

Detailed Investment Types

These investment types below represent existing programs and concepts in California. However there are countless best practices, lessons learned, and case studies that can serve as a blueprint. Greenlining would like to see similar equity-centered programs replicated and scaled up across the nation in order to implement the American Jobs Plan.

1. Overarching Recommendations

- [Racial equity is not only a commitment, it is also a practice.](#)
 - As equity has become mainstream, the word is now used so often that it is beginning to lose its meaning. This has led to “fakeequity”—where equity is a stated goal, but not backed up by any strategy around how to ensure equity throughout the process, outcomes and evaluation. Additionally, many equity approaches fall short because they are siloed, half-baked or half-implemented. Greenlining’s Six Standards of Equitable Investment recognizes the larger equity implications beyond any one policy or program, and seeks to thread together the transformative components that communities need to thrive. Yet upholding these Six Standards is just the starting place -- they must be consistently embedded from start to finish throughout a policy or program. Greenlining’s Making Equity Real Framework adds layers of accountability to ensure that policies and programs center equity in their mission, process, outcomes, measurement and analysis. When combined together, the Six Standards of Equitable Investment and the Making Equity Real Framework create a practice for racial equity.
- Target at least 50% of the American Jobs Plan investments into low-income and communities of color.
- Include procedural equity provisions to ensure robust community engagement, particularly from vulnerable populations. Projects and programs in the American Jobs Plan should require community leadership, decision-making power and robust community engagement.
- Provide funding for capacity building and technical assistance.
 - Technical Assistance and Capacity Building
 - At least 10% of funds should be allocated for technical assistance and capacity building to support priority communities with the least resources and help ensure they have access to programs and funding opportunities. These funds may exceed 10% for priority communities if needed.
 - Advanced Payment
 - For grants awarded for projects that serve a vulnerable population, the administering state agency should provide advanced payment of at least 25% of the grant award to the recipient to initiate the project, and may maintain advance payments in increments of 25% of the award throughout project implementation.

- Include anti-displacement strategies for residents and small businesses.
 - Infrastructure investments in priority communities should not lead to unintended consequences, such as gentrification and displacement. Therefore, these investments must be accompanied by anti-displacement solutions that are driven by communities to ensure they are appropriate and relevant. As outlined on pages 55-58 of Greenlining's [*Making Equity Real in Climate Adaptation and Resilience*](#), some overarching strategies to avoid displacement of low-income households and small businesses include:
 - Production of affordable housing
 - Preservation of affordable housing
 - Tenant protections and support
 - Neighborhood stabilization and wealth building
 - Protections for small businesses
 - Business stabilization and wealth building

2. Clean Mobility Equity and Vehicle Electrification

Clean mobility programs that fund walking, biking, public transit, shared electric modes can not only help fight climate change and clean the air, they can improve mobility for residents of underserved communities, reduce traffic and dependence on cars, and be engines of economic empowerment that help reduce the racial wealth gap. At the same time, we need to prioritize investments that increase access to electric vehicles and charging infrastructure to the hardest to reach communities. The American Jobs Plan holds great potential to advance clean mobility and vehicle electrification. However it is critical that these programs are implemented with equity at its core. This is especially important because efforts to incentivize vehicle electrification such as California's Clean Vehicle Rebate Program and the federal government's Cash for Clunkers and the electric vehicle tax credit have not benefited underserved communities. Therefore, we must reinvent these types of investments that prioritized underserved people -- and not the technology or market transformation.

