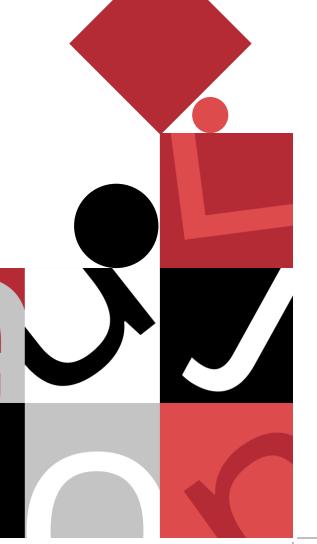


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The US Delivery Crisis

By Bruce Katz

Bruce Katz served as chief of staff to Secretary of Housing and Urban Development Henry Cisneros during the Clinton administration. He was later senior counsel and staff director for the U.S. Senate Subcommittee on Housing and Urban Affairs. He co-led the housing and urban transition team in the early days of the Obama presidency, serving as senior advisor to the new HUD Secretary Shaun Donovan. Thereafter he was a vice president at the Brookings Institution and founding Director of the Brookings Metropolitan Policy Program, as well as a visiting Professor at the London School of Economics.

He is co-founder (with Jeremy Nowak) of New Localism Advisors and is the Director of the Nowak Metro Finance Lab at Drexel University. He regularly advises leaders on public and private sector innovations that advance the well-being of communities. In 2006, he received the prestigious Heinz Award in Public Policy for his contributions to understanding the "function and values of cities and metropolitan areas and profoundly influencing their economic vitality, livability and sustainability."

s communities slowly emerge $from\ the$ ACOVID-19 global pandemic, they are faced with an unprecedented opportunity to remake their economies and reshape their physical landscape. The \$1.2 trillion Infrastructure Investment and Jobs Act, signed by President Biden in November 2021, makes some of the largest investments in transportation, water, bridges, rail and digital infrastructure in the country's history, and includes new investments in climate resiliency and lowemission technology to ensure we can adapt to the impacts of climate change. Combined with the funds made available by the American Rescue Plan, these legacy-forming measures could help propel a new burst of innovative, inclusive and sustainable growth in the United States.

Despite the attention paid to the size and scope of federal infrastructure investment, the success of our national effort will be determined by the effectiveness of state allocation and local design and delivery. The federal government is bankrolling this moment; but all of this is dependent on networked governance in cities and metropolitan areas and the marshalling of private and civic resources. Only at the local level will a myriad of infrastructure investments be pulled together for cumulative rather than disjointed impact and long term rather than short term effect.

The hidden story, unreported to date, is that the US faces a major delivery crisis. After years of federal scarcity and unreliability, most communities haven't planned or prepared for the prospect of abundant investments in economy shaping, energy shifting, climate solving, place making and the like. Most communities, simply put, are not ready for what's coming. The US delivery crisis is caused by three separate but related issues.

First, there is a fundamental disconnect between the organization of the federal government and the functioning of real communities. The federal government is the apex of fragmentation, vertically organized in a series of rigidly balkanized bureaucracies, mostly created in the mid-20th century when specialized expertise was deified. The federal government is now about to invest trillions of dollars through this legacy system via hundreds of programs across dozens of agencies. The Infrastructure Investment and Jobs Act alone provides \$110 billion for roads, \$39 billion for transit, \$25 billion for airports, \$17 billion for ports, \$65 billion for broadband, \$73 billion for the electric grid and on and on and on

Communities, by contrast, operate horizontally via networks that weave together disparate investments into a whole that is often greater than the sum of the parts. While federal programs focus on singular, technocratic solutions, communities emphasize the connections between different uses, routinely linking different forms of infrastructure with other investments in housing, economic and workforce development, place making and the remediation of former industrial properties. Such multi-dimensional action, in downtowns and innovation districts and along waterfronts and commercial and industrial corridors, has a synergistic effect that catalyzes more growth and generates more value than would occur through siloed investments.

Second, the compartmentalization of federal programs makes the blending of public resources, let alone the leveraging of private and civic capital, inordinately complex. The adaptive reuse of an iconic community anchor, like the Dayton Arcade or the former Studebaker factory in South Bend or the Central Terminal in Buffalo, requires separate but related investments in historic preservation, affordable housing, entrepreneurial start-ups and energy, broadband and transportation infrastructure. Yet funding for each of these investments will flow through separate agencies with different rules to different recipients along different time frames and via different allocation methods (e.g., block grants versus competitions versus tax incentives versus innovative financial products).

The end result is a Rubik's Cube of government programming and investment which requires dozens of different, often conflicting, funding sources in the same transaction.

Finally, the capacity of localities is not sized to the scale of federal funding or the tasks at hand. City, municipal and county governments (and many public authorities or quasi-public entities) have been degraded for decades, the long tail effect of President Reagan's depiction of government as the problem. Many non-profit intermediaries that focus on supporting local entrepreneurs or delivering community housing are similarly understaffed and under-capitalized. This means that most communities do not have the personnel with the capabilities, competencies, bandwidth or muscle memory to plan transformative projects, apply for disparate federal sources, do the capital stacking necessary to make catalytic projects happen and coordinate multiple investments for synergistic effect.

The upshot of all this: history will show that the enactment of federal legislation was

infinitely easier than local implementation and execution.

So, what to do?

The US needs a surge in capacity. Federal programs do not magically yield tangible projects, initiatives and impact. People on the ground do. Prior eras of federal investment created vast employment opportunities either through federal agencies (e.g., Civilian Conservation Corps) or vast state and local building efforts. This period must galvanize a 21st century army of technologically proficient community builders, with expertise in fields like planning, architecture, environment, engineering, small business, housing, workforce development, project finance and project management. Unlike the New Deal, the surge in capacity must happen through a mix of national direction and local amplification. The time is ripe for the kind of corporate and philanthropic leadership we saw under President Clinton (when Eli Segal led the Welfare-to-Work Partnership) and President Obama (when the Rockefeller Foundation backed the Hurricane Sandy inspired Rebuild by Design effort). The Biden Administration should work with leading businesses and foundations to galvanize billions in public, private and civic resources over the next three years to build local capacity. This will pay for tens of thousands of community builders to help develop and implement transformative projects, leveraging trillions in federal and private investment. Failure to address the capacity gap will not only undermine the deployment of important federal investments; it will also exacerbate geographic inequities, given that many smaller communities, already struggling, are the places with the least ability to access and implement federal resources.

The US needs a step shift towards routinization. Prior eras of federal investments invented simple financial products like the 30-year mortgage that boosted homeownership and wealth building for millions. This period must similarly routinize the design, financing and delivery of "community products," a new housing development, a reclaimed industrial site, a revitalized commercial corridor, a nature- based climate solution and so forth. Unlike the 30-year mortgage, community products are complex, inevitably requiring the mixing of public subsidy, private debt and concessionary or philanthropic capital. When constructed well, these capital

stacks make a project feasible in the near term as well as sustainable for the long haul. When codified smartly, they also enable exceptional, "shovel-worthy" projects to be repeated again and again. Routines, by their very definition, can be quite boring and lack the pizazz of the novel and exceptional. But routines are the vehicle for scaling impact, enabling efficiency and reducing the leakage of scarce public dollars to the hordes of lawyers, accountants, syndicators, consultants and others who benefit when complexity is the order of the day.

The US needs a burst of institutional transformation. Prior eras of federal action catalyzed new federal institutions (e.g., the Federal Housing Administration) and new local institutions (e.g., public housing authorities, redevelopment authorities) tasked with bringing federal investments to the ground. Many of these institutions are showing their age and are not taking maximum advantage of mechanisms used in other parts of the world to coordinate across disparate disciplines (see, for example, "How City-Based Ecosystems Drive Climate Solutions: The Helsinki Case" at the website for The New Localism) or generate long-term revenue for the public good ("Cities and the Glasgow Climate Summit: Lessons from Copenhagen", The New Localism). Similarly, multi-city networks in the

US focus mostly on aggregating political power and advocating for federal and state investments and reforms rather than on aggregating market power and perfecting financial models that balance public and private gain. Fortunately, a few US cities are using this disruptive period to reform legacy institutions ("Tulsa and the Remaking of Urban Governance", The New Localism). But we must go further. This period should see an explosion of institutional innovation. What about City Climate Commissions, now emerging in Europe, to marshal the disparate efforts necessary to achieve a low carbon, climate resilient future? Or Community Equity Corporations to boost wealth building in disadvantaged neighborhoods? Or Supplier Diversity Intermediaries to harmonize procurement practices across multiple public authorities to grow Black- and Brown-owned businesses? Or an Urban Investment League to help networks of cities build new norms of project finance and new models for public/private co-investment.

Rebuilding America is no longer a question of Presidential leadership and Congressional action. It is now a challenge of national initiative and local delivery. Who will step up to solve our nation's delivery crisis?

Selling Carbon Credits Generated from Buyout Properties in a Carbon Market

By Rebecca Cotton, MSPPM-DA '22, Mack Peterman, MSISPM '22, & Luis Emanuel Varela, MSIT '22

Executive Summary

Over the past three decades, the Federal Emergency Management Agency (FEMA) has acquired thousands of properties deemed high-risk. While these buyouts mitigate health and safety risks, the maintenance and upkeep of these properties remain the responsibility of local communities.

The purpose of this paper is to evaluate the feasibility of generating forestry carbon credits on these buyout properties. In order to gain access to the carbon market, local communities have to overcome cost and scale barriers. Efforts from several organizations to make the market more accessible to small landowners and rising offset prices could make entry possible in the future.

Through research and stakeholder interviews, a stochastic model was developed to determine the conditions under which a community could benefit from entering a carbon market. The model estimates the costs and payouts associated with participating in a market. Based on the current market price, community participation in a carbon market is not profitable. However, communities can avoid paying several hundred dollars in ongoing maintenance costs if yearly carbon market operational costs are below the cost communities currently pay to maintain vacant lots.

Based on the local context, our model can help communities assess the feasibility of entering a carbon market. Additionally, with minimal modifications, our model could also evaluate expected costs and benefits of other land-use decisions either tied, or not tied to, buyout properties.¹²

Project Context

Since the late 1980's, the Federal Emergency Management Agency (FEMA) has made over 40,000 property acquisitions. These *buyouts* help individuals move

¹ Benincasa, Robert. "Search The Thousands Of Disaster Buyouts FEMA Didn't Want You To See." NPR, March 5, 2019, sec. Investigations. https://www.npr.org/2019/03/05/696995788/search-the-thousands-of-disaster-buyouts-fema-didnt-want-you-to-see.

² Jimenez-Magdaleno, Karla, and Brian Dabson. "FEMA-Funded Property Buyouts: The Impacts on Land and People." Literature Review, The University of North Carolina at Chapel Hill, 2017. https://ncgrowth.unc.edu/wp-content/uploads/2018/01/Buyouts_Impact_LIteratureReview_Final.pdf.

away from high-risk locations like flood zones. After a buyout is complete, the property is designated as "perpetual open space", meaning the land can never be redeveloped. Many buyout properties are therefore left as vacant lots. Transforming homes to vacant lots results in lost property tax revenue for local governments, and makes some communities unwilling or unable to pursue buyouts. To reduce this financial deterrent and improve communities' disaster resilience, FEMA requested the authors explore possibilities to generate value from perpetual open spaces.

Our research sought to answer two questions: (1) Is it technically and legally possible for buyout properties to generate revenue in a carbon market, and if so, (2) under which conditions is this process profitable? Carbon markets are growing rapidly, as governments, businesses, and individuals seek to offset their emissions to mitigate climate change. The 2021 Markets in Motion report from the Ecosystem Marketplace found that the voluntary carbon market is on track to exceed \$1 billion in transactions this year. 4 As of August 2021, over 1,700 million metric tons of carbon dioxide have been offset. ⁵ Compared to 2019, the volume of credits traded rose by 80 percent in 2020 and by August 2021, the number of credits traded was already 27 percent higher than total 2020 numbers. 6 Carbon credit prices are also increasing: between 2018 to 2021, prices for carbon credits sold under California's cap-and-trade program - which can include land use projects – nearly doubled from \$15.05 to \$28.26 per ton.⁷ Given this explosive growth across the carbon market, we hoped to identify ways to harness carbon finance to increase the long-term sustainability of FEMA's buyout program and add a secondary benefit of carbon sequestration.

Despite strong growth in the carbon market, our research uncovered significant cost and scale barriers for local communities to overcome before they can sell carbon offsets. Efforts within the carbon market industry to open participation to smaller landowners⁸ and the potential for carbon offset prices to rise suggest that these barriers may be overcome. Selling carbon offsets from buyout lots may be a viable land-use choice for local communities in the future. To help community leaders evaluate the conditions necessary for the use of their buyout properties in a carbon offset project, we created a stochastic model that outputs a range of possible costs and benefits from entering this market. The model can be found in the attached Excel document.

The information and data discussed in this report were collected through interviews with FEMA employees, flood mitigation experts, and carbon market experts, as well as traditional research and data modeling. Although this paper focuses specifically on flood mitigation buyout properties, the methodology we used can be applied to a variety of land acquisition or property management projects that seek to utilize space in more environmentally sound manners.

Mitigating Flood Risk

Flood mitigation strategies involve one of three actions: resistance, accommodation, or retreat (Figure 1). No single method works best or is a viable

³ Forest Trends' Ecosystem Marketplace. "'Market in Motion', State of Voluntary Carbon Markets 2021." Washington DC: Forest Trends Association, 2021.

⁴ Forest Trends' Ecosystem Marketplace. "'Market in Motion', State of Voluntary Carbon Markets 2021." Washington DC: Forest Trends Association, 2021.

 $^{5, 6 \}quad Forest \ Trends \ Ecosystem \ Marketplace, 2021.$

^{7 &}quot;California Cap-and-Trade Program: Summary of California-Quebec Joint Auction Settlement Prices and Results." California Air Resources Board, November 2021. https://ww2.arb.ca.gov/sites/default/files/2020-08/results_summary.pdf.

option for all communities. Flood resistance refers to measures that stop flood waters from reaching homes and businesses, such as building sea walls or piling sandbags. Flood accommodation involves modifying infrastructure to adapt to flooding, like waterproofing homes up to a certain height or elevating structures on stilts. Finally, the managed retreat strategy focuses on buyout programs and involves physically relocating people, and sometimes structures, to safer locations.

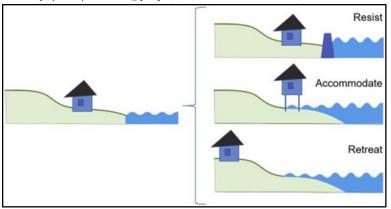


Figure 1. Flood Mitigation Strategies. 10

FEMA Buyout Programs

Several FEMA programs are authorized to provide grants to fund property buyouts. Until recently, the buyout process could only be initiated after a presidentially-declared disaster, however the Building Resilient Infrastructure and Communities (BRIC) grant program now offers a path for buyout acquisition before disasters strike.

Because of its complex and bureaucratic nature, the FEMA buyout process requires coordination from FEMA, state officials, and local communities (*Figure 2*).¹¹ After receiving input from local communities, state officials submit grant requests to FEMA. FEMA then awards money to the states, leaving them to decide which local projects and communities will receive funding.¹² FEMA grants cover 75 percent of the cost of property acquisition; state and local governments are responsible for funding the remaining 25 percent.¹³ In some cases, small impoverished communities and properties that were damaged in previous disasters may be eligible for FEMA to cover 90 percent of the buyout cost.¹⁴ The only funding restriction that applies is that community cost share cannot be covered by other federal grants.¹⁵

The FEMA-funded buyout process is lengthy and complex. It necessitates

⁸ Repka, Marisa. "New Forest Carbon Offset Strategies Turn to Small Landowners for Big Impact." Conservation Finance Network, July 24, 2020. https://www.conservationfinancenetwork.org/2020/07/24/new-forest-carbon-offset-strategies-turn-to-small-landowners-for-big-impact.

⁹ Siders, A. R. "Managed Retreat in the United States." One Earth 1, no. 2 (October 25, 2019): 216–25. https://doi.org/10.1016/j.onecar.2019.09.008.

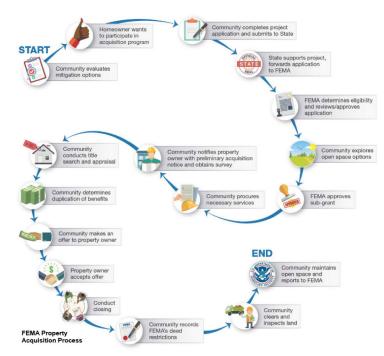
^{10 &}quot;Frequently Asked Questions: Property Acquisitions for Open Space." Federal Insurance and Mitigation Administration. Accessed December 6, 2021. https://www.pema.pa.gov/Mitigation/Grants-Projects/Documents/FEMA-Property-Acquisitions-Open-Space-FAQ.pdf

^{11, 12} Horn, Diane P. "Federal Emergency Management Agency (FEMA) Hazard Mitigation Assistance." CRS Insight. Congressional Research Service, October 5, 2020. https://sgp.fas.org/crs/homesec/IN11187.pdf.

^{13 &}quot;Summary of FEMA Hazard Mitigation Assistance Grant Programs." FEMA, March 2021. https://www.fema.gov/sites/default/files/documents/fema_summary-fema-hazard-mitigation-assistance-grant-programs_032321.pdf.

¹⁴ Horn, 2020.

Figure 2. Due to bureaucratic procedures and differing levels of authority, the FEMA Property Acquisition Process is long and complex. ¹⁶



coordination between homeowners, local communities, the state, and FEMA. It can take months or years to complete. ¹⁷ Limited funding means not all interested communities will be approved for the buyout program and not all homeowners wish to accept a buyout offer. FEMA buyouts are completely voluntary.

While buyouts reduce the risk of death or injury and the cost of post-disaster recovery, local governments still pay long-term costs, as the land must be maintained and managed. Buyout properties are often converted into value-generating public amenities (parks, hiking trails, athletic facilities, etc.), but many others remain vacant lots (mown, left as bare soil, or allowed to "return to nature"). The resulting patchwork buyout patterns — which leave buyouts interspersed with non-buyout properties — are difficult to develop into amenities.

Carbon Markets and Emissions Offsetting

In this paper, we use the terms *carbon offset* and *carbon credit* interchangeably, defining both as a "reduction in one ton of atmospheric carbon dioxide to compensate for emissions made somewhere else."²⁰ Carbon offset solutions began with a Guatemalan agriforest project in 1989 and cover a wide range of activities, including technological innovations in industrial processes, direct air

 $^{15{,}16\,}$ "Frequently Asked Questions: Property Acquisitions for Open Space." Accessed December 6, 2021.

^{17,18} Jimenez-Magdaleno, Karla, and Brian Dabson, 2017.

 $^{19\ \} Verra.$ "Verra - Verified Carbon Units (VCUs)," 2021. https://verra.org/project/vcs-program/registry-system/verified-carbon-units-vcus/.

^{20~}Smoot, Grace. ``The History of Carbon Offsetting: The Big Picture." Impactful Ninja (blog). Accessed December 6, 2021. https://impactful.ninja/the-history-of-carbon-offsetting/.

²¹ van der Werf, G., Morton, D., DeFries, R. et al. CO2 emissions from forest loss. Nature Geosci 2, 737–738 (2009). https://doi.org/10.1038/ngeo671.

²² California Cap-and-Trade Program: Summary of California-Quebec Joint Auction Settlement Prices and Results, 2021.

²³ Voluntary Carbon Market - An International Business Guide to What They Are and How They Work. Ricardo Bayon, Amanda Hawn and Katherine Hamilton 2007.

capture, and forest protection or restoration.²¹ Forestry carbon offsets generated from forest protection or restoration projects work by enhancing the natural carbon sequestration cycle. Through photosynthesis, plants remove carbon dioxide from the atmosphere and transform the carbon into simple sugars. This effectively "traps" the carbon in the plant and prevents it from being released back into the atmosphere until the plant dies and decomposes. Wetlands slow the decomposition process, storing carbon for decades beyond a tree's death. Growing forests and restoring wetlands allow carbon to be removed from the atmosphere for decades or centuries. Conversely, deforestation and forest and peatland degradation account for 15 percent of all human-caused greenhouse gas emissions. ²²

Forestry carbon markets are a platform to pay individuals, communities, or organizations to protect or regrow forested land rather than use the land for another purpose. Once properties are verified as viable parcels for carbon offsets, owners can receive payments based on the amount of carbon that is sequestered on the land. Some markets are compliance-based, such as California's capand-trade system. ²³ Compliance-based markets are mandated by a government agency and require carbon emitters to cap their emissions under a certain level or purchase carbon credits to offset the difference. ²⁴ Other markets are voluntary and are therefore more flexible and less structured. Flood buyout land could be used to generate offsets in either, but we will focus most of our analysis on voluntary markets.

Voluntary markets are not created by regulation nor are they the result of governmental action to limit greenhouse gas (GHG) emissions. They can include a variety of project types and financial transactions, giving them the potential to be more innovative, flexible, and experimental than compliance markets. ²⁵ Some voluntary markets have a structure and reporting procedure similar to compliance markets, such as the Carbon Offsetting and Reduction Scheme for International Aviation. ²⁶ However, most large transactions between offset sellers and purchasers are negotiated between participants rather than on an open exchange. ²⁷ These private market exchanges limit public availability of voluntary market information.

The overall process of a voluntary carbon market follows a specific path beginning with *product creation*, which develops a carbon offset project. Once the product is designed, it needs to be *verified and certified* to ensure the project will reduce or remove GHG emissions. Third-party verifiers like Verra, ²⁸ Gold Standard, ²⁹ or the American Carbon Registry ³⁰ certify projects that follow documented methodologies to prove their carbon offsets truly reduce emissions. Carbon credit purchasers typically prefer to acquire only these verified credits.

