homelessness, overcrowding, or housing instability are at greater risk of COVID-19 because transmission of the virus is more

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[1] The COVID Tracking Project. 2021. Retrieved from: https://covidtracking.com/data
[2] Centers for Disease Control and Prevention (CDC). 2020. COVID-19 hospitalization and deaths by race/ethnicity. Updated March 12, 2021. Retrieved from: https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html
[3] National Alliance to End Homelessness. 2020. "Racial Inequities in Homelessness, by the Numbers." Retrieved from: https://endhomelessness.org/resource/racial-inequalities-homelessness-numbers/
[4] US Census Bureau. 2020. 2019 American Community Survey, 1-yr [data file]. Retrieved from: https://www.census.gov/programs-surveys/acs
[5] National Low Income Housing Coalition. 2021. *The Gap: A Shortage of Affordable Homes*. Washington, DC: Author. See: https://nlihc.org/gap
[6] Airgood-Obrycki, W. 2020. "High-Proximity Jobs and Household Vulnerabilities." Joint Center for Housing Studies of Harvard University. Retrieved from: https://www.jchs.harvard.edu/blog/high-proximity-jobs-and-household-vulnerabilities

likely in congregate shelters and crowded homes, where people are unable to maintain safe social distancing.[7,8]

The pandemic made clear that affordable homes are necessary for individual and public health, but renters have struggled to remain safely and stably housed throughout the pandemic. This housing instability is due in large part to the severe shortage of affordable and available homes for people with the lowest incomes before the pandemic began. Ten million very low-income households struggled to pay rent before the COVID-19 crisis, and they are now in an even more perilous position due to loss of jobs and increased expenses from the pandemic.

NLIHC's annual report, *The Gap: A Shortage of Affordable Rental Homes*, documents the severe shortage of decent, accessible, and affordable homes for extremely low-income people. The report provides estimates of affordable housing needs for each state, the District of Columbia, and the largest metropolitan areas in the U.S. This research demonstrates the housing instability that existed before the pandemic and that contributed to the tremendous needs during the pandemic.

Pre-pandemic, there was a shortage of nearly seven million affordable and available rental homes for America's lowest-income renters earning less than the federal poverty rate or 30% of their area median income (AMI). For every 10 of the lowest-income renters, there are fewer than four homes affordable and available to them. Without affordable options, nearly ten million very low-income households were severely housing cost-burdened pre-pandemic, spending more than half of their incomes on rent and utilities.

Paying most of their limited incomes to keep roofs over their heads, these ten million renter households were one financial shock away from missing rent and facing eviction and, in worst cases, homelessness. The coronavirus and its economic fallout *was* that financial shock. Low-income renters lost jobs and wages, had increased costs, and struggled more than ever to make ends meet.

A patchwork of federal, state, and local resources and protections, including a federal eviction moratorium implemented in September 2020 by the Centers for Disease Control and Prevention (CDC), kept many renters stably housed during the pandemic – but millions of families struggled to pay the rent. The latest estimates indicate that at least 9 million renter households[9] owe over $50 billion in rent and utility arrears[10] and remain at high-risk of losing their homes during the pandemic.

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[7] Nande, A., et al. 2021. "The effect of eviction moratoria on the transmission of SARS-CoV-2." Working paper. Retrieved from: https://www.medrxiv.org/content/10.1101/2020.10.27.20220897v2
[8] Chapman, L. A. C., et al. 2020. Comparison of infection control strategies to reduce COVID-19 outbreaks in homeless shelters in the United States: A simulation study. MedRxiv working paper. Retrieved from: https://www.medrxiv.org/content/10.1101/2020.09.28.20203166v3
[9] Consumer Financial Protection Bureau. 2021. "Housing Insecurity and the COVID-19 Pandemic." Retrieved from: https://www.consumerfinance.gov/data-research/research-reports/housing-insecurity-and-the-covid-19-pandemic/
[10] Zandi, M.,& Parrott, J. 2021. "Averting an Eviction Crisis." Retrieved from: https://www.urban.org/research/publication/averting-eviction-crisis

In response to the pandemic-related housing needs, Congress extended the CDC eviction moratorium through January 2021 (and President Biden further extended it through June 2021) and provided a combined total of $85 billion for housing and homelessness assistance, including $46.5 billion in emergency rental assistance to address rent and utility arrears accrued during the pandemic.

These critically needed resources will go a long way to help renters remain in their homes and to keep people experiencing homelessness safe, healthy, and housed during COVID-19. As the nation recovers from the pandemic, Congress must turn its attention to increasing investments in long-term solutions that address the underlying, structural reasons for our nation's housing crisis, and to advancing the policy and programmatic changes needed to ensure housing programs work for Black, Indigenous, and other people of color.

These solutions, advanced by NLIHC's HoUSed campaign for universal, stable affordable housing[11], include:

1. Expanding rental assistance to make it universally available to all eligible households in need and improving the program to ensure it meets the needs of the lowest-income and most marginalized people;[12]

2. Increasing the supply of housing affordable to people with the lowest incomes through a $70 billion investment to preserve the nation's public housing infrastructure and at least $40 billion to expand the national Housing Trust Fund (HTF);[13]

3. Creating a permanent emergency rental assistance program, through a National Housing Stabilization Fund, to keep families stabilized during a crisis, whether that crisis be another pandemic, a natural disaster, or other financial crisis;[14] and

4. Strengthening and enforcing renter protections to address the power imbalance between renters and landlords, which puts renters at risk of housing instability.[15]

In my testimony today, I will discuss the housing needs of the lowest-income people, the need to invest in vital affordable housing programs through a comprehensive infrastructure and jobs package, and how doing so will help our nation not only recover from the pandemic but thrive in its wake.

[11] National Low Income Housing Coalition. 2021. Housed Campaign. Retrieved at: https://nlihc.org/housed
[12] National Low Income Housing Coalition. 2021. Housed Campaign, "Ensure Universal Rental Assistance." Retrieved from: https://nlihc.org/sites/default/files/Solution_Rental_Assistance.pdf
[13] National Low Income Housing Coalition. 2021. Housed Campaign, "Expand and Preserve the Supply of Affordable Rental Homes." Retrieved from: https://nlihc.org/sites/default/files/Solution_Supply.pdf
[14] National Low Income Housing Coalition. 2021. Housed Campaign, "Provide Emergency Rental Assistance to Households in Crisis." Retrieved from: https://nlihc.org/sites/default/files/Solution_Stabilization_Fund.pdf
[15] National Low Income Housing Coalition. 2021. Housed Campaign, "Expand Renter Protections." Retrieved from: https://nlihc.org/sites/default/files/Solution_Renter-Protections.pdf

Urgent Housing Needs During the Pandemic

The COVID-19 economic recession and its resulting job and wage losses magnified and accelerated the existing affordable housing crisis. More than 20 million renters live in households that have suffered COVID-19-related job loss.[16] While the overall unemployment rate fell to 6.7% by the end of 2020, the Black and Latino unemployment rates were still considerably higher – 9.9% and 9.3%, respectively – and a Federal Reserve analysis finds the unemployment rate for workers in the bottom wage quartile may have been higher than 20%.[17]

Many low-income renters, who are disproportionately people of color, are behind on rent and not confident about their ability to pay in the coming months. In January, 21% of renters reported being behind on rent payments. Among renters earning less than $25,000 per year, over 30% were behind. Renters of color are more likely to be struggling: 29% of Latino renters and 36% of Black renters were behind on rent, compared with 12% of white renters. Nearly one-third of all renters, and nearly half of the lowest-income renters, had no or only slight confidence they could pay next month's rent on time or had deferred payments. Among renters who had fallen behind on rent, over 47% expected an eviction in the next two months, even with eviction moratoriums still in place.[18]

Many renters experiencing cash shortages during the pandemic relied on sources other than income to pay rent. Thirty percent of renters reported using money from government aid or assistance to pay rent, and another 30% indicate that they have borrowed cash or obtained a loan to make rent payments.[19] Tenants also used credit cards to pay the rent, with a 43% increase in the first two quarters of 2020 as compared to the prior year.[20] There is evidence that families shifted their dwindling budgets towards ensuring they paid rent at the expense of other needs. Food pantry requests increased by as much as 2000% in some states,[21] with nearly 30 million Americans reporting they did not have enough food.[22]

A patchwork of federal, state and local resources and protections kept many struggling renters in their homes and helped to avoid an unprecedented eviction crisis that could otherwise have

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[16] Aspen Institute. 2020. "20 million renters are at risk of eviction." Retrieved from: https://www.aspeninstitute.org/blog-posts/20-million-renters-are-at-risk-of-eviction/

[17] Brainard, L. 2021. "Full Employment in the New Monetary Policy Framework." Inaugural Mike McCracken Lecture on Full Employment. Board of Governors of the Federal Reserve System. Retrieved from: https://www.federalreserve.gov/newsevents/speech/files/brainard20210113a.pdf

[18] US Census Bureau. 2021. Household Pulse Survey Data Table, January 6-January 18, 2021. Retrieved from: https://www.census.gov/programs-surveys/household-pulse-survey/data.html

[19] Born, M. 2021. "Rent Payments Increase Slightly in July, but Landlords and Tenants Continue to Struggle." Retrieved from: https://www.avail.co/blog/rent-payments-increase-slightly-in-july-but-landlords-and-tenants-continue-to-struggle

[20] Zego. 2020. "May Rent Payment Data Reveals April Trends Have Continued as a Result of COVID-19." Retrieved from: https://www.gozego.com/articles/may-rent-payment-data-reveals-april-trends-have-continued-as-a-result-of-covid-19/

[21] Golla, B., Javed, I., & Kreuter, M. 2020. "Food Pantries: UPDATED." Health Communication Research Laboratory. Washington University in St. Louis. Retrieved from: https://hcrl.wustl.edu/items/food-pantries-updated/

[22] Andone, D. 2020. "Nearly 30 Million Americans Told the Census Bureau They Didn't Have Enough to Eat Last Week." CNN. Retrieved from: https://www.cnn.com/2020/07/31/us/food-insecurity-30-million-census-survey/index.html

resulted in an estimated 30-40 million people losing their homes by the end of 2020.[23] In addition to resources for housing and homelessness provided in the CARES Act, a federal eviction moratorium issued by the CDC in September 2020, provided vital protections to tens of millions of renters at risk of eviction for nonpayment of rent during the pandemic.

Research conducted on the efficacy of state, local, and federal eviction moratoriums provide further evidence that such moratoriums are effective at both reducing eviction filings[24] and reducing COVID-19 transmission and fatalities. Nationally, researchers found that expired eviction moratoriums led to an additional 433,700 COVID-19 cases and 10,700 associated deaths.[25]

While recent steps taken by the Biden administration to extend the moratorium through June 2021 and to provide greater enforcement of its protections are critically needed, they are not enough.[26] The existing order has significant flaws that undermine its public health benefits and prevent renters from making full use of the moratorium's protections: the order must be strengthened and enforced.

But eviction moratoriums, on their own, are insufficient. The moratoriums postpone but do not prevent evictions because the rent is still due, and renters have fallen behind. Latest estimates show that renters have accrued over $50 billion in rent and utility arrears during the pandemic.[27] To address this urgent need, Chairwoman Waters and others fought for, and Congress ultimately approved, a combined $46.5 billion in Emergency Rental Assistance to address rent and utility arrears and some ongoing needs for housing assistance.

These critical funds will go a long way to addressing the urgent needs of renters. NLIHC is tracking, [28] analyzing,[29] and sharing best practices[30] for ensuring emergency rental assistance is distributed[31] to households most in need and is used to advance racial equity.[32] Federal

[23] Benfer, E., et al. 2020. *The COVID-19 Eviction Crisis: An Estimated 30-40 Million People in America Are at Risk.* https://nlihc.org/sites/default/files/The_Eviction_Crisis_080720.pdf
[24] Hepburn, P. 2021. "Eviction Tracking System." National Call on Coronavirus, Disasters, Housing, and Homelessness. Retrieved from: https://nlihc.org/sites/default/files/COVID-19_National_Call_011921.pdf
[25] Leifheit, K., Linton, S., Raifman, J., Schwartz, G., and Benfer, E., Zimmerman, F., & Pollack, C., 2020. "Expiring Eviction Moratoriums and COVID-19 Incidence and Mortality.". Available at SSRN: https://ssrn.com/abstract=3739576 or http://dx.doi.org/10.2139/ssrn.3739576
[26] National Low Income Housing Coalition, National Housing Law Project, & Eviction Lab. 2020. "Housing Priorities for the Biden-Harris Administration: A Memorandum to the Transition Team." Retrieved from: https://nlihc.org/sites/default/files/Eviction-TM_Biden.pdf
[27] Zandi, M., & Parrott, J. 2021. "Averting an Eviction Crisis." Retrieved from: https://www.urban.org/research/publication/averting-eviction-crisis
[28] National Low Income Housing Coalition. 2021. State and Local Rental Assistance. Retrieved from: https://nlihc.org/rental-assistance
[29] National Low Income Housing Coalition, Housing Initiative at Penn, NYU Furman Center. 2021. "COVID-19 Emergency Rental Assistance: Analysis of a National Survey of Programs." Retrieved from: https://nlihc.org/sites/default/files/HIP_NLIHC_Furman_Brief_FINAL.pdf
[30] Aurand, A., et. al. 2021. "Learning from Emergency Rental Assistance Programs: Lessons from Fifteen Case Studies." Retrieved from: https://nlihc.org/sites/default/files/ERA-Programs-Case-Study.pdf
[31] National Low Income Housing Coalition. 2021. Letter to US Department of Treasury. Retrieved from: https://nlihc.org/sites/default/files/NLIHC-Letter-on-FAQ_03052021.pdf
[32] Aurand, A., et. al. 2021. "Advancing Racial Equity in Emergency Rental Assistance Programs." Retrieved from: https://furmancenter.org/files/Advancing_Racial_Equity_in_Emergency_Rental_Assistance_Programs_-_Final.pdf

policymakers should ensure program administrators set spending thresholds to provide sufficient funding for renters with the lowest incomes and other historically marginalized people, invest in outreach and targeting, simplify applications and documentation, monitor progress, and make mid-course corrections as needed.

The Pre-Pandemic Affordable Housing Crisis

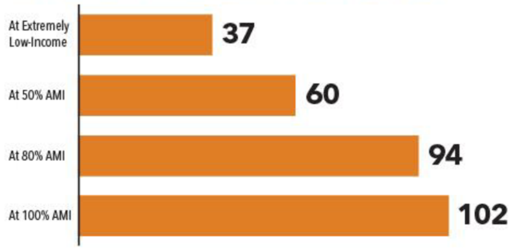
Even before the current COVID-19 pandemic, the country was in the grips of a pervasive affordable housing crisis, impacting rural, suburban and urban communities alike. While the crisis has many dimensions, a fundamental cause of housing instability is the mismatch between what people earn or otherwise have available to spend for their homes and housing costs. Rents have risen much faster than renters' incomes over the last two decades, and since 1960, renters' incomes have increased by only 5% while rents have risen 61%.[33]

The shortage of affordable homes is most severe for extremely low-income (ELI) households whose incomes are at or below the poverty guideline or 30% of their area's median income (AMI), whichever is higher. In California, an ELI renter could be a family of four with two working parents who earn less than $27,050 annually combined, a low-income senior with an income of $18,900, or a single person with a disability relying on an annual income of just under $11,500 from Supplemental Security Income (SSI). In North Carolina, an ELI renter could be a family of four with two working parents earning less than $21,250 annually combined, a low-income senior with an income of no more than $14,900, or a couple with disabilities relying on an annual income of $14,100 from SSI.

NLIHC's *The Gap: A Shortage of Affordable Homes* report demonstrates the shortage of affordable and available homes for households at different income thresholds – those with incomes at 30% of AMI (ELI households), 50% of AMI, and 80% of AMI. Data from this year's *Gap* report shows only 7.4 million affordable rental homes exist for the nation's 10.8 million lowest-income renter households, assuming they spend no more than 30% of their incomes on housing costs.[34] However, only four million homes that rent at affordable prices for extremely low-income renters are available to them, leaving a shortage of 6.8 million affordable and available homes for renters with extremely low incomes. Put another way, only 37 rental homes are affordable and available for every 100 extremely low-income renter households (Figure 1).

[33] Joint Center for Housing Studies of Harvard University. 2018. *The State of the Nation's Housing.* Cambridge, MA: Author. Retrieved from: https://www.jchs.harvard.edu/state-nations-housing-2018
[34] According to HUD, households spending more than 30% of income for these housing costs are considered to be "cost-burdened." Households spending more than 50% are considered to be "severely cost-burdened."

FIGURE 1: AFFORDABLE AND AVAILABLE RENTAL HOMES PER 100 RENTER HOUSEHOLDS, 2019

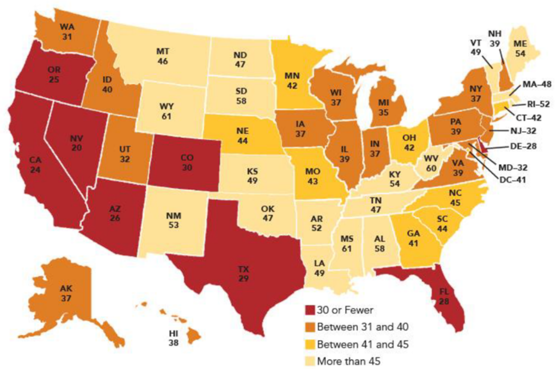


Source: NLIHC tabulations of 2019 ACS PUMS data. AMI = Area Median Income

In Chairwoman Waters' district, there are fewer than 2 affordable and available rental homes for every 10 of the lowest-income households. Across the country, in Ranking Member McHenry's district, there are about 3 affordable and available homes for every 10 extremely-low income renters.[35] Representative Cleaver's district in Missouri is similarly situated, with 3 affordable and available homes for every 10 extremely low-income households, while Representative Stivers's district has 4 affordable homes available for every 10 of the lowest-income renter households.[36] Across the country, there is no state with a sufficient number of homes affordable and available to its lowest-income renters (Figure 2).[37]

[35] National Low Income Housing Coalition. 2021. Congressional District Housing Profiles: California and North Carolina. Washington, DC: Author.
[36] National Low Income Housing Coalition. 2021. Congressional District Housing Profiles: Missouri and Ohio. Washington, DC: Author.
[37] National Low Income Housing Coalition. 2021. *The Gap: A Shortage of Affordable Homes*. Washington, DC: Author. See: https://nlihc.org/gap

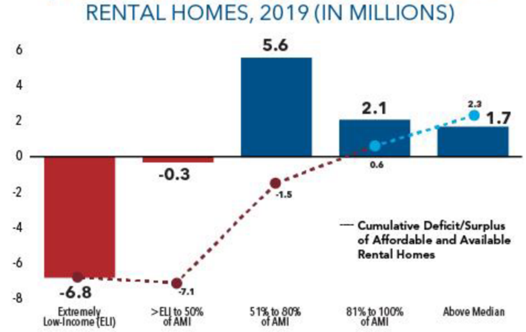
FIGURE 2: RENTAL HOMES AFFORDABLE AND AVAILABLE
PER 100 EXTREMELY LOW INCOME RENTER HOUSEHOLDS BY STATE



Note: Extremely low income (ELI) renter households have incomes at or below the poverty level or 30% of the area median income. Source: NLIHC tabulations of 2019 ACS PUMS Data.

The lack of homes affordable and available to households with incomes above 30% of AMI is driven by the insufficient number of homes for the lowest-income households. Figure 3 shows the incremental change in the shortage or surplus of rental homes available and affordable to households of different incomes.

FIGURE 3: INCREMENTAL CHANGE TO SURPLUS (DEFICIT) OF AFFORDABLE AND AVAILABLE RENTAL HOMES, 2019 (IN MILLIONS)

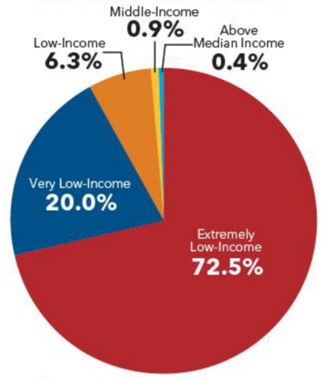


Source: NLIHC tabulations of 2019 ACS PUMS data.

The shortfall of almost 7 million homes available and affordable to extremely low-income households accounts for virtually the entire shortage of affordable homes in the U.S. In areas where very low-income and low-income households have difficulty with housing affordability, it is principally due to extremely low-income households having to rent homes they cannot afford, spending over 50% of their limited income on housing and competing with higher-income families for that limited housing.

Because of the shortage of affordable and available homes, 10.4 million renter households are severely housing cost-burdened, paying more than half of their incomes towards housing. Of these severely housing cost-burdened households, nearly three-quarters have extremely low incomes.[38] Combined, extremely low-, very low- and low-income households account for nearly 99% of all severely cost-burdened renters (see Figure 4).

FIGURE 4: SEVERELY HOUSING COST-BURDENED RENTERS BY INCOME, 2019



Source: NLIHC tabulations of 2019 ACS

Decades of structural racism created tremendous racial disparities in housing and homelessness. Renters of color are much more likely to be housing cost-burdened: 52% of Latino renters and 54% of Black renters are cost-burdened, more than 10 percentage points higher than white renters.[39] Black Americans represent 13% of the general population but are 40% of people experiencing homelessness and more than 50% of homeless families with children.[40] Native communities have some of the most urgent housing needs in the nation – 6% of homes on tribal lands lack adequate plumbing, 12% have inadequate heating, and 16% are

[38] National Low Income Housing Coalition. 2020. *The Gap: A Shortage of Affordable Homes*. Washington, DC: Author.
[39] Joint Center for Housing Studies of Harvard University. 2020. *The State of the Nation's Housing*. Retrieved from: https://www.jchs.harvard.edu/sites/default/files/reports/files/Harvard_JCHS_The_State_of_the_Nations_Housing_2020_Report_Revised_120720.pdf
[40] National Alliance to End Homelessness. 2020. "Homelessness and Racial Disparities." Retrieved from: https://endhomelessness.org/homelessness-in-america/what-causes-homelessness/inequality/

overcrowded, compared to 1-2% of the general population, and 38% of Native households report being housing cost-burdened.[41]

Severe housing cost burdens can have negative consequences for families' physical and mental well-being. Severely housing cost-burdened families spend 74% less on healthcare and 35% less on food than similarly poor households who are not severely cost-burdened; and poor seniors who are severely cost-burdened spend 75% less on healthcare.[42] These households forgo healthy food or delay healthcare or medications to pay the rent. In the worst cases, they become homeless.

Housing cost burdens make it more difficult for extremely low-income households to accumulate emergency savings. Without emergency savings, unexpected costs (such as car repairs, medical bills, etc.) or loss of income (such as reduced work hours) can cause households to fall behind on rent and face eviction. Data from the 2017 American Housing Survey (AHS) show that households in poverty with severe housing cost burdens are more likely to fall behind on rent payments and be threatened with eviction than poor households that are not severely cost-burdened.

Housing instability causes significant disruptions in critical services and economic stability. The lack of stable housing can disrupt the care given to chronically ill individuals, interrupt student learning, and decrease academic achievement.[43] Housing instability can also undermine economic stability by disrupting employment. The likelihood of job loss increases for working low-wage renters who lose their homes (primarily through eviction),[44] indicating that affordable housing and housing subsidies are foundational to employment and economic security.

NLIHC's *Out of Reach: The High Cost of Housing* report estimates each locality's "housing wage," the hourly wage a full-time worker needs to earn to afford a modest apartment. In 2020, the national housing wage was $23.96 per hour for a two-bedroom apartment and $19.56/hour for a one-bedroom rental. The average minimum wage worker must work nearly 97 hours per week (more than two fulltime jobs) to afford a two-bedroom rental home or 79 hours per week (almost exactly two full-time jobs) to afford a one-bedroom rental home at the Fair Market Rent. While the housing wage varies from state to state and county to county, in only 5% of all U.S.

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[41] Walters, A. 2020. "Native American, Alaska Native, and Native Hawaiian Housing Programs." *2020 Advocates Guide.* Retrieved from : https://nlihc.org/explore-issues/policy-priorities/native-american-housing

[42] Joint Center for Housing Studies of Harvard University. 2019. *The State of the Nation's Housing.* Retrieved from https://www.jchs.harvard.edu/sites/default/files/reports/files/Harvard_JCHS_State_of_the_Nations_Housing_2019%20%281%29.pdf

[43] Maqbool, N., Viveiros, J., & Ault, M. 2015. *The Impacts of Affordable Housing on Health*. Retrieved from https://nhc.org/wp-content/uploads/2017/03/The-Impacts-of-Affordable-Housing-on-Health-A-Research-Summary.pdf; Brennan, M., Reed, P., & Sturtevant, L. 2014. *The Impacts of Affordable Housing on Education.* Retrieved from https://nhc.org/wp-content/uploads/2017/03/The-Impacts-of-Affordable-Housing-on-Education-1.pdf

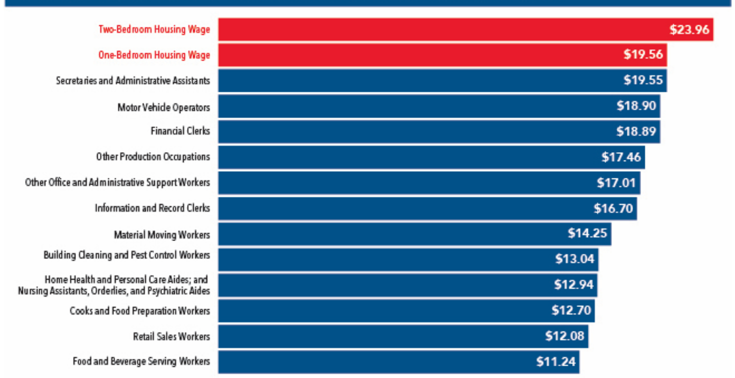
[44] Desmond, M. & Gershenson, C. 2016. *Housing and Employment Instability among the Working Poor.* Social Problems, 63(1): 46-67. Retrieved from https://scholar.harvard.edu/files/mdesmond/files/desmondgershenson.socprob.2016.pdf

counties can a full-time minimum-wage worker afford a one-bedroom rental home at Fair Market Rent.

It is not just minimum wage workers for whom rents are out of reach: the average renter in the U.S. earns approximately $18.22 per hour, $5.74 per hour less than the national two-bedroom housing wage. In 49 states, the District of Columbia, and Puerto Rico, the average renter earns less than the average two-bedroom housing wage.[45]

This mismatch between wages and housing costs will continue. Twelve of the twenty largest occupations in the country, including home health aides, janitors, and food servers, provide a median wage lower than what is needed for a full-time worker to afford modest rental housing (see Figure 5).[46] With wages insufficient to pay for modest rental housing even when individuals work full-time year-round, a brief furlough or loss of hours, as we have seen over the past year, can create debts that renters can never repay.[47]

FIGURE 5: TWELVE OF THE TWENTY LARGEST OCCUPATIONS IN THE UNITED STATES PAY LESS THAN THE HOUSING WAGE



Source: Occupational wages from May 2019 Occupational Employment Statistics, BLS, adjusted to 2020 dollars. Housing wages based on HUD fair market rents.

Declining Federal Resources

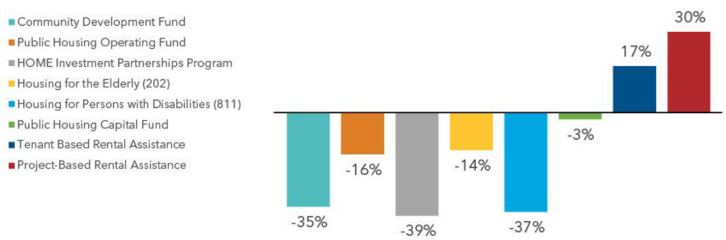
The shortage of rental homes affordable to the lowest-income people is caused by market failure and chronic underfunding of solutions. Without government intervention, decent and affordable homes cannot be reliably built, operated, and maintained at a price the very lowest-income workers, seniors, or people with disabilities can afford. The private market cannot on its own solve this persistent market failure. Government intervention, in the form of subsidies, is

[45] National Low Income Housing Coalition. 2020. *Out of Reach: The High Cost of Housing* [data files]. See: https://nlihc.org/oor
[46] Ibid
[47] National Low Income Housing Coalition. 2020. *Out of Reach: The High Cost of Housing*. Washington, DC: Author

necessary to fill the gap between what people can afford and the costs of developing and operating rental homes. Congress has consistently underfunded housing subsidies such that just one in four households eligible for and in need of housing assistance receives any.[48]

HUD's budget has declined dramatically over the last ten years since the Budget Control Act (BCA) was enacted. Inflation-adjusted federal funding for public housing, housing for the elderly, housing for persons with disabilities, and other important programs has fallen precipitously since FY2010. Only funding for tenant-based and project-based rental assistance programs has modestly increased to keep up with the rising operating cost for previously authorized assistance (see Figure 6).

FIGURE 6: CHANGES IN FUNDING LEVELS FOR KEY HUD PROGRAMS (FY10 TO FY21)



March 2021. Adjusted for inflation.

Solutions: Priorities for the American Jobs Plan Act

To end homelessness and housing poverty once and for all, Congress must advance anti-racist policies and significantly expand investments in affordable housing for America's lowest-income and most marginalized households.

President Biden announced on March 31 his priorities for the "American Jobs Plan," an approximately $2 trillion infrastructure and recovery package. The president's proposal includes $213 billion overall for housing, including $40 billion to make much needed repairs to public housing, as well as resources to support homeownership and weatherize homes, and new incentives to encourage communities to eliminate exclusionary zoning and harmful land-use restrictions.

Chairwoman Waters introduced on April 12, 2021 the "Housing is Infrastructure Act of 2021," which outlines essential resources needed to meaningfully address the needs of the lowest-income renters. These resources include $70 billion to fully address the capital needs backlog and repair the nation's disinvested public housing stock and $45 billion for the construction of

[48] Center on Budget and Policy Priorities. 2017. "Three Out of Four Low-Income At-Risk Renters Do Not Receive Federal Rental Assistance." Retrieved from: https://www.cbpp.org/three-out-of-four-low-income-at-risk-renters-do-not-receive-federal-rental-assistance

new units of deeply affordable housing through the national Housing Trust Fund. NLIHC strongly supports these investments: Chairwoman Waters' bill should form the basis of the housing provisions in the American Jobs Plan Act.

NLIHC urges that any final infrastructure package:

- Make rental assistance available to all eligible households;
- Preserve and expand the country's affordable housing infrastructure with:
    - $70 billion to repair and preserve public housing; and
    - At least $40 billion for the national Housing Trust Fund to build and preserve nearly 200,000 homes affordable to people with the lowest incomes.[49]

As Congress invests robust resources into communities, it must also advance necessary reforms and improvements to ensure these investments undo the legacy of racism and discrimination rooted in our housing system.

Make Rental Assistance Available to All Eligible Households

Rental assistance is a critical tool for helping the lowest-income people afford decent, stable homes, and avoid housing insecurity or homelessness, but 3 out of 4 households who qualify for rental assistance do not receive it because of chronic underfunding. Expanding rental assistance to meet the needs of all housing cost-burdened households is key to any successful strategy to solve the affordable housing crisis.

Housing Choice Vouchers (HCV) are a proven solution to homelessness and housing poverty. Vouchers help people with the lowest incomes afford housing in the private market by paying landlords the difference between what a household can afford to pay for rent and the rent itself, up to a reasonable amount. Housing vouchers are flexible — for instance, families may use them to rent homes that best meet their needs, including in areas with higher performing schools and greater access to jobs and transportation. Housing vouchers may also be tied to a specific housing development in a way that facilitates the development's financing and makes it easier for property owners to provide health and other services some people need.

Congress should make housing vouchers universally available to those in need. As a first step, Congress should enact the "Family Stability and Voucher Opportunity Act," introduced by Senators Chris Van Hollen (D-MD) and Todd Young (R-IN). This bipartisan bill would create 500,000 new housing vouchers for families with young children and provide mobility counseling and case management to help families who choose to move to areas with higher performing schools and lower poverty rates.[50] To ensure greater racial equity, Congress must bar

[49] Parrott, J. & Zandi, M. 2021. *Overcoming the Nation's Daunting Housing Supply Shortage.* Urban Institute. Retrieved from: https://www.urban.org/sites/default/files/publication/103940/overcoming-the-nations-daunting-housing-supply-shortage.pdf

[50] Senator Chris Van Hollen. December 18, 2019. Press release: Van Hollen, Young introduce bipartisan bill to dramatically increase affordable housing vouchers. Retrieved from:

discrimination based on source of income (e.g., housing vouchers), sexual orientation, gender identity, and marital status.

While vouchers are the most common form of rental assistance, other promising policy innovations could be used to reach more families such as creating a new federal renters' tax credit. A variety of renters' tax credit proposals have been advanced, including some that would target aid to the nation's lowest-income and most marginalized households.[51]

Preserve Affordable Housing Infrastructure

Congress must provide robust resources to preserve the existing affordable housing stock, including the roughly 900,000 public housing units that are currently home to over 1.5 million residents, predominantly people of color. Like other federal housing investments, public housing provides people with low incomes with the affordable, stable homes.

Congress has underfunded public housing for decades. More recently, between 2000 and 2016, funding for public housing repairs declined 53%, while funding for public housing operations met the need only three times.[52] Between 2010 and 2016 alone, Congress cut public housing funding by $1.6 billion. While Congress recently increased funding for public housing in fiscal years 2020 and 2021, overall funding for the program remains 13% lower than the FY10 funding level.

These decades of declining resources have threatened the quality and existence of public housing. With limited funding, many public housing agencies (PHAs) are unable to make needed repairs to preserve these homes. As a result, our country loses 10,000 to 15,000 public housing apartments each year to obsolescence or decay,[53] as other public housing units fall into deep disrepair. In 2010, the country's public housing had a $26 billion capital-needs backlog, which is estimated to grow by $3.4 billion each year. Today, the funding needed to address capital repairs in public housing is estimated to exceed $70 billion.[54]

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https://www.vanhollen.senate.gov/news/press-releases/van-hollen-young-introduce-bipartisan-bill-to-dramatically-increase-affordable-housing-vouchers

[51] Galante, C. et al. 2016. "The FAIR Tax Credit: A Proposal for Federal Assistance in Rental Credit to Support Low Income Renters." Terner Center for Housing Innovation, UC Berkley, http://ternercenter.berkeley.edu/uploads/FAIR_Credit.pdf; Fischer, W. et al. 2017. "Renters' Credit Would Help Low-Wage Workers, Seniors, and People with Disabilities Afford Housing." Center on Budget and Policy Priorities, https://www.cbpp.org/research/housing/renters-credit-would-help-low-wage-workers-seniors-and-people-with-disabilities ; Patenaude, P. et al. 2013. "Housing America's Future: New Directions for National Policy." Bipartisan Policy Center, https://bipartisanpolicy.org/report/housing-americas-future-new-directions-national-policy/ .

[52] Rice, D. 2016. *Cuts in Federal Assistance Have Exacerbated Families' Struggles to Afford Housing*. Center on Budget and Policy Priorities. Retrieved from https://www.cbpp.org/research/housing/chart-book-cuts-in-federal-assistance-have-exacerbated-families-struggles-to .

[53] National Low Income Housing Coalition. 2018. *Advocates Guide*. Washington, DC: Author. See: https://nlihc.org/sites/default/files/AG-2018/2018_Advocates-Guide.pdf

[54] The "Transportation, Treasury, Housing and Urban Development, Judiciary, and Independent Agencies Appropriations Act of 2008" directed HUD to perform an updated Capital Needs Assessment for the public housing portfolio. (The previous assessment was conducted in 1998.) HUD selected Abt Associates to conduct the assessment, which was published as Capital Needs in the Public Housing Program (Contract # C-DEN-02277- TO001) on November 24, 2010. The assessment estimated total

Congress should enact the "Housing is Infrastructure Act of 2021" to provide $70 billion to eliminate the public housing capital needs backlog and ensure public housing is safe, decent, and affordable for all current and future residents. Additionally, to meaningfully address the severe shortage of affordable, available housing, Congress must repeal the Faircloth Amendment, which prohibits the construction of new public housing units that result in a net increase to a PHA's overall stock of housing. With Faircloth in place, PHAs can create few new public housing units without demolishing or disposing of other units. Repealing the amendment would allow for the first expansion of public housing in decades, increasing the supply of homes available to extremely low-income renters.