It is critical that we scale programs that comprehensively foster community-led mobility equity, such as the [*Sustainable Transportation Equity Project*](#), a grant that funds communities to weave together their desired investments across public transit, mobility, vehicle electrification and infrastructure, and more. Communities don't just need more train and bus stops, they also need safe sidewalks and bike lanes to access public transit. Those investments must be further complemented by workforce development opportunities and anti-displacement measures. Furthermore, we must promote federal and state interagency coordination and funding to maximize available resources for clean mobility investments and to target them to the people with the most barriers, such as the [*Clean Vehicle Assistance Program*](#). This equity program exemplifies that all vehicle electrification incentive programs must be in the form of grant or voucher, not a post-purchase rebate, so as not to create a financial barrier for low-income consumers. While in the short term, we should continue to provide clean vehicle incentives and charging infrastructure to the hardest to reach populations, eventually we must phase out all programs that continue to entrench our dependency on single-occupancy vehicles. The majority of the following example pilots and programs are highlighted in Greenlining's [*Clean Mobility Equity: A Playbook*](#) with key equity best practices, challenges, lessons learned, and recommendations to improve

them. These types of programs deploy innovative equity approaches and should be replicated and scaled up nationally through the American Jobs Plan.

- Equitable Electric Vehicle Incentive Programs
 - Clean Cars for All
 - The Clean Cars 4 All program enables low-income Californians in five air districts (San Joaquin Valley, South Coast, Bay Area, Sacramento, and San Diego) to replace older, polluting vehicles with cleaner ones with a voucher of up to \$9,500 and an optional home charger up to \$2,000. This program seeks to get low- and moderate-income drivers in disadvantaged communities out of old, polluting vehicles and into a zero- or near- zero emission vehicle (conventional hybrid, plugin hybrid or, battery electric).
 - Clean Vehicle Assistance Program
 - The Clean Vehicle Assistance Program is an equity-focused California statewide program providing grants and affordable loans to help low-to-middle income earners purchase clean vehicles at the point of purchase. In addition to providing grants to purchase conventional hybrid, plug-in hybrids, and full-battery electric vehicles, the program also offers two different charging grant options to meet a variety of needs: a Level 2 charging station installation for homeowners or a prepaid charge card for those who rent or live in multi-dwelling units.
 - Access Clean California
 - The Access Clean California -- formerly known as One-Stop-Shop and now commonly called ACCess -- is a centralized, streamlined website platform for low-income Californians to navigate and access the many complementary incentive programs under one simplified application. ACCess was created in response to the issue that low-income people were expected to learn about each incentive program separately, then figure out whether they were eligible for each, and finally complete multiple, time-intensive applications across different platforms. ACCess is also collaborating with an outreach network of trusted community partners to help do outreach and education to create awareness and improve participation in these programs from hard to reach communities.
- Electric Car Share Programs
 - BlueLA
 - This is an all-electric car sharing service that serves low-income communities of Los Angeles. It is supported by Blink Mobility, the City of Los Angeles, Shared Use Mobility Center, and committee of community-based organizations. The committee of community-based organizations was established to help design and implement a program that would serve their community and deliver equity outcomes.
 - Our Community Car Share
 - This pilot project is an electric vehicle car sharing service currently serving seven affordable housing sites located within disadvantaged and low-income census tracts in the Sacramento region. This program helps low-income families, seniors,

and people with disabilities access healthcare, grocery stores, employment opportunities, and recreational activities.

- Community-Driven Mobility Programs

- Sustainable Transportation Equity Project

- The Sustainable Transportation Equity Project (STEP) is a statewide project that funds two types of grants: 1) Planning and Capacity Building Grants to fund the groundwork to identify residents' mobility needs in disadvantaged and low-income communities, and 2) Implementation Grants to fund community-driven projects in disadvantaged communities that have been co-designed with residents to address their needs and historic inequities. Step requires the submission of a community needs assessment to ensure that project outcomes are community-driven, projects meet diverse local mobility needs across the state, and programs have high adoption rates.

- Car Sharing and Mobility Hubs at Affordable Housing Sites

- The Mobility Hubs in Affordable Housing pilot project is developing three mobility hubs at affordable housing sites in Oakland, Richmond, and San Jose. Depending on the specific needs of residents, the hubs will prioritize a selection of electric vehicle car sharing, bikesharing, e-scooter sharing, and transit passes to serve approximately 6,000 low-income residents.