After verification and certification comes *product distribution*, where credits are offered to consumers. Traders (e.g., retailers, investors, brokers, market exchanges, project registries) often facilitate this distribution, although some

²⁴ Voluntary Carbon Market - An International Business Guide to What They Are and How They Work, Ricardo Bayon, Amanda Hawn and Katherine Hamilton 2007.

^{25,26} Silvia Favasuli and Vandana Sebastian, "Voluntary Carbon Markets: How They Work, How They're Priced and Who's Involved," June 10, 2021, https://www.spglobal.com/commodity-insights/en/market-insights/blogs/energy-transition/061021-voluntary-carbon-markets-pricing-participants-trading-corsia-credits.

²⁷ Verra. "Verra," 2021. https://verra.org/.

²⁸ Gold Standard. "The Gold Standard," 2021. https://www.goldstandard.org/.

²⁹ American Carbon Registry. "American Carbon Registry," 2021. https://americancarbonregistry.org/.

^{30 &}quot;Carbon Canopy: Lessons Learned from Nearly a Decade of Developing Forest Carbon Projects in Southern Appalachia." Dogwood Alliance. Accessed December 1, 2021. https://s3.amazonaws.com/media.dogwoodalliance.org/wp-content/uploads/2017/08/CC-Lessons-Learned-Report-for-Web.pdf.

carbon offset generators negotiate directly with a buyer. The final step, **product consumption**, involves the process of a carbon credit being "used". One ton of carbon is sequestered to offset emissions from a buyer. The product consumption phase ensures credits are not sold multiple times.

Generating Carbon Offsets using Buyout Properties

Most land-use carbon offset projects require at least 1,000-2,500 acres for economic viability.³¹ However, several organizations are now operating as **small-scale carbon offset** aggregators, which allows these organizations to unify projects across multiple small landowners and reach the economies of scale necessary for market success. We believe communities will be able to enter the carbon market most easily by partnering with one of these small-scale aggregators.

Before entering any carbon market, communities must consider several variables to evaluate project feasibility. These variables are as follows:

Project type: There are several land use carbon offset projects that may be appropriate for buyout properties. We focused on reforestation projects in this analysis, but wetland restoration projects may also be relevant. To our knowledge, no small-scale carbon offset aggregators currently have wetland restoration projects.

Geography: For forestry carbon offset projects, different regions of the U.S. will sequester different amounts of carbon each year. Data from the Chicago Climate Exchange³³ can estimate carbon sequestration rates.

Land area and continuity: Small-scale carbon offset aggregators still require a minimum amount of land area before landowners can join the program and often require that the land be contiguous.³⁴ For example, the FFCP requires³⁰ acres of land, roughly equal to 150 buyout lots. If additionality can be proved, the land area could include more than just buyout lots.

Initial project costs: Communities can avoid many initial project costs by joining an aggregation project instead of entering the carbon market individually. Costs associated with land improvements such as tree planting may still be required near the beginning of the project.

Ongoing verification and monitoring costs: Selling carbon credits requires ongoing verification and monitoring throughout the project lifetime. Joining an aggregation project may allow communities to avoid paying these costs directly. Additionally, new monitoring methods using

remote sensing may significantly decrease these costs across the market in future years.³⁵

Risk: Land use carbon offset projects are inherently "risky" since carbon sequestered by plants can be released back into the atmosphere through fire or decomposition. Buyout properties offer less risk since forests will never be clear-cut for development. However, if storms are likely to damage or destroy forests, the site may not be appropriate for a carbon offset project.

Given the complexity of assessing these variables, communities' consultation with a carbon market expert will likely be necessary. Before hiring an expensive consultant, communities must know whether selling offsets is likely to be a revenue-generating or revenue-consuming option. Our model aims to answer this question.

Proof of Additionality³²: Carbon offset projects must demonstrate that the project sequesters more carbon than would have occurred in a "no action" or baseline scenario. This means projects must not be mandated by law or regulation, as a mandated project would occur with or without revenue from carbon offsets. As an example, a buyout lot that is already forested greenspace would likely fail the additionality test because regulation prevents future development at this location. Recently acquired buyouts or those that are bare soil likely qualify because activities like tree planting could improve the parcel's carbon sequestration. However, these activities are not mandated by law—a baseline scenario is one where the parcel does not sequester as much carbon.

 $^{31\ \ ^{\}circ}VCS$ Standard." Verra, September 19, 2019. https://verra.org/wp-content/uploads/2019/09/VCS_Standard_v4.0.pdf.

^{32 &}quot;Chicago Climate Exchange: Forestry Carbon Sequestration Project Protocol." Chicago Climate Exchange, Inc., August 20, 2009. https://www.theice.com/publicdocs/ccx/protocols/CCX_Protocol_Forestry_Sequestration.pdf

³³ Family Forest Carbon Program, "Family Forest Carbon Program," 2021. https://www.familyforest-carbon.org.

³⁴ Repka, Marisa. "New Forest Carbon Offset Strategies Turn to Small Landowners for Big Impact." Conservation Finance Network, July 24, 2020. https://www.conservationfinancenetwork.org/2020/07/24/new-forest-carbon-offset-strategies-turn-to-small-landowners-for-big-impact.

Challenges and Opportunities with Selling Carbon Offsets from Buyout Properties

As more small-scale carbon offset aggregator organizations enter the carbon market, there will likely be increased opportunities for communities with buyout properties to partner with them. These partnerships remove many of the barriers that would otherwise prevent a community from entering the carbon market.

Though small-scale carbon offset aggregators make carbon markets much more accessible to small landowners, barriers remain. For example, the FFCP still requires landowners to have at least 30 acres of land, or the area of 150 buyout lots. This scale remains inaccessible for many communities with buyout properties, although it may become more feasible if the community also has adjacent non-buyout land that meets additionality constraints. Minimum land requirements could decrease as more aggregators enter the market, but this constraint is likely to continue limiting community-level participation.

Partnering with aggregators allows communities to avoid high project proposal and verification costs – up to \$100,000 per project. Aggregators can spread this fee across all collaborating landowners.³⁷ Even with reduced costs from aggregator partnerships, communities are responsible for the cost of land improvements necessary for property use in an offset project and ongoing yearly monitoring costs.

In addition to the aforementioned factors, a significant initial barrier for communities is determining the conditions that make participating in a carbon market economically viable. Carbon offset prices fluctuate, carbon sequestration rates vary across regions and forest type, and yearly monitoring costs are poorly defined, especially for small-scale landowners. We sought to address the latter barrier by building a stochastic model that captures the uncertainty inherent in these projects and returns an estimate of likely costs and payouts for communities.

A Stochastic Model of Carbon Market Payouts

Stochastic Models Allow Decision Makers to Better Capture Uncertainty The uncertainty of model inputs makes it difficult for communities to estimate the benefits of participating in a carbon market. For example, it is impossible to know, with certainty, the value of carbon offsets five years in the future, how many tons of carbon can be sequestered per acre in a specific community, or exact yearly operational costs.

The stochastic model we developed takes the uncertain inputs and projects a range of possible outcomes as well as their likelihoods. The model's value is in its ability to provide a low-cost initial estimate of whether pursuing entry into a carbon market is worthwhile. This early analysis can help communities decide if they should invest in a supplementary cost-benefit analysis with expert consultants in order to provide advice and guidance throughout the project.

METHODOLOGY

³⁵ Family Forest Carbon Program, 2021.

³⁶ Parajuli, Rajan, Mark Megalos, Tatyana Ruseva, Stephanie Chizmar, and Mansfield Fisher. "An Introduction to Forest Carbon Offset Markets | NC State Extension Publications." NC State Extension, July 15, 2019. https://content.ces.ncsu.edu/an-introduction-to-forest-carbon-offset-markets.

³⁷ Robert Benincasa, 2019.

³⁸ Family Forest Carbon Program, 2021.

³⁹ Board of Governors of the Federal Reserve System. "Having a Lot Isn't Enough: Trends in Upsizing Houses and Shrinking Lots," November 3, 2017. https://www.federalreserve.gov/econres/notes/feds-notes/trends-in-upsizing-houses-and-shrinking-lots-20171103.htm

To determine the cost and returns of participating in a carbon market, community leaders must determine how much land is available (see section titled *Generating Carbon Offsets using Buyout Properties* for an explanation of what land is eligible to generate carbon credits). We calculated this based on the number of vacant buyouts within a community, as decisions to apply for buyout funding are based on the number of properties under consideration rather than the acreage of those lots. An estimate in acres could easily be substituted into the model.

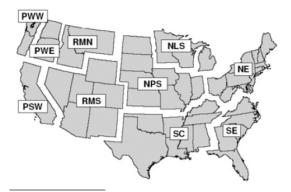
To estimate land area in acres, we calculated:

Equation 1: Land Area (Acres) = (Number of Lots) * (Median size in acres/lot)

For our analysis, we considered five different buyout scenarios: 15, 30, 60, 150, and 500 lots. The first three scenarios resulted from analyzing zip code level data where at least 1 FEMA buyout occurred from 1989 through 2017. More than 20 percent of zip codes had at least 15 buyouts, 10 percent had at least 30 buyouts, and 5 percent had 60 or more buyouts; buyouts from entities other than FEMA were not counted. Given that the land area from these buyouts is not large enough for a community to participate in small-scale carbon offset markets, we also considered a scenario with 150 buyouts – approximately 30 acres – which is the minimum requirement for participation in the Family Forest Carbon Program. Lastly, we considered a large-scale scenario with 500 buyouts, or approximately 100-125 acres. We used data from the Federal Reserve to estimate median lot size. Between 1980 and 2014, median lot size for properties built in the US ranged from 0.20 - 0.28 acres. We used a randomly selected number in this range in our model iterations.

After calculating land area, communities must determine how much carbon dioxide an acre of land can remove from the atmosphere each year. The Chicago Climate Exchange⁴¹ provides estimates of how much additional carbon is sequestered per year by forests with different ages of trees throughout the country. For our analysis, we considered sequestration estimates from three regions: Rocky Mountain South (low sequestration), the Southeast (medium sequestration), and the Pacific Northwest (high sequestration).





^{40,41 &}quot;Chicago Climate Exchange: Forestry Carbon Sequestration Project Protocol." 2009.

⁴² Forest Trends' Ecosystem Marketplace, 2021.

⁴³ California Cap-and-Trade Program: Summary of California-Quebec Joint Auction Settlement Prices and Results, 2021.

^{44 &}quot;Future Demand, Supply and Prices for Voluntary Carbon Credits – Keeping the Balance." Trove Research, June 1, 2021. https://trove-research.com/wp-content/uploads/2021/06/Trove-Research-Carbon-Credit-Demand-Supply-and-Prices-1-June-2021.pdf

⁴⁵ Day, Rob. "Carbon Offsets Are About To Become A Huge Market." Forbes, April 29, 2021. https://www.forbes.com/sites/robday/2021/04/29/carbon-offsets-are-about-to-become-a-huge-market/.

To estimate the total sequestration over an area of buyout land, we calculated:

Equation 2: Tons of CO, /yr =(Land Area in Acres) *(Sequestration | acre)

For each ton of CO2 sequestered, communities can sell one carbon credit in a carbon offset market. Today, carbon credits from forestry projects sell for \$3-8 per ton in voluntary markets. ⁴³ In California's cap-and-trade program, carbon credits have recently been auctioned at \$15-\$17 per ton. ⁴⁴ Research from the Trove Institute predicts forestry carbon credit projects become economical at \$25 - \$30 per ton, and the majority of projects become feasible at \$60 - \$70 per ton. ⁴⁵ Other research suggests that the "social cost of carbon", which is the societal value of abating or sequestering one ton of carbon dioxide, could be as high as \$100 per ton. ⁴⁶ Since a number of communities may wish to consider non-monetary benefits of carbon sequestration action in a project cost-benefit analysis, we analyzed a final scenario at \$90 - \$100 a ton, despite this being well above current prices. Additionally, if carbon pricing becomes institutionalized, offset prices could conceivably rise to \$100 per ton during the lifetime of the project. ⁴⁷

To calculate total income from participating in a carbon market, we used: 40414243

Equation 3: Carbon Market Income = (Tons of CO, /yr) * (Price / ton)

We chose to ignore the initial cost of entering into a carbon market in this model. As of 2021, entry costs are over \$100,000, meaning they are high enough to make it infeasible for landowners with less than 1,000-2,500 acres to enter markets on their own. However, organizations like the Family Forest Carbon Program and others are working on business models which allow small landowners to enter carbon markets without facing high initial fees., Since the initial entry cost is a one-time payment, we believe it is feasible for communities interested in entering a carbon market to seek grants or other funding sources to cover this one-time expense. Ongoing costs, such as those allocated toward monitoring properties and verifying carbon sequestration activities, are much more likely to be paid directly by the community.

Calculating the operating costs of carbon market participation is difficult. Little data is publicly available, and most forestry carbon offset projects operating today involve thousands or hundreds of thousands of acres. In contrast, buyout projects today usually cover only a few acres of land. Of U.S. zip codes with at least one buyout, only 5 percent had more than 60 buyout properties, which, on average, only amounts to 15 acres.⁴⁹

For community stakeholders, the most crucial information is how the cost of carbon market participation compares to the current cost of maintaining buyout properties, many of which remain vacant lots. A 2011 report from the Government Accountability Office (GAO) found that communities spent \$25 - \$300 per vacant property annually on mowing and general maintenance. We used these costs as an estimate of how much communities spend on buyout property maintenance. Using current maintenance costs as a reference point, we considered four possible scenarios for ongoing operational costs to participate in a carbon market: 5 - 25 percent of current maintenance costs (very low-cost scenario, \$1 - \$75 / lot), 25 - 75 percent (low-cost scenario, \$6 - \$225 / lot),

^{46 &}quot;Carbon Pricing Bills Comparison Tables and Charts" (Citizens' Climate Lobby, August 10, 2019), https://community.citizensclimate.org/resources/item/19/220.

^{47 &}quot;Carbon Canopy: Lessons Learned from Nearly a Decade of Developing Forest Carbon Projects in Southern Appalachia." Accessed December 1, 2021.

⁴⁸ Robert Benincasa, 2019.

⁴⁹ Karla Jimenez-Magdaleno and Brian Dabson, 2017.

75 - 125 percent (same cost scenario, \$20 - \$375 / lot), or 125 - 175 percent of current maintenance costs (high-cost scenario, \$30 - \$525 / lot). The total cost to participate in a carbon market was calculated as follows:

Equation 4a: Carbon Market Cost =(Number of Lots) * (Current Cost / Lot) * (percent of current cost)

In Equation 4a, costs are calculated based on the number of buyout lots, as the GAO estimates we used depend on the current cost per lot, not the current cost per acre. If future research provides more accurate estimates of carbon market participation costs (likely on a per acre scale), Equation 4 could be easily modified, using:

Equation 4b: Carbon Market Cost per acre =(Number of acres) * (Cost/acre)

For communities who enter the market with buyout properties, subtracting carbon market costs from carbon market income gives an estimate of the net cost or benefit per year:

Equation 5: Carbon Market Outcome = Carbon Market Income - Carbon Market Cost

There is a second outcome that communities should consider: the difference in costs that come from participating in a carbon market compared to current, status quo practice. Despite the Carbon Market Outcome calculated in Equation 5 being a net cost, it may still be cheaper than the cost of paying \$25 - \$300 per buyout property on mowing and maintenance. This is calculated as follows:

Equation 6: Carbon Market vs Status Quo Outcome = Carbon Market Outcome - Status Quo Costs

Although our current model does not assess it, future iterations could consider quantifying additional benefits of carbon market participation, including outdoor recreation access, biodiversity conservation, and stormwater control.

We ran the equations above in an Excel stochastic model that iterated the inputs of each equation 100,000 times. All but one input was assumed to follow a uniform distribution. The "Tons of Carbon Sequestered / acre / year" input was assumed to follow an asymmetric triangle distribution around the average value of carbon stored in a region across all tree species and all forest ages.

Scenario Analysis and Results

This model is not a perfect representation of costs and benefits associated with entering a carbon market. However, the trends and estimations it produces can still provide valuable insight to community decision makers. Additionally, communities that can reduce the uncertainty in the distribution and ranges of the model inputs will be able to glean more accurate and customized insights.

KEY TAKEAWAYS:

- Even if initial costs are ignored, participation in carbon offset markets will not yield extra income for communities unless carbon credit prices rise to \$60 \$100 per ton.
- As long as annual costs of participating in carbon markets remain below the annual costs communities pay to maintain vacant lots, carbon market participation will result in communities avoiding hundreds to thousands of dollars in costs currently expended to maintain vacant lots.

Increasing the price for carbon offsets increases the likelihood that communities

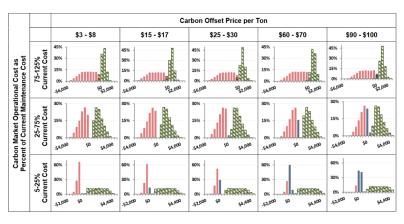
Data Sources & Metrics Assessed by Model									
Metric	# Lots	Median Lot Size (Acres)	Maintenance cost/vacant lot	Tons of CO2 Stored / acre / year	Payout / ton of CO2 stored / year	Carbon Market Cost / acre / year			
Assumed Distribution	Static	Continuous Uniform	Discrete Uni- form	Asymmetric Triangle	Continuous Uniform	Continuous Uniform			
Data Source	# of FEMA buyouts 1989 - 2017 by zip code, NPR Land area required to participate in ex- isting small-scale forestry carbon offset markets, Family Forest Carbon Program (FFCP)	Median Lot size in the US 1980 - 2014, Federal Reserve	Reported annual mowing cost / vacant lot, GAO	Tons CO2 stored / year by region, tree species, and forest age, Chicago Climate Exchange	Current vol- untary market price, Ecosystem Marketplace California com- pliance market price, California Air Resources Board Carbon credit supply curve for forestry credits, Trove Research	Percentage of current maintenance costs			
Values Assessed	15 lots (> 20percent of buyout zip codes) 30 lots (> 10percent of buyout zip codes) 60 lots (< 5percent of buyout zip codes) 150 lots (minimum size to participate in FFCP) 500 lots (comparison size)	0.20 - 0.28 acres	\$25 - \$300	Low sequestration scenario: 0.25 - 1.71 tons (avg 0.68) Average sequestration scenario: 1.17 - 2.64 tons, (avg 2.13) High sequestration scenario: 0.71 - 8.38 tons, (avg 3.73)	Current voluntary market: \$3 - \$8, avg \$5 / ton Recent CA compliance market: \$15 - \$17 / ton High payout future scenario: \$25 - \$30 / ton Very high payout future scenario: \$60 - \$70 / ton Social cost of carbon: \$90 - \$100 / ton	Very low-cost scenario: 5 - 25 percent of current maintenance costs Low-cost scenario: 25 - 75 percent of current maintenance costs Same cost scenario; 75 - 125 percent of current maintenance costs High-cost scenario: 125 - 175 percent of current maintenance costs			

can generate revenue from carbon market participation, but only when prices approach the social cost of carbon (estimated at roughly \$100/ton). This pattern holds true as other model inputs are varied.

However, lower operational costs make carbon market participation profitable at lower offset prices. If operational costs are or can be made cheaper than the range of scenarios we explored, profitable carbon market participation may be more feasible than our analysis suggests.

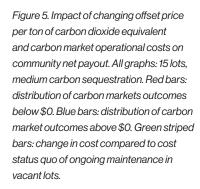
Carbon Offset Price per Ton \$3 - \$8 \$15 - \$17 \$25 - \$30 \$60 - \$70 \$90 - \$100 75-125% Current Cost 20% Carbon Market Operation Cost as Percent of Current Maintenance Cost 46,0 25-75% Current Cost 20% 10% 0% 0% 0% \$4,000 \$4,000 \$4,000 50,0 5-25% Current Cost \$2,00

With low operational costs for carbon market participation, communities can avoid paying thousands of dollars in ongoing annual maintenance costs. Even when carbon market operational costs are similar to the cost communities currently pay to maintain vacant lots, communities are still likely to break even on their net expenditures because carbon markets bring in extra revenue.



Our model analysis doesn't depict economies of scale because land use carbon credit projects today need far more acreage to be economical than almost any community-level buyout aggregation. Therefore, the model shows additional buyout properties as simply changing the magnitude of costs and benefits, not the distribution shape or displacement around \$0.

Figure 4. Impact of changing offset price per ton of carbon dioxide equivalent and carbon market operational costs on community payout. All graphs: 15 lots, medium carbon sequestration. Red bars: distribution of carbon markets outcomes below \$0. Blue bars: distribution of carbon market outcomes above \$0.



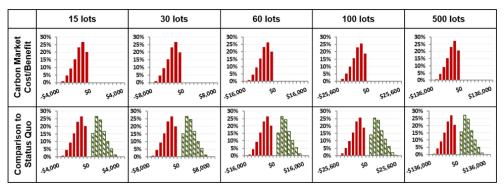


Figure 6. Increasing the number of lots increases the magnitude of the decision, but since economies of scale are not represented in this model, the distribution of the payout does not change. This pattern holds true as other inputs are varied. All graphs: carbon offset price \$3-\$8, medium carbon sequestration, operational costs 25-75percent of current maintenance costs. Red bars: distribution of carbon markets outcomes below \$0. Green striped bars: change in cost compared to cost status quo of ongoing maintenance in vacant lots.

Annual carbon market operational costs are the least defined input in our model. If operational costs are cheaper than current buyout land maintenance costs, then carbon markets are likely to help communities save money over time. As operational costs rise, it becomes more likely that switching to a carbon market will incur additional costs and not be economically viable.