Expand Affordable Housing Infrastructure

To further expand the affordable and accessible housing stock, Congress should provide at least $40 billion annually to the national Housing Trust Fund (HTF), a dedicated funding stream to efficiently build, rehabilitate, preserve, and operate rental housing for extremely low-income people. A one-time investment of $40 billion in the HTF would support the construction and preservation of more than 192,000 rental homes affordable to people with the lowest incomes, while creating 260,000 jobs.[55].

Capital investments in the HTF can also be used to assist states and cities with acquiring hotels and motels currently being funded during the pandemic by the Federal Emergency Management Agency (FEMA) to convert these and other commercial spaces into the permanent supportive housing needed to ensure stable homes for individuals experiencing homelessness.

Several House Financial Services Committee members have long championed programs to expand the supply of affordable, accessible housing. Chairwoman Waters introduced the "Housing is Infrastructure Act of 2021" to invest $45 billion in the HTF to support the creation of more than 211,000 new units of housing that would be affordable to the lowest-income households.[56] Representatives Ayanna Pressley and Rashida Tlaib were original co-sponsors of the "Housing and Economic Mobility Act," which proposed funding the HTF at $44.5 billion.[57]

In addition, the federal government should incentivize or require state and local governments that receive federal transportation and infrastructure funding to reduce regulatory and zoning barriers that increase the cost of development and limit housing supply for all renters. The

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capital needs of the nation's public housing portfolio in 2010 to be $25,607,944,000. In addition, the assessment noted that "assuming that existing capital needs were completely addressed, each year approximately $3.4 billion would be required to address the ongoing accrual needs, or on average $3,155 per unit." Extrapolating the $3.4 billion in accrual needs each year from 2010 until 2019, the capital needs backlog is currently estimated to be $56.6 billion.

[55] Parrott, J. & Zandi, M. 2021. *Overcoming the Nation's Daunting Housing Supply Shortage.* Urban Institute. Retrieved from: https://www.urban.org/sites/default/files/publication/103940/overcoming-the-nations-daunting-housing-supply-shortage.pdf

[56] House Financial Services Committee. June 30, 2020. Press release: House infrastructure package contains Chairwoman Waters' housing infrastructure bill. Retrieved from: https://financialservices.house.gov/news/email/show.aspx?ID=2GN62MEPYV5KUKQBK6GTHHPGXI

[57] Senator Elizabeth Warren. March 13, 2019. Press release: Warren and colleagues reintroduce historic legislation to confront America's housing crisis. Retrieved from: https://www.warren.senate.gov/newsroom/press-releases/warren-and-colleagues-reintroduce-historic-legislation-to-confront-americas-housing-crisis

"Housing, Opportunity, Mobility and Equity Act," introduced by Representative Jim Clyburn (D-SC) and Senator Cory Booker (D-NJ), would require localities receiving Community Development Block Grants and Surface Transportation Block Grants to develop a strategy for inclusive zoning policies. In addition to providing robust investments in public housing and the HTF, Chairwoman Waters' "Housing is Infrastructure Act" includes $10 billion to be spent in part on eliminating zoning and other requirements that limit affordable housing development.

All federal investments to increase the supply of affordable rental housing must require states and communities to affirmatively further fair housing. By fostering integration, Congress can make certain that renters have fair and affordable housing options in all communities. Congress should also ensure that localities prevent the displacement of low-income and marginalized renters during development to allow long-term residents to continue to remain in their communities.

Other Needed Solutions

In addition to including these essential investments in the American Jobs Plan Act, Congress must advance other needed solutions, including:

A National Housing Stabilization Fund

Congress should create a National Housing Stabilization Fund to provide emergency rental assistance to the lowest-income households to prevent housing instability and homelessness. Temporary assistance can stabilize households experiencing economic shocks, whether caused by a pandemic, a natural disaster, or an everyday financial emergency, *before* such shocks cause housing instability and homelessness which may require more prolonged, extensive and expensive housing assistance. Today, tens of millions of households are one financial setback (e.g., a broken-down car, an unexpected medical bill, job loss, etc.) away from major economic hardship that could quickly spiral out of control.

The bipartisan "Eviction Crisis Act" introduced by Senators Rob Portman (R-OH) and Michael Bennet (D-CO) and cosponsored by Senators Brown (D-OH) and Young (R-IN) would create an emergency stabilization fund to provide financial assistance to cover the gaps between income and rental costs during a financial crisis. The bill would also provide housing stability services, such as counselors and legal aid. When combined, short-term housing assistance and support services can significantly reduce evictions and homelessness.

Robust Renter Protections

Affordable, accessible housing and robust housing choice are the foundations upon which just and equitable communities are built. However, the power imbalance between renters and landlords put renters at greater risk of housing instability and homelessness.

Despite the broad and lasting consequences of evictions, only 10% of renters in eviction court receive legal representation, compared to 90% of landlords.[58] In many states, landlords can

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[58] Desmond, M. 2015. "Unaffordable America: Poverty, Housing, and Eviction." Institute for Research on Poverty. Retrieved from: https://www.irp.wisc.edu/publications/fastfocus/pdfs/FF22-2015.pdf

evict renters for no reason, and there are no federal protections against arbitrary, retaliatory, or discriminatory evictions or other abusive practices by some landlords. Discrimination by some landlords against renters prevents households from effectively using federal, state, or local rental assistance, and is often a pretext for illegal discrimination against renters of color, women, and people with disabilities. Some landlords evict survivors of domestic or intimate partner violence because of the actions of their abusers, or refuse to rent to survivors, putting them at greater risk of housing instability and homelessness.

Congress should enact legislation to better protect renters. Establishing a national right to counsel would help more renters stay in their homes and mitigate harm when eviction is unavoidable. Banning credit reporting agencies from including eviction-related information after three years would stop evictions from following families for years. Creating “just-cause” eviction protections would ensure greater housing stability, particularly for survivors of violence. Prohibiting discrimination against source of income would help renters more effectively use federal housing assistance and help prevent other unlawful forms of discrimination.

The Case for Increased Federal Investments in Affordable Homes

Investing in affordable housing solutions improves lives and saves the federal government money. Research clearly demonstrates that housing is inextricably linked to an array of positive outcomes in other sectors.

Education: Student achievement is maximized when students can go home to stable, affordable homes. Low-income children in affordable homes perform better on cognitive development tests than those in unaffordable homes.[59] Low-income students who are forced to change schools frequently because of unstable housing perform less well in school and are less likely to graduate,[60] and continual movement of children between schools disrupts learning for all students in the classroom because more time is required for review and catch-up work.[61] When affordable housing options are located in high-opportunity areas with low-poverty and economically diverse schools, they can dramatically lift the academic performance of low-income students and narrow the achievement gap between them and their more affluent

[59] Newman, S.J. & C.S. Holupka. 2015. *Housing Affordability and Child Well-Being.* Housing Policy Debate, 25(1), 116-151. Retrieved from https://www.tandfonline.com/doi/abs/10.1080/10511482.2014.899261

[60] Voight, A., Shinn, M., & Nation, M. 2012. *The Longitudinal Effects of Residential Mobility on the Academic Achievement of Urban Elementary and Middle School Students*. Educational Researcher, 41(9), 385-392. Retrieved from http://journals.sagepub.com/doi/pdf/10.3102/0013189X12442239; Cunningham, M., & MacDonald, G. 2012. *Housing as a Platform for Improving Education Outcomes among Low-Income Children*. Washington, DC: Urban Institute. Retrieved from: http://www.urban.org/sites/default/files/publication/25331/412554-Housing-as-a-Platform-for-Improving-Education-Outcomes-among-Low-Income-Children.PDF; Fischer, W. 2015. *Research Shows Housing Vouchers Reduce Hardship and Provide Platform for Long-Term Gains Among Children.* Washington, DC: Center on Budget and Policy Priorities. Retrieved from http://www.cbpp.org/sites/default/files/atoms/files/3-10-14hous.pdf

[61] Cunningham, M., & MacDonald, G. 2012. *Housing as a Platform for Improving Education Outcomes among Low Income Children*. Washington, DC: Urban Institute. Retrieved from: https://www.urban.org/sites/default/files/publication/25331/412554-Housing-as-a-Platform-for-Improving-Education-Outcomes-among-Low-Income-Children.PDF

peers.[62] Across the country, low-income families are priced out of the strongest schools; housing near high-performing public schools costs 2.4 times more than housing near low-performing public schools.[63]

Health: Decent, stable, affordable homes are a major social determinant of health and are linked to better health outcomes throughout a person's lifespan. Children who experienced prenatal homelessness are 20% more likely to have been hospitalized since birth. Children who experienced post-natal homelessness are 22% more likely to have been hospitalized since birth.[64] In 2011, families living in unaffordable homes spent one-fifth as much on necessary healthcare compared to those in affordable housing.[65] When people have access to good affordable housing, primary care visits increase by 20%, ER visits decrease by 18%, and total Medicaid expenditures decrease by 12%.[66] Children's HealthWatch estimates that the U.S. will spend $111 billion over the next ten years in avoidable healthcare costs because of housing instability.[67]

Racial Equity: Affordable homes located in economically diverse neighborhoods can help reduce residential segregation and concentrations of poverty. Today, one in four Black families and one in six Latino families live in neighborhoods of concentrated poverty, compared to only one in 13 white families. A recent study by the Urban Institute found that if Chicago reduced its residential segregation just to the national median, incomes for African Americans would rise by $2,982 per person per year, regional GDP would increase by $8 billion, the homicide rate would decrease by 30%, residential real estate values would increase by $6 billion, and 83,000 more adults would complete bachelor's degrees.[68]

Economic Mobility: Affordable homes can also help children climb the income ladder as adults. Economist Raj Chetty and his team looked at low-income children whose families used housing vouchers to access affordable homes located in neighborhoods with lower poverty. These children were much more likely to attend college, less likely to become single parents, and more likely to earn more as adults. In fact, younger children who moved to lower-poverty neighborhoods with a housing voucher earned an average of $302,000 more over their lifetimes

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[62] Schwartz, H. 2010. *Housing Policy is School Policy.* Washington, DC: The Century Foundation. Retrieved from https://tcf.org/content/commentary/housing-policy-is-school-policy/.
[63] Rothwell, J. 2012. *Housing Costs, Zoning, and Access to High-Scoring Schools.* Washington DC: Brookings Metropolitan Policy Program. Retrieved from https://www.brookings.edu/wp-content/uploads/2016/06/0419_school_inequality_rothwell.pdf
[64] Sandel, M., et. al. 2016. *Housing as a Healthcare Investment*. National Housing Conference and Children's HealthWatch. Retrieved from https://www.opportunityhome.org/wp-content/uploads/2018/02/Housing-as-a-Health-Care-Investment.pdf
[65] Joint Center for Housing Studies of Harvard University. 2013. *The State of the Nation's Housing.* Retrieved from http://www.jchs.harvard.edu/sites/default/files/son2013.pdf
[66] Wright, B., et. al. 2016. *Health in Housing.* Center for Outcomes Research and Education. Retrieved: https://www.enterprisecommunity.org/download?fid=5703&nid=4247
[67] Poblacion A, Bovell-Ammon A, Sheward R, Sandel M, Ettinger de Cuba S, Cutts D, Cook J. 2017. *Stable Homes Make Healthy Families*. Children's HealthWatch Policy Action Brief. Retrieved from: http://childrenshealthwatch.org/wp-content/uploads/CHW-Stable-Homes-2-pager-web.pdf
[68] Pendall, R., Acs, G., & Trekson, M. 2017. *The Costs of Segregation*. Urban Institute and Metropolitan Planning Cancel. Retrieved: https://www.metroplanning.org/work/project/33

compared to their peers in higher-poverty neighborhoods.[69] In 2015, the Children's Defense Fund modeled an expansion of the Housing Choice Voucher program and found that expanding these housing subsidies would reduce child poverty by 20.8% and lift 2.3 million children out of poverty.

Economic Productivity: Investments in affordable homes are a proven catalyst for economic growth, job creation, increased government revenue, and increased consumer spending. According to the National Association of Home Builders, building 100 affordable homes generates $11.7 million in local income, 161 local jobs, and $2.2 million in taxes and other revenues for local government. The high costs of housing are limiting opportunities for people to increase their earnings, which, in turn, slow GDP growth. Researchers estimate that GDP growth between 1964 and 2009 would have been 13.5% higher if families had better access to affordable homes. This GDP increase would have meant a $1.7 trillion increase in income, or $8,775 in additional wages per worker.[70]

Food Security: When rent eats up an already limited paycheck, low-income families have fewer resources to buy adequate and nutritious food. Low-income families living in affordable homes experience greater food security and their children are 52% less likely to be seriously underweight compared to those who are cost-burdened by rent.[71]

Criminal Justice: Individuals transitioning out of the criminal justice system face many housing obstacles and are vulnerable to homelessness. They need good places to call home so they can reconnect with society and rebuild their lives. Formerly incarcerated individuals who find stable affordable housing are less likely to go back to jail than those who do not.[72]

Veterans: After serving our country, veterans need access to decent, stable, affordable homes so they can thrive in the neighborhoods they swore to defend. Rental assistance for veterans has proven highly effective in dramatically reducing veteran homelessness, but there remains significant unmet need.[73]

The evidence is abundantly clear that being able to afford a decent home in the neighborhood of one's choice is a prerequisite for opportunity in America. The promise of better health, racial

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[69] Chetty, R., Hendren, N., & Katz, L. 2015. *The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment*. Cambridge, MA: National Bureau of Economic Research. Retrieved from http://www.nber.org/mtopublic/final/MTO_IRS_2015.pdf.

[70] Moretti, E. & Hsieh, C. 2015. *Housing Constraints and Spatial Misallocation*. American Economic Journal: Macroeconomics. Retrieved from https://www.nber.org/system/files/working_papers/w21154/w21154.pdf

[71] Children's HealthWatch and Medical-Legal Partnership of Boston. 2009. *Rx for Hunger: Affordable Housing*. Retrieved from: https://www.issuelab.org/resources/5379/5379.pdf

[72] Fontaine, J. 2013. *The Role of Supportive Housing in Successful Reentry Outcomes for Disabled Prisoners*. Cityscape: A Journal of Policy Development and Research, 15(3). US Department of Housing and Urban Development. Retrieved from: https://www.huduser.gov/portal/periodicals/cityscpe/vol15num3/ch3.pdf

[73] Fischer, W. 2014. *Rental Assistance Helps More than 340,000 Veterans Afford Homes, but Large Unmet Need Remain*. Center on Budget and Policy Priorities. Retrieved from: https://www.cbpp.org/research/rental-assistance-helps-more-than-340000-veterans-afford-homes-but-large-unmet-needs

equity, increased economic opportunity, and quality education can be fulfilled only if our nation's families have safe, decent, accessible, affordable homes.

Conclusion

Significant and sustained investments are needed to preserve and expand our nation's affordable housing infrastructure. NLIHC looks forward to working with this committee, and all of Congress, to advance the "Housing is Infrastructure Act of 2021" and achieve the large-scale, sustained investments and reforms necessary to begin to end housing poverty and homelessness in our country, once and for all.

Thank you for the opportunity to testify today. I look forward to your questions.

Build Back Better: Investing in Equitable and Affordable Housing Infrastructure

Committee on Financial Services
U.S. House of Representatives

April 14, 2021

Testimony Submitted by the Action Center on Race and the Economy (ACRE)

The COVID-19 crisis is the latest illustration of what happens when we don't treat housing as a right and when we don't invest in housing as infrastructure. Estimates were that tenants could owe as much as $70 billion in rental arrears, and that as many as 40 million renters were at risk of losing their homes.[1] Meanwhile, building on their gains in the aftermath of the 2008 Foreclosure Crisis, the largest corporate landlords and private equity firms have amassed over $245 billion and counting, with plans to expand their reach into our housing even further.[2]

These are symptoms of a dysfunctional system where we prioritize housing as a commodity, not as shelter, and not as a guaranteed right.

By embracing housing as infrastructure, we have the opportunity to center Black, Indigenous, and other communities of color most harmed by our racialized housing system, via redlining, urban renewal, predatory debt, the many negative causes and outcomes of the foreclosure crisis, environmental racism, disproportionate evictions and homelessness, and now, outsized housing debt during the pandemic.

The throughline that explains our current situation is our decision as a country, to treat housing as an investment vehicle, for homeowners to enter the middle class, and more insidiously, for investors as an asset to ensure consistent returns. This has included treating racialized mortgage debt as our default national housing policy. Where public housing once filled the role of housing infrastructure, it has been gutted for decades in favor of public-private subsidy programs that operate as huge benefits to the real estate industry. What's clear is that the set of programs we relied on before the pandemic are woefully inadequate in both design and in scale.

The bulk of U.S. subsidy programs have translated to more of our housing owned by a few corporations, like Low Income Housing Tax Credits, Project-Based Section 8, Section 8 vouchers, and more. What's more, these programs don't address the climate crisis, and because they are subject to a profit-driven housing market, new subsidized construction easily perpetuates environmental racism, building on the cheapest land in floodplains, underneath highways, or near other toxic hazards. It is little surprise that communities of color are overrepresented in these developments, as documented in a recent report looking at Project-

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[1] https://www.bloomberg.com/news/articles/2020-12-10/u-s-households-may-be-70-billion-behind-on-rent; https://nlihc.org/sites/default/files/The_Eviction_Crisis_080720.pdf
[2] https://ips-dc.org/wp-content/uploads/2021/03/Cashing-in-on-Our-Homes-FINAL-revised.pdf p. 3; https://www.perenews.com/ares-raises-1-7bn-for-its-largest-ever-us-real-estate-equity-fund/

Based Section 8 developments in Houston.[3] There is a real concern that if we stick with these subsidy programs, the next economic recovery package will exacerbate environmental racism and continue the consolidation of our homes in the hands of a few very large landlords.

In the aftermath of the 2008 Foreclosure Crisis, private equity companies swooped into our homes. Blackstone-backed Invitation Homes emerged as the single biggest landlord in the country. This happened through federal programs like the Distressed Asset Stabilization Program, bulk sales by the Federal Housing Finance Agency, and more. The federal government directly facilitated the transfer of wealth from households to Wall Street. And in the worst cases, many of these prior homeowners wound up renting homes they used to own from this new class of landlord with terrible consequences. While our housing crisis looks slightly different today, many investors are waiting to deploy their hundreds of billions into what is now a proven market.

For example, Investment company Ares Management has signaled their intentions, raising their largest ever U.S. real estate fund ($1.7 billion) with an eye towards senior housing and single family rental properties.[4] There is a growing consensus that the flood of opportunities will come in the next year, once federal support to families sunset, and that single family rental, multifamily, senior housing, and property technology (proptech) are the winning bets.[5] All while countless families, many of them Black, indigenous and other people of color, have lost their homes to eviction, foreclosure, or are facing thousands in debt once the CDC moratorium lifts.

Because of Covid-19 crisis there are as many as 10 million renters who owe thousands in back rent.[6] Even with the passage of the American Rescue Plan, research by the Philadelphia Federal Reserve suggests that rental debts will tick back up for the nearly 2 million households with outstanding debt after September 2021, and that will disproportionately impact women led households and people of color.[7] The solutions we need must ensure no one carries a burden from this pandemic, whether it is money owed or the inability to rent again because of an eviction on a legal record or credit report.

Our communities can't afford for us to double down on the harms of our current broken and abusive housing system. Instead, we need to aggressively fund truly and permanently affordable, community-owned housing that is resilient in the face of the growing climate disaster, that curbs gambling with our homes, and protects frontline communities who are most vulnerable precisely because they have historically borne the brunt of our racist housing policies.

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[3] https://texashousers.org/unsafe-unsanitary-unequal/
[4] https://www.perenews.com/ares-raises-1-7bn-for-its-largest-ever-us-real-estate-equity-fund/
[5] https://www.bloomberg.com/news/articles/2021-04-06/with-1-trillion-of-distress-gone-debt-pickers-fight-for-scraps?sref=CZcaXeEr
[6] https://www.moodysanalytics.com/-/media/article/2021/averting-an-eviction-crisis.pdf
[7] https://www.philadelphiafed.org/-/media/frbp/assets/community-development/reports/household-rental-debt-during-covid-19-update-for-2021.pdf

Appendix I: Personal Impact Testimonies

Keisser Alvarez (Houston, TX)

When Keisser's apartment burnt down in Houston, TX, property managers forced her family to live in the damaged unit. Between COVID, the disastrous winter storm, and the fire, they barely have enough money to pay rent on time and in full. "I'm afraid that after the moratorium expires my family will revisit the traumatic experience of being homeless," she says. "Unfortunately, we are far from alone. There are countless other families like ours in the Houston area that have had similar experiences because the city lacks local protections for tenants. Apartment owners don't have anyone holding them accountable for unjust landlord practices."

Sybil Sybille (Houston, TX)

Sybil Sybille is a disabled veteran who used the CDC moratorium to resist her landlord's threats to evict. Although she has been able to stay, she is facing thousands of dollars in back-rent. "I don't want to be put out on the street, but I can't pay that.", she stated. Sybil, like many Houstonians, cannot afford to pay back almost a year of rent. We need better solutions for renters who will be unable to pay their debts.

Hector Huezo (Compton, CA)

Hector and his wife, Nicole, are first time homeowners and foster parents in Compton, CA, where it's been reported that residents pay the highest water rates and sewer maintenance fees in the country. Two recent fires at industrial businesses, located close to residential homes, created community outrage over reported low water pressure in the fire hydrant system that contributed to delays in fighting the fires. In addition to the public safety concerns, the water in Hector's home remained brown for two days following extensive hydrant usage. Hector and Nicole were not alone in this experience and their neighbors share deep concerns about water infrastructure maintenance especially after paying so much in fees.

Cipriano Belser (Los Angeles, CA)

Cipriano Belser moved from the San Francisco Bay Area to Los Angeles in 2011. Securing and maintaining decent housing has been a struggle for him during his 10 years in the city, due to a lack of renter protections and the degraded building conditions of his apartments. Since moving here, he has lived in 8 different units from Elysian Valley to South LA. In one case, his landlord increased his rent by $100/month while refusing to address roach and mice issues in Silverlake. In his Boyle Heights unit, he found a pipe leaking under his duplex that caused black mold, eating its way through his and his neighbors' shared bathroom walls. Cipriano's neighbors did raise this issue with the landlord out of fear that contacting them about it would get them evicted. Cipriano found himself having to either frequently move from slumlord to slumlord as rent prices rose or having to endure poor housing conditions because he couldn't pull together a security deposit and first month's rent to move.

Sherena Walton (Sacramento, CA)

Sherena, who is currently doing heroic work as a medical assistant intern at the Del Paso Heights COVID-19 vaccination clinic, is a single mother of two aged 9 and 5. Sherena was evicted this month due to nonpayment of rent during the pandemic. Despite California state SB 91 protections, which protect tenants from these types of evictions, the courts moved forward with her eviction. While the landlord's aggressive campaign to get Sherena and her girls out of the house succeeded, the landlord expressed to Sherena's lawyers their full intent to apply for SB 91 rental assistance funds to recoup rent debt from Sherena.

Eric Marsh (Philadelphia, PA)

Eric Marsh lives in West Philadelphia with his two children. He grew up in the Nicetown neighborhood of North Philadelphia, where the majority of his family still lives. When he went to look for a house to rent for his family in Nicetown, he was unable to find any housing that was both affordable and livable. Nicetown had been deeply impacted by the 2008 financial collapse, with many unable to afford the upkeep of their homes. The lack of recovery for the Nicetown neighborhood led to lowered housing stock that was sometimes in unsafe and dilapidated condition. In response, Eric moved to a different neighborhood in Philadelphia further away from his extended family.

Testimony of Principal Chief David W. Hill for the House Financial Services Committee Hearing: Build Back Better: Investing in Equitable and Affordable Housing Infrastructure

April 23, 2021

The Honorable Maxine Waters, Chair,
The Honorable Patrick McHenry, Ranking Republican Member
House Financial Services Committee
2129 Rayburn HOB
Washington, DC 20515

Chair Waters, Ranking Member McHenry, and Members of the Committee, it is my great honor as the 31st Principal Chief, elected since removal and resettlement of the Muscogee (Creek) Nation ("MCN") in Indian Territory, to submit this testimony on behalf of our citizens. The MCN is a federally recognized Indian Tribe with over 90,000 citizens making us the fourth largest Tribe in the country. With headquarters in Okmulgee, Oklahoma, we are eligible – like most other federally recognized Tribes -- for federal funding from the Bureau of Indian Affairs.

Chairman Waters, the MCN commends you on holding this critically important hearing. Throughout your long career in Congress, you have been a tireless and consistent champion on many important issues, including that of fair, affordable, and equitable housing for all Americans. You could not be more correct in identifying the fact that housing is a critical component of infrastructure, and that many vital housing programs and needs must be addressed as part of the House's comprehensive infrastructure bill.

From an Indian Country perspective, NAHASDA is an absolutely critical program that helps us as tribal governments in our task to provide adequate housing for our tribal citizens. The NAHASDA program is overdue for reauthorization, and we are very pleased to see the Chair's commitment to including NAHASDA in the presumptive broader 'Housing is Infrastructure' package.

While we wholeheartedly endorse the reauthorization of NAHASDA, and enthusiastically support many elements of your overall housing initiative for all Americans, we are unable to fully support and advocate for passage of the legislation at this time due to a single factor of concern to the MCN. That factor is the proposed inclusion of language potentially restricting access to federal housing funding for the Five Tribes of Oklahoma (Muscogee Creek Nation, Cherokee Nation, Chickasaw Nation, Choctaw Nation, and Seminole Nation) if certain conditions concerning enrollment of individuals as tribal citizens are not met. Were it not for the inclusion of this language, we would today be giving our unqualified endorsement to the entire package of housing initiatives you have proposed, and should this objectionable language be removed, we stand by to support you with every means at our disposal to advocate for the passage of all 'Housing is Infrastructure' elements this hearing addresses.

The questions involving the enrollment status of the descendants of Creek Freedmen is an extremely complex one, which goes to the heart of tribal sovereignty and self-determination for all Native Americans, not just the Five Tribes of Oklahoma. It has a very complicated history over the past 155 years, one that is still evolving today.

Like many issues facing tribal governments and their citizens, this is an issue that is highly emotional for all involved. The MCN strongly believes that our position on citizenship qualifications is solidly based on Federal law as well as our Constitution and enrollment laws, and that a process already exists that allows for each individual citizenship case can be resolved under the MCN administrative and tribal justice systems. If individuals are not satisfied with the results of our tribal proceedings, they also have the right to pursue their claims in the federal court system. Currently, there are unresolved cases pending in the MCN administrative and judicial systems where individuals are moving through these processes under tribal law.

Although we strongly disagree with your proposed legislative language addressing Freedmen enrollment, we believe that you have offered this language in good faith and with consistency with your long record of championing the rights of all Americans. While we believe that your intentions are earnest, we also believe that any congressional action on this topic at this time would be unnecessary and inappropriate. Therefore, we respectfully request that when the final NAHASDA and 'Housing is Infrastructure' bills are released, that you omit any language regarding tribal citizenship status that would affect any of the several hundred federally-recognized tribes nationwide. We urge you to respect our hard-fought tribal sovereignty, the integrity of our judicial system, and the numerous processes that already exist to resolve these matters without the need for federal legislative involvement.

In the near future, we intend to send the Chair, Ranking Member, and each Member of the Committee a follow-up letter that outlines the history, legal precedents, and other pertinent information regarding this issue, which will go into greater detail than the testimony presented today.

In closing, I want to once again salute Chair Waters and this Committee for their long history of fighting for better housing on behalf of all Americans. The Muscogee (Creek) Nation stands ready to support you in your mission to improve housing for all Americans, and to work to answer your questions and attempt to find common ground on any areas in which we currently disagree.

Sincerely,

David Hill
Principal Chief
Muscogee (Creek) Nation

COMMENTS FOR THE RECORD ▸ April 2021

U.S. House Committee on Financial Services

Build Back Better: Investing in Equitable and Affordable Housing Infrastructure

April 14, 2021

CoreLogic®

April 14, 2021

Rep. Maxine Waters
Chair, Committee on Financial Services
2129 Rayburn House Office Building
Washington, DC 20515

Rep. Patrick McHenry
Ranking Member
2129 Rayburn House Office Building
Washington, DC 20515

RE: *Build Back Better: Investing in Equitable and Affordable Housing Infrastructure*

Chair Waters and Ranking Member McHenry:

Thank you for addressing our nation's affordable housing infrastructure in your recent hearing. CoreLogic is currently focusing on many of the issues highlighted in your discussion and would appreciate the opportunity to brief the committee's staff on our data & analytical capabilities.

One particular public policy topic of importance to this Committee is federal, state, and local subsidies, such as grants and tax credits. The Neighborhood Homes Investment Act, recently introduced by Senator Cardin of Maryland and Senator Portman of Ohio, is an example of new legislation that addresses this issue by providing a novel tax credit to incentivize new affordable homeownership construction.

Additionally, when cities and states have better tools and resources, they can quickly and prudently deploy subsidies that address the "right" mix of housing. This allows cities and states to respond to community needs, while also ensuring that affordable homeownership developments are an economically viable business opportunity for builders, lenders, and property managers.

While manufacturing efficiencies in on-site "stick-built" housing have not evolved much as of late, there are new technology innovations and collective action frameworks that can speed the cycle time of new development significantly, helping scale new housing unit production. These tools and frameworks can generate new efficiencies in development project planning, collaboration, and expedited approval processes at the community level.

Use of GPS and mapping tools at the neighborhood and property levels can make it much faster and easier for home builders to locate communities and even the specific parcels that make good candidates for new development or rehabilitating existing housing stock. Market listing data can help gauge consumer demand and price points, and construction cost data can accurately determine the cost of developing these homes. Machine learning models can help to optimize housing designs and ensure they provide a reasonable rate of return to the home builder.

The use of these data in collaborative forums, such as workshops that bring together all public and private stakeholders to a development project, can help to increase communication, build trust, and ultimately accelerate project approval timelines.

Ultimately, this helps get everyone on the same page—local county or municipal leaders, homebuilders, lenders, and others. This coordination can help with critical choices like where to build homes and what types of homes to build. This can result in faster "greenlighting" of new projects and can significantly reduce the cycle time from development concept ideation to "shovel in dirt," providing a repeatable playbook for scaling new affordable housing starts across the United States.

Sincerely,

Stuart Pratt
Global Head, Public Policy and Industry Relations
CoreLogic

Center for Responsible Lending

Statement for the Record

"Build Back Better: Investing in Equitable and Affordable Housing Infrastructure"
U.S. House of Representatives Committee on Financial Services

April 14, 2021

The Center for Responsible Lending (CRL)[1] appreciates this opportunity to submit a statement for the record for today's hearing. Housing is a critical component of infrastructure and a major contributor to our national GDP. We fully support the committee's efforts to bolster the availability of down payment assistance to underserved communities who lack intergenerational wealth as a result of structural discrimination in federal policies and broader societal discrimination. Acting now to increase homeownership among these communities is a cost-effective solution to strengthen the middle-class and grow the economy.[2] In this statement, we include a recommendation for a targeted first-generation down payment assistance program developed jointly with the National Fair Housing Alliance.

Homeownership is the primary way that most families build wealth and achieve economic stability. But buying a home is an expensive proposition, and the upfront costs stand as a significant impediment, especially for those who cannot fall back on their families for help with a down payment and closing costs. Accordingly, we welcome and applaud the efforts to develop a new DPA program to complement existing programs and put homeownership in reach of those currently excluded from the market.

For people of color, homeownership is especially elusive. For decades, federally-sanctioned discrimination in the housing finance system denied them access to homeownership opportunity on parity with whites.[3] As a result of this and other forms of long-standing

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[1] CRL is a nonprofit, non-partisan research and policy organization dedicated to protecting homeownership and family wealth by working to eliminate abusive financial practices. CRL is an affiliate of Self-Help, one of the nation's largest nonprofit community development financial institutions. For 40 years, Self-Help has created asset-building opportunities for low-income individuals, rural communities, women, and families of color. In total, Self-Help has provided over $9 billion in financing to 172,000 homebuyers, small businesses, and nonprofit organizations and serves more than 160,000 mostly low-income families through 72 credit union branches in North Carolina, California, Florida, Illinois, South Carolina, Virginia, Washington, and Wisconsin.

[2] Nick Noel, Duwain Pinder, Shelley Stewart, and Jason Wright, *The Economic Impact Of Closing The Racial Wealth Gap*, McKinsey & Company (August 13, 2020), https://www.mckinsey.com/industries/public-and-social-sector/our-insights/the-economic-impact-of-closing-the-racial-wealth-gap; Dana M. Peterson and Catherin L. Mann, *Closing The Racial Inequality Gaps: The Economic Cost of Black Inequality in the U.S.*, Citi GPS: Global Perspectives & Solutions (Sept. 20, 2020), https://www.citivelocity.com/citigps/closing-the-racial-inequality-gaps/; Jeff Cox, *Morgan Stanley Says Housing Discrimination Has Taken A Huge Toll On The Economy*, CNBC, Nov. 13, 2020, https://www.cnbc.com/2020/11/13/morgan-stanley-says-housing-discrimination-has-taken-a-huge-toll-on-the-economy.html.

[3] *See A Review of the State of and Barriers to Minority Homeownership*, United Sates House of Representatives Committee on Financial Services, Subcommittee on Housing, Community Development, and Insurance, 116th Cong.

institutional discrimination, Black and Hispanic families have less wealth and lower homeownership rates, and thus less ability to provide financial assistance to their children. At the same time, broader societal discrimination, including in education and employment, have produced a massive income gap that makes it more difficult for Black and Hispanic families to accumulate sufficient savings. For these and other reasons, access to homeownership and its wealth-building benefits continue to be delayed or denied to far too many people of color and other low-wealth families, and the wealth gap continues to grow.

The numbers tell the story. The homeownership rate for Blacks under age 35 is below 20% – less than half the rate for whites. The gap closes some over the lifecycle, but even for those aged 35-54, the Black homeownership rate is just 50% compared to over 70% for whites.[4] Overall, the gap – more precisely, the chasm – today is even higher than it was in 1968 when the Fair Housing Act was enacted. Bringing the Black homeownership rate up to the level of whites would require increasing the number of Black homeowners by roughly five million, which would represent approximately a 66% increase.

Even more troubling, the Urban Institute projects that over the next twenty years all net new household growth will be from families of color, but that the homeownership rate, left unaddressed, will continue to fall for every age group.[5] Even more starkly, the same study projects that the Black homeownership rate will fall even further by 2040, with the decline particularly pronounced for households age 45-74. This is an economic disaster for the Black families who will be unable to achieve homeownership, but it is also a moral and economic problem for the country. The safety and soundness of the future mortgage market depends on there being consumers who can access safe and responsible loans.

Further, even those Black families who eventually are able to assemble a down payment and money for closing costs are able to afford less home and must take out more debt at a higher cost than whites; that plus the delay in entering the market depresses Black families' ability to accumulate wealth through their investment.[6]

A robust and sustained federally-funded DPA program is a proven strategy that can begin to address these barriers and facilitate new homeownership. Although there undoubtedly are millions of young families for whom down payment assistance could accelerate their path to

(May 8, 2019) (Testimony of Nikitra Bailey), https://financialservices.house.gov/uploadedfiles/hhrg-116-ba04-wstate-baileyn-20190508.pdf.