- Clean Mobility Options

- The Clean Mobility Options Voucher Pilot Program is a statewide project that funds both planning grants and the implementation of projects such as zero-emission car sharing, carpooling, vanpooling, bikesharing, scooter-sharing, innovative transit services, and ride-on-demand services. Applicants for the program must demonstrate that the proposed clean mobility project is community-driven and based on direct engagement with community residents.

- Rural Mobility Programs

- Agricultural Worker Vanpool

- The Agricultural Worker Vanpool, operating as CalVans, has been transporting agricultural workers to and from their worksites and evolving their community relationships since 2001, and received funding to reduce emissions by deploying 15-passenger vans retrofitted with hybrid technology. CalVans is the only recognized agricultural worker transportation in the nation. Around 70% of the project fleet is deployed in California's San Joaquin Valley, with the remainder serving the Coachella Valley, Salinas Valley, Santa Maria, and the South Coast.

- Green Raiteros

- The Green Raiteros is a community owned mobility project that operates as an electric ridesharing program in Huron, California. Volunteer drivers use the program's electric vehicles on their own vehicles to drive fellow residents to access medical appointments or other services in exchange for a small fee. This program serves predominantly low-income Latino residents, many of whom are farmworkers in this rural region which suffers from some of the unhealthiest air quality in the country and high transportation costs.

- [Ecosystem of Shared Mobility](#)
 - The Ecosystem of Shared Mobility consists of three shared mobility services in rural communities in California’s San Joaquin Valley: 1) Electric vehicle car sharing, known as Miocar, located in affordable housing complexes in eight rural communities in Tulare and Kern counties; 2) a volunteer ridesharing service, known as VOGO, which supplements existing transit service in transport-disadvantaged rural areas in San Joaquin and Stanislaus counties; and 3) the Mobility as-a-Service (Maas) platform that allows planning and/or payment for fixed and demand-responsive transit service, including VOGO.
- [Lift Line Dial-A-Ride Paratransit Program](#)
 - This project replaced two existing gas-powered shuttles with two 16-seat electric vehicle shuttles that include wheelchair lifts. This program provides 60,000 door-to-door rides a year to 700 seniors and people with disabilities who live in disadvantaged communities.
- [School Mobility Programs](#)
 - [Clean Mobility in Schools](#)
 - The Clean Mobility in Schools is a statewide project that supports a broad range of strategies to reduce emissions and vehicles traveled in disadvantaged communities. This project’s mission addresses multiple community concerns, including advancing environmental education, fostering clean mobility behavior changes, and improving the school community’s air quality and public health. The project does this through funding zero-emission vehicles, active transportation, transit passes, zero emission landscaping equipment, and outreach and education aimed to familiarize the community with emerging clean technologies.
 - [School Bus Replacement Program](#)
 - The School Bus Replacement Program assists schools throughout low-income and disadvantaged communities in California in transitioning from old, polluting diesel school buses to zero or low emission vehicles. The program provides vehicle replacements, while also fueling infrastructure and workforce development and training. The School Bus Replacement Program aims at reducing child exposure to diesel exhaust by replacing old polluting school buses with zero or low emission vehicles.
- [Equitable Charging Infrastructure Deployment](#) - We offer the following equity focused guidance for the deployment of electric vehicle charging infrastructure.
 - Accessibility vs Deployment
 - [Through SB 1000](#) (Lara, 2018), The California Energy Commission (CEC) has released preliminary results addressing the issue of deployment vs accessibility. According to, “[Electric Vehicle Charging Infrastructure Deployment Assessment](#)” the CEC was tasked with “Assessing whether charging station infrastructure is disproportionately deployed...using parameters that include population income,

population density and geographical area to inform proportionate deployment of charging station infrastructure and guide the allocation of program funding for transportation solicitation”. The issue pertaining to deployment vs accessibility is one that Greenlining suggests be considered in the pursuit of equitable EVSE investment. While deployment data may point to the existence of charging infrastructure in disadvantaged communities, it does not present evidence that individuals who would be considered low income or people of color are the ones indeed accessing the infrastructure located in a disadvantaged community designated census tract. In other words, the deployment of charging infrastructure geographically may be perceived as equitable due to its location but may not be serving the priority populations.