Changing carbon sequestration rates over the range defined by the Chicago Climate Exchange did not significantly change the output of our analysis. If the range of uncertainty for other inputs decreases, variation in carbon sequestration rates could have more impact on the model.



See Appendix for an explanation of how to run the model in Excel.

Recommendations

RECOMMENDATIONS FOR COMMUNITIES

1. Seek partnerships with small-scale carbon offset aggregators.

Our research and analysis suggest that, as of 2021, it would be difficult for communities to participate in a carbon market project. However, partnering with small-scale aggregators removes significant barriers in the process. Even though carbon markets are not currently profitable, communities may still wish to participate in one to reduce ongoing maintenance costs.

We suggest communities use our stochastic model to gain a rough estimate of the cost of participating in a carbon market and use this analysis to decide

Figure 7. Carbon market participation is likely only economical if annual operational costs are less than annual maintenance costs without a carbon market. This pattern holds true as other inputs are varied. All graphs: 15 lots, carbon offset price \$3-\$8, medium carbon sequestration. Red bars: distribution of carbon markets outcomes below \$0. Green striped bars: change in cost compared to cost status quo of ongoing maintenance in vacant lots.

whether to seek additional expert consultation. We recommend communities attempt to better define yearly operational costs of carbon market participation as this was our weakest model input and significantly impacted the project's overall feasibility.

Compare costs and benefits of carbon market participation with other land use alternatives.

While generating carbon offsets may be an excellent use of some buyout properties, communities can use these assets to develop parks, playgrounds, athletic fields, and hiking trails. Buyout properties could be turned over to land trust for management. Although not all measures can be applied to buyout properties because of infrastructure restrictions, creative land resolutions may be possible with flood-prone land. For example, Washington Harbor in the Georgetown area of D.C. is a parking facility that also helps to divert floodwaters when the Potomac River floods. ⁵¹

We recommend that communities consider the social, environmental, and financial costs and benefits of land use options before initiating a carbon offset project. This should include less easily quantified benefits, such as the community health benefits from increased access to green space. ⁵² To assess how different groups are disproportionately harmed or benefited, communities should also consider the equity implications of various land use options.

RECOMMENDATIONS FOR FEMA

FEMA has reported forty-nine thousand property acquisitions since 2005. ³⁹ Our model suggests that if these properties were converted to forested land, these acquisitions would remove sixteen thousand to thirty thousand tons of carbon dioxide from the atmosphere every year. This is equivalent to offsetting the annual emissions of thirty-five thousand to sixty-five thousand vehicles. ⁵³ Creating accessible opportunities for communities to participate in the carbon market can help ensure this carbon reduction benefit is fully realized. We suggest FEMA focus on the following areas to further this work.

1. Continue supporting research to quantify the cost of small-scale carbon offset projects and the value of open space.

Quantifying the operational cost of carbon market participation was the most poorly defined model input and contributed to the most significant amount of uncertainty in our model outputs. To determine if a carbon offset project is economically viable, reducing the uncertainty around operational costs is necessary. We encourage FEMA to continue supporting research on this topic to help communities determine if small-scale carbon offset projects are a possible land-use option.

Additionally, our model does not estimate co-benefits of carbon market participation such as habitat restoration, community access to open space, or the additional social and environmental benefits of sequestering atmospheric GHGs. Although our model demonstrates that communities cannot profit from a carbon market today, co-benefits from reforestation may be worth the net price. Quantifying the benefits of carbon markets and other land use alternatives can help communities make better decisions about buyouts, perhaps enticing their future participation.

 $^{51\,}$ "Urban Green Spaces and Health." Copenhagen: WHO Regional Office for Europe, 2016. https://www.euro.who.int/__data/assets/pdf_file/0005/321971/Urban-green-spaces-and-health-review-evidence.pdf

⁵² OAR US EPA, "Greenhouse Gas Emissions from a Typical Passenger Vehicle," Overviews and Factsheets, January 12, 2016, https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle.

2. Subsidize costs of carbon market participation for buyout communities, but analyze equity impacts first.

FEMA should subsidize carbon market participation through several mechanisms to encourage buyout land-use decisions that also offset greenhouse gas emissions:

- i) FEMA should offer to decrease the community share of buyout costs by the amount a community pledges to invest in entering a carbon market.
- ii) FEMA should submit a bid for an organization to serve as a small-scale carbon offset aggregator specifically for buyout properties.
- iii) FEMA should purchase carbon credits to offset its operational emissions from credits generated by buyout properties.

Since entering carbon markets is a complex process and requires a significant upfront investment, wealthier communities have the resources to take advantage of this opportunity. Additionally, affluent areas can absorb the risk that carbon markets perform poorly and do not yield a net profit for the community. Therefore, before FEMA invests resources in encouraging carbon market participation, the agency should first determine if assistance can be provided in a way that allows all communities to access carbon market finance.

Conclusion

Our stochastic model is a valuable tool for users to examine an initial range of outcomes from entering a carbon market. At present, to our knowledge, there has been no research examining the possibility of using buyout properties to create revenue for carbon offset markets. Although there are significant knowledge gaps and cost barriers to using buyout properties to generate revenue in a carbon offset market, our model could allow communities to reduce ongoing costs associated with maintaining the properties.

Within its scope, the model shows communities the current and future impacts of entering a carbon market with buyout lots in a fast, customizable, inexpensive, and accessible way. Additionally, this model could be customized by users to evaluate co-benefits of carbon market participation or to explore payoffs from other land use alternatives. Our model is not intended to be the determining factor for a land-use decision; however, it is a valuable tool to help users explore possible outcomes associated with entering a carbon market.

Appendix

The original Excel workbook is unable to be published here. If you would like to access this model, please reach out to the listed author, Rebecca Cotton, at the following email: rcotton@alumni.cm.edu. With this model, local government officials and other users can estimate the value of vacant lots on a carbon market. It is intended solely to assist communities with estimating possible costs and returns and should not be considered a robust projection. Users should reference the ReadMe tab of the Excel workbook while using the model.

CARBON MARKET RESOURCES

1) 3rd Party Carbon Project Verifiers

- a. Verra, https://verra.org/
- b. American Carbon Registry, https://americancarbonregistry.org/
- c. Gold Standard, https://www.goldstandard.org/

2) Understanding Carbon Markets

- a. Family Forest Carbon Program, https://www.familyforestcarbon.org -
- b. Ecosystem Marketplace, https://www.ecosystemmarketplace.com/
- c. An Introduction to Forest Carbon Offset Markets, https://content.ces.ncsu.edu/an-introduction-to-forest-carbon-offset-markets Verra's Project Requirements, https://verra.org/wp-content/uploads/2019/09/VCS_Standard_v4.0.pdf
- d. How to Pay for Green Infrastructure: Funding and Financing, https://www.georgetownclimate.org/adaptation/toolkits/green-infrastructure-toolkit/how-to-pay-for-green-infrastructure-funding-and-financing.html

Glossary Terms and Acronyms

Additionality: Carbon offset projects must demonstrate that their process sequesters more carbon than would have occurred in a baseline or "no action" scenario.

At-risk: In this paper's context, at-risk describes individuals and property that are at higher risk of flooding.

Carbon credit/carbon offset: a reduction in one ton of atmospheric carbon dioxide to compensate for emissions made somewhere else.

FEMA: Federal Emergency Management Agency

FFCP: Family Forest Carbon Program, a nonprofit organization that aggregates land from small, private landowners in Pennsylvania and West Virginia to generate credits to sell in a carbon market.

FIMA: Federal Insurance and Mitigation Administration

GHG: "greenhouse gasses" are gasses, such as carbon dioxide, that trap heat within the earth's atmosphere.

Project: in the sense of a carbon offset, a project is the process from initiation, validation, transparency, and completion and are multi-year in nature. **Small-scale carbon offset aggregators:** Organizations that unify offset projects across multiple small landowners to reach the economies of scale necessary to succeed in carbon markets.

Political Polarization and Multi-Member Districts: An Analysis of the New Zealand 1993 Referendum

By Alexander Talbott, MSPPM-DA '22

Abstract

Polarization is an increasingly alarming issue in United States politics. Citizens and politicians alike are unwilling to work with those on the "other side." One issue exacerbating polarization trends in the US is citizens' perception that their voices are not being heard—that their democracy is unrepresentative. This is partly due to the first-past-the-post electoral system employed in the US. In this paper, I first explore a potential remedy to this issue: multi-member districts (MMD). I review MMDs and the various electoral systems to pair with them both in the US and abroad, contrasting benefits and drawbacks to each model, including the racial, electoral, and gender implications of MMDs on the elected body. I then turn to the case of New Zealand, which reformed to MMDs and proportional representation in 1996 following a 1993 binding referendum. By conducting a synthetic control analysis, I conclude the New Zealand MMD reform resulted in lower polarization over the proceeding elections. I finish the article with a recommendation to adopt a similar reform in the United States.

1. Introduction

Political polarization is at an all-time high in the United States.¹ Americans' esteem for their self-identified political party is increasing² and, importantly, their distrust of the opposite party is increasing as well.³ A rise in negative

¹ Abramowitz, Alan I., and Kyle L. Saunders. "Is Polarization a Myth?" The Journal of Politics 70, no. 2 (April 1, 2008): 542-55. https://doi.org/10.1017/S0022381608080493.

² Abramowitz, Alan, and Jennifer McCoy. "United States: Racial Resentment, Negative Partisanship, and Polarization in Trump's America." The ANNALS of the American Academy of Political and Social Science 681, no. 1 (January 1, 2019): 137–56. https://doi.org/10.1177/0002716218811309.

³ Heltzel, Gordon, and Kristin Laurin. "Polarization in America: Two Possible Futures." Current Opinion in Behavioral Sciences, Political Ideologies, 34 (August 1, 2020): 179–84. https://doi.org/10.1016/j.cobeha.2020.03.008.

 $^{4\,}$ Schwalbe, Michael C., Geoffrey L. Cohen, and Lee D. Ross. "The Objectivity Illusion and Voter Polarization in the 2016 Presidential Election." Proceedings of the National Academy of Sciences 117, no. 35 (September 1, 2020): 21218–29. https://doi.org/10.1073/pnas.1912301117.

⁵ Duverger, Maurice. Political Parties: Their Organization and Activity in the Modern State. London: Methuen, 1964. http://archive.org/details/politicalparties0000duve.

partisanship was especially pronounced in the presidential election of 2016.⁴ The result of this increased polarization is a Congress made up of Democratic representatives that are increasingly left-of-center and Republican representatives that are increasingly right-of-center with fewer moderates in the middle to facilitate cooperation and bipartisanship. Polarization can lead to legislative gridlock and should be viewed as a grave threat to democracy.

One explanation for the cause of such increased polarization lies within the electoral system of the United States. Westminster-style democracies (such as those seen in the UK and its former colonies) employ single-member districts (SMD) with first-past-the-post (FPTP) plurality elections. This type of electoral system incentivizes voters and parties towards a two-party state and makes third-party candidates largely nonviable. Candidates and parties with similar, but not identical, values must merge, or they will fail in the face of a united opposition. As a result, parties continue to coalesce until the two strongest parties remain, a trend Duverger termed "polarization."

With only two parties, it is much easier for voters to adopt an "Us versus Them" mentality leading voters to sort themselves into homogenous districts of co-partisans. The number of swing districts in the House of Representatives decreased from over 180 in 1996 to less than eighty in 2020. This segregation increases demonization and extreme distrust of the out-group. Consequently, partisan "tribalism," or the tendency to favor in-groups at the expense of out-groups, is also rising. As one apparent root cause of such polarization, the American electoral system is arguably in need of reform.

One former Westminster-style democracy decided to do away with FPTP elections altogether. In 1993, New Zealand held a binding referendum to replace FPTP with multi-member districts elected in a mixed-member proportional electoral system. Multi-member districts (MMDs) present an interesting policy alternative to Westminster-style SMDs as they promise to better achieve proportional results. MMDs are not a new idea in the US (the Senate provides an example of two-member districts in each state). However, their implementation has not delivered the desired results.

In this paper, I provide an overview of MMDs with special attention paid to their potential application in the United States as a remedy for heightened political polarization. I cover the history of MMDs in the US and why they have increased, rather than decreased, disproportionality. Next, I explore the various electoral systems to pair with them and the electoral, gender, and race implications they have on the electorate. Then, I examine the New Zealand

⁶ Duverger, Maurice. "Factors in a Two-Party and Multiparty System." Party Politics and Pressure Groups, 1972, 23–32.

⁷ Cho, Wendy K. Tam, James G. Gimpel, and Iris S. Hui. "Voter Migration and the Geographic Sorting of the American Electorate." Annals of the Association of American Geographers 103, no. 4 [July 1, 2013): 856–70. https://doi.org/10.1080/00045608.2012.720229.

⁸ Skelley, Geoffrey. "Changing How Primaries Work Probably Won't Make Politics Less Divisive." Five ThirtyEight (blog), July 19, 2021. https://fivethirtycight.com/features/changing-how-primaries-work-probably-wont-make-politics-less-divisive/.

⁹ Defined as an average margin of difference of how a district votes and how the country overall votes within 10 points. For more information: https://fivethirtyeight.com/methodology/how-fivethirtyeights-house-and-senate-models-work/

¹⁰ Warner, Benjamin R., and Astrid Villamil. "A Test of Imagined Contact as a Means to Improve Cross-Partisan Feelings and Reduce Attribution of Malevolence and Acceptance of Political Violence." Communication Monographs 84, no. 4 (October 2, 2017): 447–65. https://doi.org/10.1080/03637751. 2017.1336779.

¹¹ Defined as an average margin of difference of how a district votes and how the country overall votes within 10 points. For more information: https://fivethirtyeight.com/methodology/how-fivethirtyeights-house-and-senate-models-work/

reform to MMDs and proportional representation with a synthetic control design evaluating political polarization before and after the reform. I conclude with policy recommendations for future MMD and electoral reform in the United States.

2.1 MMD ELECTORAL SYSTEMS

MMDs can theoretically be paired with many different types of electoral systems, demonstrated by the wide variety of electoral systems seen in MMDs in different countries around the world. Electoral system design has important implications on the outcome of elections in terms of proportionality and optimal electoral strategies. Below, I outline the six main electoral systems used with MMDs and the countries or states that are currently implementing them.

2.1.1 MULTIPLE NON-TRANSFERABLE VOTE

Of the ten US state legislatures with MMDs, eight (AZ, MD¹⁷, NH, NJ, ND, SD¹⁸, VT, and WV) elect their representatives using multiple non-transferable voting (MNTV, also known as block voting). In MNTV, voters get as many votes as there are seats in the MMD. The candidates with the highest vote totals are elected. MNTV is not proportional and tends to produce landslide victories for the majority party. Parties are incentivized to run as many "clones" of the most popular candidate as there are seats, often resulting in a complete sweep of all seats in the MMD. 20

2.1.2 POST VOTING

The other two state legislatures using MMDs (ID and WA) and the US Senate elect their candidates using post voting, which divides the MMD into separate seats. Instead of running in a pool, candidates run for a specific seat, much like they would in a SMD. For most purposes, MMDs with post voting behave very similarly to SMDs with FPTP as both result in a

winner-take-all affair for a single seat.²¹

2.1.3 SINGLE NON-TRANSFERABLE VOTE

The single non-transferable vote (SNTV) is similar to MNTV except that in SNTV, voters are limited to one vote and, therefore, may only vote for their top-choice candidate out of the pool. When votes are tallied, the top vote-getters (amount is equal to district magnitude) are elected to office. This system facilitates minority party representation as large parties are disincentivized to run many candidates and results in a legislature with a mix of large and small parties. This system is used in Puerto Rico, Kuwait, and, recently, Hong Kong-²²⁻²³

2.1.4 SINGLE TRANSFERABLE VOTE

In single transferable vote (STV), also known as ranked-choice voting, voters rank the candidates in order of their preference. Votes are counted in multiple rounds, with the least popular remaining candidate eliminated after each round. Votes for eliminated candidates are transferred to the voter's next preferred choice. This process continues until the number of candidates remaining equals the district magnitude. STV, when compared to FPTP voting, results in fewer "wasted" votes. STV can achieve proportionality and it ensures no one party will disproportionately win all seats as in MNTV. STV is used in the lower house of Ireland²⁵ and, recently, in New York City.²⁶

 $^{12\,}$ UK Parliament. "Voting Systems," 2021. https://www.parliament.uk/about/how/elections-and-voting/voting-systems/.

¹³ USAGov. "Presidential Election Process | USAGov," 2021. https://www.usa.gov/election.

^{14 &}quot;Report of The Royal Commission on the Electoral System 1986 | Electoral Commission," May 24, 2017. https://web.archive.org/web/20170524153410/http://www.elections.org.nz/voting-system/mmp-voting-system/report-royal-commission-electoral-system-1986

^{15 &}quot;How Does the Irish Electoral System Work?" BBC News, February 26, 2011, sec. Europe. https://www.bbc.com/news/world-europe-12587715.

¹⁶ ACE Project. "Multimember Districts: Advantages and Disadvantages," 2021. https://aceproject.org/main/english/bd/bda02a02.htm.

¹⁷ All districts in Maryland elect 3 members with Districts 1, 27, 29, and 38 using post voting for all 3 offices. Districts 2, 3, 9, 23, 30, 31, 34, 35, 37, 42, 44, and 47 use a combination of block and post voting with as two candidates are elected by block and the third by post.

2.1.5 PARTY-LIST PROPORTIONAL REPRESENTATION

In party-list proportional representation (PLP) voting, political parties publicly post lists of their candidates on the ballot. When voters go to the polls, they vote for their preferred party rather than candidate. Seats are then allocated to the parties proportionally using various statistical methods. The parties fill the seats granted to them with the candidates on their list. PLP offers nearly perfect proportionality, but voters do not get to vote for their candidates directly and, in some cases, do not have any control over the candidates on the party list. PLP is especially popular throughout Europe and Latin America.²⁷

2.1.6 MIXED-MEMBER PROPORTIONAL REP-RESENTATION

Mixed-member proportional representation (MMP) is a hybrid system where voters get two votes. The first vote is cast for a candidate running in an SMD. These votes are summed and the candidate with a plurality of votes is elected for that district, as in FPTP voting. The second vote cast is for a party list, as in PLP. The party list votes are used to allocate seats in a compensatory manner to the parties that did not win many seats in the first vote. MMP achieves proportional representation with the compensatory party list votes while also retaining the direct link between voter and representative as in traditional SMDs. MMP is currently utilized in Germany, New Zealand, and Bolivia.²⁸

2.2 MMDS IN THE USA

Today, all 435 members of the House of Representatives represent SMDs. However, SMDs have not always been the norm. For many years, Representatives were elected in MMDs. The US Constitution does not stipulate how states must design their electoral districts; thus, all

guidance on the issue has come from Congress. Starting with the 1842 Apportionment Bill, Congress began to outlaw MMDs, mandating geographically defined SMDs in the House.²⁹ MMDs continued under various exceptions until 1967, when Congress passed the Uniform Congressional District Act, finally ending MMDs in the House.

The Supreme Court has weighed in on MMDs in multiple cases. The Court established the precedent that congressional and state legislative districts must be roughly equal in population in Wesberry v. Sanders (1964) and Reynolds v. Sims (1964), respectively. Following these decisions, the Court ruled in Fortson v. Dorsey (1965) that MMDs do not violate the Equal Protection Clause with the logic that MMDs do not disenfranchise voters if there is 'substantial equality of population' as established prior. In Burns v. Richardson (1966), the Court reiterated that there was no requirement for legislative districts to be single member given the MMDs were not designed to disenfranchise any groups. However, in 1971, the Court held in Connor v. Johnson (1971) that "single-member districts are generally preferable to large multi-member districts."

While slowly declining in prevalence, MMDs continue to see usage in state legislatures. In the early 1960s, over half of state legislature representatives came from MMDs. This began to change during the 1960s, and by 1984 only 26 percent of state house representatives and 7.5 percent of state senators were elected from MMDs. Today, ten states elect representatives from MMDs in at least one legislative chamber: Arizona, Idaho, Maryland, New Hampshire, New Jersey, North Dakota, South Dakota, Vermont, Washington, and West Virginia, with West Virginia set to eliminate them in the 2020 redistricting cycle. 31

¹⁸ Districts 26 and 28 are elected using post voting

 $^{19 \}quad Calabrese, Stephen. \\ \text{`Multimember District Congressional Elections.''} \ Legislative Studies Quarterly 25, no.\ 4 (2000): 611-43. \\ \text{https://doi.org/} \\ 10.2307/440437.$

²⁰ Elkind, Edith, Piotr Faliszewski, and Arkadii Slinko. "Cloning in Elections." Proceedings of the AAAI Conference on Artificial Intelligence 24, no. 1 (July 4, 2010): 768–73.

²¹ Cox, Gary W. "Strategic Electoral Choice in Multi-Member Districts: Approval Voting in Practice?" American Journal of Political Science 28, no. 4 (1984): 722–38. https://doi.org/10.2307/2110996.

²² Lijphart, Arend, and Bernard Grofman. "Electoral Laws and Their Political Consequences," 1986. https://www.socsci.uci.edu/~bgrofman/R21%20Grofman%20and%20Lijphart.%201986.%20Intro%20to%20%20Electoral%20Laws....pdf

²³ Fujimura, Naofumi. "Running Multiple Candidates, Dividing the Vote Under the Single Nontransferable Vote System: Evidence From Japan's Upper House Elections." Asian Politics & Policy 9, no. 3 (July 1, 2017): 402–26. https://doi.org/10.1111/aspp.12331.

²⁴ Tideman, Nicolaus. "The Single Transferable Vote." Journal of Economic Perspectives 9, no. 1 (March 1995): 27–38. https://doi.org/10.1257/jep.9.1.27.