[4] Neil Bhutta *et al*, *Disparities in Wealth by Race and Ethnicity in the 2019 Survey of Consumer Finances*, Federal Reserve Board, FED Notes (Sept. 28, 2020), https://www.federalreserve.gov/econres/notes/feds-notes/disparities-in-wealth-by-race-and-ethnicity-in-the-2019-survey-of-consumer-finances-20200928.htm.

[5] Laurie Goodman and Jun Zhu, *By 2040, the US Will Experience Modest Homeownership Declines. But for Black Households, the Impact Will Be Dramatic*, Urban Institute (Jan. 21, 2021), https://www.urban.org/urban-wire/2040-us-will-experience-modest-homeownership-declines-black-households-impact-will-be-dramatic.

[6] Jung Hyun Choi, Alanna McCargo, and Laurie Goodman, *Three differences between black and white homeownership that add to the housing wealth gap*, Urban Institute (Feb. 28, 2019), https://www.urban.org/urban-wire/three-differences-between-black-and-white-homeownership-add-housing-wealth-gap.

homeownership, given limited resources, it is essential that this program be targeted in a way that delivers on President Biden's promise to address the long-term discrimination and racial inequities that continue to plague our society, especially those rooted in exclusionary housing policies.[7] It is also critical that the program reaches potential homebuyers who bear the burdens of past discrimination and who may never be able to achieve the dream of homeownership without this assistance.

For a DPA program to reduce barriers to home ownership in a way that advances the Biden-Harris Administration's commitment to racial equity and puts the nation on a firm trajectory to closing the wealth and home ownership gaps between whites and people of color, CRL and the National Fair Housing Alliance have made the following recommendation:

1. Eligibility should be limited to first-generation homebuyers whose income is within 120% of the Area Median Income (AMI).[8] This will create an eligible pool of 12.2 million families, 72% of whom will be families of color, including 43% Black families. Estimating "likely" program participants (those with incomes above 40% AMI and first home buying age of 25-54, the pool is approximately 5.0 million families, 71% of whom would be families of color, including 34% Black families.
2. Half of the funds should be set aside for state Housing Finance Agencies that have adopted Affirmatively Furthering Fair Housing (AFFH) Plans, awarded based on the size of the renter population in each state. These funds can be administered by the Department of Housing and Urban Development. The other 50% should be awarded through a competitive bidding process run by the CDFI Fund to select Administrators committed to and capable of delivering funds to socially and economically disadvantaged individuals. These funds can be administered through the Treasury Department once it affirms that the CDFI Fund is subject to the Fair Housing Act's Affirmatively Furthering Fair Housing provision.
3. The DPA should be a minimum of $20,000 per applicant (could be increased for high-cost markets) to provide sufficient funds to make homeownership affordable.

In addition, strong reporting and evaluation requirements should be included to ensure transparency and efficacy.

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[7] *See* Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*, 86 Fed. Reg. 7009 (Jan. 20, 2021), https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government. *See also* Presidential Memorandum, *Redressing Our Nation's and the Federal Government's History of Discriminatory Housing Practices and Policies*, 86 Fed. Reg. 7487 (Jan. 26, 2021), https://www.federalregister.gov/documents/2021/01/29/2021-02074/redressing-our-nations-and-the-federal-governments-history-of-discriminatory-housing-practices-and.

[8] For estimates of how many participants would be eligible for DPA using different definitions of first-generation homebuyer, *see* Jung Hyun Choi and Janneke Ratcliffe, *Down Payment Assistance Focused on First-Generation Buyers Could Help Millions Access the Benefits of Homeownership*, Urban Institute (April 7, 2021), https://www.urban.org/urban-wire/down-payment-assistance-focused-first-generation-buyers-could-help-millions-access-benefits-homeownership.

Finally, the Departments of Justice and Housing and Urban Development should be directed to conduct a study to determine whether this program, in conjunction with any other extant efforts, will succeed in remedying the effects of past and present discrimination and closing the racial homeownership gap. If the study finds that more is needed, the Administrators shall be authorized to use race-conscious remedies to overcome discriminatory barriers to serving socially and economically disadvantaged people, using a rebuttable presumption that people of color are socially and economically disadvantaged.

While it is essential to increase housing supply, equally critical to improving our infrastructure for everyone is ensuring that there is full access to this supply through meaningful homeownership opportunities. That requires a substantial investment in down payment assistance for underserved communities too long locked out of the American Dream. We look forward to working with you to ensure that this becomes a reality.

Sincerely,

Center for Responsible Lending

Testimony for the Record:

The Manufactured Housing Institute

Before the:

U.S. House of Representatives Committee on Financial Services

Virtual Hearing Entitled:

Building Back Better: Examining the Need for Investments in
America's Housing and Financial Infrastructure

April 14, 2021

1655 Fort Myer Drive, Suite 200, Arlington, VA 22209
(703) 558-0400 | info@mfghome.org
www.manufacturedhousing.org

On behalf of the Manufactured Housing Institute (MHI), the nation's only trade association representing all segments of the manufactured housing industry, we submit this testimony about the importance of affordable housing, specifically manufactured housing, to America's future.

MHI's members include home builders, suppliers, retail sellers, lenders, installers, community owners, community operators, and others who serve our industry, as well as 48 affiliated state organizations. In 2020, our industry produced nearly 95,000 homes, accounting for approximately nine percent of new single-family home starts nationwide. Our membership provides non-subsidized affordable and workforce housing to people across this state and the nation.

Manufactured housing can make a significant contribution to the production of affordable housing – moreover, it is affordable homeownership – the only naturally occurring affordable housing in America. Manufactured homes are affordable without government subsidy or assistance. But barriers set up by local government and communities eliminates this option for millions of Americans.

MHI appreciates and would support the inclusion of the provision identified in the Fact Sheet on the "American Jobs Plan" that is entitled "Eliminate exclusionary zoning and harmful land use policies." The summary states that this provision would establish a "an innovative, new competitive grant program that awards flexible and attractive funding to jurisdictions that take concrete steps to eliminate such needless barriers to producing affordable housing." The Further Consolidated Appropriations Act of 2020, Public Law No. 116-94 (H.R. 1865)i directs the U.S. Department of Housing and Urban Development (HUD) to issue guidance for the inclusion of manufactured housing in states' and local governments' Consolidated Plans. This has yet to be implemented and could assist states and localities in identifying these barriers.

Further, the "American Jobs Plan" calls for federal resources to "build, preserve, and retrofit[1]" older homes. Manufactured homes built prior to 1976 are known as "mobile homes" and were built to voluntarily industry standards that were enforced by 45 of the 48 contiguous states. In June 1976, the Federal Manufactured Home Construction and Safety Standards Act (also known as the HUD Code) went into effect, which established federal standards for manufactured housing design and construction, strength and durability, transportability, fire resistance, energy efficiency and quality. The HUD Code also sets performance standards for the heating, plumbing, air conditioning, thermal and electrical systems. Because mobile homes were not built to the HUD Code, many of these homes do not meet today's rigorous standards and owners of mobiles homes would benefit from replacing and/or retrofitting their current homes to HUD Code homes. Legislation introduced last year by Rep. Axne (D-IA) and passed in the House infrastructure package would greatly serve to address this.

HUD has existing authority to take actions to directly combat the practice of exclusionary zoning which prohibits or restricts manufactured homes from being constructed in a local community. As explained in more detail in our statement, HUD should: (1) strengthen its statutory responsibility to enforce "preemption" under which the exclusive authority over construction and safety standards is the HUD Code, and (2) amend the Affirmatively Further Fair Housing (AFFH) rule to give local citizens more tools to contest local exclusionary zoning actions to exclude manufactured homes and violate Fair Housing laws. These changes would increase jobs by spurring more construction of manufactured homes and increase the availability of the most affordable homeownership option in American, manufactured housing.

There are also a number of legislative proposals that have been introduced in both this and the last Congress to improve access to manufactured homes. The Yes in My Backyard Act encourages localities to update their zoning policies and encourage the development of affordable homes. The Housing Supply and

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[1] FACT SHEET: The American Jobs Plan, White House, March 31, 2021, https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/31/fact-sheet-the-american-jobs-plan/

Affordability Act is a sibling ot the YIMBY Act and provides grants to state and localities who update their codes and policies to provide expanded access to affordable manufactured homes.

Finally, our statement identifies steps FHA and FHFA can take to improve the availability of affordable loans for manufactured homes.

Manufactured Housing is Quality Affordable Housing

According to a recent study by the U.S. Department of Housing and Urban Development (HUD), "Manufactured housing plays a vital role in meeting the nation's affordable housing needs, providing 5.5 percent of occupied housing units and 7.2 percent of the single-family housing stock. More than seven million families reside in manufactured housing, with a median annual household income of $33,000. Manufactured homes are particularly important in rural communities, constituting approximately 15.4 percent of occupied housing units."[2]

Manufactured housing is the largest form of unsubsidized affordable housing in the U.S. and the only type of housing built to a federal construction and safety standard (i.e., the HUD Code). The HUD Code's single regulatory framework for home design and construction includes standards for health, safety, energy efficiency, and durability. It is also the only type of housing that Congress recognizes as playing a vital role in meeting America's housing needs as a significant source for affordable homeownership accessible to all Americans. Today, 22 million people live in manufactured housing and the industry employs tens of thousands of Americans nationwide.

Manufactured housing is one solution for addressing the shortage of affordable housing in the country and ensuring that the dream of homeownership remains an affordable and attainable reality for millions. The affordability of manufactured homes enables individuals to obtain housing that is often much less expensive than renting or financing the purchase of a site-built home. Today, the average cost of a new manufactured home without land is $81,900 compared to the average cost of a new site-built home without land of $299,415. Manufacturers deliver high quality HUD Code homes with designs and features consumers want at lower price points than site-built homes.

Today's manufactured homes are nearly identical to traditional site-built homes. According to a 2020 HUD report, "Factory-built housing has undergone many physical changes that have made it more similar to, and in many ways indistinguishable from, conventional site-built housing. In terms of style and design, factory-built homes are growing in square footage, with larger double- or multi-section units now more common than smaller single-section homes. Further, because of technological innovations that integrate the chassis with the floor system, as well as the ease of transporting modules and construction materials used for assembly, two-story homes are now being built in climate-controlled facilities and then transferred to the site. Quality improvements in construction and installation practices have increased durability so that the life expectancy of factory-built housing increasingly is comparable to that of site-built or onsite housing."[3]

Today's manufactured homes which are built to the HUD Code, perform as well or better than site-built homes during a storm. The building materials used to construct a manufactured home are the same as those used in site building and manufactured homes are engineered for wind safety and energy efficiency, based on the region in which they are sold. In addition, the construction standards for manufactured housing across

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[2] *Eliminating Regulatory Barriers to Affordable Housing: Federal, State, Local, and Tribal Opportunities*, Department of Housing and Urban Development, Jan. 2021, www.huduser.gov/PORTAL//portal/sites/default/files/pdf/eliminating-regulatory-barriers-to-affordable-housing.pdf.
[3] Evidence Matters: *Effects of Market Forces on the Adoption of Factory-Built Housing*, Department of Housing and Urban Development, Winter/Spring 2020, https://www.huduser.gov/portal/periodicals/em/WinterSpring20/highlight2.html.

the country are subject to robust compliance and quality assurance regulations, sometimes more stringent than those for traditional site-built homes. Furthermore, federal regulations for manufactured homes require a design professional and quality assurance professional during construction to verify that the home is built correctly. Conventional residential construction is not subject to such a rigorous design and inspection system.

Manufactured homes also reduce energy costs for homeowners and improve the resiliency of homes. Another HUD study found that, "The factory-built housing industry is constantly evolving to meet the changing needs of its customers. From disaster resilience technology that makes manufactured homes safer in the event of natural disasters to energy-efficient innovations that help reduce energy costs and environmental impacts to labor innovations that lower housing costs to make homeownership accessible to more people, the factory-built housing industry adapts rapidly to benefit individuals, families, and communities."[4]

Residents of manufactured homes pay significantly lower costs overall than those in site-built homes. A recent Fannie Mae study found, "The median all-in monthly housing cost of $925 per month for manufactured homeowners was $675 per month less than that paid by owners of site-built homes.[5]" That is a savings of 43 percent. According to a study about zoning barriers to manufactured housing, "when structure, transport, installation, land, and site development costs are included, one study found the total purchase price of a manufactured home might be as much as 75% less than the cost of a traditional home of comparable size and quality."[6]

Local Zoning Decisions Ignore the Benefits of Manufactured Homes

Manufactured homes serve many housing needs in a wide range of communities, from rural areas where housing alternatives are few and construction labor is scarce or prohibitively expensive, to higher-cost metropolitan areas as in-fill applications. However, zoning and land planning ordinances have a profound impact on housing patterns. For example, restrictive local ordinances, which can include limitations or outright prohibitions against manufactured homes, are discriminatory barriers against affordable housing.

A 2018 study by the Urban Institute found that "zoning restrictions impede the use of manufactured homes as an affordable housing tool in urban and suburban areas and may help explain why a disproportionate amount of manufactured housing is in rural and unincorporated areas (49 percent of units are located outside a metropolitan statistical area, versus 22 percent of all single-family detached housing units).[7]"

Across the country, there are countless examples of state and local zoning, planning, and development restrictions that either severely limit or outright prohibit the placement of a manufactured home. These discriminatory practices include:

A. **Outright Bans** – Adoption of ordinances that eliminate or ban the placement of manufactured homes in cities, localities, or municipalities.
B. **Zoning Barriers** – Subsequent changes to zoning laws after developers have already purchased the land to prevent the development of manufactured home communities.

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[4] Id.
[5] Multifamily Market Commentary, Manufactured Housing Landscape 2020, May 21, Fannie Mae, et al. "Manufactured Housing Landscape 2020." Manufactured Housing Landscape 2020 | Fannie Mae Multifamily, 21 May 2020, multifamily.fanniemae.com/news-insights/multifamily-market-commentary/manufactured-housing-landscape-2020.
[6] The Urban Lawyer: *Zoning Barriers to Manufactured Housing,* Daniel R. Mandelker, Spring 2016, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2828268
[7] Urban Institute; Goodman, Golding, McCargo, Ganeish, *Manufactured homes could ease the affordable housing crisis. So why are so few being made?, January 29, 2018;* https://www.urban.org/urban-wire/manufactured-homes-could-ease-affordable-housing-crisis-so-why-are-so-few-being-made

C. **Segregated Zoning** – Banning manufactured homes as a "permitted use" in residential zones and segregating them into one special overlay zone in one area of the community. These segregated areas are usually removed from essential community services (e.g., grocery stores, schools, churches, and civic centers) or manufactured homes are used as a buffer between other "more premium" residential zones and commercial or industrial zones.
D. **Lot Size Restrictions** – Requiring a lot or tract to include a minimum number of acres for placement of a manufactured home on private land.
E. **Valuation Requirements** – Setting an arbitrary and capricious retail or appraised value requirement that a manufactured home must meet before it can be sited in the city, locality, or municipality.
F. **Home Age Restrictions** – Prohibiting placement or movement of a manufactured home based exclusively on the home's age, notwithstanding any other factor.

HUD has long recognized that local and state zoning issues purposely exclude manufactured homes. In 1997, under authority from the National Manufactured Housing Construction and Safety Standards Act, HUD issued its "Statement of Policy 1997-1 State and Local Zoning Determinations Involving HUD Code."[8] This policy statement summarizes HUD's position concerning federal preemption and certain zoning and/or planning decisions made by state or local governments. In its statement, HUD clarifies, "if a locality is attempting to regulate and even exclude certain manufactured homes through zoning enforcement that is based solely on a construction and safety code different than that prescribed by the [National Manufactured Housing Construction and Safety Standards] Act, the locality is without authority to do so."[9] Following passage of the Manufactured Housing Improvement Act of 2000, HUD's preemption authority was significantly strengthened. Given that the Improvement Act expanded HUD's authority, MHI believes it is past time for HUD to update its 1997 Policy Statement. Further, updating the statement would galvanize HUD's pledge to facilitate the availability of affordable manufactured homes and to increase homeownership for all Americans.

MHI believes HUD must exercise its preemption authority when local construction regulations or zoning, planning, or development policies adversely affect the placement of manufactured housing. While HUD has pursued individual cases where local jurisdictions have introduced construction and safety standards that are not consistent with the HUD Code or have imposed zoning and planning requirements that exclude HUD-compliant manufactured homes, HUD must play a much greater role in this effort, and it has a congressional mandate to do so.[1] Furthermore, HUD has jurisdictional authority to move beyond case-by-case enforcement, and it should renew its policy position opposing state and local regulatory schemes that are inconsistent with Congressional intent. If HUD is unable to do this itself, Congress should require them to do so.

A 2016 Law Review analysis of the zoning barriers to manufactured housing suggested how Congress can address these zoning challenges. "Congress should revise the statute to preempt restrictive zoning that applies to manufactured housing certified under the HUD Code. An obvious change is a requirement that preempts zoning regulations that provide unequal treatment for manufactured and traditional housing, such as the exclusion of manufactured, but not traditional, housing from residential zones. Congress should also require procedural protections in decision making under zoning ordinances, and prohibit or restrict substantive zoning regulations that can have an exclusionary effect, such as the exclusion of manufactured housing from residential zones."[10]

Unequal treatment of HUD Code manufactured homes persists in localities across the country where

[8] 62 Fed. Reg. 24337 (May 5, 1997).
[9] Id. at 24337.
[10] The Urban Lawyer: *Zoning Barriers to Manufactured Housing*, Daniel R. Mandelker, Spring 2016, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2828268

zoning restrictions that are applied to manufactured housing are not similarly applied to site-built homes. AIn the legal study, the author found that HUD Code manufactured homes:

> "…face insurmountable zoning barriers in many states. These barriers, such as the unequal treatment of manufactured housing, exclusions from residential zones, the exclusionary use of aesthetic standards, and the denial of conditional use approval, are not justified. Arguments that the negative impacts of manufactured housing justify discriminatory zoning treatment are no longer true or are illegitimate. Manufactured housing requires the same treatment that zoning ordinances give to traditional housing."[11]

This exclusion through zoning prevents many lower income and minority families from obtaining an affordable home. Manufactured homes represent the most affordable form of homeownership. Even when homeowners rent their land in a manufactured home community, those rents are significantly less than those for traditional renters. The average site-rent increase in 2020 was approximately three and half percent — well below the five percent or greater average increase for apartment rents.

We support legislation such as H.R. 4231, the "Yes in My Back Yard Act (YIMBY)" from last Congress, introduced by Rep. Trey Hollingsworth (R-IN) and former Rep. Denny Heck (D-WA). This legislation encourages localities to eliminate discriminatory land use policies and remove barriers that prevent needed housing from being built around the country. The YIMBY Act achieves these goals by requiring Community Development Block Grant (CDBG) recipients to report periodically on the extent to which they are removing discriminatory land use policies and implementing inclusive and affordable housing policies detailed by the bill. The YIMBY Act increases transparency in land use, zoning, and housing decisions; sheds light on exclusionary polices; and ultimately encourages localities to eliminate barriers to much-needed housing. We believe this bill will be reintroduced soon, sponsored by several members of this Committee.

We also support H.R. 2126, the "Housing Supply and Affordability Act" introduced by Representatives Blunt Rochester (D-DE), Herrera Beutler (R-WA), and Beatty (D-OH). This legislation will create a housing policy grant program to incentivize regions, states, cities, and tribes to adopt pro-housing policies, housing plans, and updated codes. To avoid repeating the past mistakes of decades of discriminatory housing practices, the "Housing Supply and Affordability Act" requires applicants to adopt policies that avoid displacement, including policies such as allowing manufactured homes in areas zoned primarily for single detached residential. This legislation will expand access to affordable housing in all areas of communities.

Actions HUD Should Take to Address Exclusionary Zoning

In a recent Op-Ed published in the *National Mortgage News*, MHI argued that "HUD must stop localities from excluding manufactured homes from their communities, which many have done through actions which range from exclusionary zoning restrictions to outright prohibitions against manufactured homes. The Manufactured Housing Improvement Act of 2000 specifically states that when HUD construction and safety standards are in effect, a locality does not have authority to establish different standards. The statute explicitly states that this preemption should be "broadly and liberally construed" to avoid disparate local requirements. HUD has the authority and duty to pursue more vigorous enforcement of this provision, which clearly establishes federal supremacy for manufactured housing construction." [12]

Secondly, HUD should reverse changes made a year ago the reduce the ability to challenge exclusionary zoning actions which violate Fair Housing laws. A year ago, MHI weighed in with concerns about potential

[11] *See supra* note 5.
[12] https://files.constantcontact.com/5a36018e301/5c7fac26-9d8f-40ef-a6c3-f4fb14b57ede.pdf

changes to the HUD Affirmatively Furthering Fair Housing (AFFH) rules – offering specific suggestions about preserving the ability under AFFH to prevent localities from excluding manufactured housing from their communities in a manner that violates our federal Fair Housing laws. Ultimately, HUD replaced the AFFH assessment tool with a certification process as part of determining compliance with the fair housing requirement.

While MHI appreciates that manufactured housing regulations and restrictions were listed in the certification process as one of 16 barriers to affordable housing, AFFH compliance rules and the process should be strengthened. The end result should be that local citizens and affordable housing developers (including manufactured housing providers) have sufficient tools and legal authority to contest local actions that violate fair housing by restricting or zoning out affordable homeownership options such as manufactured homes from their community.

Supporting Preservation of Manufactured Housing Communities

We strongly support legislation introduced by Representatives Cindy Axne (D-IA) and Ro Khanna (D-CA), that was added as an amendment to the House infrastructure package (HR 2), that passed the House last year. This legislation, H.R. 5547, the "Manufactured Housing Community Preservation Act of 2020", provides federal grant money to entities purchasing or rehabilitating manufactured housing communities for the purpose of creating affordable housing opportunities. Funds under this program could be used for acquisition and preservation of manufactured housing communities; costs for making improvements to common areas and community property for acquired manufactured housing communities; and/or the demolition, removal, and replacement of dilapidated homes from a manufactured housing community. Entities who receive grants are required to keep, manage and maintain the property for at least twenty years. Further, the amendment limits rent increases to no more than ten percent annually. The recipient of funds is also required to match the amount granted with non-federal funds.

This program would improve the infrastructure of existing communities, and help facilitate replacement of pre-HUD Code mobile homes, with safe, durable, sustainable HUD Code manufactured homes. This will significantly improve the housing quality for residents of older communities. Land-lease manufactured housing communities are more than just affordable housing, they offer a sense of neighborhood for their residents. MHI's independent research shows that manufactured housing residents report high levels of satisfaction with their housing choice and that they are likely to recommend it to others. This legislation would preserve these communities and provide quality housing to the residents.

More Manufactured Home Financing Options Are Needed

There are several federal programs designed to help lower-income Americans obtain affordable housing. These programs too, are critical to the success of our housing infrastructure. Available housing without available financing is pointless. Federal programs designed for the financing of manufactured homes are largely failing.

The FHA Title I program is underutilized, and volumes continue to diminish because of outdated rules that make the program unworkable. In 2020, FHA's Title I program insured a total of **thirty-three** manufactured home loans nationwide, down from 204 loans in 2019, and 848 in 2017. That number of loans does not have any significant impact on an industry that sold more than 95,000 homes that same year. Substantial updates are needed to improve the program and expand access to financing for manufactured homes. Of the many changes needed, below are a few that will have an immediate positive impact on manufactured housing:

- **Adjust the loans limits.** Despite being required by statute, the loan limits have not been changed since 2009, even though construction costs have increased more than 30 percent. The loan limit is currently $69,678 for a home-only loan. Taking an estimate of the current inflation rates for each year from 2009 to present (averaging 1.8% per year), the adjusted loan amount would be $84,766 for a home-only loan.
- **Update Origination Fee Cap**. FHA should adjust the two percent cap on origination/underwriting fees to the greater of two percent or $2,000. The low dollar principal amounts of new personal property manufactured home loans means that the existing cap of two percent of the loan amount on the fees a lender can charge is not high enough to cover the costs the lender incurs when underwriting most Title I loans.
- **Make FHA Manufactured Home Definitions Consistent with HUD Code Definitions.** The FHA should make its definitions of "existing manufactured homes" and "new manufactured homes" consistent with terms defined under the Manufactured Housing Construction and Safety Standards Act and in the HUD Code. Currently, the terms for new and existing manufactured homes in the FHA Handbook reference a time period, "within 18 months of the date of manufacture," which conflicts with other HUD definitions. Realigning the FHA's terms with HUD's definitions, which are defined under federal law, would eliminate confusion.
- **Allow the Financing of Closing Costs in Land-Home Transactions.** The FHA needs to amend its current policy to allow sellers to contribute up to six percent of closing costs, just like current FHA Title II policy. Current regulations for land-home transactions do not allow certain fees to be financed into the loan or closing costs to be paid by the seller. This results in the borrower having to pay these fees out of pocket, which may include survey fees, attorney fees, and title insurance premiums. Unfortunately, this "hidden" cost moves business away from the Title I Loan program, as it limits a consumer's ability to incorporate land into their manufactured home financing package.

FHA's Title II program is also in desperate need of modernization, with respect to manufactured homes. In FY 2020, only 36,000 loans were financed through Title II. The program could better provide access to affordable credit for manufactured homeowners by making updates and revisions. Prime examples of needed changes include:

- **Ensure "New Class" Manufactured Homes Are Treated the Same as Site-Built Homes.** In December 2020, HUD issued Mortgagee Letter 2020-48 to ensure that FHA's appraisal policies accommodate factory-built homes that are constructed to HUD's building code and indistinguishable from homes built on-site but at a more attainable price point. MHI has trademarked this complementary class of HUD Code homes as "CrossMod" homes. MHI appreciates that the FHA recognized the need to have "specific comparable selection guidance targeted to the eligibility for FHA insurance of manufactured homes meeting these [CrossMod] program construction requirements." However, additional changes are needed to ensure the FHA's new policy to support CrossMod homes will, in practice, facilitate the availability of FHA Title II financing for these homes.
- **Revise the FHA Inspection Rule.** Given that manufactured homes must be inspected by an inspector who is approved by either HUD's Office of Manufactured Housing Programs or a HUD-certified State Administrative Agency, the inspections HUD already requires should also satisfy the requirements for FHA-insured manufactured homes. After HUD eliminated its Inspector Roster, many lenders have struggled to find inspectors who qualify under the new rules because there is no guarantee that an International Residential Code (IRC) certified inspector is also qualified to inspect a manufactured home. Instead of requiring lenders who finance FHA-insured manufactured homes to secure additional inspections through a process that does not adequately consider manufactured housing, HUD's current inspection requirements should be enough to also secure FHA approval.

- **Expedite Rulemaking for Manufactured Homes in Flood Zones.** The FHA's Title II program has specific requirements for manufactured homes designated by FEMA as being in special flood hazard areas. These rules require that the finished grade level beneath the home be at or above the 100-year return frequency flood elevation, which is not consistent with HUD regulations governing minimum property elevation standards for one- and two-family dwellings. Further, the National Flood Insurance Program requires that the elevation of the home's lowest floor (which may include the basement)—not the finished grade level beneath the home—be at or above the base flood elevation. MHI believes these FHA requirements arbitrarily treat manufactured homes unfairly. Lenders struggle to insure loans for manufactured homes in flood hazard areas (unless the finished grade level is at or above the elevation requirements), which only hurts prospective homebuyers. Further complicating matters, compliance with the requirement burdens new homeowners with what is essentially an unanticipated financial penalty because the cost of hauling in fill dirt to raise the site elevation is prohibitively expensive, and that is especially hard for financially vulnerable consumers.
- **Align FHA Foundation Requirements with HUD's Installation Standards.** FHA should stop using HUD's outdated "Permanent Foundation Guide for Manufactured Housing" and instead incorporate the HUD Code's model minimum installation standards. The Permanent Foundation Guide has not been updated since September 1996 and is no longer consistent with the installation standards in the HUD Code.

The role of Fannie Mae and Freddie Mac (the GSEs) in manufactured housing markets could also be improved. In 2008 Congress created the Duty to Serve for the GSEs and made manufactured housing one of the three areas of focus. Both Fannie Mae and Freddie Mac have made significant progress with respect to loan products for manufactured homes with land including changes to their loan programs for a new category of HUD Code homes, referred to as CrossMod homes. Fannie Mae did this through their MH Advantage program and Freddie Mac through CHOICEHome. However, with respect to chattel loans, where the homeowner purchases the home but not the land, little progress has been made.

Although both Fannie Mae and Freddie Mac included the goal of significant increases in chattel loans in their Duty to Serve 2018-2020 Plans, this did not come to fruition. MHI understands that this last year has been a difficult period for mortgage markets and mortgage loans, with the emergence of the COVID-19 crisis. However, the manufactured housing industry has waited more than a decade for the GSEs to re-enter the chattel loan market. But ultimately, the goal is not just for them to purchase a few hundred chattel loans, but instead to create a true secondary mortgage market for manufactured housing chattel loans.

While both Fannie Mae[13] and Freddie Mac[14] included plans to explore the creation of a securitization flow for chattel loans in their 2018- 2020 Duty to Serve Plans, neither entity included this action in their plans for 2021. MHI believes it is important for the Fannie Mae and Freddie Mac to refocus their efforts on the ultimate goal of developing a flow program for purchase and securitization of chattel loans. This will greatly improve access to affordable financing for lower income borrowers wishing to purchase an affordable manufactured home.

Conclusion

The Manufactured Housing Institute agrees that "affordable housing is a critical part of the national

[13] Explore securitization structures that attract private capital and provide sustainable liquidity to the chattel market." https://www.fhfa.gov/PolicyProgramsResearch/Programs/Documents/2018-DTS-Reports/FannieMae/FNM_MH_Chattel_3_2018.pdf
[1414] "to help inform future product design to build out capabilities for flow path."; https://sf.freddiemac.com/content/_assets/resources/pdf/marketing-materials/freddie-mac-manufacturedhousing-underserved-markets-plan.pdf

infrastructure of the United States but there is a severe shortage of affordable housing in the United States and the existing stock is badly in need of repair"[15]. Manufactured homes can be a significant part of the solution to the affordable housing needs of Americans, but more needs to be done to facilitate that.

Localities are increasingly engaging in practices that make it impossible or incredibly difficult to site manufactured homes. HUD must exercise its preemption authority when local building standards and zoning policies exclude manufactured housing. As HUD reviews its Affirmatively Furthering Fair Housing (AFFH) regulations, they should require consideration of local land use planning that limits manufactured housing. If HUD is unable or unwilling to use these authorities, Congress should use its authority to require them to do so.

Expanded options for financing, will help more lower income Americans purchase an affordable manufactured home. FHA must update their Title I and Title II financing programs to make these loans a more workable option for manufactured home buyers. Fannie Mae and Freddie Mac must work towards creating a strong, stable secondary mortgage market for chattel loans, as part of their Duty to Serve responsibilities.

MHI stands ready to work with the Committee to ensure that investments in America's housing and financial infrastructure will support homeownership through manufactured housing. In closing, we appreciate the Committee's consideration of these concerns.

[15] H.R. 5187, Finding #1, https://www.congress.gov/bill/116th-congress/house-bill/5187/text

NFHA NATIONAL FAIR HOUSING ALLIANCE

April 23, 2021

The Honorable Maxine Waters
Chairwoman
Committee on Financial Services
United States House of Representatives
Washington, DC 20515

The Honorable Patrick McHenry
Ranking Member
Committee on Financial Services
United States House of Representatives
Washington, DC 20515

RE: Statement for the Record in Support of the Housing is Infrastructure Act

Dear Chairwoman Waters and Ranking Member McHenry,

Thank you for the opportunity to share our support for the Housing is Infrastructure Act (the Act). The National Fair Housing Alliance (NFHA) strongly supports the Act as it makes critical investments to increase the supply of affordable, quality, rental housing and meet existing demands for homeownership. NFHA is especially supportive of the $5 billion investments in fair housing enforcement and compliance programs, as well as the $6 billion for grants to incentivize inclusionary zoning and the removal of barriers to producing affordable housing.

Housing forms a foundational element of our economy and, regrettably, housing investments and past national infrastructure projects have worked in tandem to restrict economic opportunity for people of color. For example, housing has often been taken from well-established communities of color by imminent domain to make way for roads, bridges, highways, and other physical investments that are intended to connect us and make us function better together. At the same time, infrastructure projects have been used to create and foster residential segregation, often by siting highways, bridges, and roads in a manner that hemmed in communities of color and isolated them from neighborhood opportunity, all the while providing extensive benefits for predominantly White communities. This history runs parallel to and reinforces the enduring legacy of government-sponsored residential segregation prior to the passage of the Fair Housing Act. It is therefore critical that significant investments in fair housing oversight be coupled alongside major investments that aim to meet the demand for affordable housing development, rehabilitation, preservation, and homeownership. The Act provides $5 billion in fair housing enforcement funding to address these concerns about equitable distribution of these funds.

Alongside much-needed investments in public housing, the Housing Trust Fund, Capital Magnet Fund and other important housing programs, the Act proposes other provisions to ensure that the development, rehabilitation, and maintenance of housing is done so in an equitable manner. The Act recognizes that housing is a core element of what shapes our communities and that it and our nation's physical infrastructure are inextricably linked. The Act's "fair and equitable housing

NFHA NATIONAL FAIR HOUSING ALLIANCE

development requirement" will help to ensure federal funds are used to develop housing in an equitable manner, and the application of the Fair Housing Act's Affirmatively Furthering Fair Housing requirement to the Act's down payment assistance provision are much-needed guardrails for the use of those funds.

The Housing is Infrastructure Act also recognizes that a rental-focused approach to meeting the nation's demand for affordable housing is not enough and that there are millions of mortgage-ready renters who can safely and responsibly transition to homeownership. The Act provides various forms of down payment assistance to help individuals, especially first-time homebuyers and socially and economically disadvantaged individuals, develop personal wealth and financial stability. By empowering mortgage-ready individuals to purchase a home, the Act frees up additional rental stock that can help alleviate the affordable housing crisis while simultaneously helping past renters attain wealth and stability through homeownership.

The National Fair Housing Alliance is proud to Support the Housing is Infrastructure Act and urges Congress to pass it quickly. The nation needs both supply and demand-side responses to our housing affordability crisis, and we urge Congress to include the Act in any infrastructure legislation it pursues. Please reach out to Jorge Andres Soto at JSoto@nationalfairhousing.org or 202-898-1661 should you have any questions.

Sincerely,

Lisa Rice,

President & CEO

NHRC
National Housing Resource Center

The Honorable Maxine Waters
Chairwoman
Rayburn House Office Building, Rm: 2221
Independence and S. Capitol St., S.W.
Washington, DC 20515

The Honorable Al Green
Member
Rayburn House Office Building, Rm: 2347
Independence and S. Capitol St., S.W.
Washington, DC 20515

April 20, 2021

Dear Chairwoman Waters and Representative Green,

The National Housing Resource Center (NHRC) is writing to support the Build Back Better: Investing in Equitable and Affordable Housing Infrastructure package that calls for major investment in public and affordable housing. Affordable housing is vital to the economic and physical health of our country.

Smart, targeted investment in housing will not only improve the quality of life of the impacted homeowners and renters, but also makes it easier for them to be productive and healthy participants in the economy. Investment in housing also means economic activity in the form of jobs and improved tax revenue. The National Association of Realtors® estimates that each existing home purchase generates more than $60,000 in positive economic activity;[1] and the National Association of Home Builders report that building 1,000 average single-family homes creates 2,900 full-time jobs and generates $111 million in taxes and fees and building 1,000 rental apartments generates 1,250 jobs and $56 million in taxes and revenue for local, state and federal government.[2]

We also thank the House Financial Services Committee for the Downpayment Toward Equity Act, which provides downpayment assistance to first-time and first-generation homebuyers. Homeownership is the most consistent way Americans building wealth and the Black and Brown households have a much lower share of homeownership than white households.[3] Including this valuable program is a lasting investment in the financial growth and security of tens of thousands of American families.

