

**Written Testimony of Khalil Shahyd**  
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**Before the U.S. House of Representatives**  
**Ways and Means Committee**  
**Hearing entitled:**  
**“LEVERAGING THE TAX CODE FOR INFRASTRUCTURE INVESTMENT”**  
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Good morning Chair Neal, Ranking Member Brady, and distinguished members of the House Ways and Means Committee. I want to thank you for holding this hearing on “Leveraging the Tax Code for Infrastructure Investment” and inviting me to testify and provide comment.

My name is Khalil Shahyd. I am a Senior Policy Advisor on Equity, Environment and Just Communities with the Natural Resources Defense Council (NRDC). NRDC is an international nonprofit organization of scientists, lawyers, and environmental specialists dedicated to protecting public health and the environment. Founded in 1970, NRDC has more than 3 million members and activists supporting work to protect public health, the environment and grow more sustainable livelihoods.

The United States is confronted today by the extraordinary and interconnected crises of the global pandemic, economic recession, the persistence of deep racial injustice, a rapidly destabilizing climate, and threats to the democratic foundations of the nation. Few sessions of Congress have ever shouldered a greater responsibility -- or a greater opportunity. Among the many acts of leadership that will be necessary, making it safely through these crises will require comprehensive and sustained federally led investment to recover, rebuild, and lay the foundation for a more just and stable future.

## The Infrastructure Crisis Plaguing American Cities

No place in America is more emblematic of how these interweaving crises are made worse due to deteriorating infrastructure than Jackson, Mississippi. For nearly five weeks beginning in mid-February, parts of Jackson —the state’s capital and most populous city—faced a water crisis.<sup>1</sup> Two consecutive storms hit the city and led to prolonged freezing temperatures, causing pipes to burst. Thousands of residents were under a boil-water advisory, which wasn’t lifted until March 18.

But these storms did not cause this health and human rights crisis in Jackson. The city’s water system was in crisis long before the storms exposed what most residents already knew. Activist and concerned citizens in Jackson have long advocated for the types of investments needed to repair the city’s broken infrastructure.<sup>2</sup> Yet the city was left to fend for itself to pay the cost of deferred infrastructure maintenance with an estimated \$2 billion price tag for needed repairs and upgrades.<sup>3</sup>

What happened in Jackson is shamefully reminiscent of the tragedy of neglect and broken infrastructure that saw Flint, Michigan literally poisoned. It is a scenario all too common in cities and small towns across the nation where racism and limited government rhetoric has left gaping needs to protect families from harm.

At a time when access to clean water, to wash hands and sanitize surfaces, literally meant life and death due to COVID-19, too many households were left with their survival compromised and threatened.<sup>4</sup>

Almost two years ago, an analysis by NRDC found that nearly 30 million people in the United States drank water from community water systems that violated the federal drinking water law between

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<sup>1</sup> <https://www.motherjones.com/politics/2021/03/water-crisis-in-jackson-mississippi-is-a-dire-warning-sign/>

<sup>2</sup> <https://www.washingtonpost.com/opinions/2021/05/12/my-majority-black-city-went-weeks-without-potable-water-this-wouldnt-happen-whiter-town/>

<sup>3</sup> <https://www.brookings.edu/blog/the-avenue/2021/03/26/in-jackson-miss-a-water-crisis-has-revealed-the-racial-costs-of-legacy-infrastructure/>

<sup>4</sup> <https://www.nrdc.org/experts/kristi-pullen-fedinick/covid-context-lead-water>

January 2015 and March 2018.<sup>5</sup> It also found that 5.5 million people received their drinking water from systems that had levels of lead that exceeded EPA's Lead Action Level—a level of lead that requires water systems to take immediate steps to reduce the amount of lead in the water.

Additional analysis revealed that lead-related violations were not equally distributed across populations.<sup>6</sup> Startlingly, the analysis found that in Puerto Rico **before** the devastating effects of Hurricane Maria, 97.2 percent of the archipelago's population was served by systems with violations of the Lead and Copper Rule—the largest percentage of a population of any state or territory in the nation.

Jackson's crisis, like that of so many cities and towns are driven by the lack of proactive investment in infrastructure upgrades. Along with cities like Flint, Camden and others Jackson has been denied the levels of direct federal financial support that helped to build the urban middle classes that eventually fled to suburbs taking the tax base and spending power with them. To raise money for local services, cities now must rely on property taxes and floating bonds to court private investment. However, the capacity to raise funds and benefit from private investment is highly unequal with large coastal cities and those able to specialize in high valued services (technology, bio-health, finances) typically taking the lion's share of investment and a more highly educated workforce.