2. Multi-member districts

Multi-member districts are legislative districts with multiple representatives elected to serve the same geographical area. This can also be referred to as having a "district magnitude" greater than one. This is in contrast with the SMD structure that is most prevalent in the United States, the United Kingdom, and their former colonies where one legislator represents each district. ¹²⁻¹³ District magnitude can vary widely. Some countries, such as South Africa, maximize district magnitude, electing all representatives from one country-wide district. ¹⁴ In this case, each elected official represents the country's entire population. Others vary district magnitude between districts, as is seen in the lower house of Ireland, which elects representatives from three, four, and five-member districts. ¹⁵

Proponents of MMDs claim MMDs better achieve proportional representation than SMDs, facilitate minority parties, and reduce the need for redistricting and gerrymandering as population changes can simply be reflected in a change in the district magnitude. These benefits, however, come at the cost of a decreased link between voter and candidate, and a potential lack of accountability in the elected representative, as they are not solely beholden to their constituents. ¹⁶

3. Electoral implications of MMD

Studies have shown the electoral advantage to incumbent candidates is weaker in MMDs than SMDs. ³² This indicates candidates in MMDs are more vulnerable to losing their reelection bid and suggests higher amounts of turnover in legislative chambers represented by MMDs. MMDs have also been shown to encourage coalition-building between representatives and report higher levels of collaboration. Representatives from the same geographic area in an MMD are likely to have shared values and a shared incentive to perform positive actions for their district, even if they are members of opposing parties. The coordinated efforts between MMD representatives from the same district are mutually beneficial as they positively affect their shared constituents. ³³

MMDs in the United States have traditionally tended to be more ideologically diverse. Studies done comparing the Arizona State House (two-member MMDs) and Senate (SMD) and the Illinois House (MMD) and Senate (SMD) have consistently shown a more ideologically extreme partisan makeup in the MMD chamber. In the Illinois case, this difference was lost when the House transitioned to SMDs. S

²⁵ Gallagher, Michael. "Ireland: The Archetypal Single Transferable Vote System (1997) —," 1997. https://aceproject.org/regions-en/countries-and-territories/IE/case-studies/ireland-the-archetypal-single-transferable-vote-system-1997.

²⁶ NYC Board of Elections. "Ranked Choice Voting," 2021. https://vote.nyc/page/ranked-choice-voting.

²⁷ Dindar, Hayrullah, Gilbert Laffond, and Jean Lainé. "Referendum Paradox for Party-List Proportional Representation." Group Decision and Negotiation 30, no. 1 (February 1, 2021): 191–220. https://doi.org/10.1007/s10726-020-09713-y.

²⁸ Gallagher, Michael, and Paul Mitchell. The Politics of Electoral Systems. OUP Oxford, 2005.

²⁹ Calabrese, Stephen. "Multimember District Congressional Elections." Legislative Studies Quarterly 25, no. 4 (2000): 611–43. https://doi.org/10.2307/440437.

³⁰ Bertelli, Anthony M., and Lilliard Richardson. "Ideological Extremism, Branding, and Electoral Design: Multimember versus Single-Member Districts." SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, 2008. https://papers.ssrn.com/abstract=1143474.

³¹ Russell, Charles R. "Creating Single-Member House Districts in West Virginia." West Virginia Law Review 120 (2018 2017): 185.

4. Gender implications of MMD

One highly cited feature of MMDs is their tendency to elect more female representatives than traditional SMDs.³⁶ States of varying size, partisan lean, levels of urbanization, and culture have shown this effect, with the common thread among these states being that they use MMDs.³⁷ Additionally, research has shown MMDs to increase women's "substantive representation" in state legislatures, meaning more issues that disproportionately affect women are addressed than in traditional SMD chambers.³⁸ However, the link between female representation and MMDs is disputed. Some researchers have found the connection to be small and statistically insignificant.³⁹ Other studies have found the electoral system used did not have any significant effect on women's representation in the elected body.⁴⁰ It has been theorized that the correlation between MMDs and women's representation is spurious and simply comes down to the fact that more women run in MMDs; thus, more women are elected.⁴¹

5. Racial implications of MMD

The main impetus behind the decline of MMDs in the United States during the Civil Rights Movement of the 1960s was the perceived effect of US MMDs on minority voters. MMDs (with MNTV voting) were thought to dilute minority votes and prevent the election of minority candidates. During this time, the Uniform Congressional District Act of 1967 was passed, formally ending MMDs in the House of Representatives. Additionally, the Supreme Court ruled against the MMDs of North Carolina as racially gerrymandered in Thornburg v. Gingles (1986), stating the MMD maps "impair the ability of ... cohesive groups of Black voters to participate equally in the political process and to elect candidates of their choice."

This perception of racial inequality in MMDs in the United States is supported by research. Researchers have found MMDs with MNTV voting to reduce the likelihood of minority electoral success⁴² and to result in less diverse delegations than SMDs. ⁴³ They have found legislatures with these types of MMDs to have significantly less substantive representation of minorities in the form of less generous welfare policies. ⁴⁴ Furthermore, transitioning from these MMDs to SMDs has been shown to lead to gains in Black representation ⁴⁵ with one paper stating, "the effect of changing to [single-member] districts is unequivocally toward greater equity." ⁴⁶ This effect has been shown to be beneficial for Latinos as well. ⁴⁷

However, the cause of racial discrimination in MMDs was not due to the MMDs themselves, but to the prevalence of underlying racism in the states which have had MMDs, particularly in the Deep South. 48 Moreover, MMDs with proportional representation have been shown to have better representation for racial

³² Cox, Gary W., and Scott Morgenstern. "The Incumbency Advantage in Multimember Districts: Evidence from the U. S. States." Legislative Studies Quarterly 20, no. 3 (1995): 329–49. https://doi.org/10.2307/440224.

 $^{33\,}$ Kirkland, Justin H. "Multimember Districts' Effect on Collaboration between U.S. State Legislators." Legislative Studies Quarterly 37, no. 3 (2012): 329–53. https://doi.org/10.1111/j.1939-9162.2012.00050.x.

³⁴ Bertelli, Anthony M., and Lilliard Richardson. "Ideological Extremism, Branding, and Electoral Design: Multimember versus Single-Member Districts." SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, 2008. https://papers.ssrn.com/abstract=1143474.

³⁵ Adams, Greg D. "Legislative Effects of Single-Member Vs. Multi-Member Districts." American Journal of Political Science 40, no. 1 (1996): 129–44. https://doi.org/10.2307/2111697.

³⁶ Schwindt-Bayer, Leslie A., and William Mishler. "An Integrated Model of Women's Representation." Journal of Politics 67, no. 2 (2005): 407–28. https://doi.org/10.1111/j.1468-2508.2005.00323.x.

minorities. ⁴⁹ This indicates that the racial equity shortcomings of MMDs in the US were not due to the MMD themselves, but rather the electoral system attached to them.

6. MMP reform in New Zealand

From the meeting of the first Parliament in 1854 during the colonial era until very recently, New Zealand employed the typical Westminster electoral system of SMDs with FPTP plurality voting. Owing to this system, New Zealand experienced a period of two-party dominance from the 1930s to the 1990s. The National and Labour parties formed every government during the period. Only the minor Social Credit party gained seats otherwise, although never more than two in one Parliament. This two-party system echoed the Conservative-Labour and Democrat-Republican systems still seen in the UK and US, respectively.⁵⁰

Uneasiness with the two-party system began when National won two successive elections, in 1978 and 1981, without a plurality of the national vote share. ⁵¹ In the next election, in 1984, Labour ran on an electoral reform campaign. When elected to power, Labour created a Royal Commission on the Electoral System, which recommended reform to MMP. ⁵² However, neither major party was incentivized to change the status quo. In 1990, the National Party came into government with its largest majority ever, winning sixty-seven of ninety-seven seats (69 percent) while only garnering 48 percent of the votes cast. ⁵³ Meanwhile, a collection of small parties (New Labour, Greens, and Christian Heritage) won 17.1 percent of the vote and only 1 percent of seats. ⁵⁴

Neither major party took the reform to MMP seriously. Instead, the parties capitalized on voter frustration with the increasing disproportionality of the FPTP system and used the promise of reform as a campaign tactic. National made a campaign promise in 1990 to hold a referendum on replacing FPTP, believing the referendum would not pass. However, a strong push from a coalition of third parties, recognizing the current system to only benefit National and Labour, led to the overwhelming success of the 1992 non-binding referendum.⁵⁵ The results showed 84.7 percent of voters in favor of moving away from FPTP and 70.5 percent in favor of MMP.⁵⁶ This led to a second, binding referendum in 1993, held concurrently with the general election, pitting MMP directly against FPTP. Despite a strong opposition campaign, the referendum passed with 53.86 percent of the vote.⁵⁷ A third referendum was held regarding MMP in 2011, with voters again approving the new electoral system.

The new MMP system in New Zealand is typical in that candidates are

³⁷ Matland, Richard E., and Deborah Dwight Brown. "District Magnitude's Effect on Female Representation in U. S. State Legislatures." Legislative Studies Quarterly 17, no. 4 (1992): 469-92. https://doi.org/10.2307/439862.

³⁸ Clark, Jennifer Hayes, and Veronica Caro. "Multimember Districts and the Substantive Representation of Women: An Analysis of Legislative Cosponsorship Networks." Politics & Gender 9, no. 01 (March 2013): 1–30. https://doi.org/10.1017/S1743923X12000670.

³⁹ Welch, Susan, and Donley T. Studlar. "Multi-Member Districts and the Representation of Women: Evidence from Britain and the United States." The Journal of Politics 52, no. 2 (May 1, 1990): 391–412. https://doi.org/10.2307/2131899.

⁴⁰ Bullock, Charles S., and Susan A. MacManus. "Municipal Electoral Structure and the Election of Councilwomen." The Journal of Politics 53, no. 1 (1991): 75–89. https://doi.org/10.2307/2131721.

⁴¹ R, Darcy, Welch, Susan, and Clark, Janet. "Women Candidates in Single- and Multi-Member Districts: American State Legislative Races - ProQuest," December 1, 1985. https://www.proquest.com/openview/426a0ed2a93c82effeaab7c8e920af40/1?pq-origsite=gscholar&cbl=1816420.

⁴² Grofman, Bernard, Michael Migalski, and Nicholas Noviello. "Effects of Multimember Districts on Black Representation in State Legislatures." The Review of Black Political Economy 14, no. 4 (March 1, 1986): 65–78. https://doi.org/10.1007/BF02903792.

first elected to single-member districts, then compensatory seats are granted from party-list votes to achieve proportionality. Compensatory seats are allocated using the Saint-Laguë method.⁵⁸ The New Zealand MMP system requires a party to meet one of two thresholds to gain a seat, either winning a district seat outright or gaining at least 5 percent of the national vote. If a party wins more constituencies than its share of the national vote would otherwise entitle it to, the party receives overhang seats, increasing the size of Parliament to accommodate the extra seat(s).

The first general election held under MMP took place in 1996. From that election until 2020, no single party held an outright majority of seats, with many smaller parties gaining footholds in Parliament. New Zealanders overall saw significant shifts towards positive attitudes about politics, including an increase in trust in government. ⁵⁹ This shift was especially pronounced among those who were previously political minorities as they began to see that their votes mattered. ⁶⁰ Voters reported a significant increase in interest for minor parties as well. ⁶¹ In terms of votes cast, MMP saw significant split-ticket voting. In 1996, two-fifths of New Zealand voters supported a candidate from a different party to the party they supported in their list vote. ⁶² Since the electoral reform, MMP has become a partisan issue in New Zealand, with minor parties supporting the system and National, and formerly Labour, supporting a shift back to FPTP voting. ⁶³

A unique aspect of the New Zealand electoral system is the dedication of seats in Parliament to the largest ethnic minority in the country, the Māori. Male Māori have had the ability to vote in New Zealand since 1852. However, since 1867, they have elected MPs in a separate set of Māori-only electoral districts. The Māori were originally allotted seats in Parliament representing only four districts. The number of seats did not change to reflect Māori population changes and there was no redistricting to maintain population parity between the districts over time. Some likened this arrangement to the "separate but equal" doctrine of the Jim Crow era in the United States. 64 After the reform to MMP, Māori voters maintained their dedicated districts with the number of districts allowed to adjust to reflect Māori population changes. As a result, the number of seats immediately increased to five and has since increased to seven. MMP also facilitated the growth of the Māori Party, giving voice to the group in Parliament. Researchers argue Māori political participation in New Zealand is a positive example of a government implementing the 2007 UN Declaration on the Rights of Indigenous Peoples, ensuring indigenous participation in state politics.⁶⁵

⁴³ Calabrese, Stephen. "Multimember District Congressional Elections." Legislative Studies Quarterly 25, no. 4 (2000): 611–43. https://doi.org/10.2307/440437.

⁴⁴ Larimer, Christopher W. "The Impact of Multimember State Legislative Districts on Welfare Policy." State Politics & Policy Quarterly 5, no. 3 (September 1, 2005): 265–82. https://doi.org/10.1177/153244000500500304.

⁴⁵ Bullock, Charles S., and Ronald Keith Gaddie. "Changing from Multimember to Single-Member Districts: Partisan, Racial, and Gender Consequences." State & Local Government Review 25, no. 3 (1993): 155–63.

⁴⁶ Mundt, Robert J., and Peggy Heilig. "District Representation: Demands and Effects in the Urban South." The Journal of Politics 44, no. 4 (1982): 1035–48. https://doi.org/10.2307/2130672.

⁴⁷ Leal, David L., Valerie Martinez-Ebers, and Kenneth J. Meier. "The Politics of Latino Education: The Biases of At-Large Elections." The Journal of Politics 66, no. 4 (2004): 1224–44. https://doi.org/10.1111/j.0022-3816.2004.00297.x.

⁴⁸ Derfner, Armand. "Multi-Member Districts and Black Voters." Black Law Journal 2 (1972): 120.

⁴⁹ Richie, Rob, and Steven Hill. "Proportional Representation." Social Policy 26, no. 4 (June 22, 1996): 24–38.

7. Analyzing the 1993 referendum

7.1 DATA AND METHODS

Making use of available data and methodology, I adapted the work of Peterson and Spirling⁶⁶ and applied it to the New Zealand House of Representatives before and after the 1996 referendum. Peterson and Spirling measured polarization in the UK House of Commons by training machine learning classifiers on speeches given by members of Parliament with the classification output labels being the speaker's party. Polarization was then measured by assessing the accuracy of the trained classifier. The researchers found when accuracy is high, meaning the classifier learned to identify the speaker's party well, polarization can be assumed to be high and similarly, when accuracy is low, it can be assumed the polarization in the parliament is low. The researchers compared their results to existing qualitative and quantitative measures of polarization in the UK with similar results and other researchers have recommended the method over similar methods to measure polarization using speech data.⁶⁷

The following analysis employs this method using parliamentary speech data from the ParlSpeech $V2^{68}$ dataset. This dataset contains 6.3 million parliamentary speeches given in various democratic legislatures between the years 1987-2019 pulled from official government sources. Each speech includes metadata on the speaker, the speaker's party, and other labels. This analysis utilizes speech data from the included legislatures between the years 1991 and 2001 (five years preceding and following MMP reform).

To estimate the causal effect of the 1996 MMP reform, a synthetic control was built from the legislative bodies of Germany, Sweden, and the United Kingdom. These legislatures were largely chosen due to data availability but nonetheless offer a diverse variety of electoral systems and parliamentary models. ⁶⁹⁻⁷⁰

7.2 TEST RESULTS

Figure 1 shows the polarization of all legislatures included in the analysis. Figure 2 shows polarization in New Zealand and an average of all other legislatures. These figures show New Zealand with relatively high polarization pre-reform that steadily decreases over the included years to roughly the same level as the other legislatures. In Figure 3, polarization in New Zealand is compared to that of "Synthetic New Zealand" to test this apparent trend causally. As evidenced by Figure 4 and Figure 5, MMP reform in New Zealand appears to

⁵⁰ Levine, Stephen, and Nigel S. Roberts. "The New Zealand Electoral Referendum and General Election of 1993." Electoral Studies 13, no. 3 (September 1, 1994): 240–53. https://doi.org/10.1016/0261-3794(94)90022-1.

 $^{51\,}$ In 1978, Labour won 40.41% of the popular vote to National's 39.82% while Labour held only $40\,$ seats in Parliament to National's 51. In 1981, Labour won 39.01% of the popular vote to National's 38.77% while Labour held only $43\,$ seats in Parliament to National's 47.

⁵² Report of the Royal Commission on the Electoral System, (Wellington: Government Printer, 1986).

 $^{53\,}$ Levine, Stephen, and Nigel S. Roberts. "The New Zealand Electronal Referendum and General Electron of 1993." Electronal Studies 13, no. 3 (September 1, 1994): 240-53. https://doi.org/10.1016/0261-3794(94)90022-1.

⁵⁴ Banducci, Susan A., Todd Donovan, and Jeffrey A. Karp. "Proportional Representation and Attitudes about Politics: Results from New Zealand1Authors' Names Are Listed in Alphabetical Order; Authorship Is Equal.1." Electoral Studies 18, no. 4 (December 1, 1999): 533–55. https://doi.org/10.1016/S0261-3794(99)00019-0.

⁵⁵ Vowles, Jack. "The Politics of Electoral Reform in New Zealand." International Political Science Review 16, no. 1 (January 1, 1995): 95–115. https://doi.org/10.1177/019251219501600107.

⁵⁶ Levine, Stephen, and Nigel S. Roberts. "The New Zealand Electoral Referendum and General Election of 1993." Electoral Studies 13, no. 3 (September 1, 1994): 240–53. https://doi.org/10.1016/0261-3794(94)90022-1.

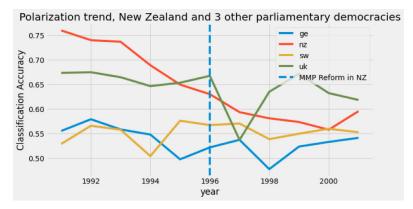


Fig 1. Polarization (as measured by classification accuracy) of Germany, New Zealand, Sweden, and the United Kingdom from 1991-2001. New Zealand 1996 MMP reform indicated by dashed line.

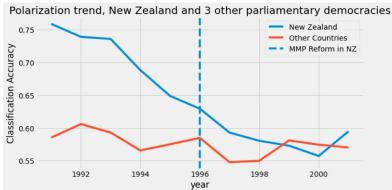


Fig 2. Polarization (as measured by classification accuracy) of New Zealand and mean polarization of other countries (Germany, Sweden, and the United Kingdom) from 1991-2001. New Zealand 1996 MMP reform indicated by dashed line.

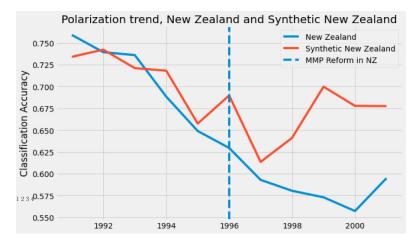


Fig 3. Polarization (as measured by classification accuracy) of New Zealand and synthetic control from 1991-2001. New Zealand 1996 MMP reform indicated by dashed line.

 $^{57\:}$ Levine, Stephen, and Nigel S. Roberts. "The New Zealand Electoral Referendum and General Election of 1993." Electoral Studies 13, no. 3 (September 1, 1994): 240-53. https://doi.org/10.1016/0261-3794(94)90022-1.

⁵⁸ Saint-Laguë calculates a quotient: q=V2s+1 for each party where V is the number of votes received and s is the number of seats allocated so far. The party with the highest quotient receives the next seat. The process is repeated until all seats are filled.

^{59,60} Banducci, Susan A., Todd Donovan, and Jeffrey A. Karp. "Proportional Representation and Attitudes about Politics: Results from New Zealand1Authors' Names Are Listed in Alphabetical Order; Authorship Is Equal.1." Electoral Studies 18, no. 4 (December 1, 1999): 533–55. https://doi.org/10.1016/S0261-3794(99)00019-0.

⁶¹ Banducci, Susan A., Todd Donovan, and Jeffrey A. Karp. "Proportional Representation and Attitudes about Politics: Results from New Zealand1Authors' Names Are Listed in Alphabetical Order; Authorship Is Equal.1." Electoral Studies 18, no. 4 (December 1, 1999): 533–55. https://doi.org/10.1016/S0261-3794(99)00019-0.

Fig 4. Difference in polarization (as measured by classification accuracy) between New Zealand and synthetic control from 1991-2001. New Zealand 1996 MMP reform indicated by dashed line.

Polarization trend, difference between New Zealand and synthetic control

O.20

O.15

O.10

O.05

O.00

O.05

O.00

O.05

O.00

O.05

O.00

O.015

O.00

O.0

Fig 5. Difference in polarization (as measured by classification accuracy) between all countries and their generated synthetic controls from 1991-2001. New Zealand indicated by red line. New Zealand 1996 MMP reform indicated by dashed line.

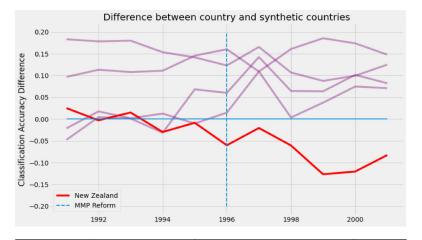


Table 1. Difference in polarization (as measured by classification accuracy) between New Zealand and synthetic control from 1996-2001 (post treatment). Can be interpreted as causal treatment effect.

have had a significant effect in reducing polarization, shown by the difference in actual polarization and expected polarization from the synthetic control. The treatment effects of MMP are shown in *Table 1*, with an average effect of 7.86 percentage points lower polarization in the post-reform years (1996-2001). Therefore, it can be concluded that MMP reform in New Zealand led to a more representative and less polarized Parliament. This was shown to be true when

1998

-0.1193

1999

-0.0681

200

-0.0563

2001

-0.0948

1996

-0.0480

Difference

1997

0.0848

compared with other legislatures as well as a synthetic control.