- [Equity Metrics](#)

- It is necessary to consider additional data sets that speak to relevant deployment, public health, diversity, land use and climate change data when considering charging infrastructure deployment. Expanding data and creating flexibility to consider emerging data is particularly crucial for the multiyear intended decarbonization timeline as incorporating innovative and revisited information will ensure its success both technologically and socially. The following are suggested data sets that should be considered for future charging station projects.
 - The COVID-19 pandemic reached unprecedented and disproportionate infection and death rates in low income and communities of color across the US. As a result, it is important to acknowledge the link between transportation policy, disparate emission impacts, a lack of decarbonization investments in communities of color and the pandemic. Therefore we suggest the consideration of COVID-19 data in charging station deployment and investment allocations as an equity metric.
 - Land use, zoning, and climate change are essential to understand and embed current and projected climate induced landscape changes into transportation electrification plans. Using sea level rise data, flood maps, and climate projections that determine the future of our landscapes must be analyzed along with storm and fire risk data, particularly while working with utilities that have failed to protect residents during heatwaves and winter storms, and have authorized power shut offs during an already difficult global pandemic. Anticipating how our nation’s geography will change as a result of fire and flooding will better inform where to deploy infrastructure, where to allocate resources, which populations are most at risk and therefore in need of targeted investment.
 - Demographic changes and projections are crucial for equitable infrastructure accessibility especially on a zero emission multi year timeline. Understanding where populations are moving to, in the face of gentrification, economic and climate displacement, land use speculation

and the suburbanization of poverty will reveal *where* communities of color and low income residents will be by the time charging infrastructure is shovel ready.

- Medium and Heavy-Duty Electrification
 - Medium and heavy-duty fleets are an important sector of transportation electrification efforts and play a large role in our state’s air quality goals. As such, charging infrastructure investment should consider equity in the designation of medium and heavy duty fleet electrification and coordinate multi-state service area operations. An example of such coordination is the [CARB’s Advance Clean Trucks Rule](#), [Advanced Clean Fleets Rule](#) and the [Innovative Clean Transit Regulation](#).

3. Just and Equitable Transition From Fossil Fuels

Low income and environmental justice communities have less reliable service and less access to energy efficiency and clean energy technologies. Income and wealth gaps have left our communities with less money to cover our basic needs, and too many people are forced to make difficult sacrifices in order to keep the lights on. With the overlapping crises of COVID-19, many Americans cannot afford skyrocketing utility debt and increasing numbers of families are at risk of being deprived of lighting, heating and cooling needed for health and safety, and even evicted from their homes.

Affordable, fossil fuel-free energy can help address all of these challenges, but existing programs and policies often fail to target benefits toward the communities that need them the most. Communities of color must play a lead role in our transition to a clean energy economy—as beneficiaries, as decision-makers, and as the entrepreneurs and workers that will build our clean energy future. Greenlining’s [Equitable Building Electrification Framework](#) addresses the opportunities and challenges that electrification presents for low-income and environmental justice communities – many of whom are renters. Electrification can be a transformative force for low-income residents and it explains the steps the state must take to ensure that electrification helps close the clean energy gap across the U.S. and provides relief to millions of residents facing energy insecurity in the current system. The following California strategies and programs represent innovative equity approaches and should be replicated and scaled up nationally to implement the American Jobs Plan.

- Support utility debt forgiveness to ensure protection for low-income and vulnerable communities impacted by COVID-19.
 - Fund utility debt forgiveness for vulnerable households impacted by the COVID-19 crisis, including accessible debt forgiveness for undocumented ratepayers. Without cancellation of debt accrued during the pandemic, we will experience a wave of life-threatening disconnections.
 - For at least 12 months following the pandemic, eliminate all requirements for disconnected customers to pay arrearages in order to reconnect or maintain service.