Cities like Jackson, in addition to a declining population, may also suffer from a high percentage of low-income residents—while being in one of the poorest states in the country—which limits their capacity to raise revenues for public services, including drinking water and wastewater. Simply charging more for these services isn't easy either, given widespread affordability issues.<sup>7</sup>

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<sup>5</sup> <https://www.nrdc.org/experts/kristi-pullen-fedinick/whats-your-water-updated-analysis>

<sup>6</sup> <https://www.nrdc.org/resources/threats-tap-widespread-violations-water-infrastructure>

<sup>7</sup> <https://www.theguardian.com/us-news/2020/jun/23/millions-of-americans-cant-afford-water-bills-rise>

In America, most investment in infrastructure—about 3 out of every 4 dollars for operating, maintaining, and improving infrastructure—occurs at the state and local level.<sup>8</sup> States, local governments, and infrastructure providers (for example, port authorities, and transit agencies) own over 90% of non-defense public infrastructure assets.<sup>9</sup> They fund and finance infrastructure through a combination of taxes, borrowing, and user and beneficiary charges.

The largest potential threat to the cost of financing infrastructure will come from increasing the cost for states to borrow through municipal debt. On a basic level, states and local governments borrow by issuing municipal debt that enjoy special the status of paying interest that is not subject to federal taxes (and often not subject to the state’s income tax, as well).<sup>10</sup> The muni debt market is huge—about \$3.8 trillion. Most infrastructure projects, particularly significant ones, involve issuing muni-debt to finance the costs; once built, services fees can be charged (in specific instances like toll roads and bridges) to cover the cost of construction ongoing debt service on the municipal debt.

For cities like Jackson, the crisis came long before the storm. It was born out of neglect, environmental racism, and inequities in our tax code that leave struggling cities with few resources. The result, as Mississippi Today reported in March: “parts of Jackson’s 1,500 miles of water mains are over 100 years old.”<sup>11</sup>

Ideally, infrastructure investments serve as a shared foundation for economic, environmental, and public health between different neighborhoods and municipalities. However, as racism drives a zero-sum view of federal policy, infrastructure is often neglected, unevenly and poorly maintained

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<sup>8</sup> <https://www.cbo.gov/publication/52463>

<sup>9</sup> <https://www.cbpp.org/research/state-budget-and-tax/its-time-for-states-to-invest-in-infrastructure>

<sup>10</sup> <https://www.brookings.edu/blog/up-front/2017/12/26/how-the-new-tax-bill-will-cut-infrastructure-investment/>

<sup>11</sup> <https://mississippitoday.org/2021/03/24/why-jacksons-water-system-is-broken/>

or intentionally overlooked in particular places, leading to a lack of access, affordability, and safety for many communities of color.<sup>12</sup>

### The Housing Crisis is an Infrastructure Crisis

Most people in the U.S.—particularly renters—spend more than half of their income on transportation, rent, mortgage cost and home energy costs. There is no community in the United States where a family with one full-time worker earning the minimum wage can afford the local fair-market rent for a two-bedroom apartment. According to HUD, an estimated 12 million renter and homeowner households spend more than 50% of their annual incomes on housing. The problem is likely to be exacerbated in the coming years. Analysts expect that over the next 10 years more than 400,000 new renter households will enter the rental housing market, many of these households being low income.<sup>13</sup> The pace at which the rental housing industry is developing new units is significantly slower than the number of rental housing needed in the next 10 years, meaning the gap in rental housing supply versus the demand for rental homes is only going to widen.

The shortage of affordable housing in major U.S. cities costs our economy \$2 trillion each year in lower wages and productivity, preventing low-income households from moving to areas with more economic opportunities. A lack of affordable housing access additionally prevents families from increasing their earnings and causes a slower gross domestic product (GDP) growth. A 2015 study estimates that between 1964 and 2009, the GDP growth would have been 13.5% higher if there were more affordable housing options for families<sup>14</sup>. This translates into a \$1.7 trillion increase in income overall and \$8,775 in additional wages per worker.