We strongly support the bill's requirement of housing counseling provided through a HUD-approved counseling agency. Downpayment assistance programs, mortgage lending programs, and programs to compensate agencies for services delivered are often dependent on the delivery of counseling services by HUD-approved counseling agencies. Housing counselor assist homebuyers by reviewing their income, savings, credit history, mortgage affordability, total debt, and household budget, preparing a housing action plan, and helping them achieve their housing goals. When ready, counselors will prepare people for mortgage application help assemble the appropriate loan documentation, locate available downpayment assistance, and identify a range of appropriate lenders and mortgage products. By helping well-prepared buyers access the housing market, housing counseling is critical to a healthy, well-functioning housing market. The

[1] National Association of Realtors®, *The Economic Impact of an Existing Home Purchase*, http://archive.realtor.org/sites/default/files/ecoimp_homepurchases.pdf

[2] National Association of Home Builders, National Impact of Home Building and Remodeling report. https://www.nahb.org/News-and-Economics/Industry-News/Press-Releases/2020/04/What-Building-1000-Homes-Means-to-the-US-Economy

[3] Urban Institute, https://www.urban.org/policy-centers/housing-finance-policy-center/projects/reducing-racial-homeownership-gap

Bipartisan Policy Center recommended that "[h]ousing counseling can and should play an important role as a credit enhancer, mitigating the risk of lending to borrowers on the margins of creditworthiness".[4] The benefits of pre-purchase counseling also flow to investors, as well-prepared homebuyers can reduce the risk to investors.

We appreciate the work of the Committee and urge the 117th Congress to retain the Downpayment Toward Equity Act as part of Build Back Better: Investing in Equitable and Affordable Housing Infrastructure package.

Sincerely,

Bruce L. Dorpalen

[4] Bipartisan Policy Center, *Housing America's Future: New Directions for National Policy*: http://bipartisanpolicy.org/sites/default/files/BPC_Housing%20Report_web.pdf

ROC usa®
Resident Owned Communities
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April 14, 2021

The Honorable Maxine Waters Chairwoman
U.S. House Committee on Financial Services
2129 Rayburn House Office Bldg. Washington, DC 20515

The Honorable Emanuel Cleaver Chairman
U.S. House Financial Services Subcommittee on Housing, Community Development & Insurance
2129 Rayburn House Office Bldg. Washington, DC 20515

The Honorable Patrick McHenry Ranking Member
U.S. House Committee on Financial Services
4340 O'Neill House Office Bldg. Washington, DC 20515

The Honorable Steve Stivers Ranking Member
U.S. House Financial Services Subcommittee on Housing, Community Development & Insurance
4340 O'Neill House Office Bldg. Washington, DC 20515

Dear Chairwoman Waters, Ranking Member McHenry, Subcommittee Chairman Cleaver, and Subcommittee Ranking Member Stivers:

RE: ROC USA Statement for the Record Supporting the Housing Is Infrastructure Act of 2021 and Inclusions of Manufactured Housing Investments

We write today in strong support of the House Financial Services Committee's work on infrastructure legislation. We are especially pleased that the Housing Is Infrastructure Act of 2021 included critical provisions to support manufactured housing communities that have been overlooked for decades and are desperately in need of infrastructure improvements.

The water and sewer and other critical infrastructure resources included in the legislation to help address the national crisis in these specific communities are essential to protecting vulnerable low-income families. These are low-wealth neighborhood that serve an enormous public good by producing "naturally occurring affordable housing." Many of these communities were built with little consideration for long-term occupancy – systems that were poorly or not designed and materials that were below good standards because they were intended to be short-term places for manufactured homes ("mobile homes").

Many of the 44,000 mobile home communities in the U.S. that affordably house 2.7 million households are threatened by both the aggressive speculation and poor infrastructure. Resources to upgrade failing water and sewer systems that are tied to long-term preservation and affordability will correct infrastructure health and safety and preserve these valuable community assets.

Housing is indeed infrastructure, and the needs in these housing communities is for infrastructure systems that include roads, drainage, water and sewer systems and emergency storm shelters. We applaud President Biden and the House Financial Services Committee for prioritizing housing in infrastructure plans and call on the entire Congress to expand on the groundwork already laid by crafting a plan that will make a difference in the lives of thousands of Americans living in manufactured home communities. The housing crisis in America has only been exacerbated by the pandemic, and we need to preserve and improve affordable homes as we emerge from it. We applaud the Committee for its leadership and stand ready to work with you in the months ahead. Thank you.

Very truly yours,

Paul Bradley, President
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603-513-2818

Statement for the Record

On behalf of the

Structured Finance Association

before the

Committee on Financial Services
Subcommittee on Investor Protection, Entrepreneurship, and Capital Markets

of the

United States House of Representatives

April 14, 2021

STRUCTURED
FINANCE
ASSOCIATION

Introduction

The Structured Finance Association[1] (SFA) appreciates the opportunity to submit a statement for the record for the hearing titled, "The End of LIBOR: Transitioning to an Alternative Interest Rate Calculation for Mortgages, Student Loans, Business Borrowing, and Other Financial Products." The discontinuation of the London Inter-Bank Offered Rate ("LIBOR") is one of the biggest challenges currently facing global financial markets. The subcommittee's attention to this important issue is both critical and timely. Our comments primarily focus on the need for federal legislation to support the transition away from LIBOR for contracts that have no other realistic means to transition and the concern a state-by-state legislative approach could lead to an inconsistent patchwork of requirements, thus increasing the risks of a disruptive and costly transition with broad public and investor confusion.

SFA is well suited to provide this perspective given our founding mission to support a robust and liquid market while safeguarding essential protections for investors, consumers and the financial system. Importantly, our statements reflect the collective insights across our more than 370 members who represent all sides of the structured finance market – that comprise the largest cash (non-derivative) component of the "tough legacy" LIBOR contracts, as discussed further below – from investors (many of which are pension plan and mutual fund managers, insurance companies and financial institutions) to lenders, issuers and servicing agents.

Discontinuation of LIBOR

Given significant concerns regarding the viability of LIBOR as a robust benchmark rate, a monumental multi-year global effort began over seven years ago to transition millions of contracts away from LIBOR. With approximately $400 trillion in financial contracts linked to LIBOR worldwide, the cessation of this benchmark presents significant risks across the global financial markets, impacting borrowers and consumers, lenders, investors, banks, and other market participants. The scale of the transition has rightly been compared to that of the multi-country currency changeover to the Euro currency.

On March 5, 2021, the U.K. regulator charged with LIBOR oversight, the Financial Conduct Authority, and the administrator and publisher of LIBOR, ICE Benchmark Administration, provided much-anticipated clarity on LIBOR's final cessation dates. In coordination with U.S. regulators, it was determined that the least used U.S. Dollar LIBOR rates, 1 Week and 2 Month tenors, will end on December 31, 2021, along with all other non-U.S. Dollar LIBOR rates, while the most used U.S. Dollar rates, overnight and 1-, 3-, 6- and 12-Month tenors, will end on June 30, 2023. Extending the publication of the heavily used U.S. Dollar

[1] The Structured Finance Association (SFA) is the leading securitization trade association representing over 370 member companies from all sectors of the securitization market. Our core mission is to support a robust and liquid securitization market and help its members and public policymakers grow credit availability and the real economy in a responsible manner. SFA provides an inclusive forum for securitization professionals to collaborate and, as industry leaders, drive necessary changes, advocate for the securitization community, share best practices and innovative ideas, and offers professional development for industry members through conferences and other programs. For more information, visit www.structuredfinance.org.

LIBOR tenors was to support a smoother transition away from LIBOR by allowing many "legacy USD LIBOR contracts to mature before LIBOR experiences disruptions", according to U.S. regulators.[2]

In the United States, retail financial products from floating rate mortgages, student loans and even bond investments in traditional 401k or pension plans calculate interest based on LIBOR rates. Similarly, it is also used in floating rate business loans, lines of credit, securities and interest rate hedges. In fact, for the past 30+ years LIBOR has been used for almost every consumer and business floating rate product. At the end of 2020, LIBOR exposure in the United States accounted for over half of the $400 trillion globally, used as the benchmark for over $6.2 trillion outstanding consumer and corporate loans, $2.7 trillion cash investments, and $214.0 trillion hedging instruments.[3]

We believe significant disruption to consumers and businesses, as well as a wave of litigation, are inevitable unless Congress works quickly to provide a meaningful solution that offers fair, equitable and consistent treatment for all tough legacy contracts that still lack an adequate replacement mechanism under U.S. law.

Pressing Need for a Federal Solution to Address "Tough Legacy"

Led in the U.S. by our financial regulators and the Fed-convened Alternative Reference Rate Committee (ARRC), the carefully choreographed changeover away from LIBOR, which will be a decade long upon the mid-2023 end, has already greatly minimized the legacy contracts that remain. For this reason, the remaining legacy population largely still include longer term, difficult to address contracts such as mortgages, student loans, business loans and capital market transactions that finance and hedge these lending contracts thereby affecting a broad range of American households and businesses including pension plan and other retirement savers, millions of Americans with mortgages and student loans, small and large businesses, and financial institutions.

Hardly surprising after more than 30 years of publication, the legacy contracts that were entered into prior to the announcement of LIBOR likely ending simply did not contemplate the cessation of LIBOR. Still, after the call to end LIBOR, the development and widespread adoption of a trusted replacement rate to LIBOR was required. Therefore, when LIBOR disappears it is unclear what benchmark rate will underpin interest payments unless the contracts are amended, but systemic operational and legal challenges make doing so for some contracts realistically impractical.

Even so, much progress has been made to address the $73.1 trillion[4] U.S. governed legacy LIBOR contracts that will remain outstanding after LIBOR's end. This effort includes the almost unimaginable task of amending of tens of trillions in U.S. contracts to incorporate an effective replacement rate mechanism where none existed. Even with this well-organized multi-year effort, we estimate that over $16 trillion

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[2] Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation (November 2020). *Statement on LIBOR Transition* *https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20201130a1.pdf*

[3] Alternative Reference Rates Committee. (March 2021). *Progress Report: The Transition from U.S. Dollar LIBOR* https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2021/USD-LIBOR-transition-progress-report-mar-21.pdf

[4] Ibid.

contracts have no realistic means to be renegotiated, so called "tough legacy" contracts, posing an enormous risk to the financial system and the underlying borrowers, investors and banks.

These tough legacy contracts often have very high legal and operational hurdles not the least of which is identifying, contacting, and negotiating with the large number of contractual parties who must consent to such an amendment. For instance, in each and every widely distributed bond, there is often upwards of many hundreds of bondholders who must be involved in the negotiation. Moreover, due to investor privacy constraints and operational hurdles, even simply identifying and communicating with bondholders is very challenging and time consuming, making the, most often required, unanimous consent across those bondholders to legally amend the benchmark rate practically impossible.

U.S. regulators have acknowledged the difficulty of these tough legacy contracts and even supported the temporary extension of the most-used U.S. Dollar LIBOR tenors until mid-2023 to allow the natural roll off of even more contracts. In spite of this, there will still be over $16 trillion of tough legacy contracts outstanding after mid-2023.

Recognizing the significant economic, operational and legal risks of these $16 trillion contracts, SFA investors, bond issuers, lenders, paying agents and servicers members have worked extensively with each other, and with consumer groups, regulators and other sector participants, to evaluate potential solutions. Early in the process of managing away from LIBOR, many of these market participants expressed concern about the use of legislative action that would affect previously agreed contractual matters. However, the cessation of this critically important benchmark rate presents such a unique challenge that other alternatives examined were inoperable, led to potentially inequitable outcomes for investors, consumers and lenders, presented extensive and costly litigation risk, or all the above.

After much discussion amongst our members and stakeholders, SFA members found that legislation is not only the best option, but the only viable option to safely, fairly, and equitably transition "tough legacy" contracts while avoiding a legal and financial mess that would clog our court system for years. Moreover, it became clear that, absent congressional action, the remaining challenges of the LIBOR transition will create a great deal of confusion for borrowers and investors while degrading the value of bond investments for savers, pensioners, and retirees.

With that as background, SFA market participants identified five key principles of a legislative approach:

- **Minimize any value transfer among the contractual parties**
- **Use a single, consistent replacement benchmark for all similar LIBOR contracts** based upon a liquid, robust replacement benchmark, agreed to be Secured Overnight Financing Rate "SOFR"
- **Minimize litigation risk through a comprehensive but narrow safe harbor** that provides adequate operational flexibility for billing and paying agents to implement the use of the new replacement benchmark
- **Narrowly scope legislation to facilitate the transition away from LIBOR without impacting investor, consumer or other counterparty rights and protections**
- **Do not impact contracts that already have a sufficient replacement mechanism** unless contract parties opt-in on their own

On that basis and after extensive and much appreciated ARRC-led collaboration with regulators, consumer groups and other sector market participants to ensure the necessary consumer and investor protections while addressing the often highly technical operational and legal challenges that are faced by the various stakeholders in the structured finance and lending markets, SFA is strongly supportive of the federal legislation aligned with recommendations from the ARRC.

Further, as you likely know, recently, both Chairman Powell and Secretary Yellen expressed their support for federal legislation. On February 24, 2021, Jay Powell, Chair of the Federal Reserve, called federal legislation the "best solution" to address outstanding legacy contracts that will have not run off by June 2023. On March 23, 2021, Treasury Secretary Janet Yellen agreed with Chairman Powell's assertion and stated that the transition of certain legacy contracts would be difficult without legislation, specifically noting, "Congress does need to provide legislation for the LIBOR transition." We understand that these statements of support are the result of meaningful examination of the issues and challenges involved by both the Federal Reserve and Treasury Department.

Only a federal legislative approach to fixing inadequate LIBOR replacement provisions can offer a comprehensive solution that would apply a consistent, fair and transparent approach to protect all consumer and business borrowers, investors and lenders of tough legacy contracts under U.S. law and promote financial stability by eliminating ambiguity and confusion, thereby reducing legal uncertainty and risk of mass litigation, and reducing any adverse economic impact on financial contracts.

State-by-State Patchwork Approach is not a Viable Solution

On April 6, Governor Andrew Cuomo of New York signed AB164B[5] into law. The legislation provides businesses and consumers paying or receiving LIBOR-based payments crucial clarity, minimizing adverse economic impact and legal uncertainty in New York-based tough legacy contracts. The bill passed by the New York state legislature was consistent with the ARRC legislative model

This was a big, positive step forward in the orderly transition of LIBOR as we estimate almost half of tough legacy contracts are governed in New York State. Building off this legislation established in New York State, a uniformed federal framework would expand the protections to also include the over $7 trillion tough legacy contracts remaining across the United States, allowing for all tough legacy LIBOR contracts to transition on time and in an equitable and fair manner. Timely and consistent treatment is crucial for the acceptance of the replacement rate by the investing and borrowing public. The success of the transition ultimately depends not only on the coordination across easily amendable contracts, but also on the positive and timely resolution of tough legacy contracts.

The most important reason for a federal legislative approach is to avoid the foreseeable downside risk to a state level approach. Simply put, a state-by-state approach would provide fewer comprehensive protections than what could be achievable at the federal level given the very limited time remaining until LIBOR's end in just over two years. Additionally, we risk a patchwork of varying state laws, which would compromise the very intent to provide a smooth transition.

[5] https://legislation.nysenate.gov/pdf/bills/2021/A164B

State-by-state solutions cannot ensure all borrowers, lenders, investors, and financial intermediaries of tough legacy contracts have the same fair, equitable and consistent treatment across the country which is paramount to ensuring the public and market confidence in the fairness, viability and liquidity of the replacement rate they receive for the remaining term of their contract.

A national servicer would need to explain a different replacement rate used for a mortgage holder in California or North Carolina versus New York, a different replacement rate used for an individual's mortgage versus their student loan and/or bond in their 401k. Retail and institutional investors may find themselves with certain bonds that have a new little-used replacement rate that decreases its liquidity and value. Securitization issuers may move from having LIBOR loans funded with LIBOR securities to those assets and liabilities referencing different rates – or a corporation with hedging instruments that are no longer providing the protection to the same reference rate. Any states that take no legislative actions will fail to articulate a path forward at all, leaving Americans and their businesses with potentially negative economic consequences and legal costs needed to protect their interests.

Given the ordinary complexity and significant time and resources required to move legislation through individual state government processes, attempting to also do so with one consistent model is unfathomable especially given the individualized state processes and underlying state laws, and limited time remaining until the mid-2023 deadline. Not to mention, federal legislative actions would still be necessary to address certain ambiguity, in some contracts, to the implementation of state legislation. As a result, borrowers, investors and lenders cannot rely on an approach that is dependent on separate and distinct state legislative sessions which vary extensively across the country.

In order to avoid the potential for wide-spread litigation, the timing of legislative action matters. Paying agents, lenders, servicers, investors and other service providers need ideally at least a year to operationalize, communicate and accurately bill borrowers and pay lenders and investors on millions of contracts – a task made much more difficult when a lack of national uniformity regarding changes in the benchmark rate exists. Without an appropriately authorized alternative solution, some parties responsible for directing LIBOR-based calculations in structured finance transactions have already notified bond investors and issuers that they will likely need to seek court direction to determine the appropriate replacement rate and mechanism. This approach would lead to a patchwork solution for consumers, and present a great deal of confusion.

But if this path were to be taken, in order to have sufficient time to not only seek that judicial direction through state courts on tens of thousands of contracts but to also implement the necessary operational and legal changes needed to calculate and bill those payments, calculation and paying agents will likely need at least 12 months prior to LIBOR's end to start the court process if a legislative solution fails to materialize. To be clear, this is an action market participants do not want to have to take. As such, they have been actively involved in every effort outlined to find a viable solution to these tough legacy contracts.

By providing the certainty of an equitable, liquid and transparent replacement rate and eliminating the potential for costly litigation, the legislation recently passed in New York State will serve to protect New York consumers, investors and other market participants if their contracts are governed by New York law. Similar legislation – adopted at the federal level – would provide the same protections to help ensure <u>all</u> consumers, investors and borrowers receive equitable and fair treatment regardless of where their contract is governed.

Conclusion

We are at a critical moment in the LIBOR transition and there is a need for absolute certainty as it relates to rates and products Americans rely on for legacy contracts. All borrowers and investors need a smooth transition away from LIBOR to avoid uncertainty, confusion, and potential mass litigation. The Structured Finance Association agrees that federal legislation is the best solution and is committed to working with you on responsible legislation that will ensure stability for consumers and businesses though this massive transition. Congress has the power to ensure as economic-neutral outcome as possible that can guarantee all U.S. tough legacy contracts are provided fair, consistent treatment thereby minimizing any value transfer and confusion. Failure to address the matter with comprehensive federal legislation risks foreseeable market disruption, confusion, and legal disputes for years to come.

SIERRA CLUB

April 21, 2021

The Honorable Maxine Waters,
Chairwoman
House Committee on Financial Services
2129 Rayburn House Office Building Washington, D.C. 20515

The Honorable Patrick McHenry
House Committee on Financial Services
4340 O'Neill House Office Building Washington, D.C. 20024

Dear Chairwoman Waters and Ranking Member McHenry:

The Sierra Club welcomes the Committee's hearing on infrastructure investment held on April 14, 2021. We particularly welcome the release of the discussion draft of the National Investment Authority Act as a strong starting point for the development of an institution capable of mobilizing investment at the scale we need to tackle the overlapping crises of poverty and unemployment, climate change, and racial, gender, environmental and socio-economic injustice.

The problem of misallocation of investment in our country is profound. Although we live in the wealthiest country in the world, our economic system has dramatically failed to allocate resources where they are most needed, resulting in the coexistence of vast wealth and deep deprivation. Hundreds of billionaires live in the same country as 38 million poor people, where millions of workers go without work, 37 million people go hungry, and half a million go without shelter each night.

The hurricanes and wildfires ravaging our communities offer further evidence of a systemic misallocation of investments – towards an extractive economy that rewards short-term profit over long-term value. This misdirected money is fueling the climate crisis and the reality that 141 million people in the U.S. breathe unsafe air while 2 million lack access to safe drinking water.

While economic and environmental catastrophes impact many, Black, Brown, Indigenous, and poor white communities – particularly women – bear the brunt of these interlocking crises due to persistent racism, patriarchy, and classism. Without a clear investment strategy rooted in justice, the flow of capital has tended to reinforce such systemic inequities rather than counteract them.

To reverse longstanding inequities and move money to the right priorities, we need institutional change. The U.S. government lacks **an institutional home for democratically crafting a coherent, long-term strategy for investing in equitable and sustainable economic development at scale**. This institutional gap leaves public investment decisions to be made on a short timeframe and small scale. The resulting investment programs are scattered in silos across federal agencies, often invisible and inaccessible to the people they are meant to serve. The absence of a clear, long-term public investment strategy also makes it difficult to lure private capital away from counterproductive investments, like real estate speculation and polluting industries, and toward broadly shared objectives, like clean, affordable renewable energy.

A National Investment Agency would be instrumental in creating an investment strategy with the scale, coherence, and long-term vision needed to address pressing economic, environmental, and social crises while delivering real and lasting value – not merely short-term profits.

Movement actors have long led the way in naming national investment priorities that could serve as the basis for a national plan for economic renewal. Building on those efforts, over 250 of the nation's largest union, racial justice, climate, and other grassroots groups joined forces with over 100 members of Congress last year to launch a congressional resolution called the THRIVE Agenda: a bold and cohesive economic renewal plan backed by a movement of movements and a strong majority of voters. The plan has evolved into the THRIVE Act — an investment package that would put over 15 million people back to work on projects that would simultaneously slash pollution and build climate resilience, with priority benefits for Black, Brown, Indigenous, and low-income communities. Together, these investments form an institutional blueprint for investing in racial, economic, and environmental justice.

Movement groups know that existing institutions are not up to the task of turning this blueprint into a reality. That's why THRIVE also calls for the creation of new public institutions to "strategically and coherently mobilize and channel investments...at the scale and pace that these times require." The NIA can help to answer this call. To realize the power shift envisioned by social movements, an NIA must meet three crucial requirements:

1. An equitable mandate. The legally-binding, long-term goals of the NIA should be shaped by leaders of communities impacted by chronic underinvestment, including unions, Indigenous groups, and racial and environmental justice organizations. With firsthand authority on our most glaring investment needs, they are well-positioned to identify institutional goals to tackle poverty, unemployment, climate change, toxic pollution, and racial, economic, and gender inequity. We support the NIA Act's mandate as a strong starting point for further dialogue with impacted communities.

2. Equitable decision-making power. Representatives of impacted communities must comprise a large majority of the NIA's governing board. This is essential to get the investment priorities right. There may be a thousand interpretations of the specific investments needed to achieve goals like "eliminating toxic pollution," but the one that matters most comes from those suffering from asthma, cancer and lead poisoning caused by such pollution. While impacted stakeholders are often relegated to advisory committees with no teeth, such tokenizing risks ceding the real power to Wall Street executives who are qualified to reinforce the economic status quo, not deliver economic renewal. If a national institution is to reverse long-standing inequities, so must its governing body. We are encouraged by the NIA Act's recognition of the need for an equitable governing body and we support further discussion with representatives of impacted communities to strengthen its structure and ensure democratic access and accountability.

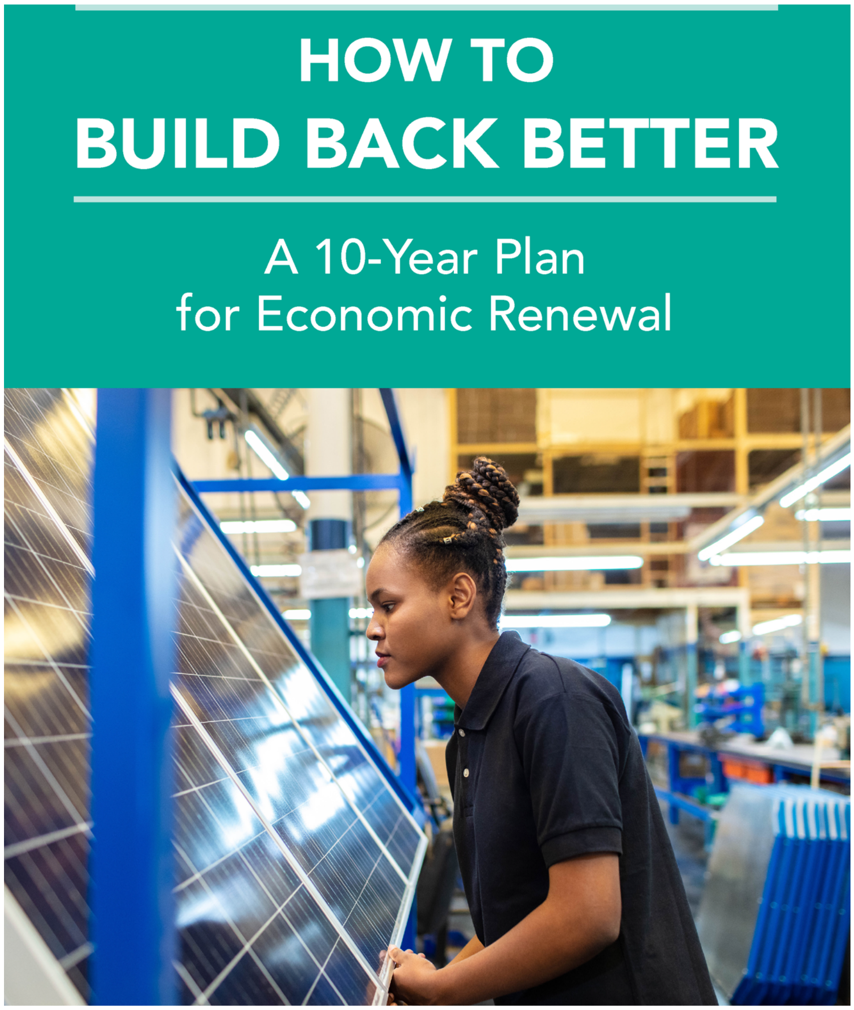
3. Clear labor, environmental, and equity criteria. Funds channeled through the NIA should come with labor, environmental, and equity conditions defined by movement actors. Unions have long advocated for prevailing wage floors, neutrality toward collective bargaining, worker safety rules, "Buy American," and other labor standards that should govern new investments to build worker power, curb outsourcing, and secure family-supporting wages. Similarly, environmental standards advanced by climate and environmental justice groups, such as "Buy Clean," should be applied to cut emissions and help communities shield themselves from climate disasters. Investments also should conform to equity standards generated by racial, gender, and economic justice groups. The THRIVE Act, for example, calls for directing at least 50 percent of investments to communities that have been excluded or harmed by racist and unjust practices. We are encouraged by the NIA Act's clear recognition of the need for such labor, equity, and environmental criteria throughout the institution's operations and we support further discussion and elaboration of these criteria, in dialogue with impacted communities.

The creation of an NIA that embodies these features will be a turning point in our nation's efforts to invest in what really matters – an economy that fosters justice, not crisis. To that end, we look forward to further dialogue on the NIA and encourage the committee to pursue meaningful engagement with impacted communities to ensure the NIA's design adequately addresses their needs and priorities.

Sincerely,

Ben Beachy, Director
Isabel Estevez, Senior Policy Advisor
A Living Economy, Sierra Club

Attachment: How to Build Back Better: A Plan for Economic Renewal


HOW TO
BUILD BACK BETTER
A 10-Year Plan
for Economic Renewal

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Acknowledgments: This report was written by Ben Beachy, Director of Sierra Club's Living Economy program, with contributions from Isabel Estevez, Senior Policy Advisor, and design by Carolyn Morrisroe, Deputy Press Secretary of the Living Economy program. The job creation estimates were produced by Robert Pollin, Distinguished University Professor of Economics and Co-Director of the Political Economy Research Institute (PERI) at the University of Massachusetts Amherst, Shouvik Chakraborty, Assistant Research Professor, and Jeannette Wicks-Lim, Associate Research Professor at PERI. The job creation estimates can be found in a PERI report, "Employment Impacts of Proposed U.S. Economic Stimulus Programs." Published February 2021. For dynamic simulations of the job creation impact of stimulus investments, please visit our Jobs Calculator.

COVER PHOTO: ISTOCK / ALVAREZ

EXECUTIVE SUMMARY

Over 10 million people are out of work, another six million people are underemployed, and yet another seven million people who want a job have given up trying to find one. Unemployment among low-income households is hovering around Great Depression levels. Job losses have been particularly acute for women, and the unemployment rate for Black and Latinx workers remains more than 50 percent higher than for white workers. Due to economic hardship, more than one in three families with children cannot afford adequate food, one in five households could not pay last month's rent, and over half of all households are having difficulty covering expenses.

To tackle this economic crisis, we cannot simply reopen the economy and hope things return to "normal." "Normal" was fundamentally unjust, unhealthy, and unstable. Thanks to decades of "normal" conditions, millions of people — particularly in Black and Latinx communities — breathe in air pollution that increases the risks of COVID-19, earn as much in one year as Jeff Bezos makes in 20 seconds, and are forced to grapple with increasing climate-related storms, droughts, and fires.

We have to do better than "normal." We need to put millions of people back to work building a healthier, more equitable, clean energy economy that leaves no one behind. The THRIVE Agenda outlines a plan to do just that. Backed by over 100 members of Congress and hundreds of union, racial justice, climate, and other grassroots groups, the THRIVE Agenda offers Congress an eight-pillar blueprint for economy-wide investments. To "build back better" instead of reverting to the unjust status quo, Congress needs to pass a THRIVE-aligned economic renewal plan that is as comprehensive as the crises we face.


PHOTO: ISTOCK / KALI9

A new economic analysis from the Political Economy Research Institute reveals that a bold, THRIVE-aligned economic renewal plan would **provide family-sustaining jobs for 15.5 million people for the next 10 years** — enough to essentially end the unemployment crisis — while building an economy that fosters cleaner air and water, higher wages, healthier communities, greater equity, and a more stable climate. Here's the sectoral breakdown of the 15.5 million new jobs:

- Over 5.2 million new jobs to upgrade our infrastructure for clean water, clean transportation, and clean energy;
- Over 4.1 million new jobs to expand renewable energy and increase energy efficiency;
- Over 3.9 million new jobs to restore our lands and invest in regenerative agriculture; and
- Over 2.3 million new jobs to care for children and the elderly and provide essential services.
- Economy-wide, nearly 1.6 million jobs would be created to manufacture the goods needed for all of the above investments.

This economic renewal plan would help us simultaneously tackle the multiple, mutually reinforcing crises that we face: public health, joblessness, inequity, and climate change. It would reduce the air pollution that is exacerbating COVID-19 risks, particularly in communities of color. It would counteract the gross levels of racial, economic, and gender inequity that the COVID crisis has magnified by ensuring that those hardest hit get priority access to economic and environmental benefits. While putting people back to work, this plan also would put us on a path to climate stability by enabling at least a 45 percent reduction in U.S. climate pollution by 2030, in line with targets set by climate scientists. Here are a few specific examples:

- To bolster our transition to a **100% clean energy economy**, stimulus investments could help many of the over 400,000 unemployed clean energy workers get their jobs back, while over 190,000 unemployed oil and gas workers could be employed to close orphaned oil and gas wells.
- A single program to exchange gas guzzlers for **affordable, clean electric vehicles** would yield over 635,000 jobs — nearly the entire population of Detroit — including over 77,000 good manufacturing jobs to produce the vehicles.
- Over 500,000 workers could be employed to **upgrade all public housing units, schools, hospitals and low-income homes nationwide** to support healthier living conditions, lower energy bills, and reduced pollution.
- Over 350,000 workers could be employed to replace lead pipes and secure **clean drinking water**.
- Over 225,000 people could be employed to **protect our wetlands and forests and shield communities from toxic pollution** by restoring ecosystems and Superfund, Brownfield, and coal mine sites.

To employ 15.5 million people for five years, this economic recovery plan would cost less than $5 trillion. That is less than the amount that the U.S. government committed in coronavirus spending in just March and April of 2020. With the cost of borrowing at rock bottom, this is a small price to pay to offer economic security to millions of unemployed people while charting a path toward a society that is healthier, more just, and less prone to crisis.

The quality of the jobs created through this economic renewal plan is just as important as the quantity of jobs. Stimulus investments must be subject to **high-road labor standards** to ensure that the jobs created are family-sustaining careers that offer workers a dignified and meaningful livelihood and lasting economic security. To chart a path to a more equitable society, these jobs must be made accessible to all people. In addition, **equitable hiring practices and targeted investments** must be used to prioritize job creation, improved health outcomes, and environmental benefits for low-income communities, communities of color, women, and others who are bearing the brunt of the economic, health, and climate crises. Finally, to yield a healthier and more stable future, stimulus investments also **must address climate change and toxic pollution**. The materials, operations, and end use of projects must uphold environmental standards that reduce pollution and increase climate resilience for communities.

To see why it is essential to attach strong labor, equity, and environmental standards to stimulus investments, we

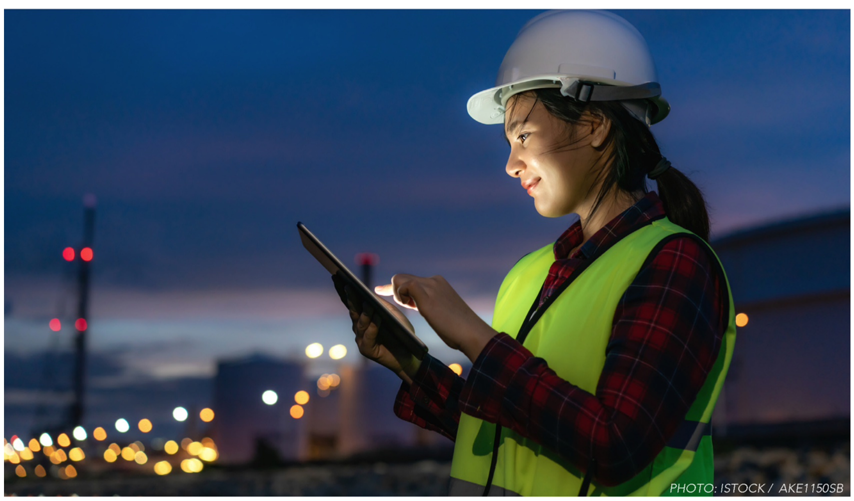

PHOTO: ISTOCK / AKE1150SB

can examine what would happen without such standards. In short, such a stimulus would reinforce the unjust status quo instead of counteracting persistent economic, racial, and gender inequity. The analysis from the Political Economy Research Institute offers some examples:

- Job Quality: While investments would create high-quality careers in some areas, without strong labor standards, certain job types would suffer from low salaries, inadequate benefits coverage, and very little union protection. For example, investments in surface transportation, regenerative agriculture, and the care economy — three of the biggest job creators — would pay salaries 40 percent to 70 percent lower than the national average salary. Meanwhile, certain investments would create jobs with health benefits for less than 40 percent of workers and retirement benefits for less than a third of workers. Absent additional measures, most jobs created also would not be unionized, particularly in industries where union density dips as low as 3 percent. To ensure that new jobs offer family-sustaining salaries and benefits and access to a union, a stimulus package must require **prevailing wage standards, use of project labor agreements, employer neutrality with regard to union organizing, and other labor standards.**
- Job Equity: Without strong equity standards, stimulus investments would simply replicate long-standing inequities in access to jobs. In many investment categories, those benefiting would be largely white and male, leaving women and people of color — particularly Black workers — with a disproportionately small slice of the economic benefits. For example, in 12 of 13 infrastructure investment categories, Black workers would constitute just 6 percent to 9 percent of the workforce, despite comprising 11 percent of the overall workforce. In general, people of color and women would be underrepresented in several high-paying job types, but overrepresented in certain low-paying job categories. For example, only 10 percent of high-paying rail jobs would go to women, while women would take on 80 percent of low-paying care economy jobs. To counteract inequity, a stimulus package must direct **at least 50 percent of investments to communities of color and other frontline communities, while requiring equitable hiring and contracting preferences that favor people of color and women.**

To tackle the full scope of the climate crisis while ending mass unemployment, this economic renewal plan would invest in sectors throughout the economy. Here is a breakdown of the jobs created by major industrial sector:

- Manufacturing: **1.6 million new manufacturing jobs.** Investments in electric vehicles, wind power, and solar power would drive the manufacturing job boost. Buy America standards should apply to all investments to bolster the manufacturing base that we need to build a more just, clean energy economy.
- Construction: **1.6 million new construction jobs.** Many of these jobs would stem from investments in upgrading infrastructure and buildings to boost efficiency and resilience while cutting pollution.
- Services: **9.3 million new services jobs.** Investments in public parks and recreation, ecosystem restoration, and the care economy would yield a particularly high share of services jobs.
- Agriculture: **1.4 million new agricultural jobs.** Investments in regenerative agriculture and marginalized farmers would yield these jobs, while supporting healthy food and rural economic security.
- Wholesale and Retail: **1.2 million new wholesale and retail jobs.** Most of these would be "induced jobs," created thanks to increased spending from workers supported by the stimulus investments.