⁶² Carey, John M., Richard G. Niemi, and Lynda W. Powell. "Incumbency and the Probability of Reelection in State Legislative Elections." Journal of Politics 62, no. 3 (2000): 671–700. https://doi.org/10.1111/0022-3816.00029.

⁶³ Vowles, Jack, Susan A Banducci, and Jeffrey A Karp. "Forecasting and Evaluating the Consequences of Electoral Change in New Zealand." Acta Politica 41, no. 3 (September 2006): 267–84.

⁶⁴ Fleras, Augie. "From Social Control towards Political Self-Determination? Māori Seats and the Politics of Separate Māori Representation in New Zealand." Canadian Journal of Political Science / Revue Canadienne de Science Politique 18, no. 3 (1985): 551-76.

⁶⁵ Xanthaki, Alexandra, and Dominic O'Sullivan. "Indigenous Participation in Elective Bodies: The Māori in New Zealand." International Journal on Minority and Group Rights 16, no. 2 (January 1, 2009): 181–207. https://doi.org/10.1163/157181109X427734.

⁶⁶ Peterson, Andrew, and Arthur Spirling. "Classification Accuracy as a Substantive Quantity of Interest: Measuring Polarization in Westminster Systems." Political Analysis 26, no. 1 (January 2018): 120–28. https://doi.org/10.1017/pan.2017.39.

8. Conclusion

Political polarization is a rising problem in the United States and many democracies worldwide. Citizens are ideologically sorting themselves to unseen levels and politicians are becoming increasingly unwilling to cross party lines to pass legislation. The causes behind this polarization are nearly infinite but one portion is due to the electoral system at the heart of the US democratic process. First-past-the-post voting effectively limits voters to choose from two main parties leading to a toxic "Us versus Them" mindset. A possible solution lies in an effective implementation of multi-member districts paired with a mixed-member proportional electoral system. Mixed-member proportional representation preserves many elements of the traditional first-past-the-post system with additional mechanisms to ensure near proportionality in the elected body. Mixed-member proportional representation has been a resounding success in New Zealand, with better representation and less polarization. I recommend the United States adopt the New Zealand model as a remedy to the current-day partisan political climate. Furthermore, the referendum model should be adopted to provide voting citizens a voice in the reform. The change to MMP in the United States will not be without its detractors, namely the established parties. However, as in New Zealand, a concerted grassroots effort will be enough to change the United States' democracy to better serve its people.

⁶⁷ Goet, Niels D. "Measuring Polarization with Text Analysis: Evidence from the UK House of Commons, 1811–2015." Political Analysis 27, no. 4 (October 2019): 518–39. https://doi.org/10.1017/pan.2019.2.

⁶⁸ Rauh, Christian, and Jan Schwalbach. "The ParlSpeech V2 Data Set: Full-Text Corpora of 6.3 Million Parliamentary Speeches in the Key Legislative Chambers of Nine Representative Democracies." Harvard Dataverse, 2020. https://doi.org/10.7910/DVN/L4OAKN.

 $^{69\,}$ The UK House of Commons follows a FPTP electoral system virtually identical to the pre-1996 New Zealand model. Germany has long had a MMP system similar to post-1996 New Zealand. Sweden follows a PLP model.

⁷⁰ Code used to generate the synthetic control was adapted from Swarup, "Causal Inference with Synthetic Control" https://towardsdatascience.com/causal-inference-with-synthetic-control-in-python-4a79ee636325

Assessing Outcomes from Conditional Cash Transfers in Mexico

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Abstract

Conditional Cash Transfers were one of the most popular approaches to reducing poverty in the developing world during the 2000s. These grants were deemed a desirable approach to poverty reduction as they were aimed at incentivizing behaviors which were conducive to improving social conditions, particularly those regarding education, health, and nutritional factors. Mexico's CCT (Progresa) program was one of the first to be implemented, and following its implementation, a worldwide boom in CCT programs began. Progresa and its subsequent transformations positively impacted various indicators that signaled improving school attendance, health care visits, and nutritional outcomes, among others. However, some features of the program hindered its efficiency and created barriers for its targeted population. This paper argues that the elimination of the Mexican CCT program could have been avoided if the program had utilized different design features. Rethinking the role of women, creating accountability roles, and eliminating conditionalities were potential modifications that could have improved this CCT.

Introduction

Conditional Cash Transfers (CCTs) provide grants to people for completing specific behavioral tasks. This structured incentive is the core of Progresa-Oportunidades-Prospera (POP), a large-scale poverty alleviation policy in Mexico. After enduring several decades of economic stagnation, the Mexican government implemented POP in 1997. The program lasted for two decades. The structural implementation of the program made it suitable for a randomized control trial (RCT) evaluation. Several studies done in the decade following the initial POP implementation found significant health and educational benefits from the

¹ Ole Doetinchem, Ke Xu, and Guy Carrin, "Conditional Cash Transfers: What's in It for Health?" (World Health Organization, 2008), https://apps.who.int/iris/handle/10665/340523.

program.² The program was thought to be gender aware since it provided grants to the female head of household. Women reported higher agency in their ability to spend the grant money, but there were also unintended consequences such as reinforcing a maternal model of care. Understanding these unintended consequences and failures is a significant task for this massive social program. Incorrect eligibility classification, increased benefits prior to elections, and a lack of large scale poverty relief are frequently cited criticisms of the policy. Our policy recommendations to strengthen the efficacy of benefits while addressing these shortcomings are as follows; remove or reduce the conditionality of benefits, adjust policy design to include male involvement when appropriate, increase political oversight, and promote universal eligibility.

Policy History and Description

During the 1980s, Mexico went through a severe economic crisis that led to the creation of a different development model for the country. A new market-government relationship was crafted, reducing the role of the government through the privatization of state-owned companies. Additionally, efforts in economic growth shifted towards the enforcement of the external markets. A salient feature of this new development model was the creation of novel programs used to address increasing poverty.

In the mid-nineties, the country faced another major economic crisis that led then President Ernesto Zedillo to seek a new social strategy to improve the economic wellbeing of the Mexicans and allow him to regain political legitimacy. Part of the social policy strategy the government implemented was geared towards improving the provision and quality of general social services targeted towards families living in extreme poverty.

This strategy was composed of policies that focused on promoting the development of human capital for those living in poverty as it was considered to be a fundamental piece to "boost their productivity, improve the labor supply, and contribute to economic growth." At the time of the program's implementation, the necessary budgetary conditions were already in place due to a reorganization of public spending towards policies, such as this one, that were perceived to be more efficient.⁸

In August of 1997, the Progresa program was launched as a key element in the government's effort to implement targeted programs that promote human capital development as a mechanism to fight intergenerational poverty. Each of the subsequent governments (until 2019) considered that there is much to be gained politically and socially from the permanence of the program and, therefore, continued it. In 2002, under the regime of then President Vicente

² Paul J Gertler and Simone Boyce, "An Experiment in Incentive-Based Welfare: The Impact of PROGESA on Health in Mexico," April 3, 2001. https://www.povertyactionlab.org/sites/default/files/research-paper/449%20Progresa%20Health%20Gertler%202001.pdf; Orzaio P. Attansio, Costas Meghir, and Ana Santiago, "Education Choices in Mexico: Using a Structural Model and a Randomized Experiment to Evaluate PROGRESA," The Review of Economic Studies 79, no. 1 (2012): 37–66.

³ G. Hernández Licona et al., eds., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," México: Consejo Nacional de Evaluación de la Política de Desarrollo Social, 2019.

⁴ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," 34.

⁵ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," 34.

⁶ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," 35.

⁷ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," 35.

⁸ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," 35.

⁹ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," 35.

Fox, the name of the program was changed to Oportunidades (Programa de Desarrollo Humano Oportunidades). In September 2014, during Enrique Peña's administration, the program changed its name once again to Prospera (Programa de Inclusion Social).

POP was designed to focus on the intersectional causes of poverty. It simultaneously addressed several obstacles such as limited investment in education, health problems, and nutritional deficiencies for families living in poverty. It was also designed as a gender aware program.¹⁰

Once a family enrolled in the program, their eligibility continued for three years regardless of changes in income. 11 Each enrolled household received a fixed bimonthly payment for buying food. The amount each family received did not correspond to changes in family size to eliminate financial incentives for having more children. 12 Continued receipt of benefits depended on continuously fulfilling the program's conditions, which were associated with school attendance and health and nutrition parameters. 13

Conditioning POP participation to education, health and nutrition indicators was thought to be a way of generating positive behavioral changes in the program participants. The underlying assumption of the program was that those who participated in the program as children would have better job prospects and be more productive than those who did not upon reaching adulthood. Giving economically and socially disadvantaged individuals the tools to invest in human capital development, especially that of their own children, was thought to promote equal opportunities and advance social mobility ultimately leading families out of the cycle of intergenerational poverty. ¹⁵

CONDITIONALITY ASSOCIATED WITH EDUCATION

To incentivize education, families with children in third grade or higher would receive a payment every two months if their children achieved 85 percent school attendance or better. To discourage the early entrance of children into the workforce, and promote their school attendance, the amount of money given to the family was determined by considering the projected income children received at different ages. ¹⁶ The design of the program favored families that maintained a girl through middle school and high school. These families received payments which were 13 percent greater than the payments they would get from keeping a boy in school. ¹⁷ This distinction was designed in this way because traditionally fewer girls stayed in school beyond elementary grades. ¹⁸

CONDITIONALITY REGARDING HEALTH AND NUTRITION

Regarding health, every family member needed to accept preventive medical care and attend health educational talks. ¹⁹ With respect to nutrition,

¹⁰ Maxine Molyneux, "Conditional Cash Transfers: A 'Pathway to Women's Empowerment?," Pathways of Women's Empowerment RPC, Pathways Brief, no. No. 5 (July 2009).

¹¹ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," 74.

¹² Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," 76.

¹³ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," 76.

¹⁴ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," 35.

¹⁵ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," 36.

¹⁶ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," 69.

¹⁷ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación."

¹⁸ Quentin Wodon et al., "Mexico's PROGRESA: Innovative Targeting, Gender Focus and Impact on Social Welfare" (Washington, DC: World Bank, January 2003), https://openknowledge.worldbank.org/handle/10986/10396.

¹⁹ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación."

every family had to visit a healthcare unit to receive nutritional supplements for young children and pregnant mothers and follow-up in malnutrition cases.²⁰

GENDER-AWARENESS IN POP

The operative design of the program and some of its specific features address and are based on gender roles in Mexican households.²¹

Three characteristics indicate the gender-awareness of the program:

- 1. Financial transfers are given to the female head of the household to increase women's participation in the decision-making processes within the household.²² This design feature also relies on the notion that women are more financially responsible for the household's finances and are more willing to invest in health, education, and nutrition.²³
- 2.The benefits provision includes specificities that provide higher benefits for girls enrolled in the program.²⁴Girls attending secondary school received higher cash transfers than boys of the same age. This is particularly related to the higher possibility of dropping out for girls than boys.²⁵ This feature tries to assess the disparities regarding education access.
- 3.One of the critical targets of the program is to provide specific health services for pregnant and lactating women.²⁶ Health controls for these specific targets intend to improve healthcare conditions for newborns and reduce the risks associated with pregnancy.²⁷

Policy Analysis and Outcomes

In 2010, the benefits under POP reached 0.005% of Mexico's Gross Domestic Product (GDP). While this may seem like a small percentage of government spending, the program reached over 40 % of the country's population, serving 5.8 million Mexican families.²⁸ The magnitude of the program made its impacts easier to evaluate.

Researchers of the Abdul Latif Jameel Poverty Action Lab (J-PAL) collaborated with the Mexican government to run an RCT on the outcomes of the program's benefits. POP identified poor communities using an index of marginality, which includes indicators such as the materials used to build their homes, access to water, and level of education. Households were then categorized and alerted of their eligibility in the program.²⁹

From this original eligibility pool, 10% of the eligible households

²⁰ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," 37.

²¹ Wodon et al., "Mexico's PROGRESA."

²² Wodon et al., "Mexico's PROGRESA.

²³ Wodon et al., "Mexico's PROGRESA."

²⁴ Wodon et al., "Mexico's PROGRESA."

²⁵ Elaine Fultz and John Francis, "Cash Transfer Programmes, Poverty Reduction and Empowerment of Women: A Comparative Analysis," Working paper, December 23, 2013, http://www.ilo.org/gender/Informationresources/WCMS_233599/lang--en/index.htm.

²⁶ Wodon et al., "Mexico's PROGRESA."

²⁷ Wodon et al., "Mexico's PROGRESA."

^{28 &}quot;Mexico: Scaling Up Progresa/Oportunidades - Conditional Cash Transfer Programme," United National Development Programme, November, 2011, https://www.undp.org/content/dam/undp/library/Poverty%20Reduction/Participatory%20Local%20Development/Mexico_Progresa_web.pdf.

²⁹ Gertler and Boyce, "An Experiment in Incentive-Based Welfare: The Impact of PROGESA on Health in Mexico."

participated in the program. 30 The experimental design defined the treatment and control groups depending on the period when people received the benefits. The control group was composed of communities who would receive benefits in 2000 and the treatment group included communities that received the benefits in 1997. Group assignment was carried out at the community level to avoid potential spin-off to neighbors resulting from treatment at the household level. Multiple authors have taken the opportunity to analyze the results of this RCT focusing mainly on children's health outcomes. For instance, several studies have found the program had positive effects on healthcare visits. Subjects in the treatment group (POP participants) visited health clinics 60% more than non-treatment peers (who, on average, visited health clinics 2.09 times per day).³¹ Also, total curative visits for 0–2-year-olds in treatment households decreased by 25%, demonstrating the positive effects that preventive care had on the program beneficiaries.³² These improvements in visitation occured alongside increased health. The children of participants experienced an 18% reduction in anemia and a 1% to 4% increase in height.33 Studies have also been able to document some improvement in self-reported healthcare outcomes. An improvement in quality of life was indicated by a significant increase in the number of kilometers walked by program participants without getting tired.

These analyses demonstrated that program participation had clear benefits compared to non-participant families.

Educational outcomes were another focus area for researchers. Schultz (2004) assessed the program's impact on school enrollment during the first 18 months of program implementation. This study found that improvements in attendance could be described as representing an inverted "U" shape. Henrollment when transitioning from primary to secondary school increased between 4 and 5 percentage points for boys, and around 8-10 percentage points for girls. However, younger students did not experience a statistically significant difference in attendance. The authors claim this evidence is reasonable due to attendance still being compulsory at age ten. Nevertheless, program participation for younger children had a positive impact on other educational indicators. Behrman, Sengupta, and Todd (2005) argue that younger children participating in the program experience reductions in grade repetition and have a better grade progression.

Researchers also explored educational benefits of the program by examining its impact on child labor participation and wages. Implementation of the program was associated with a 3.3 percent decrease in child labor and 6 percent increase in child wages (given the reduction in child labor supply). These results suggest that Mexico should continue to use grant-based programs to reduce child labor.

The studies on health and educational outcomes demonstrate the value of POP. The thoughtfully constructed RCT study design used by different

³⁰ Gertler and Boyce, "An Experiment in Incentive-Based Welfare: The Impact of PROGESA on Health in Mexico," 7.

³¹ Gertler and Boyce, "An Experiment in Incentive-Based Welfare: The Impact of PROGESA on Health in Mexico."

³² Gertler and Boyce, "An Experiment in Incentive-Based Welfare: The Impact of PROGESA on Health in Mexico," 26.

³³ Gertler and Boyce, "An Experiment in Incentive-Based Welfare: The Impact of PROGESA on Health in Mexico," 1.

³⁴ Attansio, Meghir, and Santiago, "Education Choices in Mexico," 43.

³⁵ Susan W. Parker and Petra E. Todd, "Conditional Cash Transfers: The Case of Progresa/Oportunidades," Journal of Economic Literature 55, no. 3 (September 2017): 866–915, https://doi.org/10.1257/jel.20151233.

³⁶ Parker and Todd, "Conditional Cash Transfers."

research papers showed significant benefits to those communities in treatment who received benefits in 1997.³⁷

POP and Gender Awareness: Further Analysis

Different evaluations have assessed the affects that the program had on women as direct and operative beneficiaries. Positive results have been identified in decision making processes, self-awareness, and girls' school attendance.

CHANGES IN DECISION-MAKING PROCESSES

By channeling the delivery of the cash transfers to the female head of the household, the program claims to increase women's participation in the decision-making process. In five out of eight decision making categories, the probability of husbands making decisions without consulting their wives declined.³⁸ Participants of the program also mentioned that the program has promoted the recognition of the women's roles in the household and the importance of their care giver responsibilities.³⁹ Additionally, women self-reported that their ability to make decisions by themselves regarding the expenditure of POP's transfer funds increased.⁴⁰

EFFECTS IN THE SELF-AWARENESS OF THE OPERATIVE BENEFICIARIES

Receiving the cash transfers from the program required continuous participation in gatherings and meetings where issues related to the components of the program (education, health, and nutrition) were addressed. Female household heads reported that the involvement in these activities increased awareness, knowledge, confidence, and control over activities and movement. Additional reported benefits included gains in their perceived status, self-esteem, and autonomy levels. 42

OUTCOMES ON GIRL'S SCHOOL ATTENDANCE

Through evaluations of the three different program phases, positive outcomes were reported in school attendance for boys and girls.⁴³ Specific evaluations carried out under POP have shown that the program contributed to an 11% to 14% increase in girl's attendance in secondary school.⁴⁴ This is 3 to 9 percentage points higher than the increase in boys' attendance.⁴⁵

UNINTENDED IMPACTS OF THE GENDER AWARE DESIGN OF POP

Even though the program attempted to target some of the particular needs of women and relied on them as operative beneficiaries, the assumptions on which these differentiations were made might be flawed. 46 First, the program is designed based on assumptions about women's roles in the household. 47 The design reinforces a maternal model of care, and the idea that household responsibility

³⁷ Wodon et al., "Mexico's PROGRESA."

³⁸ Wodon et al., "Mexico's PROGRESA."

³⁹ Wodon et al., "Mexico's PROGRESA."

⁴⁰ Wodon et al., "Mexico's PROGRESA."

⁴¹ Wodon et al., "Mexico's PROGRESA."

⁴² Wodon et al., "Mexico's PROGRESA."

⁴³ Wodon et al., "Mexico's PROGRESA."

⁴⁴ Wodon et al., "Mexico's PROGRESA."

⁴⁵ Wodon et al., "Mexico's PROGRESA."

⁴⁶ Molyneux, "Conditional Cash Transfers: A 'Pathway to Women's Empowerment?"

⁴⁷ Molyneux, "Conditional Cash Transfers: A 'Pathway to Women's Empowerment?"

should rely particularly on females.⁴⁸ Second, the selection of women as the operative beneficiaries of the program is based on the notion that women have a natural tendency to redistribute the resources among all the household members and also exercise a more cautious use of the money (which may not be necessarily true).⁴⁹

One of the biggest unintended impacts reported by program participants was the additional burden it generated for the female head of the household. Women's workload increased due to their participation in program activities, the attendance of health check-ins and the responsibility of collecting the transfer.⁵⁰ This burden ignores the time constraints that working women might have, an issue that could be even harder to manage for single working mothers.⁵¹

Additionally, by reinforcing a maternal model of care, the program deepens gender divisions of responsibilities: binding women to care giving activities and marginalizing fathers from childcare responsibilities. ⁵² This even led, in some cases, to a reduction in the economic responsibilities and involvement of men in the household. Some participants claimed that men could perceive the transfer as a reduction of their financial burden and therefore decreased their financial responsibilities. ⁵³

Criticisms to POP

In 2019, current President Andrés Manuel López Obrador (AMLO) gave a speech in which he directly criticized POP, arguing that conditional cash transfers were detrimental to Mexican politics.

"The Secretariat of Social Development and its practices no longer exist; (...) first it was "Solidaridad", after, I do not know, "Oportunidades", after "Progresa", then "Prospera", etc (...) about 30 years of these electioneering programs, which only mediatized and gave rise to corruption using the name of humble people, of poor people, have come to an end. All that is over." ⁵⁴

ALMO framed this discourse within his policy agenda. Starting in 2018, ALMO ordered an audit of these programs culminating in the report "El Progresa-Oportunidades-Prospera, a 20 años de su creación," prepared by the National Council for the Evaluation of Social Development Policy (Consejo Nacional de Evaluación de la Política de Desarrollo Social -CONEVAL).⁵⁵

This 715-page document thoroughly analyzes the POP program and provides

This 715-page document thoroughly analyzes the POP program and provides analytical data on their scope. Three main criticisms were identified including in-

⁴⁸ Molyneux, "Conditional Cash Transfers: A 'Pathway to Women's Empowerment?"

⁴⁹ Corina Rodríguez Enríquez, "Programas de Transferencias Condicionadas de Ingreso e Igualdad de Género ¿Por Dónde Anda América Latina?," Mujer y Desarollo, no. 109 (November 2011).

⁵⁰ Rodríguez Enríquez, "Programas de Transferencias Condicionadas de Ingreso e Igualdad de Género ¿Por Dónde Anda América Latina?"

⁵¹ Francis, "Cash Transfer Programmes, Poverty Reduction and Empowerment of Women."

⁵² Julia Bango and Soledad Salvador, "Transferencias monetarias e igualdad de género: cómo mejorar su efectividad para enfrentar la crisis del COVID-19," ONU Mujeres – América Latina y el Caribe, accessed May 2, 2022, https://lac.unwomen.org/cs/digiteca/publicaciones/2020/05/respuesta-covid-19-transferencias-monetarias.