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<sup>12</sup> <https://www.vox.com/policy-and-politics/22301484/america-racism-the-sum-of-us-heather-mcghee>

<sup>13</sup> [https://reports.nlihc.org/sites/default/files/gap/Gap-Report\\_2021.pdf](https://reports.nlihc.org/sites/default/files/gap/Gap-Report_2021.pdf)

<sup>14</sup> <https://www.bloomberg.com/news/articles/2015-05-18/the-urban-housing-crunch-costs-the-u-s-economy-about-1-6-trillion-a-year>

Affordable housing infrastructure also helps local economies and creates jobs by leveraging public and private funds to increase earnings, increase tax revenue, and put people to work. Just one year of construction on 100 affordable rental units can generate \$11.7 million in local income and \$2.2 million in taxes and revenue, and create 161 local jobs, according to the National Association of Home Builders.

As affordable housing becomes more difficult to access and rents continue to increase, the creation of more affordable homes is necessary. With the affordable housing crisis affecting every state, county, and city in the nation, it is critical now more than ever for Congress to invest in affordable housing infrastructure.

But making housing affordable is not enough on its own.

Often, low-income and vulnerable households have very few housing options. They are left to rely on low-quality housing due to residential segregation, long-term neighborhood disinvestment, and deferred maintenance of the housing stock. These homes tend to waste energy so that low-income families pay more per square foot than higher income residents. The result is that nearly one-third of households in the United States struggle to pay energy bills and in fact, about one in five households has been forced to choose between buying food, medicine or other necessities – or paying an energy bill.<sup>15</sup>

As if rising cost of housing were not enough, poor and low-income Americans are increasingly reliant on older housing units, leaving them more vulnerable to major weather disasters such as hurricanes; as well as flooding, wildfires, and other climate-related emergencies. These climate related events place vulnerable housing stock at risk of destruction, leading to the displacement and destabilization of families and communities and increasing the likelihood that they will experience--or be trapped in--poverty.

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<sup>15</sup> <https://www.eia.gov/todayinenergy/detail.php?id=37072>

To avert the worst impacts of climate change, our policies must ensure both that emissions that cause climate change are reduced and that people can live in safe, affordable housing.

Two federal energy efficiency tax incentives—for energy efficient new homes (section 45L of the tax code), and existing home energy retrofits (section 25C), can help prepare our nation’s housing infrastructure to address climate change while creating jobs and more stable communities. However, these incentives expired at the end of 2020 and must be updated and reauthorized. In addition, expired Section 45M should be re-purposed to incentivize the installation of high-efficiency heat pump space and water heaters.

**Residential New Construction Incentive:** We recommend updates to Section 45L, concerning new home construction, as it is dramatically outdated and in need of modernization. The model energy code has made significant advances in energy efficiency in recent years, and incentives must be updated to promote further energy savings and innovation in new construction. We support the leadership on this issue by Congressman Gomez (D-CA), who championed a bill previously introduced in 2019 as the New Home Energy Efficiency Act (H.R. 4646). To update Section 45L we support a tiered approach to promoting energy efficiency, which would provide incentives to builders for new home construction that exceeds the efficiency of the most recent model code, with a higher-tiered incentive for zero-energy-ready homes. An analysis of the 2019 legislation from the American Council on an Energy Efficient Economy found that updates to the 45L incentive could create around 9,500 net jobs over the first three years and more than 56,000 total lifecycle jobs, while avoiding 40 million metric tons of carbon emissions and saving \$5 billion in energy costs over the lifecycle of the program. There is opportunity to further strengthen this bill, leading to even more carbon and energy savings. NRDC proposes an additional “bonus” incentive of \$500 for homes constructed to comply with either tier, that are also constructed without any on-site fossil fuel equipment (such as a gas water heater or gas furnace) and without any fossil fuel hookups. Efficient, all-electric new construction is a crucial component of

reducing carbon emissions in buildings, aligned with President Biden's commitment to reduce the carbon footprint of the U.S. building stock 50 percent by 2035 and achieve a net-zero carbon economy by 2050. Promoting efficiency and electrification at the time of new construction is the cheapest and easiest way to put the U.S. building stock on a path to meeting these goals

**Incentives for Manufacturers of Efficient Heat Pump Equipment:** In relation to Section 45M, NRDC strongly supports and prioritizes its modernization within the tax code, to incentivize manufacturing of high-efficiency heat pump space heaters and heat pump water heaters. Space and water heating combined represent 62 percent of energy use in U.S. homes, making the decarbonization of these end uses critical to building emissions reduction goals. High-efficiency heat pumps and heat pump water heaters reduce energy consumption, utility costs, and carbon emissions by 50 to 70 percent over conventional electric alternatives, yet only make up a small portion of the market today due to higher upfront costs.