For dynamic simulations of the job creation impacts of stimulus investments, please visit our Jobs Calculator.

PHOTO: ISTOCK / MORSA IMAGES

JOB CREATION FROM ECONOMY-WIDE INVESTMENTS

ECONOMIC RENEWAL PLAN: OVER 15.5 MILLION GOOD JOBS

The Problem

Due to the COVID-spurred crises of mass unemployment and public health, millions of people currently lie awake at night wondering how to make rent, put food on the table, or afford medical bills. The pandemic also has laid bare the links between the longstanding, mutually reinforcing crises that our society faces, such as racial, economic, and gender injustice; economic insecurity; toxic pollution; health vulnerability; crumbling infrastructure; and climate change.

Those links have long been a lived reality for communities across the country. In the Gulf South the intersection between systemic racism and climate impacts is no more theoretical than the five storms that battered Louisiana's Black and Indigenous communities in last year's record-breaking hurricane season. Or look to the industrial cities of the Midwest, where racist redlining has led to lower wages and higher air pollution for many Black communities — air pollution that is increasing the risk of death from COVID-19 while contributing to the climate crisis. For millions, the connections between systemic racism, economic injustice, environmental crisis, and public health have been just as real as the air we breathe.

Chronic underinvestment in our communities has exacerbated these interconnected crises. For example, after decades of inadequate and inequitable investments in our buildings infrastructure, today millions of people live in substandard and overcrowded housing that makes it difficult to shelter at home to prevent COVID infection. Meanwhile, the low energy efficiency of these buildings saddles low-income families with high energy bills that exacerbate income inequity, while contributing to the climate pollution that is feeding increasingly intense storms — storms that the same substandard buildings are not equipped to withstand.

The lesson for policymakers is clear: The crises we face are interlocking and thus our solutions must be as well.

The Solution

We cannot and need not choose between addressing job creation or climate change, public health or racial inequity, toxic pollution or crumbling infrastructure. All of

PHOTO: ISTOCK / ORANAT TAESUWAN

these are false choices. With a holistic economic renewal plan such as the THRIVE Agenda, we can put millions of people back to work while tackling the overlapping crises we face. Backed by over 100 members of Congress and hundreds of union, racial justice, climate, and other grassroots groups, the THRIVE Agenda offers Congress an eight-pillar blueprint for economy-wide investments to build an economy that fosters justice, not crisis.

For example, hiring workers to upgrade our water, energy, transportation, and natural infrastructure would support cleaner air and water, and thus, improved public health, for millions of people — particularly for communities of color and working class families. It also would diminish climate pollution and increase climate resilience, which could support greater equity by reducing the disproportionate climate threats that low-income families and communities of color face.

We can only achieve such deep infrastructure upgrades by creating millions of jobs — jobs that span the construction, manufacturing, services, agriculture, and care sectors from coast to coast. Properly designed, these jobs would raise wages and expand healthcare benefits and access to unions for working class households, curbing income inequality. Properly targeted, these investments would expand economic opportunities and slash pollution in communities of color, helping to counteract environmental racism and close the racial wealth gap. To "build back better" instead of reverting to the unjust status quo, Congress needs to pass a THRIVE-aligned economic renewal plan that is as comprehensive as the crises we face.

The Jobs

A new economic analysis from the Political Economy Research Institute shows that a THRIVE-aligned economic renewal plan would provide over **15.5 million good jobs for 10 years**. The plan includes economy-wide public investments totaling $954 billion per year, or $4.77 trillion for the first five years. The plan has four primary components:

- **5.2 million jobs to upgrade our infrastructure:** This economic renewal plan starts with a much-needed infrastructure upgrade. The American Society of Civil Engineers (ASCE) currently gives an overall grade of "D+" to our ailing transportation, energy, water, and natural infrastructure. ASCE estimates that upgrading our infrastructure to a "B" grade would take a public investment of $2 trillion over 10 years. With additional upgrades (e.g., expanding broadband access and fixing leaking gas pipes), the total infrastructure investment becomes $3.2 trillion over 10 years. These upgrades would support improved health, climate, equity, and jobs outcomes, as spelled out above and in the "Job Creation from Specific Investment Programs" section.
- **4.1 million jobs to transition to a clean energy economy:** The second component of the economic renewal plan is a comprehensive investment to meet science-based targets for reducing climate pollution, because our response to one crisis must not leave us vulnerable to another. This investment includes expanding renewable energy, increasing energy efficiency, and investing in electric vehicles.


PHOTO: ISTOCK / MONKEYBUSINESSIMAGES

A $3.6 trillion public investment over 10 years in these sectors, when coupled with an equal amount of private investment, would yield an estimated 45 percent reduction in U.S. carbon emissions by 2030, in line with the global emissions reductions goal established by the Intergovernmental Panel on Climate Change. This investment covers two areas:

  - A $2.4 trillion investment over 10 years in renewable energy, providing 2.8 million jobs for a decade, and
  - A $1.2 trillion investment over 10 years in the energy efficiency of our buildings, industries, and vehicles, providing 1.3 million jobs for a decade.

- **3.9 million jobs to restore our lands and expand regenerative agriculture.** The economic renewal plan invests $1.9 trillion over 10 years to clean up toxic pollution, restore ecosystems, and transition from a highly polluting, unsustainable food system dominated by a handful of exploitative corporations toward a regenerative agriculture model that ensures fairness for family farmers and workers, supports rural economic security and racial equity, and boosts climate resilience and access to healthy food.
- **2.3 million jobs to expand public services and care for children, people with disabilities, and the elderly.** As families struggle to access essential healthcare, child care, and adult care services, those who provide critical care work — disproportionately women of color— are all too often unpaid, underpaid, and systematically undervalued. This plan lays out investments totaling $845 billion over 10 years to increase access to — and the quality of — child care, healthcare, and public services, while creating millions of good, family-sustaining jobs that honor the value of care and public service workers.
- Of the over 15.5 million total jobs created by this economic renewal plan, nearly **1.6 million jobs would be in the manufacturing sector.** This manufacturing growth would support greater income equity, as manufacturing jobs tend to pay higher wages than construction or service-sector jobs and union density in the manufacturing sector is higher than in the private sector overall.

Below is a breakdown of the 30 categories of investment included in this economic renewal plan, with the dollars invested and jobs created for each category, as reflected in the modeling conducted by the Political Economy Research Institute.

OVER 15.5 MILLION JOBS FROM $1 TRILLION PER YEAR IN INVESTMENTS

Sector	Annual investment (billions USD)	Jobs sustained each year	10-year investment (billions USD)
Infrastructure: 5.2 million jobs			
Surface transportation	110.1	**2,268,060**	1,101
Water / wastewater	32.2	**473,340**	322
Electricity	42.7	**448,350**	427
Airports	4.2	**43,260**	42
Inland waterways / marine ports	1.5	**19,200**	15
Dams	3.9	**72,540**	39
Hazardous and solid waste	0.3	**4,590**	3
Levees	7	**131,600**	70
Public parks and recreation	10.2	**216,240**	102
Rail	20.9	**234,080**	209
Schools	38	**790,400**	380
Gas pipelines leak repairs	18.3	**157,380**	183
Broadband	35	**353,500**	350
Clean, renewable energy and energy efficiency: 4.1 million jobs			
Wind	108	**1,274,400**	1,080
Solar	108	**1,220,400**	1,080
Geothermal	24	**280,800**	240
Building retrofits	56.5	**757,100**	565
Industrial efficiency	6.3	**89,460**	63
High-efficiency autos	56	**481,600**	560
Agriculture and land restoration: 3.9 million jobs			
Regenerative agriculture	41	**975,800**	410
Farmland conservation	25	**482,500**	250
Organic farming	1.5	**35,700**	15
Resources for marginalized farmers	91	**1,965,600**	910
Agricultural R&D	2.5	**40,500**	25
Pollution cleanup	12.6	**204,120**	126
Closing orphaned wells	12	**190,800**	120
Ecosystem restoration	1	**23,000**	10
Care economy, public health, and Postal Service: 2.3 million jobs			
Care economy	77.5	**2,216,500**	775
Public health	4.5	**76,950**	45
Postal Service	2.5	**40,000**	25
TOTAL	**954.2**	**15,567,770**	**9,542**

CROSS-CUTTING ENVIRONMENTAL, LABOR, AND EQUITY STANDARDS

The quality of the jobs created through this economic renewal plan is just as important as the quantity of jobs. Stimulus investments must be subject to high-road labor standards to ensure that the jobs created are family-sustaining careers that offer workers a dignified and meaningful livelihood and lasting economic security.

To chart a path to a more equitable society, these jobs must be made accessible to all people. In addition, equitable hiring practices and targeted investments must be used to prioritize job creation, economic ownership opportunities, improved health outcomes, and environmental benefits for low-income communities, communities of color, women, and others who are bearing the brunt of the economic, health, and climate crises. Finally, to yield a healthier and more stable future, stimulus investments also must address climate change and toxic pollution. The materials, operations, and end use of projects must uphold environmental standards that reduce pollution and increase climate resilience for communities.

All investments in a THRIVE-aligned economic renewal plan must uphold the following environmental, labor, and equity standards.

PHOTO: ISTOCK / OMAR OSMAN

Climate and Environmental Standards

- Investments should meet a baseline climate and environmental test. To qualify for funding, projects should demonstrate that their use will support reduced greenhouse gases, reduced toxic pollution, and/or increased climate resilience.
- The materials and parts used should be subject to Buy Clean standards that reduce industrial pollution, climate resilience standards, and energy efficiency standards (as applicable).
- All construction and related contracts should include requirements to use climate-resilient designs for infrastructure and low-emissions operations.

Labor Standards

- All construction, service, and related contracts should include requirements for Davis-Bacon prevailing wages, project labor agreements, a neutrality policy on collective bargaining, and use of registered apprenticeship programs, among other labor standards; in addition to preferences for local hire, community-based businesses, and worker cooperatives.
- The materials and parts used should be subject to Buy America and other domestic content policies, after closing loopholes in those policies, to support manufacturing job creation.

Equity Standards

- At least 50 percent of investments should be directed toward low-income communities, communities of color, deindustrialized communities, and other communities facing disproportionate impacts from the COVID-19 crisis, toxic pollution, and/or climate change.
- The share of infrastructure funding that goes to the District of Columbia, Puerto Rico, and all U.S. territories should be at least proportional to the population of these jurisdictions.
- All construction and related contracts should require community benefits agreements; a mandatory "ban the box" policy to ensure fair employment opportunities for all; and hiring and contracting preferences for low-income workers, people of color, women, people with disabilities, LGBTQ+ individuals, and formerly incarcerated people.
- All jobs created should be accessible to undocumented immigrants and paired with a moratorium on deportations and a path to citizenship for those workers.

WHY STANDARDS MATTER: BREAKDOWN OF THE JOBS CREATED

To see why it is essential to attach strong labor and equity standards to stimulus investments, we can examine what would happen without such standards. In short, such a stimulus would reinforce the unjust status quo instead of counteracting persistent economic, racial, and gender inequity.

After modeling the total job creation potential from THRIVE-aligned investments, the Political Economy Research Institute assessed what types of jobs these investments would produce without the application of THRIVE's high-road labor or equity standards, revealing who would benefit and who would be left behind. This analysis included three components:

1. **Job Quality:** average salary, health and retirement benefit coverage, and union density for the jobs created in each category of investment, if the stimulus were to omit labor standards
2. **Who Benefits:** educational background and racial and gender composition of the workforce that would benefit from the jobs created in each category of investment, if the stimulus were to omit equity standards
3. **Sectoral Breakdown:** the number of jobs created in each category of investment, broken down by major industry sectors (e.g., manufacturing, construction, services, agriculture, and wholesale and retail)

Job Quality

This analysis makes clear that the labor standards named above are essential to ensure that stimulus jobs actually offer workers family-sustaining salaries and benefits and access to a union. Absent such standards, the quality of the jobs created ranges from high-paid careers to low-quality occupations where workers earn about half of the national average salary and have little access to health insurance, retirement plans, or union protection.


PHOTO: ISTOCK / FG TRADE

- **Salaries:** Several types of investment would likely create jobs with an average annual salary that exceeds $80,000 — significantly higher than the economy-wide average of $64,600. This includes infrastructure upgrades such as investments in rail, electricity, broadband, and leak repairs on gas distribution pipelines; and clean energy investments such as expansion of wind power, electric vehicles, and industrial efficiency. However, without strong labor standards, salaries would be less than half as high in the jobs resulting from investments in surface transportation ($37,500), regenerative agriculture ($21,500), and the care economy ($36,300). Millions of workers would live with these low salaries, given that these very investments are some of the biggest job creators in the THRIVE package, generating 2.3 million, 1 million, and 2.2 million jobs, respectively. To ensure that all of the new jobs offer dignified pay, a stimulus package must condition investments on adherence to Davis-Bacon prevailing wage standards for construction and service jobs, project labor agreements for construction projects, and new wage standards for other sectors.
- **Benefits:** Several categories of investment would yield jobs with good benefits, including health insurance coverage for at least 60 percent of workers and retirement plans for at least half of workers. Such benefits, for example, would result from investments in electric vehicles, leak repairs on gas pipelines, and the Postal Service, thanks in part to higher union density in these sectors. Meanwhile, investments in categories such as public parks and recreation, surface transportation, building retrofits, ecosystem restoration, and the care economy would create jobs with health benefits for less than 40 percent of workers and retirement benefits for less than a third of workers. A stimulus package could improve the benefits coverage of new jobs, particularly those in construction, by requiring employers to pay prevailing wages and use project labor agreements that offer workers fringe benefits.

- **Union Density:** Unionized workplaces tend to offer workers higher wages and better benefits than non-unionized counterparts. Since the workforce tends to be more unionized in industries such as airports, rail, gas pipeline leak repairs, and the Postal Service (all of which have over 20 percent union membership), stimulus investments in these sectors would tend to promote union jobs. By the same token, investments in less unionized workforces would result in a low number of union jobs, absent measures to expand access to unions. This includes investments in most agricultural sectors and the care economy, where just 3 to 6 percent of workers are union members. While fully fixing this problem will require structural reforms (e.g., amending the National Labor Relations Act to allow domestic workers and farmworkers to form unions), a stimulus package could help reverse the suppression of unions by, for example, requiring employer neutrality with regard to union organizing.

Who Benefits

Without strong equity standards, stimulus investments would simply replicate long-standing inequities in access to jobs. In many investment categories, those benefiting would be largely white and male, leaving women and people of color — particularly Black workers — with a disproportionately small slice of the economic benefits. To avoid this outcome and ensure equitable access (or even proportional access) to stimulus jobs, investments must be concentrated in communities of color and paired with equitable hiring and contracting practices.

- **Racial Composition:** People of color constitute 37 percent of the overall workforce. People of color would benefit from a similar share of stimulus jobs for certain categories of investment (e.g., most infrastructure categories). However, without strong equity standards, people of color would be underrepresented in certain high-paying jobs (e.g., fixing leaks in gas pipelines, industrial efficiency), while several low-paying job categories would employ a disproportionately high number of people of color (e.g., surface transportation, care economy) — a clear example of systemic racism. But this overall picture obscures an even starker reality: Black workers would be underrepresented in nearly all job types. In 12 of the 13 infrastructure job categories, Black workers would constitute just 6 percent to 9 percent of the workforce, despite comprising 11 percent of the overall workforce. (The one exception — surface transportation, where Black workers would be overrepresented — is the lowest-paying infrastructure category.) This is likely due in part to the fact that a disproportionately small number of Black workers work in construction, which constitutes a significant share of the infrastructure jobs. Black workers would be similarly underrepresented in virtually all energy, agricultural, and land restoration jobs, while being overrepresented in the care economy — another low-paying category — and the Postal Service, where new jobs would be higher-paying but relatively scarce. To ensure that people of color, particularly Black workers, get access to job creation benefits, a stimulus package must direct at least 50 percent of investments to communities of color and other frontline communities. In addition, investments should be paired with requirements to use equitable hiring and contracting preferences that favor people of color, including via community benefits agreements and project labor agreements.
- **Gender Composition:** While women make up nearly half of the overall workforce, they are vastly underrepresented in most job types that would be supported by these stimulus investments. In some investment categories such as rail or building retrofits, only 10 percent of the jobs created would go to women, unless equity standards were used. As with Black workers, in the few job types where women would have proportional or high representation, the salaries tend to be low. The clearest example is the care economy, where women would likely fill 80 percent of the jobs, though with an average salary of just $36,000. The fact that women would miss out on many of the jobs in this stimulus package probably stems in part from the fact that women only make up 13 percent of the construction workforce (many infrastructure investments are construction-intensive) and just 29 percent of the manufacturing workforce (many energy investments are manufacturing-intensive). To ensure that investments counteract gender inequity rather than reinforce it, a stimulus package must use equitable hiring and contracting preferences that favor women.
- **Educational Background:** Thankfully, these stimulus investments would create jobs that are broadly accessible to people without a college degree. In fact, in many infrastructure, energy, agriculture, and land restoration categories, the share of jobs that would go to people with only a high school degree is higher than in the economy overall.

Sectoral Breakdown

Any economic stimulus package that aims to tackle the full scope of the climate crisis while ending mass unemployment will need to invest in sectors throughout the economy. The THRIVE stimulus package does just that, resulting in significant job creation in an array of major industries.

- **Manufacturing:** This stimulus package would create and sustain nearly 1.6 million new manufacturing jobs, a 12 percent increase in our manufacturing employment. Many of the manufacturing jobs would stem from investments in clean energy, particularly electric vehicles, wind power, and solar power. This would offer a needed boost to a manufacturing sector that typically provides family-sustaining benefits and wages ($29 per hour on average), but that has been declining for years as corporations have outsourced production to countries with weaker labor and environmental standards. Studies have shown that the U.S. manufacturing decline is one of the biggest reasons for rising economic inequality, as a strong manufacturing base is important for sustaining a middle class. We also need a robust manufacturing base to be able to produce the goods that serve as building blocks for a clean energy economy: energy efficient building materials, wind turbines, auto parts for electric vehicles, solar panels, components to replace lead pipes, and so on. The economic transition we need is one where workers can fully capture the gains by producing the goods needed to build a new economy. To further increase the manufacturing boost from a stimulus package, the materials and parts used should be subject to strengthened Buy America and other domestic content standards.
- **Construction:** While construction accounts for only 5 percent of our economy's jobs, the jobs tend to pay well ($32 per hour on average) and the sector is currently outpacing most other sectors in job growth. These stimulus investments would create nearly 1.6 million construction jobs — a 21 percent increase in construction employment. Much of that increase would stem from construction-intensive infrastructure investments (e.g., dams and levees) and building retrofits, where more than one-third of the jobs created would be in construction.
- **Services:** Service sectors account for two-thirds of U.S. employment. The quality of these jobs ranges widely, from computer programming services that pay $50 per hour on average to restaurant work that pays $15 per hour on average. (Both of these examples are among our economy's biggest job growth sectors.) This stimulus plan would create an additional 9.3 million service jobs, an increase of 9 percent. Given the mammoth size of the services sector, it is no surprise that services would account for the majority of jobs created in many categories of investment. That said, the services sector would play a particularly dominant role in job creation in certain categories, such as investments in public parks and recreation, ecosystem restoration, and the care economy.
- **Agriculture:** While agriculture accounts for just over 1 percent of total U.S. employment, many rural communities depend on agriculture as a primary source of economic security. These stimulus investments would create over 1.4 million agricultural jobs. Most of that job creation would stem from direct investments in regenerative agriculture, resources for marginalized farmers, and other agricultural projects.
- **Wholesale and Retail:** The wholesale and retail sectors currently account for 13 percent of U.S. jobs, though they are among the sectors experiencing the largest decline in jobs. While wholesale jobs pay $33 per hour on average, the more plentiful retail jobs pay only $21 per hour on average. While the investments in this stimulus package do not directly target wholesale or retail sectors, they would create 1.2 million new wholesale and retail jobs, an increase of 6 percent. The vast majority of these new jobs would be "induced jobs," meaning that they would be created indirectly thanks to increased spending from workers who are directly supported by the stimulus investments.

Sources: *Data on sector-wide job numbers, pay levels, and racial and gender composition for each economic sector come from the Bureau of Labor Statistics.*

JOB CREATION FROM SPECIFIC INVESTMENT PROGRAMS

In addition to modeling job creation from economy-wide investments, the Political Economy Research Institute modeled the number of jobs that would be created for investments in dozens of specific programs that many labor, environmental justice, climate, and other civil society groups have proposed for an economic renewal plan.

Sierra Club's April 2020 letter to Congress on stimulus priorities describes most of these programs, with dollar amounts named for each. For each investment, the analysis from the Political Economy Research Institute estimates the total number of jobs (including the number of manufacturing jobs) that would be created. These programs fall into eight categories of investment: energy, transportation, buildings, manufacturing, water, lands/outdoors, agriculture, and care economy/public services.

The investments in these programs would put millions of people back to work to replace lead pipes, build clean and affordable public transit, modernize our grid, build and repair public housing, manufacture clean energy goods, clean up hazardous waste, restore wetlands and forests, support regenerative agriculture, increase access to child care, and more. Below are some illustrative examples for each of the eight categories.

SUPPORT CLEAN ENERGY WORKERS

The Problem

Nearly 430,000 clean energy workers are out of work due to the COVID-19 pandemic. Before the pandemic, clean energy was one of the fastest-growing sectors in the economy, employing more than 3 million workers. Growth in wind and solar power and energy efficiency has been supporting more and more working families, while promoting cleaner air and water and slashing climate pollution. However, the COVID crisis has brought hardship to many clean energy workers, as made clear in an analysis by E2: "Energy efficiency workers are losing their jobs after being shut out of homes and buildings to prevent the spread of the coronavirus. Solar and wind turbine companies are laying off workers as they're unable to access panels and parts stranded in shut-down factories and as financing disappears." To tackle this crisis, clean energy workers need economic investment.

The Solution

We urgently need to support clean energy workers by investing in the transition to a 100% clean energy economy. That means expanding tax incentives for wind, solar, battery storage, and other clean energy industries. It means extending loans and grants to launch new renewable energy projects, to connect remote sources of wind and solar to our electricity grid, and to modernize the grid for reductions in energy costs and climate pollution. While supporting jobs for hundreds of thousands of clean energy workers, we also could hire unemployed oil and gas workers to close orphaned and leaking oil and gas wells — a win-win for working families and our climate.

PHOTO: ISTOCK / SOLSTOCK

The Jobs

Investments in clean, renewable energy programs would provide good jobs for hundreds of thousands of workers. Specifically, Congress should:

- **Provide nearly 100,000 jobs by extending clean energy tax credits:** Congress needs to invest $41.5 billion over five years to extend tax credits for wind, solar, battery storage, energy efficiency, and other clean energy sectors, helping to put nearly 100,000 clean energy workers back to work. To further support clean energy, existing tax credits should be made refundable and construction and safe harbor deadlines should be extended.
- **Provide over 50,000 jobs by investing in rural access to clean, renewable energy:** Congress needs

to invest at least $50 billion over 10 years in rural electric cooperatives via existing programs at the U.S. Department of Agriculture. These investments would help rural communities to pursue democratic, cooperative ownership of clean renewable energy generation, transmission, storage, and distribution; energy efficiency upgrades; and electrification projects.

- **Provide over 190,000 jobs by closing orphaned oil and gas wells:** Congress needs to invest $60 billion over five years to close over 3 million orphaned and leaking oil and gas wells, relieving a burden that currently falls largely on states. This investment would support unemployed workers in the oil and gas industry while reducing pollution.

And More ...

For a complete list of clean energy investments, see economic analysis from the Political Economy Research Institute and Sierra Club's letter to Congress, which outlines specific priorities for a bold stimulus package that puts millions of people back to work to build a healthier, more equitable clean energy economy.

CLEAN TRANSPORTATION FOR ALL

The Problem

The transportation sector is a major source of air pollution that contributes to asthma, cancer, and an increased likelihood of death from COVID-19, particularly for communities of color who are disproportionately exposed to such pollution. In addition, the transportation sector is one of the largest and fastest-growing sources of carbon emissions in the U.S., responsible for nearly 30 percent of all U.S. climate pollution. We urgently need clean transportation for all. Thankfully, clean transportation options like electric vehicles and clean public transit have been growing, employing hundreds of thousands of workers. However, tens of thousands of clean transportation workers have lost their jobs due to the COVID crisis, and many more are at risk of unemployment as public transit agencies lose billions of dollars amid historic declines in ridership.

The Solution

We urgently need to support clean transportation workers and the continued growth of clean transportation for all. That means investing in clean public transit to ensure safety, cover lost revenues, and expand access to clean and affordable buses, subways, and light rail options. It means making clean electric vehicles affordable and accessible to everyone by offering equitable rebates to make electric vehicles cheaper, electrifying public buses, and investing in charging infrastructure in our communities. It means investing in bikeable and walkable communities that promote safety, accessible mobility, and public health.

The Jobs

Investments in clean transportation programs would provide hundreds of thousands of good jobs. Specifically, Congress should:

- **Provide over 635,000 jobs by making electric vehicles more affordable:** Congress should pass and fully fund the Clean Cars for America proposal, which would invest $454 billion over 10 years to replace millions of gas guzzlers with electric vehicles. The proposal includes consumer rebates to lower the cost of electric vehicles, particularly for lower-income families, and incentives to support domestic manufacturing of electric vehicles.
- **Provide 213,000 jobs by investing in clean public transit:** Congress needs to increase public transit operational funding by $50 billion and maintenance funding by $100 billion over 10 years to support public health measures during the COVID crisis while making up for lost revenues. Estimated COVID-related losses to transit agencies tally between $26 billion and $38 billion, and the estimated transit maintenance backlog totals $99 billion.
- **Provide 56,000 jobs by electrifying school buses and public transit buses:** Congress should invest $20 billion over five years for school districts and transit systems to replace 60,000 school and public transit buses (about 10 percent of the national fleet) with domestically manufactured electric vehicles and charging infrastructure.

And More ...

For a complete list of clean transportation investments, see economic analysis from the Political Economy Research Institute and Sierra Club's letter to Congress, which outlines specific priorities for a bold stimulus package that puts millions of people back to work to build a healthier, more equitable clean energy economy.

CLEAN AND HEALTHY BUILDINGS


PHOTO: ISTOCK / NAEBLYS

The Problem

Too many of our homes, offices, and other buildings are old, inefficient, polluting, costly, vulnerable, and unhealthy. Overcrowded and substandard housing is currently making it harder for millions of people to shelter at home to prevent COVID-19 infection. Meanwhile, residential and commercial buildings account for nearly 40 percent of U.S. carbon dioxide emissions, due to the burning of oil and gas for heat in some buildings and the inefficient use of energy in most buildings for heating, cooling, lighting, and appliances. Such inefficiency also spells high energy bills; about one-third of all U.S. households have trouble paying those bills. The burden falls heaviest on low-income families, which tend to spend significantly higher shares of their income on electricity — twice as much as the median household. In addition, many old buildings also contain indoor air pollutants such as mold that can trigger asthma attacks. Compounding these threats to human health and safety is the fact that many buildings are not equipped to handle climate-related disasters such as increased flooding, extreme heat, or violent storms.

The Solution

We urgently need to upgrade our buildings to support public health, reduced emissions, economic security, and climate resilience. That means fully electrifying our homes, schools, hospitals, offices, and other buildings so that they do not need to rely on polluting fossil fuels for heat. It means weatherizing and retrofitting buildings to increase energy efficiency, slash electricity bills, and reduce climate pollution. It means upgrading buildings to withstand climate change and support healthy living and working environments.

The Jobs

Investments in clean and healthy buildings would provide good jobs for hundreds of thousands of workers. Specifically, Congress should:

- **Provide over 230,000 jobs to upgrade all public housing:** Congress needs to pass the Green New Deal for Public Housing Act, investing $172 billion over 10 years to retrofit all U.S. public housing in support of energy efficiency, electrification, rooftop solar, climate resilience, and a healthier living environment. In addition to creating hundreds of thousands of jobs, this investment would improve living conditions for over 2 million people, and cut over 5 million tons of carbon emissions each year.

- **Provide over 165,000 jobs to upgrade all schools, hospitals, and municipal buildings:** Congress needs to invest $61.2 billion over five years to retrofit every school, university, hospital, and municipal building in the country. These building upgrades would create good jobs; improve health standards for hospital patients, health workers, students, and teachers; cut energy costs; reduce pollution; and help tackle climate change.
- **Provide over 92,000 jobs to support community-led development:** Congress needs to invest $30 billion for Community Development Block Grants over five years to expand affordable housing, improve living conditions and public health, and support community-led economic development in low-income neighborhoods.

And More ...

For a complete list of clean building investments, see economic analysis from the Political Economy Research Institute and Sierra Club's letter to Congress, which outlines specific priorities for a bold stimulus package that puts millions of people back to work to build a healthier, more equitable clean energy economy.

MANUFACTURING RENEWAL

The Problem

PHOTO: ISTOCK / KALI9

We are not producing nearly enough of the goods needed for the transition to a 100% clean energy economy. To expedite that transition, and ensure that workers gain from it, we need to invest in increased manufacturing of electric vehicle parts, wind turbine components, energy efficient building materials, and other clean energy goods. Meanwhile, industry remains a significant source of pollution. Too many communities who live outside the fences of U.S. factories endure health problems from industrial pollution, including the type of air pollution that is increasing the likelihood of death from COVID-19, particularly in communities of color. Industry also is the largest source of U.S. climate pollution, when accounting for factories' burning of fossil fuels, chemical processes, and consumption of electricity. While climate pollution from other sectors is expected to decline or remain constant, industrial climate pollution is expected to rise even further. In addition, the U.S. imports as much industrial climate pollution as it produces. Each year, over 1.4 gigatons of climate pollution is emitted abroad just to produce the manufactured goods that we import — the same amount of climate pollution produced by all U.S. factories combined.

The Solution

We urgently need to invest in a manufacturing sector that is compatible with the transition to a 100% clean energy economy. That means using government purchasing, grants and loans, and other investments to spur increased manufacturing of clean energy goods. It means rewarding factories that slash pollution and investing in technologies to reduce industrial emissions. It means establishing institutions to support a swift and coherent transition to sustainable production of strategic goods while investing in manufacturing workers.

The Jobs

Nearly 1.6 million good manufacturing jobs would be generated just to produce the goods required by the energy, transportation, buildings, water, land, agriculture, care economy, and other investments detailed in this economic renewal plan. Beyond this impact, direct investments in clean manufacturing would provide hundreds of thousands of additional jobs. Specifically, Congress should:

- **Provide hundreds of thousands of jobs via government purchases:** Federal, state, and local governments need to expand procurement of domestically manufactured clean energy goods, including electric vehicles for government fleets; components for government-owned public transit and passenger rail; energy-efficient construction materials and appliances for government buildings; and renewable energy, battery storage, and grid modernization components for federal and municipal-owned energy systems. Every $1 billion of government purchases would create 13,000 jobs if spent on clean transportation goods, 11,000 jobs if spent on clean energy goods, and 10,600 jobs if spent on goods for clean buildings.
- **Provide over 46,000 jobs by expanding grants and incentives for clean energy manufacturing:** Congress needs to invest $3 billion over five years for retooling grants under Section 132 of the Energy Independence and Security Act, and invest $20 billion over five years in the Advanced Technology Vehicles Manufacturing program, to expand manufacturing of electric vehicles and components. Congress also should invest $3 billion over five years in the Advanced Manufacturing Tax Credit under section 48C of the Internal Revenue Code to boost manufacturing of renewable energy, energy storage, and energy efficiency goods.
- **Create a National Investment Agency, including an economic development and industrial bank to support manufacturing jobs:** Congress needs to create and capitalize an economic development and industrial bank to provide preferential loans, grants, and contracts to manufacturers to produce goods needed for clean energy, clean transportation, clean buildings, and clean water, and to invest in reductions in greenhouse gases and toxic emissions from industrial production.

And More ...

For a complete list of clean manufacturing investments, see economic analysis from the Political Economy Research Institute and Sierra Club's letter to Congress, which outlines specific priorities for a bold stimulus package that puts millions of people back to work to build a healthier, more equitable clean energy economy.

CLEAN WATER FOR ALL

The Problem

Hand washing is an essential part of preventing the spread of COVID-19. Yet, amid the COVID crisis, access to clean running water is out of reach for millions of families. Even before the crisis, an estimated 15 million people had experienced water shutoffs. Now, as unemployment persists and people struggle to pay utility bills, utilities are actually shutting off people's water — during a public health crisis. Meanwhile, far too many communities still do not have access to clean drinking water. In nearly 3,000 communities, lead poisoning is more than twice as severe as in Flint, Michigan. For many, that's due to toxic water from lead pipes. In addition, in cities across the country, major storms — which are intensifying with climate change — are causing destructive flooding, sewage overflows, and toxic runoff, due to old and overburdened wastewater systems.

PHOTO: ISTOCK / FIZKES

The Solution

We urgently need to invest in clean water for all. That means halting all water shutoffs and reconnecting all households that have been disconnected from running water. It means replacing lead pipes in homes, schools, and buildings throughout the entire country and removing other water pollutants so that no one has to question whether their tap water is safe to drink. It means replacing wastewater systems to reduce flooding and toxic runoff in hard-hit communities.

The Jobs

Investments in clean water would provide good jobs for hundreds of thousands of workers. Specifically, Congress should:

- **Provide over 356,000 jobs to secure clean drinking water:** Congress needs to invest $45 billion over 10 years in the Reducing Lead in Drinking Water program to replace lead pipes and protect our children and communities from the damaging impacts of toxic lead pollution (this would provide 68,400 jobs). To further secure clean water for our communities, Congress needs to invest $100 billion over five years in the Clean Water and Drinking Water State Revolving Funds (this would provide 288,000 jobs).
- **Provide over 59,000 jobs to halt water shutoffs and restore connections:** Congress needs to immediately invest at least $5 billion to fund emergency relief and a nationwide moratorium on shutoffs of water for the duration of the crisis. This includes funding the costs for utilities to restore and maintain water service for homeowners and renters.
- **Provide over 56,000 jobs to upgrade wastewater infrastructure:** Congress needs to invest $6 billion for wastewater infrastructure over the next 18 months to prevent sewage overflows, prevent flooding, and stop runoff pollution.

And More ...

For a complete list of clean water investments, see economic analysis from the Political Economy Research Institute and Sierra Club's letter to Congress, which outlines specific priorities for a bold stimulus package that puts millions of people back to work to build a healthier, more equitable clean energy economy.