- Instead, allow customers to participate in a debt relief program that is flexible and reasonable.
- All cost deferrals should be done in a longer-period time frame to ensure true economic relief for customers. Low-income customers should be exempt from all rate hikes related to cost recovery deferral. Prioritize energy efficiency investments within affordable housing to ensure increased bill savings and decreased greenhouse gas and air toxics emissions.
 - Invest in healthy homes and deep weatherization.
 - Ensure insulation materials used for weatherization and efficiency programs, are free of asthmagens and respiratory sensitizers (such substances should not be intentionally added or present at greater than 0.1 percent [1,000 parts per million] by weight in the product).
 - Jurisdictions seeking to enact zero net energy or zero net carbon local reach codes must create a working group of affordable housing providers and renters to seek input so as to not increase existing barriers to developing multifamily affordable housing units. Further as funds to construct and preserve affordable housing units are declining, all-electric code requirements must be passed with adequate technical and financial resources so as to not further exacerbate the affordable housing crisis.
 - Invest in climate adaptation and clean energy to build resilience especially for our most vulnerable communities.
 - Invest in clean, zero-emission, and community-led microgrids involving the integration of energy efficiency, renewable distributed generation, energy storage, and demand response technology delivery in low-income housing and community facilities to prepare for the upcoming wildfire season and protect communities disproportionately impacted by wildfires and power outages.
 - Establish an Economic Recovery EJ Multi-Family Resiliency Program
 - Although we believe the three aforementioned categories are important and can be implemented on their own we call for the creation of and investment in the Economic Recovery EJ Multi-Family Resiliency Program, which would fund the implementation of clean energy, energy efficiency, and energy resilience services for California's disadvantaged communities and vulnerable populations. This is one approach, but not the only approach to combine and implement the recommendations made above. This program would be funded by the remaining funds in the Climate Credit, but exempt CARE and FERA customers so they could continue receiving it. According to our estimates, this would provide approximately 1 billion dollars a year for much needed environmental justice and economic recovery programs.
 - These include solar and storage, home weatherization upgrades, microgrids and distributed energy infrastructure, and clean transportation options in buildings. The EJ Resiliency Program would expand the scope and funding of existing California energy programs—including the [Low-Income Weatherization Program](#), [Solar on Multifamily Affordable Housing](#), and [Self-Generation Incentive Program](#) — and ensure there is strong coordination between them to maximize benefits

for low income residents. The program will have strong workforce development standards and tenant protections to ensure that all the investments avoid causing unintended harm. Streamlining and expanding California's various energy services for environmental justice communities will provide numerous benefits including reduced energy costs; reduced greenhouse gas emissions; improved air quality; healthier and safer homes; and local, high-quality job creation in the clean energy economy.

4. Broadband

All Americans, regardless of income or ethnicity, deserve affordable quality, high-speed Internet. Yet unfortunately, many consumers have a chronic lack of high-speed broadband choices that are affordable and accessible -- this is particularly true for low-income communities of color and rural communities. Making high-speed Internet universally available and affordable will help families move up into the middle class, increase opportunity in rural communities, and increase the quality of life for all Americans. The following recommendations will help reach the goal of closing this [digital divide](#), as outlined in the American Job Plan.

- Designate a minimum broadband speed goal of 100 megabits per second download speed to guide infrastructure investments and program implementation to benefit all Americans.
- Foster collaboration with relevant local, regional, state, and federal stakeholders to support data aggregation and mapping efforts.
 - Tracking progress towards the adoption, access and affordability goals requires collecting data on those metrics. Therefore, the federal government should collect, analyze, benchmark, and publish detailed, market-by-market information on broadband pricing, availability, infrastructure, and competition, which will encourage competitive behavior (e.g., customers can compare pricing and choices in different markets). Internet service providers are often reluctant to provide detailed pricing data and the terms of service for many providers prohibit researchers from using online pricing data for research. There is a similar problem with broadband availability data, often one house in a census block has coverage but their neighbors may not, current practice means that the entire census block will count as "served" and therefore ineligible for broadband infrastructure funds. Transparent data from internet service providers will allow the U.S. to design and implement appropriate remedies when competition and affordability are lacking in specific areas.
- Promote open access and future-proofing in projects using public funds
 - The U.S. should use its public funds effectively. Currently [California's Advanced Services Fund](#) (CASF), provides grants to private operators to build out infrastructure and provides incentives for open access infrastructure. Federal broadband funding should do the same and require 100Mbps capability, upgradeable to 1Gbps and incentivize open access middle mile when providing grants. At a certain threshold of public investment,