⁵³ Molyneux, "Conditional Cash Transfers: A 'Pathway to Women's Empowerment'?"

⁵⁴ Gabriela Jiménez, "Programas de Sedesol eran electoreros: AMLO," El Sol de México | Noticias, Deportes, Gossip, Columnas, March 12, 2019, https://www.elsoldemexico.com.mx/mexico/sociedad/programas-de-sedesol-eran-electoreros-amlo-3176087.html.

⁵⁵ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación."

effective targeting, corruption and patronage within the program, and a reduced impact on poverty alleviation.

TARGETING EFFECTIVENESS

One of the first conclusions of the POP audit was that the targeting design was inaccurate, divisive, and perceived as arbitrary by the population. In this regard, the selection schema created tensions and conflicts within communities, undermining social cohesion.⁵⁶ As seen in Figure 1, 55% of eligible households

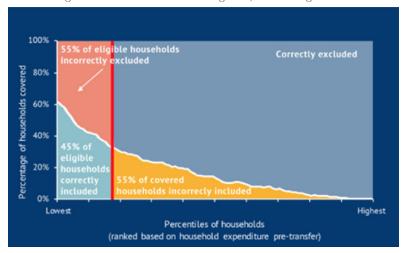


Figure 1: Targeting effectiveness of the Prospera program (2016)

were incorrectly excluded from POP.57

To measure this, the AMLO administration used the Coefficient of Exclusion Errors (CEE) and Coefficient of Inclusion Errors (CEI). The CEE captures the proportion of the population living in extreme poverty excluded from the program while the CEI shows the proportion of the erroneously selected beneficiaries, meaning that they did not live in extreme poverty (or ceased to) but

		2008	2010	2012	2014
CEE	National	0.494	0.504	0.558	0.533
	Rural	0.247	0.26	0.315	0.289
	Urban	0.722	0.696	0.723	0.687
CEI	National	0.528	0.497	0.525	0.506
	Rural	0.499	0.459	0.484	0.472
	Urban	0.588	0.557	0.581	0.546

Table 1: Coefficients of Exclusion and Inclusion Errors, 2008-2014.

remained in POP.

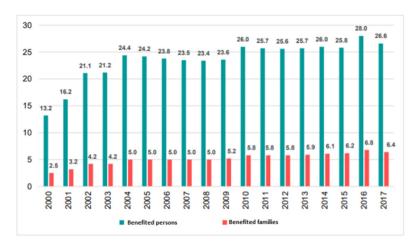
As seen in Table 1, the national Coefficient of Exclusion Errors increased from 2008 to 2014 - this rate was considerably higher in urban areas. Alternatively, the Coefficient of Inclusion decreased across categorizations.⁵⁸ The

 $^{56 \}quad Stephen \ Kidd, ``The Demise of Mexico's Prospera Programme: A Tragedy Foretold, '`Development Pathways (blog), February 6, 2019, https://www.developmentpathways.co.uk/blog/the-demise-of-mexicos-prospera-programme-a-tragedy-foretold/.$

⁵⁷ Kidd, "The Demise of Mexico's Prospera Programme."

⁵⁸ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," 178.

Figure 2: Register of beneficiaries, individuals, and families (in millions), POPs, 2000-2017



overall rating of both the CEE and the CEI showed that subsidies were not well distributed and that targeted populations were not being effectively covered by the program.

Furthermore, Figure 2 shows that despite the initial growth in both benefited population and benefited families between 2000 and 2004, the register of beneficiaries remained relatively stagnant between 2004-2009, and since has only grown significantly in response to economic shocks (2009) or due to the integration of the Food Support Program (Programa de Apoyo Alimentario or PAL) into POP (2015-2016).⁵⁹

CORRUPTION AND PATRONAGE

Additional criticism of POP claimed that it fostered patronage and captive votes from beneficiaries. From the beginning of the program and until 2006, the appointments of officials linked to program allocation had an equitable partisan distribution, meaning that decisions to extend the program to new areas of Mexico were made by consensus. This balance made partisan bias less likely to occur. Unfortunately, from 2006 onwards, POP appointments started to become more politicized. With this practice in place, patronage appeared. For instance, when Felipe Calderón, the President of Mexico from 2006 to 2012, was elected, one of his first actions was to name a former mayor of Atlixco and leading figure in the National Action Party (Partido de Acción Nacional or PAN) as a Senior Officer of the Secretariat of Social Development and National Coordinator. ⁶⁰The appointment of an active member of a political party to such a role enabled them to gain access to large economic resources. To this end, many of PAN's militant members were appointed to political positions with some even selected as state delegates. ⁶¹

⁵⁹ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," 180.

^{60 &}quot;Dip. Neftalí Salvador Escobedo Zoletto - Annual report," 2017, Congreso de Puebla, accessed November 1, 2021, http://congresopuebla.gob.mx/docs/informes/lix/diputados/146/anual_2017. pdf?iframe

⁶¹ Yuriko Takahashi, "Poverty, Clientelism and Democratic Accountability in Mexico," WINPEC Working Paper Series No. E1620 (April 26, 2020), https://www.waseda.jp/fpse/winpec/assets/uploads/2020/05/6a03caa5bb463546bfff6501c1375b25.pdf; Felipe Hevia de la Jara, "De Progresa a Oportunidades: efectos y límites de la corriente cívica en el gobierno de Vicente Fox," Sociológica (México) 24, no. 70 (August 2009): 43–81; Julio Boltvinik, "La Jornada: Economía moral," April 6, 2018, https://www.jornada.com.mx/2018/04/06/opinion/024o1eco; Gilles Serra, "Clientelismo y corrupción electoral en México: Persistencia a pesar de los avances legislativos / Clientelism and electoral corruption in Mexico: Persistence in spite of the legislative achievements," Revista Mexicana de Estudios Electorales 1, no. 17 (January 30, 2017): 149–74.

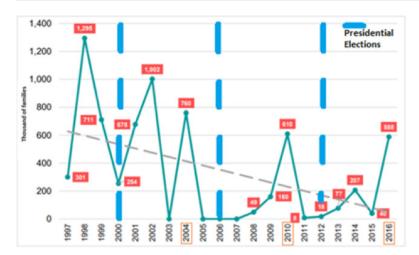


Figure 3: Number of new POP beneficiary families

When analyzing Figure 3 from a political standpoint, we can observe that the peak of new beneficiaries tends to occur two years before each presidential election in Mexico. From 2006 onwards, this pattern is even more evident, since small increases in the number of beneficiaries are followed by a huge peak of new families included in the program. Notably, before the presidential election of 2012, 610 new beneficiaries were included in the POP program during the 2010 presidential campaign. Similarly, before the presidential election of 2018, 588 new beneficiaries were included in the POP program during the 2016 presidential campaign.

This increase in the number of families served by POP has had a political impact. ⁶³ The "National Study on Vote Buying and Coercion 2018" developed by the Mexican Electoral Prosecutor's Office has investigated this direct correlation between the program and politics. ⁶⁴ Several scandals at the national and subnational levels in Mexico revealed that POP was abused for political purposes, resulting in what scholars have called a "vote-buying mechanism." ⁶⁵ One of the most relevant cases happened in the state of Veracruz in 2013, when it was revealed that a PAN leader used POP in his favor during the 2012 elections. ⁶⁶

POVERTY HAS REMAINED ALMOST UNCHANGED

Even though POP was in place, high levels of poverty persisted and extreme poverty only slightly declined during this time. This was true across various methodologies of poverty measurement, such as the LP and LPI utilized by the CONEVAL (Consejo Nacional de Evaluación de la Política de Desarrollo Social) and the MMIP (Método de Medición Integrada de la Pobreza). This evidence can be seen in figure 4.67

The only significant drop in poverty is found when comparing the extreme poverty and total poverty values for 2014 with those of 1996. However, this difference can largely be attributed to the unprecedented levels of poverty

⁶² Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," 183.

⁶³ Takahashi, "Poverty, Clientelism and Democratic Accountability in Mexico."

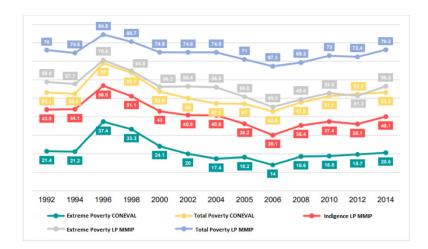
⁶⁴ Fiscalía Especializada en Delitos Electorales 2018, "Estudio Nacional de Compra y Coacción de Votos 2018." Fiscalía Electoral, accessed November 1, 2021 http://www.fepade.gob.mx/work/models/fepade/Resource/151/Estudio_Delitos_Electorales_2018.pdf.

⁶⁵ Takahashi, "Poverty, Clientelism and Democratic Accountability in Mexico."

^{66 &}quot;PRI le revira al PAN: También compraron votos con 'Oportunidades,'" Animal Político, April 23, 2013, https://www.animalpolitico.com/2013/04/pri-le-revira-al-pan-tambien-con-video/.

⁶⁷ Hernández Licona et al., "El Progresa-Oportunidades-Prospera, a veinte años de su creación," 188.

caused by the "Tequila Crisis" from 1994-1995. Overall, the extreme poverty (CONEVAL base) of 2014 is even higher than that registered in 2002, a phenomenon that also appears in the MMIP model.



Policy Recommendations

As previously mentioned, some design features of the CCTs in Mexico have hindered the impact on beneficiaries and on the nation. Even though the Mexican government decided to discontinue POP, an alternative solution to these issues would have been modifying the program design. A modification of critical features in the design could have increased the program's impact, reduced its unintended effects, and reduced opportunities for corruption. Three recommendations are suggested:

- 1. Restructure the program to promote universal eligibility and remove the conditionalities associated with program participation. This modification will help reduce program costs and ease the process for the population to access and maintain POP. On the administrative side, burdens regarding both targeting and following up with conditioning completion will be eliminated. This will reduce the program implementers' responsibilities as well as reduce potential criticisms regarding selection biases. On the beneficiary's side, given that condition completion can generate roadblocks, dropping them will reduce the chances of program dropout. This could reduce potential deterrents that were facilitating the participation of those the program intends to target, especially for the female head of the households. For example, eliminating mandatory assistance to health checkouts at inconvenient hours can ease access for single-headed families.
- 2. Adjust the POP design to impact gender equality by maintaining its beneficial effects on women's participation while promoting shared parenting practices. A new design for the activities implemented as part of the program could include requirements for men's involvement when appropriate. Several policies have promoted shared parenting as it positively affects women's participation in the job market, generates better cognitive and emotional outcomes for children, and increases children's and fathers' physical and mental health. For instance, Chilean policymakers have successfully achieved higher involvement of the fathers in raising children by generating and distributing educational guides that address this subject as part of the doctors' health support. This could be replicated along

with POP's activities to promote both assistance and continuing involvement of the male heads of the household. Modifications like this could transform gender relations within the household and contribute to evening out the distribution of care responsibility.

3. To reduce corruption, an autonomous and apolitical body (like an ombudsman) in charge of monitoring the cash transfers to the most vulnerable sectors of society should be created. This office would work to minimize the risk of political clientelism and corruption. Officials could be appointed in non-election years so that their term of office never overlap with an election period. Given that presidential elections are held every six years in Mexico, the creation of a position could be feasible before the 2030 election. The head of this body could be appointed for six years but would take office halfway through the prior presidential term (continuing with the example, this position could be filled in 2027 so that the term would run between 2027 and 2033). A specialized anti-corruption body would allow better cross-checking of policies, audits, and generally better accountability.

Conclusion

Progresa-Oportunidades-Prospera (POP) was Mexico's first CCT program and served as a model for CCT programs worldwide. The goal of the program was to break the cycle of intergenerational poverty by improving social conditions such as school attendance, health care visits, and nutritional outcomes. Including gender awareness in its design, it also sought to increase women's participation in household decision-making. During its two-decade run however, the program was criticized for three main reasons: ineffective targeting, issues with corruption and patronage, and a lack of impact on poverty alleviation. By redesigning the program to include universal eligibility, in essence removing conditionalities and selection biases, program dropouts and potential deterrents would be minimized. This would alleviate targeting issues and raise the potential of the program to further reduce poverty conditions. In addition, promoting balanced parenting practices could increase the father's involvement in household responsibilities, reducing the individual burden placed on the mother. Finally, introducing a third autonomous party in charge of making cash transfers to families would result in a reduction in the instances of corruption that have plagued POP over time.

The Immigration Public Benefit Trap: The Case for Repealing the Public Charge Rule

By Nicholas Chan, MSPPM / JD '22

Abstract

The Immigration and Nationality Act's "public charge" rule has long outlived its historical purpose. Considering the Trump administration's 2019 interpretation of the public charge rule expanded the list of public benefit programs that would disqualify a noncitizen from admission into the United States or from an adjustment of status, the recent Biden administration's rollback of the rule's interpretation is only a half-step in the right direction. In examining the public charge rule's administrative judicial history, one can see how it has been used as a discriminatory tool against women, racial/ethnic minorities, and noncitizen immigrants with physical and/or mental disabilities. The stringent grounds of inadmissibility codified under the law, the public charge rule's incompatibility with the growth and adoption of the country's welfare system, and its long-term deterring effect on immigrant communities' utilization of welfare services calls for the repeal of the outdated rule from U.S. immigration law.

I. Introduction

With almost 550,000 people applying for green cards every year, and 380,000 noncitizens legally present in the United States who are potentially eligible to adjust their immigration status, a huge swath of the immigrant population is impacted by the public charge rule. While the 2019 Trump-era changes to the public charge rule created additional barriers for noncitizens to be admitted into the United States or to adjust their immigration status, the Supreme Court's eventual dismissal of these changes only rolled back the policy to follow the 1999 Field Guidance on Deportability and Inadmissibility on Public Charge Grounds (1999 Field Guidance)² of the US Immigration and Naturalization Services (INS). Since the Immigration and Nationality Act (INA) never explicitly defined "public charge" under the statute, the INS' 1999 Field Guidance attempted to

¹ Sanzeh Duadi, "Choosing Between Healthcare and a Green Card: The Cost of Public Charge," Emory Law Journal 70, no. 1 (2020): 201, 211.

² Department of Homeland Security, "DHS Secretary Statement on the 2019 Public Charge," March 9, 2021, https://www.dhs.gov/news/2021/03/09/dhs-secretary-statement-2019-public-charge-rule.

³ Field Guidance on Deportability and Inadmissibility on Public Charge Grounds, 64 Fed. Reg. 28,689 (1999).

⁴ U.S. Citizenship Act, H.R. 1177, 117th Cong. (2021).

clarify the broad term by outlining certain public benefits like Social Security Income and Medicaid that would be used in public charge determinations.³ Absent any changes to public charge determinations by Biden's proposed U.S. Citizenship Act, the public charge rule will merely be reverting back to a rule rooted in a history of discrimination and only serves as a band aid solution for federal immigration policy.⁴

This Note argues that the INA's broad definition of "public charge" has been used to justify a pattern of discriminatory immigration policies and has outlived its historical purpose. Therefore, Congress should repeal §212(a)(4) and §237(a)(5) of the INA. The first section of this Note examines the administrative and judicial history of the term "public charge." The next section addresses the history of discrimination rooted in the public charge determinations. The final section discusses justifications for repealing the outdated public charge rule and concludes with a recommendation to Congress.

II. The History of the Public Charge Rule

A. IDIOTS, INSANE PERSONS, AND PAUPERS AS A PUBLIC CHARGE

The very first inclusion and interpretation of the term "public charge" appeared around 1850, when states like Massachusetts and New York passed laws defining public charges as those with disabilities or "any lunatic, idiot, deaf and dumb, blind or infirm persons." At that time, towns were responsible for providing relief to "poor persons" as wards of the town—eventually known as public charges—6 and these laws were attempts to limit the associated costs. Congress officially codified the public charge language in the Immigration Act of 1882 by allowing immigration officers to board arriving ships to determine if passengers were a "convict, lunatic, idiot, or any person unable to take care of himself or herself without becoming a public charge."

The 1882 Immigration Act was accompanied by a Congressionally supported "immigrant fund" intended to provide relief for newly arriving immigrants in the United States.⁸ New York Representative John Van Voorhis applauded the policy, stating that while some immigrants may need aid when they first arrive, many go on to learn the language, adapt, and "become a valuable component part of the body-politic." Thus, even in its early immigration policies, Congress established a fine line between barring migrants who were "unable to support [themselves]" and helping those merely "in distress." Almost a decade later, in the Immigration Act of 1891, Congress expanded the term 'public charge' to include "[a]ll idiots, insane persons, paupers, or persons likely to become a public charge."11 In addition, Congress for the first time included a provision that would make noncitizens not only inadmissible upon entry, but also deportable if they were deemed a public charge within one year of arrival in the United States. 12 The 1903, 1907, and 1917 versions of the Immigration Act extended the determination period to two¹³, three¹⁴, and five years¹⁵, respectively. This was only the beginning of allowing immigration officers to make determinations based on subjective predictions about a noncitizen, years into the future. The public charge provision transformed from a synonymous term associated with paupers and beggars, to its own distinct ground of inadmissibility and deportable charge

^{5, 6} Gerald L. Neuman, "The Lost Century of American Immigration Law (1776-1875)," Columbia Law Review 93, no. 8 (December 1993): 1833, 1850,1855 n. 138.

^{7, 8, 9, 10, 11, 12} New York v. U.S. Dep't of Homeland Sec., 969 F.3d 42, 65 (2d Cir. 2020).

¹³ Immigration Act of 1903, Pub. L. No. 57-162, ch. 1012, §20, 32 Stat. 1213, 1218.

¹⁴ Immigration Act of 1907, Pub. L. No. 59-96, ch. 1134, §20, 34 Stat. 898, 904-05.

¹⁵ Immigration Act of 1917, Pub. L. No. 64-301, ch. 29, §19, 39 Stat. 874, 875.

for at least the first five years of a noncitizen's entry.

B. THE DEVELOPMENT OF THE INS'S 1999 FIELD GUIDANCE FOR "PUBLIC CHARGE"

Following the passage of the INA in 1952, a series of legislation in the '80s and '90s created confusion around the public benefits being used in public charge determinations and ultimately prompted the creation of the INS' 1999 Field Guidance. In 1952, Congress first passed the INA, allowing noncitizens on temporary visas the ability to adjust their immigration status while still in the United States. ¹⁶ The INA further established grounds of inadmissibility and deportation, which included the public charge language from previous federal immigration laws. ¹⁷ The language in the statute gives discretion to the consular officer to determine if the noncitizen "at the time of application for admission or adjustment of status, is likely at any time to become a public charge," without giving the noncitizen an attempt to appeal the decision. ¹⁸ While a monumental framework for U.S. federal immigration policy, the INA has never explicitly defined "public charge" by statute, leaving it open to interpretation by the courts and government agencies. ¹⁹

Over a decade later, Congress passed the Immigration Reform and Control Act in 1986, which created a five-year ban on public welfare assistance for noncitizens with temporary visas. ²⁰ In 1996, the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) took a step further and barred all noncitizens from any federal public benefits for the first five years of arriving in the United States. ²¹ Despite these restrictions, Congress clarified that certain federal public benefits would still be allowed including medical assistance, short-term disaster relief, public health assistance, education benefits, and Food Stamp Act assistance. ²² A month after the passage of PRWORA, Congress also passed the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA), which added five factors to be considered in public charge determination: age; health; family status; assets, resources and financial status; and education and skills. ²³

Following this series of legislation which caused severe confusion regarding the definition of the public charge and its impact on federal public benefit eligibility for noncitizens, the INS issued the 1999 Field Guidance. The 1999 Field Guidance clarified that "public charge" meant a noncitizen who was "primarily dependent on the government for subsistence, as demonstrated by either (i) the receipt of public cash assistance for income maintenance or (ii) institutionalization for long-term care at government expense." The 1999 Field Guidance also specified the public benefits that may be considered for the purpose of determining a public charge, including: supplemental security income, Temporary Assistance for Needy Families, general assistance programs for income maintenance, and programs like Medicaid used to support immigrants who are institutionalized for long-term care.

^{16, 17, 18} Immigration and Nationality Act, Pub. L. No. 82-414, 66 Stat. 163 (codified as amended at 8 U.S.C. §1255 (2018)).

¹⁹ Cook Cty v. Wolf, 962 F.3d 208, 215 (7th Cir. 2020).

 $^{20,\,21,\,22}$. Immigration Reform and Control Act, Pub. L. No. 99-603, 100 Stat. 3359 (codified at 8 U.S.C. $\S1255a(h)$ (2018)).

²³ Illegal Immigration Reform and Immigrant Responsibility Act, Pub. L. No. 104-208, 110 Stat. 2009 (codified as amended at 8 U.S.C. \$1182(a)(4)(B).

 $^{24,\,25,\,26}$ Field Guidance on Deportability and Inadmissibility on Public Charge Grounds, 64 Fed. Reg. $28,689\,(1999).$

C. TRUMP'S 2019 PUBLIC CHARGE RULE AND BIDEN'S ROLLBACK

Most administrations followed the INS' 1999 Field Guidance until President Trump's 2019 rule, which redefined public charge with more stringent requirements—narrowing the scope of eligibility for potential green card recipients and those seeking to adjust their immigration status. On August 14, 2019, the Department of Homeland Security (DHS), under the Trump administration, published a final agency rule redefining the term "public charge" to include any noncitizen who "receives one or more designated public benefits for more than 12 months in the aggregate within any 36-month period." In addition, the term "public benefit" was expanded to include Food Stamp Act assistance, SNAP, most forms of Medicaid, and Section 8 Housing assistance. Before the rule could take effect nationwide, multiple courts filed preliminary injunctions to halt enforcement of the 2019 DHS Rule. 29

Within his first weeks in office, President Biden issued an Executive Order calling on federal agencies like DHS to immediately review the public charge grounds of inadmissibility. During this time, the states of New York, Connecticut, Vermont and various religious and community organizations sued DHS to challenge Trump's new interpretation of the public charge rule. The Supreme Court granted certiorari review of the 2nd Circuit's case of Department of Homeland Security v. New York to determine whether the 2019 final rule was "arbitrary and capricious," a violation of a legal standard for a willful and unreasonable action without consideration or in disregard of facts or law. On March 9, 2021, DHS determined that continuing to defend the 2019 final rule that changed the definition of public charge was "neither in the public interest nor an efficient use of limited government resources." The Department of Justice dismissed its pending appeals of all judicial decisions enjoining enforcement of the 2019 Rule in the Supreme Court—officially ending the Trump era public charge rule.