POLLUTION-FREE COMMUNITIES, LANDS, AND PARKS

The Problem

Fifty-three million people live within three miles of 1,836 "Superfund" sites — places contaminated by toxic pollution and hazardous waste, which pose disproportionate threats to communities of color. In addition, over 5 million people in Appalachia live within a mile of an abandoned coal mine with dangerous contamination. As we grapple with the COVID-19 crisis, such hazards only compound public health threats. While many of the places we live are contaminated with pollution, many of the places we love are disappearing or out of reach. Louisiana loses the equivalent of a football field of wetlands every 100 minutes, exposing Gulf Coast communities to increased climate risks. Meanwhile, protections for our public lands are under constant attack from corporate polluters. Such protected areas also are too often inaccessible. Fewer than half of all people in the U.S. live within walking distance of a park, as neighborhoods divided by race and class put the benefits of the outdoors out of reach for many low-income families and communities of color.

The Solution

We urgently need economic investments to protect the places we live and love. That means cleaning up toxic pollution at contaminated sites to support healthy communities. It means hiring local workers to protect and restore our wetlands and forests. And it means investing in projects to improve our parks and support equitable access to the outdoors.

PHOTO: ISTOCK / OZGURDONMAZ

The Jobs

Investments in pollution-free communities, lands, and parks would provide hundreds of thousands of good jobs for workers. Specifically, Congress should:

- **Provide nearly 100,000 jobs by cleaning up polluted communities:** Congress needs to invest $20 billion over five years for Superfund site cleanup to protect communities from toxic pollution, with funding set aside for workforce training and renewable energy development. In addition, Congress should invest $10 billion in the Brownfields program over five years to clean up contaminated sites in support of community-driven economic development, while protecting against community displacement.

- **Provide over 25,000 jobs by restoring our wetlands, forests, and parks:** Congress needs to invest $10 billion over 10 years to fund the creation of a Stewardship Corps to hire local workers to protect and restore forests, wetlands, and other ecosystems, as outlined in the Climate Stewardship Act. In addition, Congress should fund the National Park Service's Outdoor Recreation and Legacy Partnership program at $1 billion over 10 years to support park improvement projects that boost economic competitiveness, job training, and equitable access to the outdoors.
- **Provide over 13,000 jobs in Appalachia by restoring abandoned coal mines:** Congress needs to pass and fully fund the RECLAIM Act and the Abandoned Mine Land Reauthorization Act to spur economic development in hard-hit mining communities by restoring land and water resources impacted by coal mining. Congress should invest $10 billion over 10 years to clear the entire backlog of abandoned mine restoration projects.

And More ...

For a complete list of lands and outdoors investments, see economic analysis from the Political Economy Research Institute and Sierra Club's letter to Congress, which outlines specific priorities for a bold stimulus package that puts millions of people back to work to build a healthier, more equitable clean energy economy.

REGENERATIVE AGRICULTURE AND HEALTHY FOOD

PHOTO: ISTOCK / RAWPIXEL

The Problem

The way we produce food is unhealthy, unfair, and unsustainable. In a food system dominated by a handful of corporations, exploitation of farm workers and family farmers is pervasive. Status quo agricultural policies favor agribusiness giants, which undercut small-scale farms and use highly polluting practices that poison our air, land, and water and threaten the health and safety of farmworkers, communities, and consumers. Moreover, this model cannot be sustained. Soil degradation has eroded the nutritional content of our food and depleted agricultural ecosystems to the point that, according to the UN Food and Agriculture Organization, there are fewer than 60 years of harvests left if current practices continue. The climate change impact of our food system is similarly concerning: Intensively managed soils have lost 50 percent to 70 percent of their pre-cultivation carbon, releasing billions of tons of carbon into the atmosphere. Under current practices, agriculture accounts for nearly 10 percent of aggregate U.S. greenhouse gas emissions.

The Solution

We urgently need to rebuild our food system to support family farmers, farmworkers, and rural economic security, while regenerating healthy ecosystems and safe, nutritious food. That means investing in marginalized farmers who have been historically exploited and excluded. It means equipping family farmers to protect communities and consumers from land, water, and air pollution, while cutting greenhouse gas emissions and expanding climate resilience.

The Jobs

Investments to build a healthier, more resilient food system would provide hundreds of thousands of good jobs for workers. Specifically, Congress should:

- **Provide nearly 2 million jobs by supporting marginalized farmers and farmworkers:** Congress needs to invest $91 billion per year for 10 years to support Black, Latinx, Indigenous, immigrant, young, and other marginalized farmers by funding training, research, land transfer programs, and health and safety measures like the Asuncion Valdivia Illness and Fatality Prevention Act, which Congress should immediately pass and fund.
- **Provide over 975,000 jobs by equipping farmers to transition to ecologically regenerative practices:** Congress needs to invest $41 billion per year for 10 years to transition away from a system of dependency on large, highly polluting multinational corporations and toward ecologically regenerative practices. Funds should be made available to subsidize costs for family farmers who commit to fully transition to regenerative farming practices and to support displaced workers and their families.
- **Provide over 482,000 jobs by supporting farmland conservation:** Congress needs to invest $25 billion per year for 10 years to bolster existing programs like the Conservation Stewardship, Agricultural Conservation Easement, and Regional Conservation Partnership programs, which have demonstrated improvements in environmental quality.

And More ...

For a complete list of agricultural investments, see economic analysis from the Political Economy Research Institute and Sierra Club's letter to Congress, which outlines specific priorities for a bold stimulus package that puts millions of people back to work to build a healthier, more equitable clean energy economy.

AN ECONOMY BUILT ON CARE

The Problem

Chronic underinvestment in the care economy and essential public services has left millions without access to the services they need to live full, healthy lives. Even before the COVID-19 pandemic, millions of families lacked access to affordable child care, care for people with disabilities, and care for the elderly. In many parts of the country, the number of children outnumber the number of child care slots by more than four to one. This gap contributes to gender inequity by keeping many women out of the workforce. Meanwhile, those who provide such critical care work — disproportionately women of color — are all too often unpaid, underpaid, and systematically undervalued. Beyond the care economy, the pandemic also has spotlighted a glaring gap in other essential services, such as emergency preparedness for health and climate calamities. As a society, we remain ill-equipped to limit the damage from climate-related storms and droughts or to respond to outbreaks of disease. Disinvestment in emergency preparedness is a gamble we cannot afford.


PHOTO: ISTOCK / DRAZEN ZIGIC


PHOTO: ISTOCK / FATCAMERA

The Solution

We urgently need to recognize the importance of care work and essential public services by reinvesting in caregivers to reflect the enormous value of the services they provide. That means building and upgrading care facilities; increasing pay, training, and benefits for care workers; and offering families safe, high-quality, and affordable access to child care and long-term care. It means reinvesting in our public infrastructure for health, including community services that support preparedness for climate and health emergencies. By directing investments away from pollution-intensive, extractive activities and toward the low-carbon care economy, we can simultaneously support community health, gender equity, and greater climate stability.

The Jobs

Investments in care work and public services would provide good jobs for hundreds of thousands of workers. Specifically, Congress should:

- **Provide over 2.2 million jobs by mobilizing a Caregiving and Education Force:** Congress needs to invest $77.5 billion per year for 10 years to bolster the care economy (child care, including early childhood education, care for people with disabilities, and care for the elderly), as proposed in The Biden Plan for Mobilizing American Talent and Heart to Create a 21st Century Caregiving and Education Workforce.
- **Provide nearly 77,000 jobs by reinvesting in public health infrastructure and capabilities:** Congress needs to invest $4.5 billion per year for 10 years to support core public health capabilities at the state, territory, local, and tribal levels, including through the State Climate and Health program of the Centers for Disease Control and Prevention, improvements in public health emergency preparedness, and funding to address social determinants of health and to advance health equity.
- **Provide 40,000 jobs by sustaining and modernizing the Postal Service:** As a vital part of our country's economic, political, and cultural infrastructure, the U.S. Postal Service requires sustained investment. Congress should invest $2.5 billion per year for 10 years to support and modernize postal infrastructure and operations, including by purchasing clean delivery vehicles and improved processing equipment.

And More ...

For a complete list of care economy and public services investments, see economic analysis from the Political Economy Research Institute and Sierra Club's letter to Congress, which outlines specific priorities for a bold stimulus package that puts millions of people back to work to build a healthier, more equitable clean energy economy.

Goldman Sachs | Global Macro Research

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TOP of MIND

REFLATION RISK

Amid the accelerating economic recovery, the largest US fiscal stimulus outside of war times and the Fed's commitment to keep monetary policy very easy until higher inflation is sustained have stoked concerns that the US economy is set to overheat, sending US inflation expectations and bond yields higher. Whether these concerns are warranted, and the implications for bond yields and broader markets, is Top of Mind. Given that GS growth forecasts are at the high end among forecasters, our Fed views are at the dovish end, and yet we don't expect problematic overheating, we put our own Jan Hatzius in the hot seat. He explains that much more slack in the US economy than suggested by official estimates means that even our high growth forecasts will generate only moderate inflationary pressures, which will lessen as this year's temporary fiscal stimulus fades. We then ask Dominic Wilson and other GS strategists what this means for bond yields (a moderate rise from here) and other assets (more upside for cyclical assets), and how to protect portfolios from reflationary risks.

"There's no question that the amount of stimulus set to hit the US economy this year is unprecedented outside of major wars… but the economy is coming out of a deep hole and there's still a large gap to fill between actual and potential output… so [the stimulus] should not result in substantial overheating.

- Jan Hatzius

The market today probably still isn't fully reflecting the above-consensus growth that we expect in the coming months… This suggests more near-term upside for cyclical assets.

- Dominic Wilson

All major commodity bull markets and inflationary episodes have been invariably tied to redistributional, or populist, policies that have reduced income and wealth inequality.

- Jeff Currie"

WHAT'S INSIDE

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Macro news and views

We provide a brief snapshot on the most important economies for the global markets

US

Latest GS proprietary datapoints/major changes in views

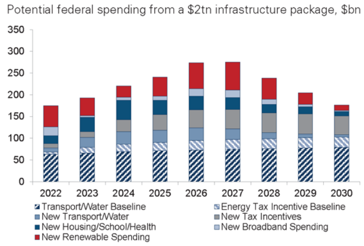
- We raised our 2Q21 GDP forecast to 10.5% qoq ann. following a sharp pickup in consumer spending in March.

Datapoints/trends we're focused on

- The next round of fiscal spending, which we expect to be focused on infrastructure and total at least $2tn, and will likely be at least partially offset by tax increases.
- Fed tapering/liftoff, which we continue to expect to begin in early 2022 and 1H24, respectively.
- Overheating risk; we're not that worried about large overheating given ample economic slack and a fading fiscal impulse.
- Virus/vaccines; while case growth has recently moved sideways, the daily pace of vaccinations has risen to 2.8mn.

Fiscal spending: more ahead, but smaller growth boost

Potential federal spending from a $2tn infrastructure package, $bn



Source: CBO, Goldman Sachs GIR.

Japan

Latest GS proprietary datapoints/major changes in views

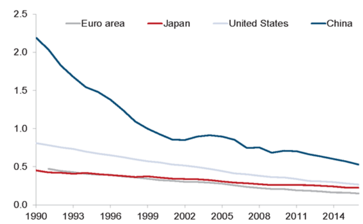
- We lowered our 1Q21 GDP forecast to -6.0% qoq ann. to reflect lower-than-expected January consumption data due to lower holiday travel and a renewed state of emergency.

Datapoints/trends we're focused on

- Zombification risk; we expect zombie companies to be smaller in size than in the 1990s, limiting the potential macroeconomic impact of any zombification.
- Climate goals; while Japan has set a goal of achieving carbon neutrality by 2050, we anticipate the country will face many challenges to doing so, including geographic conditions and the risk of natural disasters.

Japan has been relatively slow to reduce emissions

Greenhouse gas emissions/real GDP, kg per PPP $ of GDP



Source: OECD, Goldman Sachs GIR.

Europe

Latest GS proprietary datapoints/major changes in views

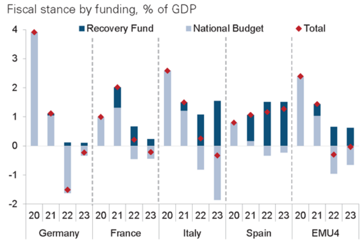
- No major changes in views.

Datapoints/trends we're focused on

- EMU4 fiscal stance, which we expect will remain expansionary in 2021 before turning slightly contractionary in 2022/23, although German elections later this year may nudge fiscal policy more towards expansionary territory.
- Italian politics; while PM Draghi appears to be steering policy in the right direction, we believe political uncertainty remains the key risk for the economy beyond 2021.
- Virus/vaccine divergence; while case growth in the UK has declined as the vaccine rollout has moved ahead rapidly, cases in the EA have risen as the rollout continues to lag.

Budgets: 2021 expansions, followed by contractions

Fiscal stance by funding, % of GDP



Source: Goldman Sachs GIR.

Emerging Markets (EM)

Latest GS proprietary datapoints/major changes in views

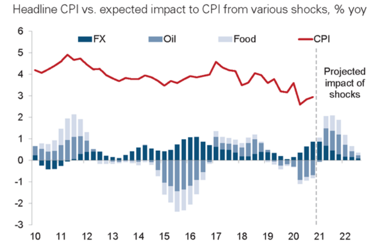
- We raised our 2021 China growth forecast to 8.5% on stronger-than-expected exports and IP data in Jan/Feb.

Datapoints/trends we're focused on

- Inflation and central bank moves; we expect higher oil and food prices to drive EM headline inflation sharply higher, raising the risk of more hawkish EM central banks over the next 3-12 months.
- Herd immunity, which we think is unlikely in many EMs, including the majority of Asian economies, until 2022.
- EM sovereign downgrades, which have continued even as sentiment has improved, but we think the worst is now over.

EM headline inflationary pressures set to rise

Headline CPI vs. expected impact to CPI from various shocks, % yoy



Source: Goldman Sachs GIR.

Reflation risk

Amid the accelerating economic recovery from the COVID-19 recession, the largest US fiscal stimulus outside of war times as well as the Fed's commitment under its new Average Inflation Targeting (AIT) framework to keep monetary policy very easy until higher inflation is actually sustained have stoked concerns that the US economy is set to substantially overheat. Indeed, the likes of former Treasury Secretary Larry Summers and former Chief IMF economist Olivier Blanchard have recently voiced such concerns (see pg. 6), which they and others argue, to varying degrees, could ignite inflationary pressures similar to the late 1960/70s, or force the Fed to tighten policy more quickly than it currently expects, potentially strangling growth and jeopardizing the still nascent recovery.

Partly in response to these concerns, US bond yields have jumped as inflation expectations have risen and as the market has pulled forward its expectations for Fed liftoff from 2Q24 at the beginning of the year to 1Q23 currently. And investors have begun to grapple with what the prospect of higher bond yields means for other assets. Whether the current overheating worries are warranted, and the implications for bond yields, and markets more broadly, is Top of Mind.

We first speak with Jan Hatzius, GS Head of Global Investment Research and Chief Economist, who pushes back on the view that US fiscal support far exceeds what's needed to aid the recovery and will lead to substantial overheating. So what are those who are more worried missing? According to Hatzius, two things: one, the amount of slack in the economy is likely much higher than official estimates suggest, so even GS's above-consensus growth forecasts will leave the economy operating only slightly above potential, and, two, fiscal stimulus, and, in turn, growth, is set to decline sharply beyond this year, even assuming another sizable investment-oriented package is enacted, which will limit any overshoot of potential output.

As a result, despite GS's strong growth views, Hatzius expects inflation to rise only modestly above the Fed's target over the coming months, before moderating somewhat (see pg. 7 for an overview of GS inflation views). These views, he says, are consistent with the Fed starting to taper asset purchases in early 2022, and hiking rates in 1H24—later than the market is currently pricing. And he sees risks to the timing of liftoff as balanced, or even skewed to the later side. That said, once the hiking cycle begins, risks are skewed toward a steeper hiking path, in his view.

David Mericle, GS Chief US Economist, then discusses the risks around our US growth, Fed, and inflation views that would generate more overheating than we currently expect. But if the economy did substantially overheat, he thinks the bigger worry than the Fed allowing an inflationary spiral would be the high cost of slowing things down given the historical track record of sparking recessions in these situations.

So what does this all suggest for bond yields? Praveen Korapaty, GS Chief US Interest Rates Strategist, answers the most-asked questions about the bond yield outlook. He argues that after a brief pause, yields will move higher—on the order of an additional 20bps for UST 10y yields—to end the year at 1.9%, driven by the growth acceleration that GS economists expect. In his view, an overshoot is certainly possible, but probably unsustainable, and a further steepening in nominal, and especially, real yield curves is likely from here.

We then turn to Dominic Wilson, GS Senior Markets Advisor within Global Investment Research, to discuss how the current situation in bond markets differs from past episodes of volatility, such as the 2013 Taper Tantrum, and what that means for asset performance. He underscores that the 2013 episode resulted from a major Fed policy shock, whereas the recent (and so far much smaller) repricing has mainly stemmed from progress on the economic recovery, which risk assets have generally digested more easily. But he finds that markets today still aren't fully reflecting the above-consensus growth that we expect in the coming months. So he recommends investors stay exposed to cyclical parts of the market in the near term, like cyclical equities and commodities, and avoid bonds, bond proxies and rate-sensitive growth assets.

Peter Oppenheimer, GS Chief Equity Portfolio Strategist, digs deeper into the differences between past reflationary cycles and the potential one ahead, which he argues suggest a broadly supportive environment for equities, but a shift in market leadership toward Value and Cyclical stocks, as well as regional markets with greater exposure to them, like Europe and Japan.

And Jeff Currie, GS Global Head of Commodities Research, explains why the current reflationary backdrop sets the stage for a commodity bull market, though perhaps not for the reasons commonly believed. He makes the case that the defining driver behind past commodity bull markets associated with reflationary episodes is expansionary policies focused on redistribution. These populist policies, he says, increase commodity-intensive spending from the large number of low-income households, substantially boosting commodity demand. In his view, it was this dynamic, generated by the War on Poverty in the 1960s—not oil supply shocks—that created the infamous inflation of the 1970s, and even the 2000s supercycle was driven by a wealth redistribution to low-income rural Chinese. Given policymakers' focus on using expansionary policy to address high income inequality today, he sees a similar bullish period for commodities ahead, and recommends owning commodities as a hedge against broader inflationary risks.

Finally, Christian Mueller-Glissmann, GS Senior Multi-Asset Strategist, reiterates the benefit of a pro-cyclical asset allocation orientation given the moderate reflation acceleration that we expect. But he agrees with Currie that the potential for inflation to overshoot—or, conversely, disappoint rising inflation expectations—warrants hedging portfolios against these tail risks. And options still look like an attractive way to do this.

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Interview with Jan Hatzius

Jan Hatzius is Head of Global Investment Research and Chief Economist at Goldman Sachs. Below, he argues that the risk of substantial economic overheating as the economy reopens remains limited.

Allison Nathan: Economists such as Larry Summers and Olivier Blanchard have recently raised concerns that amid an already emerging economic recovery, very expansive US fiscal policy on top of easy monetary policy risks sharply higher inflation. Our 2021 US growth forecast of 7.2% (on an annual-average basis) is one of the highest among forecasters, so do you share these concerns?

Jan Hatzius: Not really. There's no question that the amount of stimulus set to hit the US economy this year is unprecedented outside of major wars. Together with the reopening of the economy, this is likely to produce very strong growth of about 8% on a Q4/Q4 basis in 2021. But the economy is coming out of a deep hole and there's still a large gap to fill between actual and potential output. We estimate that US output was about 6% below potential as of late last year, which is only slightly smaller than the difference between our 8% growth forecast and our 1.75% estimate of potential growth. So even the above-consensus recovery that we expect should leave output only slightly above potential. That would suggest inflation of slightly, but not dramatically, more than 2%. Obviously, there is significant uncertainty around all of these estimates, so I think we need to be humble and willing to change our minds if the evidence changes. But at this point I agree with Treasury Secretary Janet Yellen that the American Rescue Plan Act (ARPA) should bring the economy roughly back to full employment but should not result in substantial overheating.

Allison Nathan: What accounts for the differences between your views and those who worry more about overheating?

Jan Hatzius: There are two main differences. First, Summers and Blanchard rely on the estimate of the Congressional Budget Office (CBO) that GDP was only 3% below potential in late 2020, while our estimate is twice as large. Output gaps are admittedly hard to measure, but we think there are strong reasons to believe that the CBO estimate is too small. Their figures show the economy running above potential in the two years before the pandemic, which is hard to square with the fact that inflation was, on average, below the Fed's target. Also, employment is still down 6% from the pre-pandemic level. Normally, this would indicate an output gap of significantly *more* than 6% because swings in output typically exceed swings in employment by a factor of about two, a relationship known as Okun's law. While Okun's law doesn't hold under current circumstances because weakness is so concentrated in the economy's most labor-intensive sectors, the 6% employment drop nevertheless makes an output gap of just 3% highly implausible.

Second, overheating concerns focus on the comparison of the output gap with the exceptionally large amount of fiscal support, which we estimate at 11% of GDP in fiscal 2021. That is undeniably a very large and positive impulse. But much of it is temporary and concentrated in one-off payments and programs, such as longer and higher unemployment benefits that are eventually set to expire and will also scale down naturally as the labor market improves. Next year, we forecast that fiscal support will diminish to just 5% of GDP. This is despite our assumption of further fiscal packages focused on infrastructure and other spending that total over $3tn, because those packages will be spread over a ten-year period and will also be partly offset by higher taxes. We expect the implied 6pp drop in fiscal support to lead to much slower growth in 2022, especially in the second half of the year. This should limit any overshoot of potential output.

Allison Nathan: What about the argument that multiplier effects will amplify the impact of the stimulus, exacerbating overheating risks?

Jan Hatzius: I don't find the discussion of multipliers very illuminating in the context of a one-off spending increase because the multiplier is a longer-run concept. So, for example, if we assume that an increase in transfer payments has a multiplier of one—meaning that it will prompt an increase in GDP equivalent to the initial increase in government spending—that doesn't mean we expect people to spend every extra dollar they receive. Rather, we assume that they will spend some of it, which will eventually generate more employment and wage growth, so that the boost to the level of GDP in two or three years' time ultimately reaches the size of the original stimulus. But this assumes that transfer payments are sustained at their higher level—otherwise the positive multiplier effects of the increase in transfer payments in year 1 will be offset by the negative multiplier effects of the *decline* in transfer payments in year 2.

Even abstracting from this issue, some parts of the ARPA are unlikely to have large effects on spending. The $350 million for state and local aid, for example, is probably bigger than what is needed to support state and local governments, whose tax receipts have come in better than expected in recent months. The state and local aid might still make sense because it will allow these governments to replenish their rainy-day funds, reducing the risk of a downturn in state and local spending in response to a future shock. But the immediate stimulative impact is unlikely to be large.

Allison Nathan: Does the shift in the Fed's framework towards Average Inflation Targeting (AIT) increase the risk that the Fed falls behind the curve and we end up with an inflation overshoot?

Jan Hatzius: Yes, but it's important to remember that the Fed now *wants* to overshoot 2% temporarily in order to ensure that inflation averages 2% over the cycle as a whole. This desire largely stems from the Fed's discovery that treating their 2% inflation target as an effective ceiling, or at least as a symmetric target, has delivered modestly below-target inflation on average. So while 2% remains the official inflation target, in practice this has probably increased by roughly three to four tenths, implying modestly higher inflation outcomes over time. In line with this shift, Fed officials have stated that they want to see clear evidence of realized inflation and the achievement of maximum employment before withdrawing stimulus in this cycle.

It's natural to worry that this shift toward greater inflation tolerance could lead to a repeat of the inflationary experience of the 1960s/70s, prior to the more pre-emptive inflation-fighting approach of Fed Chair Paul Volcker in the early 1980s. But this comparison misses the greater role that well-anchored inflation expectations play today in keeping inflation low and stable. Admittedly, we can't be 100% sure that inflation expectations will always remain anchored. But much better measurement of long-run inflation expectations today via consumer inflation surveys, forecaster inflation surveys, and inflation-linked government bonds suggest that any material shift in the market's expectations of longer-term inflation dynamics would be quickly detected earlier and thus much less likely to sneak up on policymakers in the same way as in the 1960s/70s.

And if the economy did look like it was starting to overheat seriously—whether that is because of even stronger growth than we expect, a smaller output gap than we estimate, or other unforeseen developments—the Fed would respond. At this point, our Fed call remains relatively dovish; we expect tapering to begin in early 2022 and rate liftoff in 1H24. But we're not dug into those forecasts. If inflation surprises sharply to the upside on a sustained basis, the Fed wouldn't just sit back and watch—they would react.

Allison Nathan: At the other end of the spectrum, is there a point at which the Fed would become concerned that higher bond yields were becoming too restrictive, prompting them to act on the dovish side?

Jan Hatzius: Yes, but Chair Powell has stated that they look at broad financial conditions rather than just interest rates to assess this risk. And financial conditions as reflected by our GS Financial Conditions Index (GSFCI) remain near the all-time easiest levels ever. So that's the key metric to watch, but we're still quite far from a point that would cause the Fed concern.

Allison Nathan: So how do you view the risks around our relatively dovish Fed liftoff call?

Jan Hatzius: In terms of the timing of liftoff, I think the risks to our 1H24 forecast—which is about a year later than market pricing—are fairly balanced or perhaps even tilted to the later side. That's because the Fed's guidance that they will taper QE first limits the extent to which rate hikes can be pulled forward. Our baseline forecast for the start of tapering is 1Q22, and the earliest plausible date is 4Q21. The FOMC has said that the tapering process will resemble 2013-2014, which we interpret as eight $15bn steps over a year. This means that early 2023 is the first realistic point for a rate hike, even in an upside inflation scenario. This is about a year before our baseline liftoff forecast. By contrast, a disruption of the current strong economic recovery could reasonably delay rate hikes by one, two or even more years.

In terms of the level of rates, though, risks are probably skewed to the higher side. While it's not our baseline, the Fed's willingness to let inflation run higher for longer might require earlier and more frequent hikes than what we assume in our baseline. So this potential need for the Fed to "catch up" does introduce some risk of a significantly steeper rate hiking path than we, as well as the market, expect.

Allison Nathan: Are risks to the terminal Fed funds rate skewed to the upside, then?

Jan Hatzius: The Fed's estimate of the longer-term funds rate is 2.5%, and they've said they want to wait until the economy is at full employment before hiking rates, which suggests a peak rate in this cycle perhaps slightly higher than this estimate. So a 2.5-3.0% terminal funds rate seems reasonable to me, which is only modestly above current market pricing.

But I see upside risk to this 2.5-3.0% terminal rate based on the shifting attitudes toward fiscal policy. The world seems less concerned about running larger budget deficits than was the case a decade or two ago. Just as a matter of accounting, larger public sector deficits require larger private sector surpluses, and this could mean that real rates have to rise in order to entice the private sector to save more. I'm struck by the fact that even with the substantial selloff in bond markets over the past few months, 5y5y TIPS yields are still in the 0.3%-0.4% range, which is actually slightly below the average of the five years prior to the pandemic. At a minimum, it seems likely that we will get back to the pre-pandemic average, and there's some risk that we will move meaningfully higher. This all suggests a strong curve steepening bias from here; in the short-term, the market is probably overestimating how quickly the Fed moves to rate hikes, but risks are skewed to the upside at the longer-end.

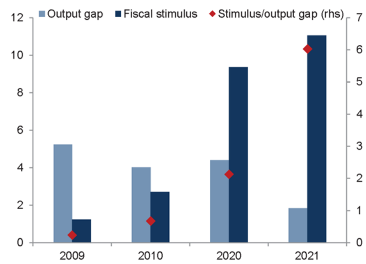
Allison Nathan: Beyond the US, are any countries or regions at risk of overheating?

Jan Hatzius: I don't think so. In fact, risks are clearly skewed in the other direction in most economies because they're generally starting from a bigger economic hole and have enacted less stimulus than the US. Specifically, real GDP was down by 2.4% year-on-year as of late 2020 in the US, compared to 5% in Europe and 8% in the UK. And while fiscal authorities in Europe, Japan, and other advanced and emerging economies provided substantial support to their economies in 2020, the incremental fiscal impulse in 2021 is less positive than in the US. As a result, even our above-consensus growth forecasts in many of these economies suggest that they will remain relatively far away from potential output and full employment in 2022, and maybe even in 2023. So it's difficult to see any kind of overheating scenario. From a policy perspective, this suggests that while the amount of support in the US seems about right, in Europe and other places, a lot more could and should be done to support the economic recovery.

Overheating concerns in pics

US stimulus set to exceed official output gap by ~6x in 2021

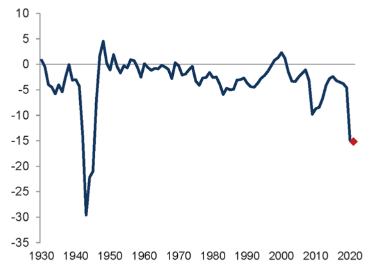
US output gap, % of potential GDP; fiscal stimulus, % of GDP



Note: Based on CBO fiscal year output gap estimate; reflects additional fiscal stimulus in response to Global Financial Crisis and COVID-19 crisis, respectively, based on year of spending; GS stimulus projections for FY20 and FY21.
Source: CBO, Goldman Sachs GIR.

The fiscal deficit this year will be the largest since WWII

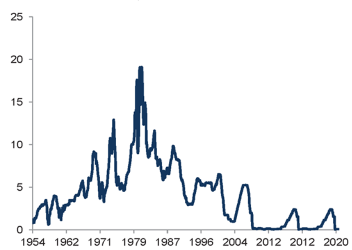
US fiscal surplus/deficit, % of GDP



Note: Based on fiscal year; GS deficit projection for FY21.
Source: Haver Analytics, Goldman Sachs GIR.

Fed funds rate remains accommodative relative to history

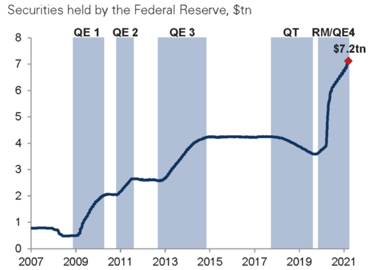
Effective fed funds rate, %



Source: Haver Analytics, Goldman Sachs GIR.

The Fed has also further expanded its balance sheet

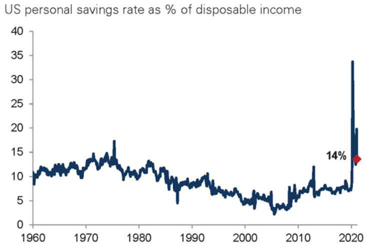
Securities held by the Federal Reserve, $tn



Note: QT refers to quantitative tightening and RM to reserve management; based on averages of daily figures for weeks ending Wednesday.
Source: Haver Analytics, Goldman Sachs GIR.

A drawdown of pent-up savings could provide a boost

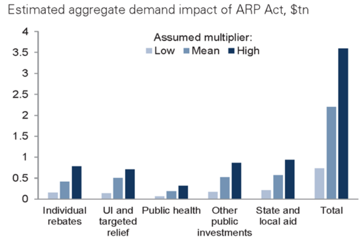
US personal savings rate as % of disposable income



Source: Haver Analytics, Goldman Sachs GIR.

Larger multipliers could amplify the impact of fiscal stimulus

Estimated aggregate demand impact of ARP Act, $tn



Note: Fiscal multipliers based on estimates made by Olivier Blanchard.
Source: Olivier Blanchard, CEA, Goldman Sachs GIR.

Inflation snapshot

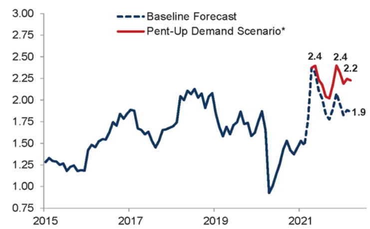
Core PCE to jump sharply before falling to 1.95% by year-end

Headline and core PCE inflation, % change yoy

Note: Dotted lines indicate GS forecast.
Source: Department of Commerce, Department of Labor, Goldman Sachs GIR.

Upside scenario could see rise to 2.4%, though only temporarily

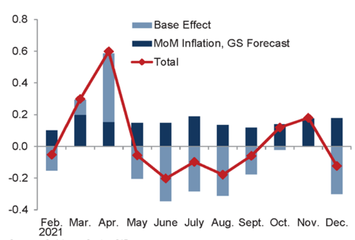
Core PCE inflation, % change yoy



Note: Pent-up demand scenario reflects a one standard deviation overshoot of virus-sensitive sectors from pre-crisis trend.
Source: Goldman Sachs GIR.

Base effects will be a key driver of near-term inflation surge

Contribution to change in yoy core PCE inflation rate, pp



Source: Goldman Sachs GIR.

Inflation expectations have started to rise, but from a low level

Index of common inflation expectations, GS monthly estimate, %

Source: Federal Reserve, Goldman Sachs GIR.

We expect higher services inflation to drive core PCE to 1.95% by year-end 2021 and 2% by year-end 2022

GS core PCE inflation forecast, weight by category, expected change and contribution to change by category, % yoy

	Feb 2021		End 2021		End 2022	
	Weight	YoY	YoY	Contribution to Change	YoY	Contribution to Change
Core PCE		**1.41**	**1.95**	**0.54**	**2.00**	**0.59**
Core Goods	**27%**	**0.1**	**0.2**	**0.03**	**-0.6**	**-0.18**
New Vehicles	3%	1.2	1.6	0.01	-0.5	-0.04
Used Vehicles	1%	8.0	-2.8	-0.13	-6.5	-0.18
Household Appliances	0%	10.8	-2.7	-0.07	-3.3	-0.07
Video, Audio, Computers	2%	-3.8	-5.2	-0.03	-7.4	-0.08
Recreational Vehicles	1%	3.3	0.8	-0.02	-0.2	-0.02
Jewelry, Watches	1%	1.1	4.9	0.03	1.8	0.00
Clothing & Footwear	3%	-4.6	2.4	0.23	1.1	0.18
Pharma & Medical	5%	-2.0	0.4	0.10	2.1	0.17
Pets Products	1%	-2.1	1.7	0.02	0.9	0.02
Expenditures Abroad	0.1%	0.0	5.7	0.01	2.9	0.00
Residual Core Goods	10%	0.5	0.4	-0.01	-0.3	-0.08
Core Services	**73%**	**1.9**	**2.6**	**0.53**	**2.9**	**0.74**
Housing	19%	2.0	2.7	0.13	3.5	0.27
Ground Transportation	0.2%	0.0	3.2	0.01	2.2	0.01
Air Transportation	1%	-18.5	14.2	0.23	3.6	0.16
Food Services & Accommodation	6%	1.3	2.1	0.05	3.2	0.13
Financial Services & Insurance	10%	1.4	4.5	0.29	2.9	0.14
Medical Services	19%	3.5	2.4	-0.21	2.5	-0.19
Foreign Travel	0%	-10.3	6.2	0.14	3.0	0.11
Residual Core Services	19%	1.9	1.4	-0.11	2.6	0.12
Mix Shift Impact (Across Categories)				**-0.02**		**0.03**

Source: Goldman Sachs GIR.
Special thanks to Spencer Hill and Ronnie Walker; see latest US Monthly Inflation Monitor here.

The risk of overheating

David Mericle discusses the risks around his US growth, Fed, and inflation views that would generate more overheating than we currently expect

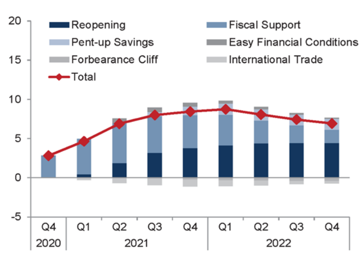
Market-implied inflation expectations have drifted substantially higher in recent months amid a debate among economists and policymakers about the risk that the economy could seriously overheat and inflation could rise well beyond the moderately above 2% level that Fed officials are targeting under their new Average Inflation Targeting (AIT) framework. But we think our optimistic growth and unemployment forecasts are still consistent with relatively tame inflation over the next several years. With this in mind, we answer four key questions about the risk of overheating.