**Existing Home Efficiency Improvements:** We also recommend the following updates to Section 25C, which provides support for homeowner energy efficiency improvements and has a track record of promoting investments that lower homeowners' energy bills while creating good jobs for contractors and manufacturers. This is particularly important at this moment in time, when the energy efficiency industry has been devastated by the effects of the Covid-19 pandemic. The efficiency sector has had job losses impacting more than 10 percent of its workforce since the pandemic began. Once again, legislation from Congressman Gomez, who previously introduced the Home Energy Savings Act of 2019 (H.R. 4506), was much appreciated in attempting to update 25C. The 25C incentive of \$500 in current law is far too low to spur the kinds of homeowner investment needed to markedly improve energy efficiency, reduce carbon emissions, and recover hundreds of thousands of lost jobs. The energy efficiency sector is in desperate need of financial stimulus, to restore and strengthen the strong local jobs created by installing efficient equipment and products. As such, we urge that the incentive amount



be doubled for the next few years, from the \$1,200 called for in the 2019 bill to \$2,400. In addition, the percentage of eligible expenditures should also double, from 15 percent to 30 percent. Efficiency levels should be specified in a way that would automatically update, and the credit should be made permanent. We request one important change: NRDC strongly prefers incentivizing heat pumps and heat pump water heaters through the upstream mechanism in Section 45M, as described above, as a manufacturer incentive will do more to spur investment and create a robust market for these products than a consumer incentive. ACEEE estimates that updates to Section 25C, including a doubling of the incentive as a short-term stimulus, could bring back 157,000 jobs in the first three years of implementation, and 195,000 jobs over the lifecycle of the program. There is the potential to save more than 127 million metric tons of carbon pollution while avoiding \$22 billion in energy costs for homeowners, as well.

This committee should work to reduce emissions as quickly as possible, on behalf of every American. That means, long term, full value extensions of the investment tax credit and production tax credit, establishing standalone investment tax credits for high voltage transmission and energy storage, eliminating the cap for the electric vehicle tax incentive and upgrading the charging incentive, as well as critical updates to a slate of energy efficiency credits – mentioned above - and reviving the 48C manufacturing credit.

### [Ensuring Low-income Renters Get the Help they Need](#)

Long term, full value extensions of the investment tax credit and production tax credit are a vital tool to ensuring our housing stock is prepared for the challenge of climate change because they provide needed capital for the preservation and repair of existing housing. However, the limits of those incentives to projects targeting homeowners and new construction, will limit their effectiveness for providing relief to our nation's lowest income households.

Additional measures like integrating renewable energy and energy efficiency tax incentives with the Low-Income Housing Tax Credit (LIHTC) incentive will be vital to ensure our most vulnerable families who contribute the least to climate change are not left behind by investments to build anew.

The LIHTC encourages private investment in the production and preservation of affordable rental housing. Maximizing the energy and water retrofits of LIHTC properties is a cost-effective way to reduce energy and water consumption, improve the financial performance of properties, and create healthier, more comfortable homes for residents, particularly for residents of multi-family buildings.

There are two primary ways renewable energy tax credits (RETC) can be combined with LIHTC to maximize the benefits to low-income residents and property owners.

First, suppose a housing provider installs a solar array on the roof of its housing property and it uses the electricity to power the property's common areas (for example, hallways, wash rooms, and parking lots). This is considered a residential use and would make the cost of the solar array eligible for both the RETC and the LIHTC.

As another example, suppose that a housing provider installs a solar array on its roof, and then uses the electricity to reduce the tenants' electric bills. This is also a residential use and would make the cost of the solar facility eligible for both the RETC and the LIHTC.

## Conclusion

Congress must act to double down on an ambitious strategy to rebuild our nation's economy, infrastructure, and struggling communities. As we rebuild the economy, we must prioritize clean jobs that are also high-quality jobs. We encourage members of this committee to secure support through the tax code for deindustrialized, socially and economically marginalized, and pollution burdened communities.

One approach to doing so is to provide an additional incentive for clean energy projects that benefit communities who live in places with high levels of pollution or long-term poverty or who face high levels of unemployment due to recent or planned closure of fossil fuel and nuclear power plants or fossil fuel extraction and processing facilities.

A “whole of government” approach to addressing the climate crisis and its related challenges, begins with this Congress. Ensuring a functioning social safety net for all Americans, investing in modernizing our nation’s infrastructure, and providing workforce training incentives will transform our economy. It will grow jobs today and set America on the path of economic success for decades to come.