With the Supreme Court's dismissal of the circuit court's injunctions, the public charge standard has reverted to the 1999 Field Guidance interpretation. Nonetheless, the rule continues to cause confusion by relying on a broad term that evolves in meaning as different administrations interpret the rule to cater to their political agendas. Historically, this has meant that it has been used by immigration officials to discriminate against noncitizens.

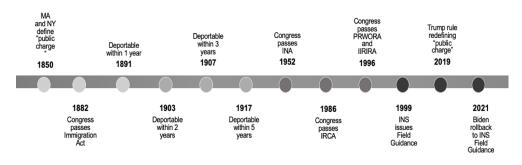


Figure 1. Historical timeline of "public charge" immigration laws in the United States.

^{27, 28} Inadmissibility on Public Charge Grounds, 84 Fed. Reg. 41,292 (Aug. 14, 2019).

²⁹ See Washington v. U.S. Dep't of Homeland Sec., 408 F. Supp. 3d 1191 (2019); City & Cty. of S.F. v. USCIS, 408 F. Supp. 3d 1057 (2019); New York v. U.S. Dep't of Homeland Sec., 408 F. Supp. 3d 334 (2019).

³⁰ Exec. Order No. 14,012, 86 Fed Reg. 8,277 (Feb. 2, 2021).

^{31, 32 &}quot;Department of Homeland Security v. New York," SCOTUSblog, See New York v. U.S. Dep't of Homeland Sec., 969 F.3d 42, 50 (2d Cir. 2020); Styskal, Wiese & Melchione, LP, "Challenging a Regulator's Actions – The 'Arbitrary and Capricious' Standard," 2022, https://www.scotusblog.com/case-files/cases/department-of-homeland-security-v-new-york-2/.

III. The Public Charge Rule as a Tool for Discrimination

The public charge rule has had a long history as a policy tool to discriminate against women, racial/ethnic minorities, and noncitizen immigrants with physical and/or mental disabilities. The criteria used for public charge determination continue to afford great leeway and authority to immigration officers, making the process ripe for abuse and bias. 36 Since the INA never explicitly defined public charge in the text of the statute, immigration officers' discretion "le[ads] to inconsistent application and biased determinations" in similar fact patterns, resulting in remarkably different outcomes.³⁷ A study found evidence of racial bias in the practice of the rule, with Mexicans and Central Americans at much greater risk of being deemed inadmissible than any other regional group, in spite of only moderate use of public assistance compared to other less disadvantaged groups.³⁸ Historian Hidetaka Hirota also noted that citizenship admission had little to do with the financial ability to support oneself and more to do with how noncitizen immigrants appeared to the American inspecting officers.³⁹ The free rein afforded to immigration officers, even with official criteria guiding public charge determinations, were (and continue to be) often based on subjective factors, as it is difficult to make predictions about noncitizen immigrants five years into the future.

A. GENDER

Historically, women seeking to immigrate were often barred admission by immigration officers, who denied "that women were capable of being self-supporting and independent in the economy." Limiting entry to women was an overwhelmingly political move to assuage the mounting fear that a fast-growing population of children from recently admitted working-class immigrants would be a burdening "social problem." Society at the time perceived women as caretakers, unable to be financially independent. However, women were still denied admission when under the financial support of a male family member. In one case, attorney Henry Gottlieb was representing an immigrant woman who had a wealthy uncle prepared to support her. However, the court still deferred to the immigration authorities' discretion in deeming the immigrant woman a public charge. Single-mothers and pregnant women eligible for an adjustment of status are to this day more vulnerable to deportation under the public charge rule because they may need to rely on public benefits while they solidify a foundation in the U.S.

B. RACE/ETHNICITY

The public charge rule has "always been used as a cover for more racially discriminatory immigration restrictions." It is no coincidence that the public charge rule and the United States' first race-based exclusionary immigration policy were passed by Congress in the same year. In 1882, the first time a

^{33~} Department of Homeland Security, "DHS Statement on Litigation Related to the Public Charge Ground of Inadmissibility," March 9, 2021, https://www.dhs.gov/news/2021/03/09/dhs-statement-litigation-related-public-charge-ground-inadmissibility.

^{34, 35} Department of Homeland Security, "DHS Secretary Statement on the 2019 Public Charge,"
March 9, 2021, https://www.dhs.gov/news/2021/03/09/dhs-secretary-statement-2019-public-charge-rule.
36, 37 Anna Shifrin Faber, "A Vessel for Discrimination: The Public Charge Standard of Inadmissibility and Deportation," Emory Law Journal 108 (2020): 1363, 1380.

³⁸ Kendal Lowrey and Jennifer Van Hook, "Standing on Their Own Two Feet: How the New Public Charge Rules Could Impact Non-European LPR Applicants," Population Research and Policy Review (2021).

³⁹ Faber, "A Vessel for Discrimination," 1381.

public charge appeared in federal immigration law, Congress passed the Chinese Exclusion Act, barring admission of Chinese workers and highlighting the contentious state of immigration policy at the time. ⁴⁵ Later, in a 1913 case, a district judge upheld a public charge determination and supported affidavits stating that "the Hind[u] laborers are obnoxious to very many of our people, that there exists a prejudice against them, and that comparatively few avenues are open to them in which to find employment. This showing is not made against any particular individual petitioner, but against the Hind[us] generally as a race." Other marginalized groups were also deemed economically unfit public charges including Jewish "peddlers" and "unclean" Indians. ⁴⁷ Depending on the political climate and effects of global immigration, the public charge rule has been used throughout its history as a mechanism to discriminate against minorities that were thought to have a difficult time assimilating into the supposedly ideal American standard.

C. PHYSICAL AND/OR MENTAL ABILITY

Despite health being considered its own separate ground of inadmissibility, the INA denied admission to noncitizens with physical or mental disorders under the public charge rule. 48 Since pauperism was historically considered a hereditary condition, Congress conflated the inability to work with "lunatics" and "deaf and dumb, blind or infirm persons." The public charge standard essentially "became a vessel for eugenics-based ideas about who was capable of work, thus targeting the mentally and physical[ly] disabled, and paupers."49 For example, in a 1911 case, a sixty-year-old Italian man who had one of his legs amputated due to gangrene was deemed a public charge by immigration officials, despite having relatives who were willing and able to financially support him. ⁵⁰ Throughout history, immigration officials have also considered "a curved spine, flat feet, heart disease, hysteria, and bunions... a hand done up, or any physical injury in any way..., or if a person has but one leg or one arm, or one eye, or there is any physical or mental defect" in their determination.⁵¹ The public charge rule became a tool to arbitrarily bar noncitizens from entry to the US based on physical or mental characteristics. The 2019 DHS rule change added potentially irrelevant factors into the public charge determination "including family size, mere application for benefits, English-language proficiency, lack of disability, and good credit history."52 However, the court's concern with stereotypes and unsupported assumptions by immigration officers are not unique to the Trump-era policy.⁵³

D. DISCRIMINATORY IMPACT OF "PUBLIC CHARGE"

For the thirty years following the Immigration Act of 1882, the public charge rule was the most used ground for inadmissibility. From 1892 to 1990, 66 percent of all immigrants denied were found inadmissible as a public charge. ⁵⁴ The broad concept of public charge has been weaponized by administrations to carry out anti-immigrant policies—bending and stretching the rule according to

^{40, 41} Daudi, "Choosing Between Healthcare," 211.

^{42, 43} Faber, "A Vessel for Discrimination," 1381.

⁴⁴ The World Staff, "Public Charge Rule Has History of 'Racial Exclusion,' Says Immigration Historian," The World from PRX, August 14, 2019, https://theworld.org/stories/2019-08-14/public-charge-rule-has-history-racial-exclusion-says-immigration-historian.

⁴⁵ Chinese Exclusion Act, ch. 126, 22 Stat. 58, 58-59.

⁴⁶ In re Rhagat Singh, 209 F. 700, 701 (N.D. Cal. 1913).

⁴⁷ Daudi, "Choosing Between Healthcare," 211.

the will of the executive. The Fourth Circuit, the only judicial circuit to uphold the 2019 DHS Rule before it was dismissed when President Biden took office, found that the public charge provision functioned like "an accordion; to expand or contract depending on the nation's needs and a given administration's policy." While the legislative history in a Judiciary Committee Report of the INA reveals that the term was intentionally kept vague due to the varied elements in the public charge determination, it is clear flexibility has caused more harm than good. Immigration officers are given statutory authority to make life-changing predictions, based on mere subjective speculation, which often leads to discriminatory practices against women, racial and ethnic minorities, and those with physical and/or mental disabilities.

IV. Justifications for Repeal of the Public Charge Grounds

Considering how much the public charge rule has deviated from its historical purpose, Congress should repeal §212(a)(4) and §237(a)(5) of the INA, to remove public charge as a ground of inadmissibility and deportation. In February 2020, Representative Grace Meng from New York introduced a House bill to repeal the public charge ground of deportability under §237(a)(5) of the INA.⁵⁷ The legislation introduced by Meng is the first step in removing these draconian immigration laws from the books.

There are three key justifications for Congressional repeal of the policy. First, the U.S. immigration system already includes extensive screening. Other grounds of inadmissibility and deportation—which are usually defined more precisely—allow for the current public charge rule to function as a catch-all category that can be used by immigration officers to discriminate. Second, the rule was historically rooted in economic determinations based on an antiquated conception of 'pauperism', which is no longer compatible with today's expansive welfare system meant to support the public. Finally, the undefined term creates an endless cycle of mass confusion in which a new administration leverages the rule in favor of its own political agenda. This results in a deterring effect on the utilization of the welfare system that makes it even more difficult for noncitizens to support themselves.

A. THE IMMIGRATION SYSTEM IS STRENUOUS ENOUGH WITHOUT THE PUBLIC CHARGE RULE

i. Grounds of Inadmissibility

Beyond the public charge provision, the INA already codifies seven other categories for inadmissibility, including a catch-all for miscellaneous grounds. SA noncitizen with a ground of inadmissibility would be unable to adjust their immigration status while in the United States because they would be deemed "ineligible to receive visas and ineligible to be admitted to the United States. SA However, under the health section of the grounds of inadmissibility, the INA already includes a similar predictive provision barring any noncitizen found to have a physical or mental disorder and behavior associated with the disorder that may pose, or has posed, a threat to the property, safety, or welfare of the alien or

⁴⁸ Immigration and Nationality Act, §1182(a)(1)(iii).

⁴⁹ Faber, "A Vessel for Discrimination," 1382.

⁵⁰ United States ex rel. Canfora v. Williams, 186 F. 354, 355 (S.D.N.Y. 1911).

^{51, 52, 53, 54} Faber, "A Vessel for Discrimination," 1383.

⁵⁵ Casa de Md, 971 F. 3d 220, 263 (4th Cir. 2020).

⁵⁶ New York v. U.S. Dep't of Homeland Sec., 969 F.3d 42, 69 (2d Cir. 2020).

others."⁶⁰ Non-citizens must also overcome the burden of proving labor and certification requirements.⁶¹ This requires the Department of Labor to certify that the noncitizen seeking to perform skilled or unskilled labor "will not adversely affect the wages or working conditions of workers in the United States" and that there are not enough sufficient workers who are able, willing, and qualified at the time of the noncitizen's application for a visa and admission.⁶² With an extensive screening for health history and a Department of Labor certification to account for the impact on the labor market, the INA's other provisions already cover the health and economic concerns used to justify the public charge grounds of inadmissibility.

In addition, the other stringent grounds of inadmissibility are enough to screen noncitizen immigrants safely and securely. For example, there are grounds of inadmissibility due to criminal reasons, national security concerns, fraud, and prior removals or unlawful presence in the U.S. 63 A section for miscellaneous grounds of inadmissibility also include barring practicing polygamists, guardians taking care of someone who is sick, international child abductors, and unlawful voters.⁶⁴ Even in the "miscellaneous" grounds of inadmissibility, the language is very clear and explicit as to the circumstances and situations that would apply, unlike the general factors that immigration officers can use to make subjective public charge determinations. ⁶⁵ The process of adjusting a noncitizen's status is arduous and many immigrants undergo a rigorous biometric screening process as well as criminal, security, and medical background checks. Additionally, noncitizens endure invasive personal interviews in which they are required to disclose intimate details of their lives. 66 Considering the extensive screening and requirements already imposed by the INA, including health and economic grounds of inadmissibility, the public charge provision no longer has a purpose beyond being used as "a catch[-]all to exclude people who fell into the broad—and broadly interpreted—category of individuals unable to work."67

ii. Grounds for Deportation

The public charge language also appears in the INA as an additional ground for deportation. ⁶⁸ Grounds for deportation allow for an immigrant legally admitted in the United States to be removed and deported. ⁶⁹ The grounds for deportation are not as extensive as the grounds of inadmissibility, but the select grounds for deportation emphasize the severity of other violations to warrant deportation. First, the INA includes grounds for deportation for immigrants who violate their immigration status, extending to those who should have been deemed inadmissible at the time of entry. ⁷⁰ The statute also includes grounds of deportation for criminal offenses, falsification of documents, security and terrorist related activities, and unlawful voters. ⁷¹ The grounds of deportation already extend to those who are inadmissible at the time of entry or adjustment of status, incorporating the eight grounds of inadmissibility, including public charge. ⁷² However, the INA adds the unnecessary provision finding deportable any noncitizen who, "within five years after the date of entry, has become a public charge from causes

^{57, 58} No Public Charge Deportation Act of 2019, H.R. 5814, 116th Cong. (2020) (also introduced as the New Deal for New Americans Act of 2019, H.R. 4928, 116th Cong. (2020)).

 $^{59,\,60,\,61,\,62,\,63,\,64,\,65\,\,8\,\,}U.S.C.\,\,\S1182(a).$

⁶⁶ Christopher Richardson, "Opinion: We Must Abolish the 'Public Charge' Rule," The Washington Post, Aug. 15, 2019, https://www.washingtonpost.com/opinions/2019/08/15/we-must-abolish-public-charge-rule/. Faber, "A Vessel for Discrimination," 1372.

⁶⁷ Faber, "A Vessel for Discrimination," 1372.

^{68, 69, 70, 71, 72, 73 8} U.S.C. §1227(a)(5).

⁷⁴ New York v. U.S. Dep't of Homeland Sec., 408 F. Supp. 3d, 55 (S.D.N.Y. 2019).

not affirmatively shown to have arisen since entry."⁷³ Theoretically, a noncitizen who suffers temporary injury and utilizes certain public benefits within their first five years in the United States can be deemed a public charge, become unable to adjust their status, and risk deportation.⁷⁴ Therefore, the public charge rule only adds unnecessary barriers to the already burdensome and strenuous process for noncitizens to enter the United States or to adjust their status.

B. THE PUBLIC CHARGE RULE IS INCOMPATIBLE WITH THE CURRENT WELFARE SYSTEM

i. Conflicts in the Past

The growth of the welfare system and its intent to support the welfare of the public has continuously conflicted with the public charge rule, leading to widespread confusion among immigrant communities and social service agencies. From the development of the public charge rule, the 2019 version under the Trump administration, and the return to the INS' 1999 Field Guidance, the law has been and is still at odds with the goals of the U.S. welfare system. This tension was already evident upon passage of the Immigration Act of 1882.⁷⁵ While Congress codified the public charge provision in federal immigration law, the bill also created an immigrant fund to support newly arriving immigrants in the United States.⁷⁶ Ironically, Congress acknowledged that newly arriving immigrants might be in distress by creating a fund to support their arrival, yet barred anyone deemed a "convict, lunatic, idiot" in the same bill.⁷⁷

Over a century later, PRWORA and IIRIRA again demonstrated the incompatibility between the modern welfare system and the broad reading still accorded to the public charge rule. PRWORA barred noncitizens from accessing certain federal public benefits. At the same time, IIRIRA included five factors that can be used in public charge determinations for noncitizens. In this caused confusion among immigrant communities and service providers when deciding when to admit a noncitizen and ultimately deterred eligible aliens and their families, including U.S. citizen children, from seeking important health and nutrition benefits that they [we]re legally entitled to receive. The confusion prompted the INS to respond with the 1999 Field Guidance defining public charge.

ii. Conflicts in the Present

Two decades later, the term intentionally left broad in the INA was once again leveraged to carry out discriminatory immigration policy by the Trump administration. Compared to explicitly discriminatory policies, "limiting public benefits offered a more palatable policy to support than arguing for additional immigration restriction on the basis of racial or ethnic phobias." The Trump administration attempted to expand the list of programs considered indicative of a lack of self-sufficiency in the public charge determination to include non-cash programs like SNAP, Medicaid, and Section 8 housing assistance. Solve However, the Board of Immigration Appeals (BIA) previously reversed decisions that put too much weight on temporary setbacks. For example, the BIA held in the

⁷⁵ Immigration Act of 1882, Pub L. No. 47-376 §2, 22 Stat. 214.

^{76, 77} New York v. U.S. Dep't of Homeland Sec., 969 F.3d 42, 50 (2d Cir. 2020).

^{78 8} U.S.C. §1611(a).

^{79 8} U.S.C. §1182(a)(4)(B).

⁸⁰ New York v. U.S. Dep't of Homeland Sec., 969 F.3d, 53 (2d Cir. 2020).

⁸¹ Field Guidance on Deportability and Inadmissibility on Public Charge Grounds, 11.

⁸² Faber, "A Vessel for Discrimination," 1396.

case Matter of Perez "[t]he fact that an alien has been on welfare does not, by itself, establish that he or she is likely to become a public charge." The Second Circuit, in its reasoning for rejecting the Trump administration's 2019 Rule, similarly articulated that while Congress intended to focus on the noncitizen's ability to support themselves, the expanded DHS interpretation of public charge as synonymous with self-sufficiency was inconsistent with judicial precedent and administrative understanding of the public charge rule. Nonetheless, the Biden administration's rollback to the 1999 Field Guidance retained consideration for the receipt of public cash assistance programs or being institutionalized at the government's expense in its public charge determination.

The undefined term "public charge" has wavered throughout history, but since the 1930s has consistently conflicted with the expansive welfare system intended to "improve public welfare by empowering agencies to administer benefits to eligible people." Since the inception of the public charge rule, the United States has "transitioned from a welfare system of state-funded poorhouses and private charitable organizations to one characterized by federal grants of public benefits." Towns are no longer solely responsible for immigrants as wards of the state but can rely on the expansive welfare system to support those in need of services and public benefits. Since INS had no role in shaping welfare policy, and the Department of Health and Human Services does not determine immigration policy, the two agencies bear a "zero-sum asymmetrical agency relationship" where "benefits-granting agencies cannot fulfill their public-welfare missions to the extent that immigration enforcement agencies deter participation by enforcing public charge using receipt of benefits."

C. THE BROAD INTERPRETATION OF THE PUBLIC CHARGE RULE CREATES A COSTLY CHILLING EFFECT

i. The Public Charge Rule is a Deterrent to Necessary Public Benefits

The undefined term "public charge" has not only outgrown its historical need; its conflicting relationship with the U.S. welfare system creates a costly chilling effect among the immigrant population that severely burdens state and local social service providers. The first example of the chilling effect was evident after the passage of both PRWORA and IIRIRA. Uncertain about which programs they would be eligible for and the potential consequences for their immigration status, many noncitizens "avoided participating in public health programs so as to not risk being designated a public charge, and thereby risk deportation." According to 2016 data, the chilling effect of the public charge rule places an estimated sixty-eight billion dollars at risk for healthcare services for Medicaid and CHIP enrollees who are noncitizens or their citizen family members. The public charge rule acted more "as a deterrent, if not a bar, to a person's acceptance of benefits" especially for women who went without prenatal care, or for parents who chose not to vaccinate their American-born U.S. citizen children. 4

Under the 2019 DHS rule, these concerns were again raised by the

⁸³ Inadmissibility on Public Charge Grounds, n. 2.

⁸⁴ Cook Cty, 962 F.3d, 232.

⁸⁵ New York v. U.S. Dep't of Homeland Sec., 969 F.3d, 69 (2d Cir. 2020).

 $^{86,\,87}$ New York v. U.S. Dep't of Homeland Sec., 969 F.3d, 69 (2d Cir. 2020) (quoting Matter of Perez, 15 I. & N. Dec. $136,\,137$ (B.I.A. 1974)).

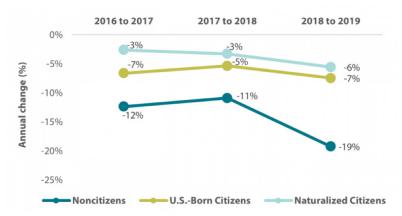
⁸⁸ Field Guidance on Deportability and Inadmissibility on Public Charge Grounds, n. 11.