How high is the risk of overfilling the output gap?

Concerns about overheating center around the combined size of the $900bn Consolidated Appropriations Act passed in December and the $1.9tn American Rescue Plan Act (ARPA) passed in March. This legislation will provide a huge boost to household disposable income that more than fills the hole in private income during the first half of this year. This is already contributing to a surge in spending in March and will also further swell the pent-up savings that households have accumulated over the course of the pandemic.

The fiscal support this year will come at a time when the economy is also benefiting from other powerful tailwinds, including the reopening of high-contact consumer services that will largely restore normal spending opportunities, spending of pent-up savings, and the boost from easy financial conditions. We estimate that the combination of these impulses will boost the level of GDP by roughly an incremental 6% in 2021 on top of an end-2020 starting point that was already benefitting from the residual effects of the CARES Act. This boost on top of the economy's potential growth pace implies a GDP growth rate roughly consistent with our 8% 2021 Q4/Q4 forecast. Starting in mid-2022, however, the combined impulse fades and becomes a drag on growth.

Reopening, fiscal support, pent-up savings likely to deliver a growth boost big enough to close output gap by 4Q21
Effect on level of real GDP, %



Source: Goldman Sachs GIR.

Our forecast implies an overshoot of our estimate of potential GDP of about 1% next year. But the uncertainty is greater than usual, both because of the lack of modern precedents for the reopening and pent-up savings effects, and because of uncertainty about future fiscal measures. Greater fiscal support and a higher rate of spending out of pent-up savings than we expect could each plausibly add as much as 1% to the level of GDP. If both risks materialized, the level of GDP could rise above potential by as much as 3%. We also see upside risks from a quicker pace of reopening or faster spending of stimulus money, but both would likely mean a short-term burst of spending that pulls demand forward, rather than a steady multi-year boost to the level of demand.

We expect our growth forecast to translate to a further rapid decline in the unemployment rate to 4% at end-2021, 3.5% at end-2022, 3.2% at end-2023, and 3.1% at end-2024. But these upside scenarios could push the unemployment rate below 3%, which would present upside risk to inflation.

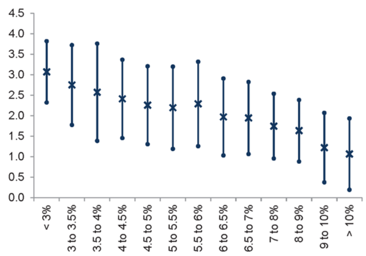
How high is the risk of a larger inflation overshoot?

We expect this sharp decline in the unemployment rate to translate to core PCE inflation of 2.1-2.2% by 2023-2024, above the peak seen last cycle but roughly the rate that Fed officials would like to see before liftoff under their new policy framework. Our view that inflation is likely to remain fairly tame takes on board two lessons from last cycle. First, the Phillips curve that captures the inverse relationship between unemployment and inflation is alive but not very steep, and that is particularly true of the PCE index. And, second, health care legislation passed under President Obama was significantly disinflationary, and that legislation remains in place and might even expand under President Biden.

We do think that a more substantial overshoot of another 0.25-0.5pp is possible, as we've found that inflation is often more uncertain than intuition suggests, consensus inflation forecast errors have been surprisingly large, and local-level data show that moderately above-target inflation has actually been fairly common in extremely tight labor markets (see Phillips Curve Alive and Well at Local Level, The Phillips Curve: A Global View, Inflation Risk is Higher Than You Think, What Makes Inflation Pop?, and Lessons of the Low Inflation Years). The bottom line is that inflation is both cyclical and hard to forecast at multiyear horizons, and we would therefore not be shocked by a moderate upside surprise to our forecast.

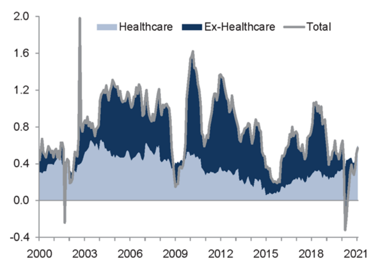
But the much larger overshoots that some commentators have suggested are less realistic, in our view, for two reasons. First, only 40% of the core PCE index shows consistent cyclicality, meaning that cyclical categories would have to run at high levels of inflation to cause a large overshoot in the overall core measure. And second, healthcare inflation is likely to remain depressed by policy pressures over the coming years.

City-level evidence shows that CPI inflation has averaged 2.5-3% in very tight labor markets
Average MSA core CPI inflation by MSA unemployment rate since 1997, one standard deviation confidence interval, % change, year ago



Source: Department of Labor, Goldman Sachs GIR.

Healthcare inflation likely to remain depressed in coming years
Contributions to SF Fed acyclical core PCE inflation, pp



Source: San Francisco Fed, Goldman Sachs GIR.

How high is the risk of de-anchoring inflation expectations?

Even a larger jump in inflation than we expect would only be a longer-term problem to the extent that it also dragged inflation expectations higher and became self-perpetuating. But, in recent decades, expectations have been firmly anchored on the 2% target, and empirical studies find that only 10-20% of fluctuations in realized inflation have flowed through to inflation expectations.

Going back further in history, the US experienced surges in inflation after WWII and then again in the 1960s and 1970s, the latter of which resulted in a long-lasting de-anchoring of expectations. The inflation surge after WWII has little contemporary relevance because the rise in inflation was caused mainly by food shortages and the removal of wartime wage and price controls, and because the Fed was largely prevented by the Treasury Department from raising interest rates at the time.

But the inflationary spiral beginning in the 1960s is more unsettling in that in that it emerged from a lengthy period in which inflation and (1-year) inflation expectations were extremely stable, and, much like then, fiscal policy today is highly expansionary and policymakers are again adopting an aggressive definition of maximum employment.

But we think the differences between that episode and today outweigh the similarities. Fed officials made a long series of major policy errors in the 1960s and 1970s that arose from serious conceptual errors and heavy political pressure that are hard to imagine today. Perhaps the most important difference is that Fed officials, having learned from past mistakes, now see keeping long-term inflation expectations anchored on 2% as a paramount goal. As a result, they are highly attentive to many high-frequency measures of household, business, professional forecaster, and market-implied measures. If these measures were to rise much above the top end of their post-2000 range, we are confident the FOMC would react forcefully.

How high is the risk that the Fed will act too slowly?

There are a few reasons to be somewhat more worried than usual that the Fed might be slow to act. First, the abruptness of the reopening process and the size of the fiscal measures will make for a much faster than usual pace of recovery. This makes it easier to imagine a scenario in which the economy overheats before the FOMC hits the brakes hard enough. Second, the FOMC has decided to taper its asset purchases before raising rates, and past experience with unfavorable market reactions have made Fed officials understandably averse to any drastic or sudden changes to balance sheet policy. Third, the Fed's new monetary policy framework rejects pre-emptive tightening in response to a low unemployment rate and commits the FOMC to not lift off until inflation reaches at least 2%, which raises the odds of venturing into a steeper part of the Phillips curve.

But we believe that some investors worried about overheating take this narrative too far. In our view, AIT is unlikely to have particularly radical implications, the political pressure on the Fed today is not comparable to that in the 1960s/70s, and the Fed's new broad-based and inclusive maximum employment goal is unlikely to delay rate hikes should inflation rise beyond the Fed's comfort zone.

If the economy did overheat seriously, we would worry less that the Fed would allow an inflationary spiral than that the price of slowing things down would be high. It's hard to imagine a situation in which inflation expectations become unanchored and the FOMC doesn't react aggressively. But history shows us that nudging up the unemployment rate just enough to undo an overshoot is very difficult in practice without sparking a recession (see Engineering a Soft Landing and Out of Room).

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Inflation: wars vs. pandemics

Kevin Daly, Co-Head of CEEMEA Economics in GS Global Investment Research, and Rositsa Chankova* compare how inflation and government bond yields have behaved around major wars and pandemics, finding that wars tend to be inflationary and see higher bond yields, but pandemics do not.

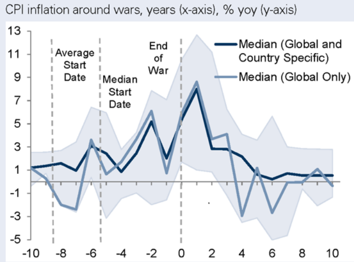
A (very) long history of wars and pandemics

Wars					Pandemics				
Event	Years	Duration (years)	Global?	Fatalities	Event	Years	Duration (years)	Global?	Fatalities
World War II	1939-1945	6	Y	150-250m	Black Death	1331–1353	22	Y	2-3bn
World War I	1914-1918	4	Y	80-120m	Spanish Flu	1918–1920	2	Y	150-200m
Thirty Years War	1618-1647	29	Y	70-130m	Plague in Kingdom of Naples	1656–1658	2		15-16m
Napoleonic Wars	1803-1814	11	Y	35-45m	Encephalitis Lethargica Pandemic	1915–1926	11	Y	6-7m
Seven Years War	1755-1762	7	Y	10-12m	Third cholera pandemic	1848-1854	6	Y	6-7m
First English Civil War	1642-1646	4		6-8m	Plague in Spain	1596–1602	6		8-9m
Vietnam War	1963-1973	10		5-8m	Asian Flu	1957–1958	1	Y	4.5-5.5m
Korean War	1950-1953	3		4-8m	Russian Flu	1889–1890	1	Y	4-5m
American Civil War	1861-1864	3		4-6m	Italian plague	1629–1631	2		3-4m
Spanish Civil War	1936-1938	2		2-3m	Hong Kong Flu	1968-1969	1	Y	2m
Franco-Spanish War	1648-1658	10		2-3m	Great Plague of Sevilla	1647–1652	5		2m
Franco-Dutch War	1672-1677	5		2-3m	Great Plague of London	1665–1666	1		1-1.5m
	Avg. Duration	**7.8**				**Avg. Duration**	**5.0**		
	Med. Duration	**5.5**				**Med. Duration**	**2.0**		

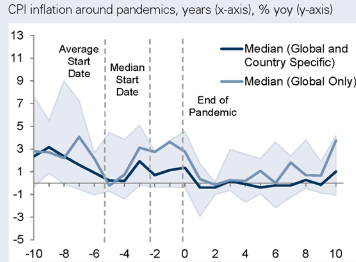
Note: 12 largest wars and pandemics, measured by deaths, excluding regional wars/pandemics without data; fatalities have been rescaled to today's global population.
Source: Cirillo and Taleb (2020); Goldman Sachs GIR.

Inflation has typically risen sharply following major wars, but not following pandemics

CPI inflation around wars, years (x-axis), % yoy (y-axis)



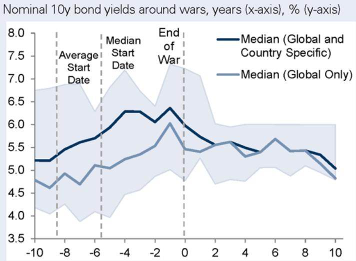
CPI inflation around pandemics, years (x-axis), % yoy (y-axis)



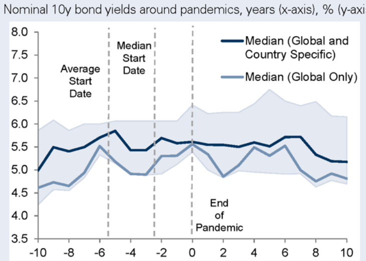
Source: BoE, Schmelzing (2018), Goldman Sachs GIR.

Bond yields have tended to rise much more during wars than pandemics

Nominal 10y bond yields around wars, years (x-axis), % (y-axis)



Nominal 10y bond yields around pandemics, years (x-axis), % (y-axis)



Source: BoE, Schmelzing (2018), Goldman Sachs GIR.

*Rositsa Chankova is an intern in the CEEMEA Economics team.

All about inflation

Measuring inflation: CPI vs. PCE

Consumer price index (CPI). One of the two main inflation measures, the CPI is a monthly measure of the average change over time in the prices paid by urban consumers—who represent ~93% of the total US population—for a market basket of consumer goods and services. The market basket is developed from expenditure information provided by families and individuals on their purchases, and is updated every two years. The CPI is constructed through price data compiled by the Bureau of Labor Statistics.

Personal Consumption Expenditures (PCE) price index. The other of the two monthly main inflation measures, the PCE measures price changes for a basket of goods that evolves on a monthly basis as household expenditure patterns shift. Because consumers tend to shift their spending over time to buy products with relatively lower inflation, the PCE tends to report lower inflation than the CPI. So the PCE likely provides a closer representation of actual price changes in the economy, which is one reason the Fed prefers to use it instead of the CPI. The PCE price index is produced by the Bureau of Economic Analysis.

Pricing inflation: Survey and market-based indicators

Survey-based inflation expectations. Measures of inflation expectations based on surveys of the general public or professional forecasters and economists conducted by various institutions. Popular surveys include the New York Fed Survey of Inflation Expectations, University of Michigan's Survey of Consumer Attitudes and Behavior, and the Survey of Professional Forecasters.

Market-based inflation expectations. Inflation expectations derived from the prices of financial securities. Two common gauges of market-based inflation expectations are the 10y breakeven inflation rate—calculated by comparing 10y nominal Treasury yields with yields on 10y **TIPS**—and **inflation swaps**. Such measures of expectations include a risk premium to compensate investors for inflation uncertainty and may be affected by factors unrelated to changes in expectations.

Treasury Inflation-Protected Securities (TIPS). A type of US government bond that provides protection against inflation. Like US Treasury bonds, TIPS pay interest twice a year at a fixed rate and repay their principal at maturity. However, while the interest rate is fixed, the principal invested in TIPS adjusts with changes in the CPI, increasing with inflation and decreasing with deflation. As a result, TIPS interest payments fluctuate with inflation. Consider an investor who buys a 30y TIPS for $1,000 with an annual coupon of 1%. If CPI inflation in the first year following the investment is 2%, the principal will adjust to $1,020 ($1,000 x 1.02), while the annual interest payment would be $10.20 ($1,020 x 1%). At maturity, the TIPS investor would receive the greater of (a) the inflation-adjusted principal and (b) the original principal.

Breakeven inflation rates. The difference in yield between US Treasury bonds and TIPS of the same maturity. Because US Treasury bonds guarantee a nominal yield and TIPS guarantee a real yield, the breakeven rate should reflect investors' expectations of the future rate of inflation. If future inflation were to match this rate, holders of regular US Treasury bonds and TIPS would, in theory, receive the same return and therefore "break even." In practice, however, breakeven inflation rates reflect more than just inflation expectations. They include risk premia to compensate investors for the uncertainty around the future rate of inflation and can reflect the relatively lower liquidity of the TIPS market compared to the regular Treasury market.

Inflation swaps. Contracts in which one party agrees to swap fixed payments for floating payments tied to the inflation rate, for a given notional amount and period of time. One party (the "payer") makes a payment that varies according to the actual rate of inflation over the contract period. The other party (the "receiver") makes a fixed payment based on the expected rate of inflation plus some inflation risk premium. The fixed rate is known as the inflation swap rate, and provides information about the expected rate of inflation at the time the contract matures. Inflation swaps are used by market participants to hedge inflation risk and to speculate on the course of inflation, and by market observers more broadly to infer inflation expectations.

Inflation forwards. Derived from **breakeven inflation rates** or inflation swap rates with different maturities, these are usually quoted as AyBy, reflecting expected inflation over a period of A years beginning B years from now. For example, the 3y7y forward rate—in the belly of the curve—reflects average expected inflation over a three-year period beginning seven years into the future.

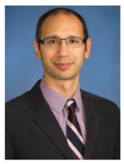
The Fed's inflation framework: A shift to AIT

Flexible average inflation targeting (AIT). Adopted by the Fed at the 2020 Jackson Hole Symposium, under AIT the FOMC will aim for inflation moderately above 2 percent following periods when inflation has run persistently below 2 percent in order to average 2 percent over time. This framework marks a departure from the previous "let bygones be bygones" approach of policy not responding to past deviations of inflation from target, though Fed Chair Powell has emphasized that the FOMC will remain flexible and will not be tied to a particular mathematical formula.

Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, Goldman Sachs GIR.

Interview with Dominic Wilson

Dominic Wilson is Senior Markets Advisor in Global Investment Research at Goldman Sachs. Below, he discusses the recent repricing in US bond markets and the spillover effects on other asset classes.



Allison Nathan: What drove the initial repricing in bond markets?

Dominic Wilson: The initial bond repricing at its heart was mostly a reflection of progress in the economic recovery. Towards the end of 2020, the economy was coming out of a big hole, and vaccine announcements led the market to upgrade its growth expectations sharply, but bond yields barely moved; Fed anchoring and the deeply distressed starting point of the economy was enough to keep a lid on yields even as growth improved. But vaccine progress has moved the economy closer to a point of substantial growth acceleration, creating dry tinder for the bond markets to finally start to reflect rising growth and inflation pressures. The spark that likely lit the tinder was the massive fiscal stimulus that was passed in December and even more so in March, which, unlike the earlier rounds of stimulus, hasn't been implemented in the face of an immediate emergency, but rather amid an emerging economic recovery. Investors looked at the mix of all that and said, we've basically left the bond market alone as we've repriced the growth outlook in many other places, and now we're seeing a more normal recovery profile that demands yields move higher.

Allison Nathan: What do you make of the jump in bond yields post the recent FOMC meeting? Is the market too concerned about Fed tightening?

Dominic Wilson: Relative to our expectations that temporary inflation pressures will recede as the strong pace of growth we expect in coming months slows once we've passed the peak fiscal impulse—and then will only build back slowly—the front-end of the curve looks like it's pricing in too many rate hikes. But the market is grappling with two challenges regarding the Fed here. The first relates to its reaction function, meaning whether the Fed will stick to the commitment they've made under their new Average Inflation Targeting (AIT) regime not to tighten policy until they actually see the whites of the eyes of inflation, and see them for some time. Given the Fed's historical track record of tightening earlier than that, the market wants reassurance that the Fed won't walk away from that commitment in the face of economic normalization. But I don't think that will be the problem. The Fed has done a pretty careful and credible job of pushing back on that concern, and understands the risks of abandoning its commitment.

The second challenge is the more difficult one: whether the Fed's forecasts for growth and inflation that suggest tightening is still some way off will prove correct. In other words, while the Fed can provide the market reassurance about their reaction function, they can't provide the same reassurance about the economic outlook. The reality is that we're probably entering a period of unprecedentedly rapid economic growth at the same time that fiscal and monetary policy remain exceptionally expansionary. This leaves the growth and inflation trajectories highly uncertain, and if growth and inflation are high enough, the Fed will raise rates. So the Fed can communicate their forecast to markets, but the market can still worry that the Fed is not bullish enough, and as a result wants to price in the risk that the Fed hikes before they think they will based on their current forecasts. This source of pressure and concern will likely only rise until the economy is on the other side of the growth and inflation bump we expect.

Allison Nathan: Do moves in other asset classes post the bond market repricing make sense?

Dominic Wilson: Directionally, yes. Equities, commodities and the more cyclical parts of the market have moved broadly higher, the Dollar has faced some upward pressure, and EMs have struggled a bit, which is what we would have generally expected. But the magnitude has been a bit more surprising. In particular, some of the moves in parts of the rate-sensitive space, EM and the NASDAQ have been larger than we would've predicted. That's likely in part a reflection of the fact that investors have built up overweight positions for a long time in areas that have benefited from the multi-decade secular downward trend in real rates, namely long-duration growth assets like tech stocks. These assets have substantially outperformed in recent years, and remain heavily subscribed, owing both to that trend as well as the favorable bottom-up fundamentals of these stocks. But the rates move is now challenging that kind of positioning, forcing rotations towards more conventional cyclical parts of the market, which has amplified moves in these assets.

Allison Nathan: Are concerns that we could be on the brink of a sharp move in bond yields, perhaps similar to the 2013 Taper Tantrum, warranted?

Dominic Wilson: It's still early days, but we're really only just approaching the lower limit of the real yield moves we saw in the 2013 episode, or even the more moderate bond yield volatility that occurred in 2015/16. Beyond size, I see important differences between the current episode and these historical ones. The 2013 Taper Tantrum was a major policy shock. Fed Chair Ben Bernanke surprised the market with early talk of tapering, causing the market to pull the whole Fed profile forward. That sort of Fed communication error, or surprise, has not happened today. And while the global growth backdrop was also broadly supportive in 2013, as it is now, growth in China was slowing. As a result, the China complex, EMs more broadly and commodity currencies were pummeled. There's no China slowdown dragging EMs down today in the same way.

Allison Nathan: So are EMs less vulnerable to rising rates today?

Dominic Wilson: 2013 was a particularly bad year for EMs because they were coming off a long period of outperformance, and then the slowdown in China and a real rate shock added to that fragility. Today, the structural backdrop for EMs looks better; they aren't suffering from similar levels of overvaluation or balance sheet issues, China growth is quite solid, and the commodity outlook is more positive. That said, rising rates and the prospect of Fed hawkishness still pose a greater challenge for the EM complex than for many other places, so there's still somewhat of a tug-of-war between these positive and negative forces, even if EMs look less vulnerable now than they did in past periods of rising rates.

One way that EMs are more vulnerable today is that the carry cushion in EM assets, and particularly in EM currencies, is lower than in the past. Historically, rates in traditionally high-yielding countries like Brazil were much higher than in the US, so even if US rates were rising, EM yields still looked attractive. Given that most EM central banks have also cut rates deeply during the pandemic, this isn't the case today. However, partly as a result of that, as well as of rising inflationary pressures, EM central banks seem more inclined to move early to withdraw some of the extraordinary recent stimulus. Brazil, Turkey and Russia have already done so, and more EMs are likely to follow. Proactively hiking rates into these pressures should act as a stabilizing force for EM bond markets and currencies, especially as central banks raise policy rates from levels that could be viewed as inappropriately stimulative. And, in any case, it's better to tighten earlier than to wait until market pressure forces a more dramatic central bank response, though recent developments in Turkey show that it can be tough for central banks to stick to this course of action.

Allison Nathan: How should investors be positioned today?

Dominic Wilson: It depends on the time horizon. The market has already priced a decent amount of growth improvement ahead. But if we map how the market has priced cyclical recoveries relative to growth views historically, the market today probably still isn't fully reflecting the above-consensus growth that we expect in the coming months, and it likely won't fully reflect it until the much stronger growth actually prints. This suggests more upside for cyclical assets in the near term, so we recommend remaining long cyclical equities, as well as commodities outside of gold. At the same time, we expect rates to continue to move moderately higher—consistent with our strong growth views (see pgs. 14-15). So investors should stay away from assets that are sensitive to higher rates, like the growth-sensitive NASDAQ, and should avoid exposure to bond and bond proxies, if not outright short them. From a global perspective, non-US DMs like Japan and Europe that have more exposure to the areas we expect to do well in this environment generally look more appealing than EMs and perhaps also the broad US market.

But beyond the next few months, the investing environment may shift. Again, we forecast that after a very strong near-term bump in growth, the overall pace of growth will remain high but slow down steadily over time and that inflation pressures will prove transient. If that plays out, it will be interesting to see whether the market anchors on the level of growth or on the momentum of growth. It often does the latter, in which case some of the heavily-cyclical trades could lose some luster and some of the rate-sensitive areas that have been underperforming—EM assets, growth stocks and perhaps bonds themselves—may move back into favor.

Allison Nathan: What would make you more concerned about the impact of rates moves on asset performance, and how can investors hedge against that risk?

Dominic Wilson: Either a faster or larger move in rates to the upside than we expect would likely prove disruptive to our pro-cyclical views, but over different time horizons. Near term, no matter the driver, any rapid rise in rates—10bp+ in one day or 30bp+ in a month—would likely lead to a patch of wobbliness in the equity market, as we've already seen. But past experience suggests that the market only needs rates to stop rising—rather than to reverse—to recover from these episodes. A sustained material increase in rates would likely erode the attractiveness of equities on a more durable basis. While we're still a long way away from credit and fixed income instruments looking appealing relative to the cash flow yields on equities, a 40-50bp move higher in real yields could start to present an obstacle to equities, both in terms of relative attractiveness to other assets and via the removal of the support to equity valuations that negative real yields have provided.

For investors worried about the risk from rising rates, the simplest way to protect portfolios is to short rates themselves. Funding long positions via the Swiss Franc or the Japanese Yen—currencies that tend to perform poorly when rates rise—could also provide some protection against higher rates. And expressing long positions in options is a way to reduce risk. Options are not particularly expensive right now for the major equity indices. So given the recent strong market performance, replacing outright long positions with upside calls seems as good a way as any to reduce risk while keeping portfolios exposed to the assets that we expect to perform well.

Allison Nathan: What's the most underappreciated risk in markets today?

Dominic Wilson: The market seems to be quite concerned about the prospect of higher inflation and the associated implications for portfolios. I worry less about this because if inflation seems at risk of moving too high for too long, the Fed will likely just head this off by raising rates more and earlier.

The risk that the market seems too complacent about is that real rates don't stay this low forever, and that the terminal rate is actually higher than the 0.5% real rate that prevailed at the end of the last cycle. Many of the factors in the last cycle that made us willing to accept that real rates would remain low are no longer in place. Recall that the last cycle began with a massive private sector deleveraging out of a huge balance sheet problem, followed by public sector austerity within 18 months of recovery. On top of that, Chinese growth shifted downward, the commodity market collapsed, and Europe and then the UK had problems of their own. The Fed then basically began to hike alone, precipitating a large Dollar appreciation. And, amid that challenging environment, a trade war began.

Conditions today look very different. The recovery is much more synchronized, the private sector will likely want to run down the significant savings it's accumulated over the pandemic once the recovery takes off, the public sector is committed to expansionary policy for longer, and commodities have entered a bull market. The market is slowly waking up to this risk, but to the extent that portfolios are deeply structured around the notion that real rates are going to remain at low levels forever, the potential need to adjust to a materially higher terminal real rate could prove to be a more persistent challenge.

Q&A on recent moves in bond yields

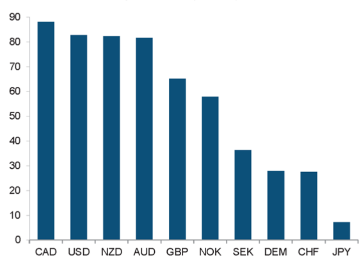
Praveen Korapaty expects the US bond selloff to continue after a brief pause, as well as further steepening of the yield curve

Q: The fierce selloff in global bond markets over the past two months appears to be slowing. Is this just a pause amid the onset of a bond bear market, a new period of stability, or the start of a reversal?

A: Since the start of the year, benchmark yields in every major bond market have moved higher. Among G10 economies, countries fall into two groups—one that includes the US, Canada, the UK, Australia and New Zealand, where 10y yields have risen by 60-90bp, and another group that mostly includes countries in continental Europe as well as Japan, where 10y yields have risen by a more modest ~25bp. While these are large moves over a short period of time, they fall well short of the spikes seen during the 2013 US Taper Tantrum or the 2015 German Bund Tantrum. And, unlike those episodes, where the selloff was the result of perceived monetary policy tightening and stretched positioning, we think the current repricing is reflationary in nature, and reflects the strong ongoing economic recovery. While yields have risen well off their lows, it's worth keeping in mind that, in most cases, those were *all-time* lows.

G10 yields have moved higher since the beginning of 2021

Year-to-date move in 10y benchmark yields, bp



Source: BBG, Goldman Sachs GIR.

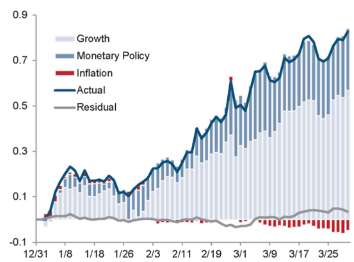
Going forward, after a brief pause, we expect the selloff to continue given our expectation for a strong acceleration in growth, which we believe markets have not yet fully priced in. We forecast year-end yields for 10y US Treasurys and Bunds of 1.9% and 0%, respectively, roughly 20bp and 30bp above current levels, respectively. So how brief a pause do we expect? We believe that most of the repricing will occur in 2Q and 3Q, coinciding with the broader opening of economies. During these two quarters, it is possible that yields exceed our forecasts given the difficulty markets may have in distinguishing between transient and permanent aspects of the economic data, but we would not expect a sizable overshoot to be sustainable.

Q: What caused the initial selloff?

A: In many cases, the exceptionally low level of bond yields following the COVID-19 shock last year suggested the market was expecting a deep and prolonged recession. As it became clear that was unlikely to be the case, yields readjusted higher. In our view, a few specific factors drove this shift in the market's outlook. First, despite some hiccups in mass vaccination drives, market and analyst expectations about when a critical herd immunity threshold would be reached in many advanced economies have been brought forward relative to last year. Second, data have generally held up better than feared through the winter months. Third, the twin Democratic wins in Georgia—which gave the party unified control of the federal government—greatly expanded what was possible on the US fiscal front. Expansionary budget proposals also emerged in other regions like the UK. Finally, the starting point for yields in many economies, particularly in Europe, was too low, and so just pricing in a cyclical bounce led to higher yields.

Recent yield repricing reflects the strong economic recovery

Year-to-date decomposition of 10y UST yields by macro factor, %



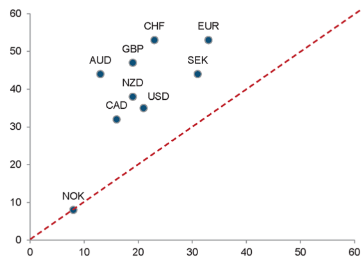
Source: Goldman Sachs GIR.

Q: Along with higher yields, markets also appear to have pulled forward policy rate normalization. Does this make sense given that central banks have indicated that they are likely to be on hold for a while?

A: If we use 1, 2, or 3y interest rate forwards to gauge how much policy rate tightening is priced, across G10 economies, markets do indeed appear to be ahead of our expectations for liftoff. Because most central banks are currently close to their respective effective lower bounds, and because forward prices are expectations over a distribution of outcomes that include scenarios with higher inflation than our base case, we would expect average market prices to reflect some tightening. However, even accounting for this, some hike pricing appears stretched to us. In the US, for instance, markets are pricing between two and three hikes by year-end 2023. The Fed's March dot plot, which shows participants' expectations of the optimal policy rate, shows no change in the median of these expectations through 2023. And our economists expect liftoff is most likely to occur in 1H24.

That said, while aggressive, we don't think market pricing is necessarily inconsistent with Fed guidance. Fed members have repeatedly noted that their guidance is outcome-based rather than calendar-based, and markets appear to be optimistic about achieving persistent above-target inflation in 2023. In other words, market hike pricing is internally consistent with market inflation expectations, though we should note that these inflation expectations are higher than what our economists, or the Fed, expects.

Markets are pricing liftoff ahead of our expectations
Months to first rate hike, market (x-axis) vs. GS forecasts (y-axis)



Source: Goldman Sachs GIR.

Q: The Fed formally adopted a new average inflation targeting (AIT) framework last year. Have markets internalized the implications of this change?

A: The Fed has been somewhat vague about the details of its goal of symmetric 2% inflation under the new framework. Fed guidance suggests liftoff won't happen until maximum employment has been achieved and inflation has "risen to 2% and is on track to moderately exceed 2% for some time." Taken literally, this means that there should be a period around and following liftoff when higher than 2% inflation is priced, but given the somewhat limited inflation shortfall we expect during this cycle, we should see a convergence back towards 2% over the long run. Traded inflation curves are extremely inverted, so they don't quite reflect this bump in the belly that would be expected under an AIT framework. That said, since markets measure headline inflation, the optimism around achieving high levels of inflation over the next one to two years could reflect not just one-offs or expectations for core inflation, but also expectations of higher commodity and especially energy prices.

Q: What does the current mix of fiscal and monetary policy mean for the US yield curve?

A: All else being equal, the Fed's new framework should mean steeper nominal yield curves. The front-end is likely to remain anchored so long as liftoff is some time away, and good news on the recovery will largely be priced as higher intermediate and longer maturity yields. Importantly, these curves will look steeper than they have in past recoveries after adjusting for where we are in the business cycle.

Real yield curves will look even steeper, again because of the Fed's new framework and employment objectives, which, in practical terms, means that the Fed will likely raise the policy rate later and possibly slower than it would have in the past given an identical set of economic data.

Q: How have other G10 bond markets fared? What are the risks to European yields here?

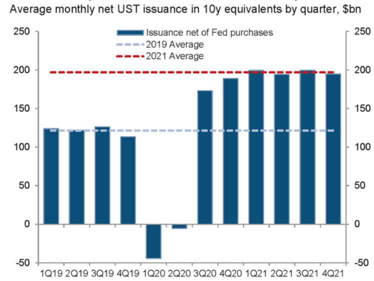
A: As noted earlier, G10 bond markets are bifurcated in how the recovery is being priced, with one group seeing larger year-to-date increases in benchmark yields than the other. Core Euro area yields fall into the latter category. This differentiation seems reasonable, as the former group consists of countries that have either engaged in larger fiscal expansions, or have greater exposure to the global commodity cycle. At the same time, the ECB has pushed back more strongly than other central banks against the recent selloff. Going forward, while we expect Euro area growth to lag behind some other G10 economies, we believe not enough cyclical upside is priced into yields currently—10y Bund yields are only slightly over 20bp above their lows for the year, and we think those yields can rise by another ~30bp this year.

Intra-Euro area yields are an interesting story. Italian yields have risen by a smaller amount than German yields, with the spread compression between the two owing to the emerging economic recovery, pandemic-related policy support, and, in Italy's case, political developments. But the point holds more broadly—most EMU spreads to Germany have been fairly stable, and we expect that to continue, although it is hard to make a case for further compression given the already tight levels of spreads in many cases. Increases in real yields warrant watching, though. While we are still far from levels where higher real yields would be problematic, beyond a certain threshold, yield increases would weigh fairly heavily on debt sustainability considerations, particularly in Italy.

Q: How much of a role has supply played in the selloff?

A: Not as big a role as many fear. Once we account for central bank purchases, of the G10 economies, the US is the only major source of duration supply. But even in the US, the massive amount of Fed purchases over the past year has taken enough inventory out of public hands so that, at least for now, supply hasn't been a factor. That's not to say it won't matter in the future. But, in any case, we find that these supply effects aren't large—we estimate around a 20bp rise in yields for every 10% increase in the stock of debt relative to GDP.

Massive Fed purchases have taken USTs out of public hands
Average monthly net UST issuance in 10y equivalents by quarter, $bn



Source: Haver Analytics, Goldman Sachs GIR.

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Equities and reflation

Peter Oppenheimer argues that the coming reflationary cycle should support equities and Value and Cyclical sectors in particular

The recent swift move higher in US yields alongside rising market inflation expectations has raised the prospect of a paradigm shift in equity markets after a decade of subdued inflation following the Global Financial Crisis (GFC). In contrast to the last equity bull market, the combination of significant monetary support and fiscal expansion prompted by the pandemic—a kind of practical application of modern monetary theory—coupled with a very strong synchronized economic rebound from a record deep recession, points to a far more reflationary environment ahead. The expected drivers, magnitude and speed of this reflation should be positive for equities, in our view, and support a continued rotation toward more Cyclical and Value-oriented leadership within the equity market. But this reflationary backdrop also suggests a greater risk that higher inflation expectations in time push up bond yields and slow asset price inflation.

From disinflation to reflation

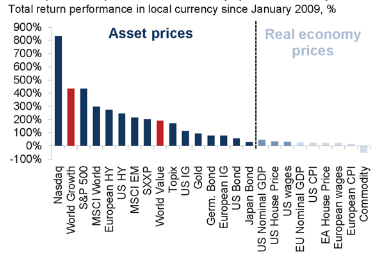
The current cycle is likely to be distinct from the cycle that prevailed after the GFC (2009-2020) in several ways. The 2020 bear market was "event-driven," triggered by the global COVID-19 pandemic and associated government policies that abruptly closed down large parts of economies to slow its spread. The recession it produced was therefore unusual in that it wasn't the result of economic or financial triggers, such as unwinding imbalances or rising interest rates, leaving less likelihood of structural overhangs in coming years, particularly in light of the aggressive monetary and fiscal policy response. In comparison, the bull market cycle that emerged out of the financial crisis came in the wake of a "structural" bear market plagued by major imbalances and a banking crisis that took time to unwind.