 $^{89, 90, 91 \ \} Joseph \ Daval, "The \ Problem \ with \ Public \ Charge," \ Yale \ Law \ Journal \ 130 \ (2021): 998, 1001.$

⁵⁵ Faber, "A Vessel for Discrimination," 1378.

circuit courts that rejected the Trump-era policy to expand the list of federal programs considered in the public charge determination. The Seventh Circuit emphasized that to err on the side of caution, noncitizens might refrain from seeking medical care, food or housing benefits, leading not only to disenrollment, but under-enrollment of federal public benefits, which would place additional strain on state and local governments to fill in the gaps. ⁹⁵ A 2019 Urban Institute survey found that 14 percent of 1,950 adults who were foreign-born or living with foreign-born family members avoided participating in public benefit programs out of fear that it would reduce their chances of qualifying for a green card. ⁹⁶ Figure 2 shows how noncitizens sharply reduced participation in the SNAP federal

Figure 2. Annual Change in SNAP Participation by Citizenship

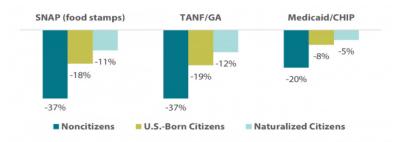


benefit program from 2016 to 2019. Even green card holders and naturalized citizens have withdrawn from federal benefits, despite the fact the public charge rule does not apply to them. 98

Figure 3 displays a decrease in enrollment in the SNAP food stamps, TANF, and Medicaid/CHIP programs, especially among noncitizens in preparation of Trump's rule going into effect.¹⁰⁰ Thus the ambiguity of the term "public charge" continues to promote confusion among the immigrant families, leading to a chilling effect for enrolling in public benefits.

During the notice and comment period before the 2019 Rule was to go into effect, commentators suggested that under-enrollment in Medicaid by

Figure 3. Changes in Participation by Low-Income Individuals in Federal Means-Tested Benefit Programs from 2016 to 2019.⁹⁹



⁹² Faber, "A Vessel for Discrimination," 1378.

⁹³ Cindy Mann, April Grady, and Allison Orris, "Medicaid Payments at Risk for Hospitals Under the Public Charge Proposed Rule," (Manatt Health, November 2018), https://www.manatt.com/Manatt/media/Media/PDF/White%20Papers/Medicaid-Payments-at-Risk-for-Hospitals.pdf.

⁹⁴ Faber, "A Vessel for Discrimination," 1378 n. 41.

⁹⁵ Cook Cty v. Wolf, 962 F.3d, 230-31.

⁹⁶ Leila Miller, "Trump Administration's 'Public Charge' Rule Has Chilling Effect on Benefits for Immigrants' Children," Los Angeles Times, September 3, 2019, https://www.latimes.com/california/story/2019-09-02/trump-children-benefits-public-charge-rule.

immigrants who are actually exempt from the new rule "would reduce access to vaccines and other medical care, resulting in an increased risk of an outbreak of infectious diseases among the general public." Since a pandemic does not differentiate between citizens and noncitizens, considering the receipt of public benefits in public charge determinations would deter both noncitizens and fearful qualified immigrants, like refugees, asylees, and victims of domestic violence, from seeking necessary healthcare, while leaving local governments to deal with the consequences of an outbreak or serious medical condition left untreated. According to the Urban Institute, 13.6 percent of adults in immigrant families in 2020 avoided public benefits, 27.7 percent feared losing green card eligibility, and many avoided COVID-19 relief programs because of immigration concerns. 103

The 2019 Rule was drastic in its expansion of federal benefits used in the public charge determination. However, the rule has always "set a trap for the unwary" by penalizing noncitizens for accepting benefits that were made available to them by Congress. 104 The Seventh Circuit stressed the irony of expanding the list of disqualifying programs where "[m]any recipients could get by without them, though as a result, they would face greater health, nutrition, and housing insecurity, which in turn would likely harm their work or educational attainment (and hence their ability to be self-sufficient)."105 The Seventh Circuit also reasoned that the DHS Rule's twelve month "stacking standard" had "no natural limitation." ¹⁰⁶ If the 2019 DHS were allowed to expand the list of federal public benefits in its public charge determination, nothing would prevent the agency "from imposing a zero-tolerance rule under which the recipient of even a single benefit on one occasion would result in denial of entry or adjustment of status." The slippery slope created by relying on receipt of public benefits to make speculations about a noncitizen five years in the future is the main reason the public charge rule has evolved into what it is—a biased rule incompatible with the principles underlying the US public welfare system.

ii. Deterring Access to Public Benefits Burdens the Healthcare System

Even before the passage of PRWORA, Congress enacted the Emergency Medical Treatment and Labor Act (EMTALA), which provided emergency medical treat-ment to anyone within the United States, including immigrants. ¹⁰⁸ Therefore, the conflicting nature of limiting public benefits to noncitizens for five years, while still allowing for immigrants to receive emergency medical treatment, would force many "to wait until an emergency medical situation before seeking assistance 'in the most expensive setting, the emergency room.'" ¹⁰⁹ With the five-year bar in place, treating a dialysis or cancer patient in critical condition will be more expensive for both the hospital and federal government when conditions have worsened. ¹¹⁰ When these burdens are inevitably shifted to under-resourced community health centers and "safety net hospitals," quality of care is jeopardized to compensate for the additional costs of taking on patients who fear utilizing federal public health benefits. ¹¹¹

The Second Circuit similarly established that the 2019 DHS Rule failed to consider the financial and health consequences of disenrollment, as well as the

^{97, 98, 99, 100} Randy Capps, Michael Fix, and Jeanne Batalova, "Anticipated 'Chilling Effects' of the Public-Charge Rule Are Real: Census Data Reflect Steep Decline in Benefits Use by Immigrant Families," migrationpolicy.org, December 21, 2020, https://www.migrationpolicy.org/news/anticipated-chilling-effects-public-charge-rule-are-real.

^{101, 102} Cook Cty v. Wolf, 962 F.3d, 231.

^{103 &}quot;Harm of the Public Charge Regulation During the COVID-19 Pandemic," Protecting Immigrant Families, March 2021, https://protectingimmigrantfamilies.org/wp-content/uploads/2021/03/PIF-Documenting-Harm-Fact-Sheet-1.pdf.

strain placed on local providers. 112 The court noted that DHS failed to explain its departure from the 1999 Field Guidance where it originally acknowledged that "deterring acceptance of 'importan[t] health and nutrition benefits' had an 'adverse impact... on public health and the general welfare."113 Despite DHS's claim that the basis for the change is to "strengthen public safety, health, and nutrition," the reality is that the chilling effect of the public charge rule would discourage exempt noncitizens from utilizing public benefits intended to support the general welfare of the public. 114 However, immigration policy's deviation from the purpose of the welfare system existed long before the 1999 Field Guidance. With EMTALA covering emergency hospital expenses of immigrants, and a five-year bar preventing noncitizens from accessing certain federal public benefits, both ineligible and qualified immigrants fear utilizing necessary programs "designed to protect them and the larger community." 115 The availability of welfare provided to immigrants has vastly changed since INA's enactment in 1952.¹¹⁶ The term "public charge" has taken on "a whole new meaning with the vast availability of federal health programs, especially compared to its conceptualization in the nineteenth and early twentieth century."117

V. Conclusion

While the Biden administration's call to review the public charge rule led to the Supreme Court's dismissal of the 2019 DHS Rule, there are currently no proposed changes to §212(a)(4) or §237(a)(5) in Biden's proposed U.S. Citizenship Act. 118 Without legislative action from Congress, the judicial system will have to continuously determine the scope of a term that is intentionally undefined in statute and based on an immigration officer's speculative (and potentially biased) assumptions about an applicant five years into the future. On reviewing its history, it is clear that the public charge rule is no longer necessary to alleviate the strain on states running poorhouses and has since only been weaponized as a discriminatory tool against women, racial and ethnic minorities, and immigrants with physical and/or mental disabilities. The other stringent grounds for inadmissibility and the growth of the welfare state are at odds with the public charge rule—creating a chilling effect among immigrant communities who are in dire need of public benefits for preventative care and contributing to the burden of under-resourced state and local government health care systems. These are strong grounds for Congress to finally nullify the law by repealing §212(a)(4) and §237(a)(5) of the INA to remove 'public charge' as a ground for inadmissibility and deportation.

^{104, 105, 106, 107} Cook Cty v. Wolf, 962 F.3d, 228

^{108, 109, 110, 111} Daudi, "Choosing Between Healthcare," 218 (citing 42 U.S.C. §1395dd (2011)

^{112, 113, 114} Cty of S.F. v. U.S. Citizenship & Immigr. Servs., 981 F.3d 742, 44-46 (9th Cir. 2020).

^{115, 116, 117} Daudi, "Choosing Between Healthcare," 239 n. 9.

¹¹⁸ Exec. Order No. 14,012, n. 5; Department of Homeland Security, "DHS Secretary Statement on the 2019 Public Charge," March 9, 2021, https://www.dhs.gov/news/2021/03/09/dhs-secretary-statement-2019-public-charge-rule; U.S. Citizenship Act, H.R. 1177, 117th Cong. (2021): n. 12.

Passing Medicaid Expansion and Expanding Medicaid for Substance Use Disorder to Make Healthcare Coverage Racially Equitable

By Divya Gupta, MSHCPM '22

Abstract

States that refuse to adopt Medicaid expansion through the Affordable Care Act contribute to the racially inequitable healthcare system in the United States. Congress should pass the expansion of Medicaid as part of the Build Back Better plan and stipulate that substance use disorder (SUD) be included in the Medicaid program. Passing the legislation and including SUD are crucial to creating racially equitable healthcare access and coverage, in particular for Black Americans.

The Expansion of Medicaid through the Affordable Care Act

The Affordable Care Act aims to reduce the uninsured population in the U.S. by providing affordable public insurance options through health insurance marketplaces and Medicaid. Through the ACA, Medicaid eligibility expanded to include those earning up to 138 percent of the federal poverty line. The ACA offered to fund 100 percent of state Medicaid expansions for its first three years, which afterwards phased down to 90 percent of costs along with subsidized marketplace plans. This expansion of Medicaid gave coverage to eligible low-income individuals, disproportionately many of whom are Black. Additionally, states with expanded Medicaid were required by the ACA to include coverage of SUD treatment.

Black Americans make up forty-six percent of the population that is eligible for Medicaid through expansion.⁶ As of today thirty-nine states including Washington, D.C. have adopted the Medicaid expansion,⁷ while twelve states, including Florida, Georgia, Kansas, Mississippi, North Carolina, South Carolina,

^{1, 2 &}quot;Status of State Action on the Medicaid Expansion Decision," Kaiser Family Foundation, October 8, 2021
3 Jesse C. Baumgartner, Sara R. Collins, and David C. Radley, "Racial and Ethnic Inequities in Health Care Coverage and Access, 2013-2019," The Commonwealth Fund, June 2021.

⁴ Anna Bailey, Kyle Hayes, Hannah Katch et al., "Medicaid Is Key to Building a System of Comprehensive Substance Use Care for Low-Income People," Center on Budget and Policy Priorities, March 18, 2021.

 $^{5\ \} Baumgartner, Collins, and Radley, "Racial and Ethnic Inequities in Health Care Coverage and Access, 2013-2019."$

South Dakota, Wisconsin, and Wyoming, have not.⁸ In 2019, expansion states reported reduced uninsured rates among Black adults, while non-expansion states that happened to have a larger Black population reported high uninsured rates for Black adults.⁹

The American Rescue Plan, the COVID-19 relief package that was enacted in March 2021, has created a new financial incentive for non-expansion states to supplement the ninety percent federal matching funds offered by the ACA. ¹⁰ States choosing to expand Medicaid would receive a five percentage point increase in their federal matching rate for two years, providing coverage for non-expansion enrollees. ¹¹ The health coverage expansion offered by the ACA is crucial for improving racial equity through healthcare, especially for Black people disproportionately affected by low income and lack of healthcare access. ¹²

Closing the Medicaid Coverage Gap in Non-Expansion States

States that did not expand Medicaid had an uninsured rate of 15.5 percent in 2019, while those who had expanded had a rate of 8.3 percent.¹³ There lies a coverage gap in non-expansion states—a so-called "donut hole"—in which over two million low-income adults remain uninsured because their income is above Medicaid eligibility but below marketplace eligibility for premium tax credits. 14 People in the coverage gap have limited family income and are likely to not have the option of employer-based coverage because of work characteristics such as low-wage jobs, part-time employment, and unpredictable workforce connections. 15 Ten percent or more of the uninsured population in Texas, Florida, Georgia, and North Carolina are among those that fall into the coverage gap. 16 Black Americans make up a disproportionate percentage of people living in the South, and among people of color they are most affected by non-expansion and the coverage gap. ¹⁷ Three of the twelve non-expansion states—Texas, Florida, and Georgia—are home to the largest non-Hispanic Black populations in the US. 18 Closing the Medicaid coverage gap by expanding Medicaid would address the healthcare disparities among the Black population in these states. ¹⁹

President Biden's Build Back Better framework, a legislative program with many components pending in Congress, offers one route to closing the coverage gap in states that have refused to expand Medicaid. Beginning in 2022, the bill would make people eligible for premium tax credits allowing them to pay for plans in the ACA marketplace. In 2024, plans would cover transportation costs for medical appointments for people who are unable to access care without it. In the following year, a federal Medicaid program would be established making coverage available to people in non-expansion states. Some access care without it.

^{6, 7, 8 &}quot;Status of State Medicaid Expansion Decisions: Interactive Map," Kaiser Family Foundation, October 8, 2021.

 $^{9\,}$ Baumgartner, Collins, and Radley, "Racial and Ethnic Inequities in Health Care Coverage and Access, 2013-2019."

^{10, 11} MaryBeth Musumeci, "Medicaid Provisions in the American Rescue Plan Act," Kaiser Family Foundation, March 18, 2021.

¹² $\,$ Baumgartner, Collins, and Radley, "Racial and Ethnic Inequities in Health Care Coverage and Access, 2013-2019."

^{13, 14, 15, 16} Rachel Garfield, Kendal Orgera, and Anthony Damico, "The Coverage Gap: Uninsured Poor Adults in States That Do Not Expand Medicaid," Kaiser Family Foundation, January 21, 2021.

Impacts of Medicaid Expansion on Black Americans

Black Americans are likely to have more chronic health conditions and less financial resources than their white counterparts, which makes access to healthcare coverage through the ACA and Medicaid critical.²⁴ Medicaid expansion is associated with improvements in health outcomes including chronic diseases and cancer.²⁵ The expansion of Medicaid in those states that accepted it has been shown to improve access to preventive and primary care, prevent premature deaths, and reduce high out-of-pocket medical spending.²⁹ Some of the impacts observed by researchers include a reduced number of uninsured breast cancer patients, a reduced rate of late-stage breast cancer detection²⁶, declines in mortality rates for Black patients with end-stage renal disease²⁷, and fewer maternal deaths per live births among Black women.²⁸ In total, expanding Medicaid would affect 2.2 million people who fall in the coverage gap, of whom 28 percent are Black.³⁰ While Medicaid expansion makes some improvements in health disparities, it is not a complete solution for creating racially equitable healthcare. One study, for example, found that the breast cancer mortality rate did not decrease after Medicaid expansion.³¹ These researchers also argued that it was important to consider variations in quality of care based on geographic limitations and the types of healthcare facilities available. This suggests that institutional constraints can limit people of color from benefiting from any health policy reform.³² It is important to consider the quality of local health systems that will serve Black people with Medicaid coverage. Relying exclusively on Medicaid expansion will not improve all health disparities among Black Americans—though it will certainly provide coverage to people who would not otherwise have it.³³

Substance Use Disorder Coverage Through Medicaid

In the past, the opioid crisis was perceived to disproportionately affect white persons, leaving Black Americans out of the discussion even though SUDs continued to affect them (including synthetic opioids like fentanyl). In fact, Black Americans tend to enter SUD treatment with more severe issues than white people, which is linked to a delay in seeking services due to economic barriers like lack of healthcare coverage. In 2020, the misuse rate of opioids was 4 percent in non-Hispanic Black Americans, similar to the national rate. About 70 percent of opioid-related overdose deaths among non-Hispanic Black Americans were from synthetic opioids in 2017, while 43 percent accounted for total drug overdose deaths. Opioid treatment medications like methadone are less accessible to Black patients and create barriers to care because they require daily monitoring appointments. Huthermore, opioid treatment programs have zoning restrictions that keep Black patients from accessing those appointments easily.

In response to the opioid epidemic, the ACA requires Medicaid expansion states to cover SUD treatment. 40 Non-expansion states rely on grants and temporary funding to fund services that Medicaid could cover. 41 Currently, Medicaid finances care for a large portion of patients with SUD. 42 This is especially important because it provides coverage and reduces access barriers for people of color who are more likely to not have access to mental health services and SUD treatment. 43 When Medicaid expansion began, the number of uninsured people with opioid-related hospitalizations decreased in expansion states from 14.3 percent in 2013 to 2.9 percent in 2015.44 Ensuring that SUD is included in the

RECOMMENDATION ONE

Congress needs to pass the Build Back Better legislation to expand Medicaid and make healthcare coverage more accessible to Black Americans. This legislation would close the coverage gap in the twelve non-expansion states by establishing federal financial assistance for people purchasing coverage from ACA's marketplace. Expanding Medicaid through the Build Back Better plan would ease access to care for people who have a difficult time getting to medical appointments because the plan will cover transportation costs for them. Additionally, a federal Medicaid program would be established, which would allow people in states without Medicaid expansion to gain access to coverage.

RECOMMENDATION TWO

Expansion of Medicaid should include coverage for substance use disorders (SUDs). As part of the expansion of Medicaid, a SUD program would support long-term recovery options and eliminate barriers to medication access and treatment. Expanding Medicaid to cover SUD treatment services would also reduce the number of annual grant programs and temporary funding sources to which non-expansion states must apply. Instead, the funding from the American Rescue Plan Act can be leveraged by states to cover community-based services that would not otherwise be covered, such as counseling, outpatient treatment, intensive outpatient programs, and peer support services. Continuing to improve SUD coverage is a key component of changing the trajectory of the opioid epidemic in the U.S., and Medicaid expansion could help change that.

The expansion of Medicaid should no longer be delayed because of state governments refusing to adopt Medicaid expansion. Instead, Congress should pass the Build Back Better legislation to expand Medicaid and provide healthcare coverage to Black Americans currently in the coverage gap. Additionally, including explicit coverage for SUD treatment within Medicaid expansion will help stymie the opioid epidemic, especially for the Black population. Acting on these recommendations will help lead to a more racially equitable healthcare system in the U.S.

²⁵ Nicole Rapfogel and Emily Gee, "The Medicaid Coverage Gap Requires Permanent Closure," Center for American Progress, September 3, 2021.

^{26, 27, 28, 29} Inna Rubin, Jesse Cross-Call, and Gideon Lukens, "Medicaid Expansion: Frequently Asked Questions," Center on Budget and Policy Priorities, June 16, 2021, https://www.cbpp.org/research/health/medicaid-expansion-frequently-asked-questions.

³⁰ $\,$ Dozier, "Build Back Better Policies Must Close the Medicaid Coverage Gap to Address Health Equity."

^{31, 32, 33} Jason Semprini and Olufunmilayo Olopade, "Evaluating the Effect of Medicaid Expansion on Black/White Breast Cancer Mortality Disparities: A Difference-in-Difference Analysis," ASCO, March 7, 2019, https://ascopubs.org/doi/full/10.1200/GO.20.00068

³⁴ Caitlin White, "Progress Against Opioid Epidemic Is Not Reaching Black Americans," Health City, February 8, 2021, https://healthcity.bmc.org/population-health/progress-against-opioid-epidemic-not-reaching-black-americans

³⁵ Sara Matsuzaka and Margaret Knapp, "Anti-Racism and Substance Use Treatment: Addiction Does Not Discriminate, but Do We?," Journal of Ethnicity in Substance Abuse 19, no. 4 (November 2, 2020): 567–93, https://doi.org/10.1080/15332640.2018.1548323.

^{36, 37 &}quot;The Opioid Crisis and the Black/African American Population: An Urgent Issue," Substance Abuse and Mental Health Services Administration, Publication No. PEP20-05-02-001 (2020).

^{38, 39} Caitlin White, "Progress Against Opioid Epidemic Is Not Reaching Black Americans."

 $^{40,\,41}$ Bailey, Hayes, Katch et al., "Medicaid Is Key to Building a System of Comprehensive Substance Use Care for Low-Income People."

^{42 &}quot;Tracking Federal Funding to Combat the Opioid Crisis," Bipartisan Policy Center, March 2019.

⁴³ Danilo Trisi, Alicia Mazzara, Sarah Lucck et.al., "House Build Back Better Legislation Advances Racial Equity," Center on Budget and Policy Priorities, September 27, 2021, https://www.cbpp.org/research/poverty-and-inequality/house-build-back-better-legislation-advances-racial-equity.

⁴⁴ Bailey, Hayes, Katch et al., "Medicaid Is Key to Building a System of Comprehensive Substance Use Care for Low-Income People."

⁴⁵ Jill Rosenthal, "Build Back Better by Advancing Better Health, Equity, Family Well-Being, and Economic Recovery," Center for American Progress, September 23, 2021, https://www.americanprogress.org/issues/healthcare/news/2021/09/23/504036/build-back-better-advancing-better-health-equity-family-well-economic-recovery/.

^{46, 47 &}quot;Build Back Better Legislation Would Close the Medicaid Coverage Gap."

⁴⁸ Brendan Saloner et al., "A Public Health Strategy for the Opioid Crisis," Public Health Reports 133, no. 1, (November 1, 2018): 24S-34S, https://doi.org/10.1177/0033354918793627.

 $^{49,\,50}$ Bailey, Hayes, Katch et al., "Medicaid Is Key to Building a System of Comprehensive Substance Use Care for Low-Income People."