The period following the GFC was also associated with sharply declining inflation expectations, slowing long-term nominal GDP expectations, and lower revenue growth in the corporate sector, except for a small area of the market, specifically, Technology. This led to a deflationary economic and financial cycle from 2009-2020, at least in the real economy. But because this coincided with significant declines in interest rates and increased credit creation—via QE and related policies—this period also saw a significant and broad-based rise in asset prices. Since 2009, most prices in the real economy have been very subdued, while asset markets have experienced significant inflation. Within asset markets, the highest inflation has been in the longest duration growth assets—the Nasdaq and "Global Growth" stocks—and the weakest in the markets more levered to growth—such as Europe and Japan—and also in shorter duration "Global Value" stocks.

Looking ahead, the different drivers and changing mix of policy support in the current cycle suggest greater risk of a reflationary cycle that could see rising inflation expectations leading to rising bond yields, which, in turn, slow asset price inflation. On a relative basis, however, equities should protect investors against higher inflation expectations to some degree, while bonds will suffer from higher term premia. This is particularly likely in the current environment when years of falling inflation expectations and perceived downside growth risks have resulted in rising equity risk premia (ERP) and a coincident increase in equity valuations. As global growth expectations accelerate from the COVID-led recession, and policy rates remain at the zero lower bound—forcing real rates to be negative—the ERP will likely narrow, supporting equities.

Asset prices outpaced "real economy" prices in last cycle

Total return performance in local currency since January 2009, %



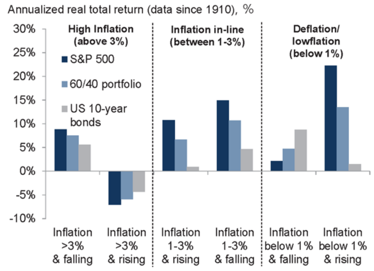
Source: Datastream, Haver Analytics, FRED, STOXX, Goldman Sachs GIR.

Dissecting the impact of inflation on equities

While starting valuations and the ERP will likely be significant determinants of equity performance amid the current reflationary backdrop, the impact of any change in inflation on the broader stock market will depend on three main factors: the level of inflation, the speed of any change in inflation and the drivers of the change.

Low but rising inflation is best macro backdrop for equities

Annualized real total return (data since 1910), %



Source: Robert Shiller, Goldman Sachs GIR.

The level and direction. Equities tend to perform best either when inflation is rising from very low levels and the risks of deflation are falling, or when inflation is moderating from high levels. Higher levels of inflation, above the 3% threshold and rising, have historically produced the worst outcomes for equities, bonds, and balanced funds. For equities in particular, the best returns tend to be when inflation is below 1% but rising; this is often associated with a recovery from a recession and also a diminishing risk of deflation, and it is therefore not particularly supportive to bond markets (see The Balanced Bear - Part 1: Low(er) returns and latent drawdown risk).

The speed of change. Gradual moves in inflation expectations, and therefore bond yields, tend to be more benign for equity markets than very fast moves, which tend to hurt equity performance. S&P 500 returns, for example, have typically been negative in months when bond yields have risen by more than two standard deviations. When bond yields have surged by one to two standard deviations in a month, or around 20-40bp today, S&P 500 returns have typically been flat (see US Macroscope: Equities and bond yields - speed matters).

The drivers of rising bond yields. Generally, equities perform better when increases in bond yields are driven by rising breakeven inflation expectations as growth expectations rise, and do worse when rising nominal yields mainly reflects a rise in real yields. In particular, if moderating growth expectations are driving a decline in breakeven inflation and, therefore, rising real interest rates, equities tend to perform poorly. But if rising nominal rates are a function of stronger growth expectations, so that inflation expectations also rise, real rates are likely to remain unchanged and equities will generally fare better. Rising real rates that reflect higher term premia because of greater uncertainty in central bank policy are also likely to have a less favorable impact on equity markets in general.

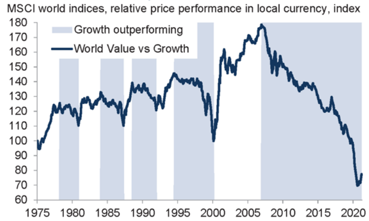
In the current environment, inflation is rising from low levels, the pace of the rise is expected to be relatively gradual, especially when adjusting for transitory pandemic-related base effects, and the main driver of the inflation, and thus, rising bond yields, is expected to be better growth as the economy continues to recover from the pandemic hit. This all reinforces the likelihood that the expected reflationary backdrop will be a tailwind for equities this time around, rather than a headwind as has been the case in some past reflationary cycles.

A (possible) shift in leadership

Amid expected broad support for the equity complex, stronger growth and potentially higher inflation expectations could lead to a shift in equity sector leadership in the coming cycle away from the significant outperformance of Growth versus Value since the GFC, at least at the margin.

Growth stocks have outperformed since the GFC

MSCI world indices, relative price performance in local currency, index



Source: Bloomberg, Goldman Sachs GIR.

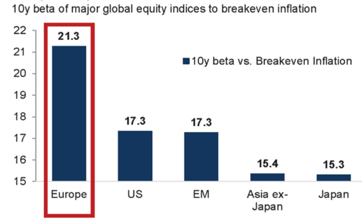
The last cycle was dominated by growth companies, which are characterized by long duration and benefit from falling interest rates, significantly outperforming value companies, which are cheaper and typically found in mature and heavily-disrupted industries that were negatively impacted by lower inflation and interest rates.

Higher bond yields and inflation expectations from here would be consistent with a continued rotation of leadership towards more Cyclical and Value-oriented parts of the market. In particular, rising bond yields would be most positive for groups of Cyclicals and Value sectors, especially those with high operational leverage or high sensitivity of earnings to changes in global nominal GDP, such as Banks, Autos, Resources and Construction. A strong relationship also exists between the relative performance of Growth versus Value and breakeven inflation or inflation swaps. A meaningful rise in inflation expectations therefore typically triggers a reasonable degree of rotation in leadership towards more Cyclical and Value-oriented companies.

The impact of inflation and bond yields on sector returns can also be reflected at the regional level as some markets are much more exposed to Growth sectors, such as the US and China, while others have a higher composition of Cyclical and Value companies, like Japan and Europe. Similar to Value sectors such as Commodities and Banks that have been the biggest laggards of the post-GFC era, Europe—also a big laggard—stands to benefit from higher global inflation too.

European equities more sensitive to inflation

10y beta of major global equity indices to breakeven inflation



Source: Bloomberg, Goldman Sachs GIR.

The increased focus on de-carbonization may also support these rotational and regional shifts in performance. While the digital revolution dominated the last cycle and, along with it technology and capital-light businesses, the de-carbonization revolution is likely to support increased growth in other sectors that have hitherto experienced mature growth, such as utilities. Such sectors may also benefit from significant increases in capex spending focused on upscaling renewables capacity and distribution. Green infrastructures are 1.5x-3.0x more capital- and jobs-intensive than traditional energy infrastructures per unit of energy produced, according to our estimates. A basket of global renewable energy companies (GSWDRNEW) most exposed to the Green transition may therefore be particularly well-positioned to benefit from the reflationary cycle ahead.

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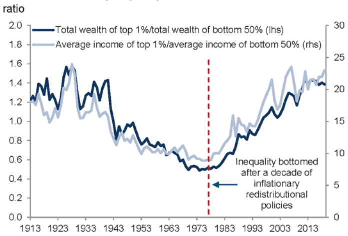
The inequality-inflation tradeoff

Jeff Currie argues that the defining driver behind past commodity bull markets associated with reflationary episodes has been populist policies focused on redistribution

Physical inflation, as measured by commodity prices, CPI or wages, is a dynamic driven by volume. It occurs when the volume of demand exceeds the volume of supply, creating a scarcity premium in prices. In contrast, financial inflation as measured by the stock market, bond yields or even GDP is a notional value dynamic—volumes simply do not matter. As we learned in the post-financial crisis period, a few economic sectors and people can drive stocks, bonds and GDP higher without creating physical price pressures.

Precisely because volumes matter in creating physical inflation, demand driven by the relatively small number of high-income households simply can never be large enough to create physical inflation. These households, however, do control a large amount of notional wealth, and can therefore create financial inflation and drive GDP growth. This suggests a negative relationship between physical inflation and income inequality. It is not a coincidence that income equality in the US was at its peak during the 1970's—a period of high inflation and commodity prices.

Inequality bottomed after the War on Poverty drove the 1970's commodity supercycle



Source: Distributional National Accounts, Goldman Sachs GIR.

Rather than technological or demographic drivers, this suggests that the commodity underperformance of the past decade, and deflationary pressures more broadly, were the inevitable consequence of global policy focused on macro and financial stability following the Global Financial Crisis (GFC). By definition, these polices took risk out of the system, and left the global economy stuck in a mid-cycle holding pattern with asset price inflation that benefited a few high-income households that don't consume a large volume of goods, driving inequality up and inflation down.

The pandemic, not the vaccine, is the catalyst for the next supercycle

It's perhaps no surprise, then, that all major commodity bull markets and inflationary episodes have been invariably tied to redistributional, or populist, policies that have reduced income and wealth inequality. Creating physical demand requires volume, achieved by increasing the incomes of as many households as possible, and especially those households that are most likely to spend it. It is a well-known fact that the propensity to consume is higher among lower-income households that are inherently consumption-constrained. Moreover, these households have a higher propensity to consume physical goods over services, and commodity-intensive goods—food, fuel, and capital goods—than higher-income households.

The stark health, wealth and racial inequalities in Western society that the pandemic laid bare has prompted a shift towards such populist policies, which will reach many more lower-income households ready to spend than the macro-stability policies enacted following the GFC. We see this shift as the catalyst for the next commodities supercycle, as policies are designed to increase the volume of demand and broaden access to future GDP growth. Such inclusive growth accentuates further rises in physical goods demand.

Solving inequality requires an overheating economy

Policies to address income and wealth inequality that shift unspent savings from a few high-income households to a large number of low-income households with a higher propensity to spend—whether this is achieved through borrowing, taxing or other methods—almost ensure the strong volumetric demand growth that lies behind an overheating economy and physical inflationary pressures. Indeed, we find that wage growth compression historically has only been achieved in overheating economies as it requires reaching deep into the labor pool. This can only occur late in the business cycle when scarcity makes sticky labor look more attractive than flexible capital.

To help reduce inequality, policymakers are incentivized to run the economy hot

Phase of the business cycle		Below Capacity: Growing Slow Recession	Below Capacity: Growing Fast Recovery	Above Capacity: Growing Fast Expansion	Above Capacity: Growing Slow Slowdown
Wage growth vs. median	Bottom Quintile	-0.5%	0.4%	2.2%	2.6%
	Second Quintile	-0.2%	-0.2%	0.6%	1.2%
	Fourth Quintile	-0.4%	-0.8%	0.0%	0.4%
	Fifth Quintile	-0.6%	-0.6%	-0.7%	-0.2%
Inflation levels	Core CPI	4.9%	3.0%	3.1%	5.9%
	Headline CPI	4.2%	2.7%	4.0%	6.9%
	PPI	4.9%	3.0%	5.9%	3.7%
Ann. daily asset returns	Commodities	-2.1%	2.1%	17.7%	8.8%
	Equities	11.0%	15.6%	13.5%	-13.2%
	Bonds	12.2%	4.5%	5.0%	14.0%

Note: Wage and inflation data 1968-2018, asset data 1981-2020.
Source: Haver Analytics, Distributional National Accounts, Bloomberg, FRED, GS GIR.

There is also a long history of using infrastructure projects to help compress inequality in these environments. Today, the focus on addressing climate change favors "green levelling", or using green capex to promote income equality. But this is not dissimilar from past power-related infrastructure projects, like the Tennessee Valley Authority in FDR's New Deal, which also had the benefit of addressing environmental and social issues.

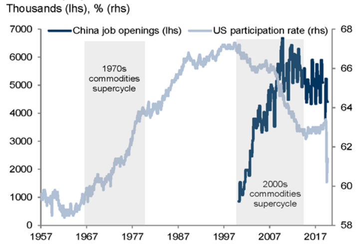
Supply shocks are inflation's red herring—populist policies are the key

A common misperception is that oil supply shocks and cost-push inflationary pressures drove the commodity bull market and the inflationary episodes of the 1960s/70s. But the supply shocks actually created recessions, reducing the volume of physical demand and, in turn, price pressures. Rather, inflationary pressures only emerged as the result of populist policies. It is almost entirely forgotten that OPEC's first attempt at an oil embargo in 1967 failed to increase oil prices because of insufficient demand. In contrast, after five years of Lyndon B. Johnson's populist "War on Poverty", oil demand growth accelerated from 3.9% in 1967 to 8.1% in 1973—more than sufficient to make OPEC's second attempt at an oil embargo successful.

Although the combination of rising oil prices alongside a rising unemployment rate led observers to blame cost-push inflation for the apparent ensuing period of "stagflation", in actuality, per capita demand increased markedly during this period, driven by a surge in employed people not captured by the unemployment rate given a sharp increase in the labor supply. Metals prices, however, reflected this dynamic—as the poverty rate declined, household formation rose, increasing demand for metals-intensive goods.

Sharp rises in employment driven by higher participation rates are a better signal for commodity price pressures than the unemployment rate

Thousands (lhs), % (rhs)



Source: Haver Analytics, Goldman Sachs GIR.

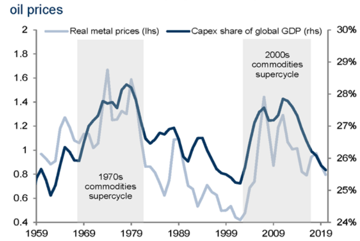
Even China's commodity bull market of the 2000s was a result of redistributional policy on a global scale. Once the US decided to allow China to join the WTO, it unleashed a powerful outsourcing arbitrage that resulted in a redistribution of wealth to a large number of low-income Chinese laborers. With this newfound income, these households bought physical goods in large volumes just as low-income households in the US and Europe did in the late 1960s and 1970s.

And just as it is tempting to blame supply shortages for the outperformance of commodities in the 1970s, it is tempting to blame too much supply driven by innovations in shale, nickel pig iron or smart farming, for the underperformance of commodities, and, in turn, inflation, over the past decade. However, there is little evidence of this. In oil, OPEC (in the spirit of "market stability") offset shale increases, while in metals Chinese "supply-side reforms" did the same.

Misplaced emphasis on debt and demographics

In a similar vein, aging demographics are often blamed for lower inflation. But the strong correlation between declining poverty and rising aggregate demand suggests that demographics in and of themselves don't matter much for inflation dynamics. Instead, what is important is how many people have newfound wealth that will spend it. So the 1970s inflationary episode was associated with the baby boomers, as is commonly understood, but from the War on Poverty that encouraged them to enter the labor market and grow their demand, not from the population growth they created.

Metal prices reflect underlying demand dynamics better than oil prices



Source: World Bank, Maddison Project, Haver Analytics, Goldman Sachs GIR.

At the other end of the spectrum, the lack of inflationary pressures in Japan despite growing government debt owes, in our view, to the spending dynamics created by their aging and shrinking population. An aging population requires increased fiscal support from a shrinking workforce, generating a structural deficit but stagnant volumes of demand, and hence no inflation. Moreover, wealth is far more evenly distributed in Japan than in the US and most other economies. As a result, there is less need for inflationary populist policies. In fact, the upward price pressures they create would actually hurt most Japanese people that show a tendency to maintain large savings—often through JGB holdings—as well as low debt.

As a result, Japan's political economy protected voters from inflationary pressures. Periods of accommodative monetary policy were offset by more contractionary fiscal policy, and vice versa. High debt levels in Japan also provide evidence that "printing money" is not sufficient to create inflation, as the proceeds never made it to those who would spend it, but instead ended up on corporate balance sheets as excess cash. Like in the US post the GFC, this liquidity was simply recycled into the financial system.

Hopefully this time it is different

Addressing income inequality is already igniting the next major commodity supercycle. Since the conditions for commodity and wage inflation are less stringent than that for CPI inflation, which requires letting the economy overheat far deeper into the cycle, there is hope that policymakers can navigate this. But given the powerful forces we expect to pull all physical demand higher, we recommend investors use commodities to hedge against the risk of a broader inflationary episode. After all, when did the US Democratic party last maintain a sweep through the midterm elections? It was during Lyndon B. Johnson's presidency amid his War on Poverty. Once populist policies start, they rarely stop until the people want them to. That's populism.

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Asset (re)allocation amid reflation

Christian Mueller-Glissmann discusses the optimal asset allocation for portfolios in the current reflationary environment

With investors moving from fading deflation risks to pricing an inflation overshoot, and as realized inflation starts to pick up, the optimal asset allocation is changing. In particular, the beneficial role of bonds in balanced portfolios will likely diminish further as reflationary pressures rise. Reflation favors greater equity exposure, which is also consistent with our current pro-risk asset allocation given expectations of a strong growth acceleration out of the COVID-19 crisis. But if inflationary pressures run too far, equities and bonds could decline together. During periods of high and rising inflation, commodities, as well non-US, short duration equities tend to outperform, suggesting portfolio tilts in these directions could prove beneficial. But as reflation optimism increases, so does the potential for disappointment. Relatively low FX and rates volatility today—which may rise should inflation-related risks increase—suggests value in hedging these risks via options.

Low inflationary pressures have benefitted 60/40 portfolios in recent decades…

Since the early 1980s, inflation and macro volatility have declined as central bank inflation targeting ushered in the Great Moderation and as disinflationary pressures from globalization, technological disruption and demographic headwinds took hold. The growth and inflation mix during this period has been generally favorable for simple 60/40 portfolios, which have delivered strong real returns. And equity/bond correlations have been mostly negative due to low and anchored inflation, resulting in robust risk-adjusted returns. As a result, bonds have not only been in a 40-year bull market, but have also offered protection during equity drawdowns.

…but new reflationary pressures favor greater equity exposure…

The beneficial role of bonds in balanced portfolios has more recently been in doubt given that bond yields close to the zero lower bound offer a diminished returns buffer during "risk-off" periods. These doubts have only increased alongside concerns that an accelerating economic recovery from the pandemic-induced recession, amplified by historically large US fiscal stimulus, could lead to a strong rise in inflation and, in turn, the start of a prolonged bond bear market. During most historical bond bear markets, equities have outperformed bonds and have delivered positive real returns. This has been especially the case over the last 20 years, during which bond bear markets tended to be short and shallow.

…although not if inflation moves too high

But higher equity allocations present their own risks. Increased exposure to equities leaves portfolios more vulnerable to deflation or negative growth shocks. And, importantly, equities often suffer if inflation and bond yields rise too much. Prior to the late 1990s, several bond bear markets saw bonds and equities falling together. During these periods, the rise in real rates often outpaced the increase in breakeven inflation, or inflation accelerated to surprisingly high levels. Large inflation surprises can put upward pressure on equity risk premia alongside bond premia. And high and rising inflation can also eventually force central bank tightening and broader deleveraging, which increases recession risk and macro volatility, weighing on equity returns. As a result, equities, bonds and 60/40 portfolios performed poorly during past periods of high and rising inflation.

What's outperformed in rising/high inflation environments?

In these past periods of high and rising inflation, the broad Dollar index (DXY) tended to decline, providing opportunities for investors to protect against inflation risk by diversifying regionally within assets, and particularly by increasing allocations to non-US assets. Commodities—especially oil—have performed the best in periods of rising inflation and the worst in periods with falling inflation, irrespective of inflation levels, in large part because commodity shortages have driven many of the historical episodes of sharply higher realized inflation. Non-US equities, TIPS and gold have also helped portfolios in periods with high and rising inflation. And within equities, short duration value stocks have tended to outperform long duration growth stocks. Portfolio tilts in these directions are therefore likely to help reduce risk stemming from reflationary pressures today.

Maintain pro-risk orientation, but hedge against risks from reflation acceleration

We continue to recommend a pro-risk asset allocation (OW equities and commodities, N credit, UW bonds) given our expectations for a strong recovery from the pandemic hit and relatively benign Fed views. The potential for reflation acceleration suggests higher equity allocations remain beneficial given the relatively moderate rise in inflation and yields that we expect (see pgs. 14-15).

That said, the combination of a strong recovery and expansionary fiscal policy raises the potential for inflation to overshoot. As a result, we favor commodities and cyclical or value parts of equities. Of course, as inflation and growth expectations continue to increase, so does the potential for disappointments. Investors therefore need to balance inflation and deflation tail risks in their portfolios. Relatively low FX and rates volatility today—which may rise should inflation-related risks increase—suggests some value in hedging these risks via options. For example, payer swaptions on US 10y rates would provide protection against a bond yield overshoot.

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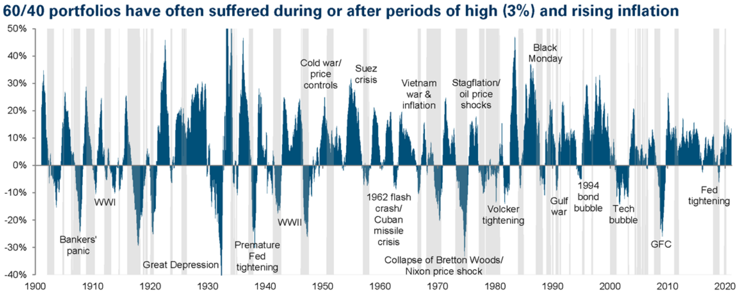
In recent bond bear markets, equities outperformed bonds and delivered positive real returns

Start	End	Duration (months)	US 10y drawdown		Annualized real return		
			Real	Nominal	S&P 500	US 10y bond	US 60/40
Apr-1941	Sep-1959	224	-39	24	12	-3	6
Mar-1967	May-1970	39	-22	-8	-9	-7	-8
Mar-1971	Sep-1981	128	-47	23	-2	-6	-3
May-1983	May-1984	13	-14	-9	-7	-13	-9
Jan-1987	Oct-1987	9	-17	-14	5	-23	-7
Oct-1993	Nov-1994	13	-15	-13	-1	-14	-7
Oct-1998	Jan-2000	16	-15	-12	32	-12	13
Jun-2003	Jun-2004	12	-13	-10	12	-12	2
Jun-2005	Jun-2006	12	-10	-6	3	-10	-2
Mar-2008	Jun-2008	3	-9	-7	20	-31	-4
Dec-2008	Jun-2009	5	-16	-14	11	-31	-8
Oct-2010	Apr-2011	6	-10	-8	26	-20	6
Jul-2012	Sep-2013	14	-13	-11	21	-12	7
Jan-2015	Jul-2015	5	-8	-6	9	-16	-2
Jul-2016	Mar-2017	8	-11	-9	18	-15	3
Sep-2017	May-2018	8	-11	-7	10	-16	-1
Aug-2020	Mar-2021	8	-13	-10	25	-20	5
		Average	-18	-5	5	-15	-1
		Median	-13	-8	9	-13	-2

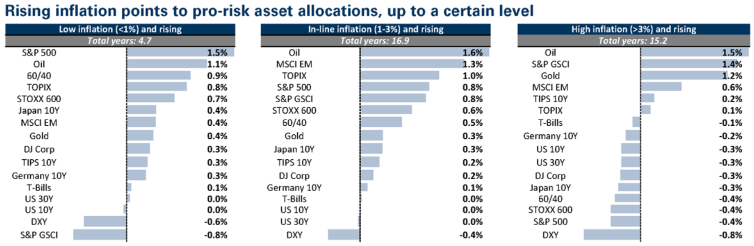
Source: Haver Analytics, Datastream, Goldman Sachs GIR.

60/40 portfolios have often suffered during or after periods of high (3%) and rising inflation



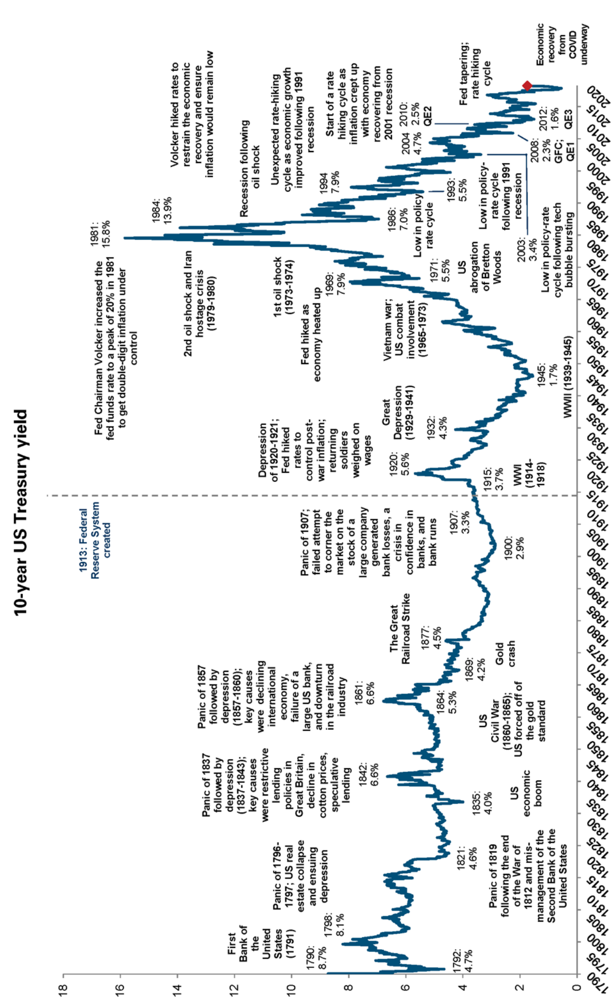
Note: Chart shows US 60/40 portfolio real returns (yoy, monthly); grey shading indicates US CPI inflation above 3% and rising.
Source: Robert Shiller, Goldman Sachs GIR.

Rising inflation points to pro-risk asset allocations, up to a certain level



Note: Average monthly real total returns since 1950; gold/oil have little movement during Bretton Woods and Texas Railroad Commission; 10y TIPS history since 1959.
Source: Haver Analytics, Robert Shiller, Goldman Sachs GIR.

The long history of US rates



Source: Global Financial Data, Inc., Federal Reserve Board, Haver Analytics, Goldman Sachs GIR.

Summary of our key forecasts

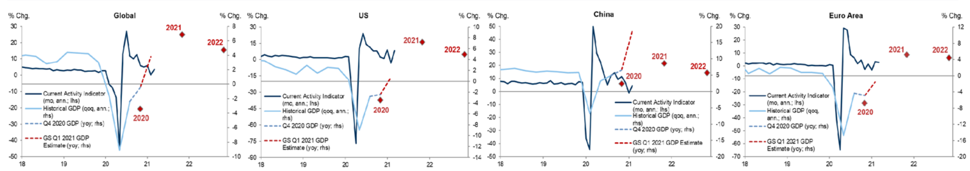
GS GIR: Macro at a glance

Watching

- **Globally,** we expect above-consensus global growth of 6.8% in 2021. Our optimism reflects the view that post-vaccination reopening, accommodative monetary and fiscal policy, pent-up savings, and limited scarring effects will support a continued recovery in economic activity, though the spread of more infectious virus strains poses risks.
- **In the US,** we expect above-consensus full-year growth of 7.2% in 2021 on the back of significant fiscal stimulus and widespread immunization—with 50% of the population expected to be vaccinated by May. We expect the unemployment rate to fall to 4% and core PCE inflation to reach 1.95% by year-end 2021.
- **The Fed** has adopted flexible average inflation targeting and outcome-based forward guidance, which we view as consistent with our expectation of liftoff in 1H24. The Fed has also adopted outcome-based forward guidance for asset purchases, and we expect tapering to begin in early 2022, though substantial further progress on employment and inflation could bring forward the start to 4Q21. On the fiscal policy front, the Biden administration has proposed a package focused on infrastructure and other benefits totaling $2.2tn over 10 years, which we expect will be partially offset via higher taxes, including an increase in corporate taxes.
- **In the Euro area,** we expect 1.9% qoq non ann. growth in Q2 on the back of an expected acceleration in the vaccine rollout, though recent virus resurgence and extended lockdowns present downside risks. We expect above-consensus growth of 5.1% in 2021, and look for underlying sequential inflation to increase from the second half of the year, but expect only a gradual increase in underlying core inflation to 1.5% in late 2024.
- **We expect the ECB** will maintain a pace of PEPP purchases of around EUR 20bn per week through Q2 and exhaust the full PEPP envelope by mid-2022, but believe it will keep rates on hold until 2025. We expect the ECB to adopt a symmetric 2% inflation aim but include "soft" elements of Average Inflation Targeting (AIT) by placing some emphasis on persistent inflation misses when the strategy review concludes in September. On the fiscal side, we expect the EUR 750bn Recovery Fund, which will provide fiscal support to the countries most affected by the virus, to be ratified and disbursement to begin in Q3.
- **In China,** we expect 2021 real GDP growth of 8.5% and view the risks to this forecast as broadly balanced, with the potential for stronger-than-expected exports posing upside risk and the recent tightening of financial conditions and emission-related industrial output curbs posing downside risks.
- **WATCH CORONAVIRUS.** While the trajectory of the coronavirus remains highly uncertain, our base case assumes that declining hospitalizations will drive a continued recovery in global economic activity this year. We expect a majority of the population in most DMs to receive their first vaccine dose by mid-year, but don't see 50% vaccination being achieved in most EMs before late 2021.

Goldman Sachs Global Investment Research.

Growth



Source: Haver Analytics and Goldman Sachs Global Investment Research.
Note: GS CAI is a measure of current growth. We have recently revised our methodology for calculating this measure. For more information on the methodology of the CAI please see "Lessons Learned: Re-engineering Our CAIs in Light of the Pandemic Recession," Global Economics Analyst, Sep. 29, 2020.

Forecasts

Economics

GDP growth (%)	2021 GS	2021 Cons.	2022 GS	2022 Cons.
Global	6.8	5.6	4.7	4.1
US	7.2	5.7	4.9	4.0
China	8.5	8.5	5.7	5.5
Euro area	5.1	4.2	4.4	4.2

Policy rates (%)	2021 GS	2021 Mkt.	2022 GS	2022 Mkt.
US	0.13	0.17	0.13	0.29
Euro area	-0.50	-0.51	-0.50	-0.51
China	2.25	2.31	2.25	2.45
Japan	-0.10	-0.09	-0.10	-0.09

Markets

Interest rates 10Yr (%)	Last	E2021	E2022	FX	Last	3m	12m
US	1.74	1.90	2.10	EUR/$	1.17	1.21	1.28
Germany	-0.30	0.00	0.05	GBP/$	1.38	1.41	1.45
Japan	0.09	0.30	0.30	$/JPY	111	108	103
UK	0.84	1.10	1.25	$/CNY	6.5	6.40	6.20

Commodities	Last	3m	12m	Credit (bp)		Last	2Q21	E2021
Crude Oil, Brent ($/bbl)	64	75	75	USD	IG	91	92	88
Nat Gas ($/mmBtu)	2.6	2.7	3.0		HY	310	310	300
Copper ($/mt)	8,788	9,200	10,500	EUR	IG	101	90	85
Gold ($/troy oz)	1,691	2,000	2,000		HY	314	305	295

Equities

S&P 500	E2021 GS	E2021 Cons.	E2022 GS	E2022 Cons.	Returns (%)	12m	YTD	E2021 P/E
Price	4,300	--	4,600	--	S&P500	8.0	6.0	29.2x
EPS	$181	$176	$197	$203	MXAPJ	14.0	2.0	21.9x
Growth	27%	23%	9%	15%	Topix	-1.0	8.0	23.6x
					STOXX 600	5.0	8.0	24.8x

Consumer	E2021 CPI (%, yoy)	E2021 Unemp. Rate	E2022 CPI (%, yoy)	E2022 Unemp. Rate	Wage Tracker 2020 (%) Q1	Q2	Q3	Q4
US	2.6	4.0	2.0	3.5	3.6	5.9	4.9	5.3
Euro area	1.3	8.9	1.0	8.1	1.7	--	--	--
China	1.1	--	1.1	--	-2.0	-0.6	4.0	5.3

Source: Bloomberg, Goldman Sachs Global Investment Research. For important disclosures, see the Disclosure Appendix or go to www.gs.com/research/hedge.html.

Market pricing as of March 31, 2021.

Glossary of GS proprietary indices

Current Activity Indicator (CAI)

GS CAIs measure the growth signal in a broad range of weekly and monthly indicators, offering an alternative to Gross Domestic Product (GDP). GDP is an imperfect guide to current activity: In most countries, it is only available quarterly and is released with a substantial delay, and its initial estimates are often heavily revised. GDP also ignores important measures of real activity, such as employment and the purchasing managers' indexes (PMIs). All of these problems reduce the effectiveness of GDP for investment and policy decisions. Our CAIs aim to address GDP's shortcomings and provide a timelier read on the pace of growth.

For more, see our CAI page and Global Economics Analyst: Trackin' All Over the World – Our New Global CAI, 25 February 2017.

Dynamic Equilibrium Exchange Rates (DEER)

The GSDEER framework establishes an equilibrium (or "fair") value of the real exchange rate based on relative productivity and terms-of-trade differentials.

For more, see our GSDEER page, Global Economics Paper No. 227: Finding Fair Value in EM FX, 26 January 2016, and Global Markets Analyst: A Look at Valuation Across G10 FX, 29 June 2017.

Financial Conditions Index (FCI)

GS FCIs gauge the "looseness" or "tightness" of financial conditions across the world's major economies, incorporating variables that directly affect spending on domestically produced goods and services. FCIs can provide valuable information about the economic growth outlook and the direct and indirect effects of monetary policy on real economic activity.

FCIs for the G10 economies are calculated as a weighted average of a policy rate, a long-term risk-free bond yield, a corporate credit spread, an equity price variable, and a trade-weighted exchange rate; the Euro area FCI also includes a sovereign credit spread. The weights mirror the effects of the financial variables on real GDP growth in our models over a one-year horizon. FCIs for emerging markets are calculated as a weighted average of a short-term interest rate, a long-term swap rate, a CDS spread, an equity price variable, a trade-weighted exchange rate, and—in economies with large foreign-currency-denominated debt stocks—a debt-weighted exchange rate index.

For more, see our FCI page, Global Economics Analyst: Our New G10 Financial Conditions Indices, 20 April 2017, and Global Economics Analyst: Tracking EM Financial Conditions – Our New FCIs, 6 October 2017.

Goldman Sachs Analyst Index (GSAI)

The US GSAI is based on a monthly survey of GS equity analysts to obtain their assessments of business conditions in the industries they follow. The results provide timely "bottom-up" information about US economic activity to supplement and cross-check our analysis of "top-down" data. Based on analysts' responses, we create a diffusion index for economic activity comparable to the ISM's indexes for activity in the manufacturing and nonmanufacturing sectors.

Macro-Data Assessment Platform (MAP)

GS MAP scores facilitate rapid interpretation of new data releases for economic indicators worldwide. MAP summarizes the importance of a specific data release (i.e., its historical correlation with GDP) and the degree of surprise relative to the consensus forecast. The sign on the degree of surprise characterizes underperformance with a negative number and outperformance with a positive number. Each of these two components is ranked on a scale from 0 to 5, with the MAP score being the product of the two, i.e., from -25 to +25. For example, a MAP score of +20 (5;+4) would indicate that the data has a very high correlation to GDP (5) and that it came out well above consensus expectations (+4), for a total MAP value of +20.

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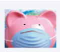
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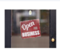
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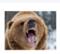
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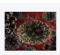
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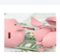
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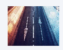
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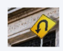
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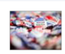
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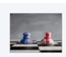
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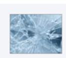
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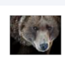
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