these networks should have open access requirements – allowing competitors to lease capacity at reasonable rates to resell to consumers. Community receipt of CASF or other broadband funding should be contingent on removing unnecessary barriers to fiber deployment and promote “One Touch Make Ready” rules, building conduit during street repairs and removing rights-of-way access fees.

- Advance deployment and competition
 - Increase Access to Network Infrastructure
 - Access to broadband infrastructure—physical poles, wires, and conduit—is the first step to promote competition. Currently, a new provider that wants to attach equipment to a pole has to wait for every other company with an attachment on the pole to move their equipment to make space, creating massive delays and increasing cost. This is one example of how barriers to entry can reduce competition and discourage new providers from entering the market. “One Touch Make Ready” rules allow a single construction crew to make the necessary changes to poles and wires. The federal government should enact these “One Touch Make Ready” rules across the country to facilitate competition.
 - Facilitating faster access to network infrastructure
 - Competitive providers and communities consistently complain that obtaining the permits and approvals necessary to build out networks takes prohibitively long, both on the city and state level. Although some states and municipalities currently have rules regarding timeframes for processing these applications, these rules are not always observed, or protests from other stakeholders can reset the application process. The federal government can help streamline broadband infrastructure development by providing technical assistance and incentives for local governments to speed up permitting, increase staffing, or to create a separate division just for handling broadband issues and permitting.
 - Utilize existing utilities’ infrastructure to promote competition and advance deployment
 - Fiber optic cable is the standard now for modern communications networks. Large providers have no incentive to invest in their networks unless they face outside competition or a mandate to do so. To upgrade networks without a competitive threat reduces profitability and runs counter to what disciplined, profit-maximizing firms should do. Therefore, the federal government needs other ways to increase the availability of fiber and should incentivize states receiving broadband deployment funding to leverage their utilities and existing fiber infrastructure to quickly and cheaply increase broadband deployment.
 - Investor-owned utilities oftentimes connect more homes than either the cable companies or broadband companies. Further, the IOUs have the most extensive infrastructure and more than 30,000 miles of transmission line rights-of-way but do not consistently utilize this resource to provide broadband access. The federal government should direct states to work to utilize this infrastructure more effectively while ensuring ratepayers are properly compensated. Other countries embrace this model as well. For example, Mexico's national broadband plan

includes an investment in the Federal Electricity Commission to deploy wireless and fiber throughout the country's electric network. Similar policies in the U.S. would reduce the digital divide and increase broadband affordability.

- The federal government should direct states to work with investor-owned and municipal utilities to develop a business model that rewards them for building and selling fiber infrastructure on a wholesale basis to competitive providers like Wave, Sonic, Megapath, Google Fiber and others who can then sell to customers at a cheaper rate. In this model, the utilities and consumers will benefit from a secondary revenue stream while increasing broadband deployment and competition.
- Increase support for adoption programs that target outreach to underserved populations
 - The California Advanced Services Fund, provides grants for community organizations to provide digital literacy and broadband adoption programs that prioritize communities and populations that have the lowest broadband adoption rates. The federal government should provide grant funding for such programs on a nationwide level to ensure that lack of digital literacy does not impede adoption. These efforts should target populations that face the widest gaps, including communities of color, seniors and those with limited English proficiency or low educational attainment.

5. Climate Mitigation, Adaptation and Resilience

Climate resilience policies and programs must meet a triple bottom line of centering equity, meeting community climate resiliency needs and creating genuine economic opportunity, particularly for low-income communities of color and other vulnerable populations. This cannot be achieved by promoting a conventional approach to climate resilience that focuses almost exclusively on natural resources and tokenizes investments and policy for vulnerable populations. To make equity real in our climate fight, we must elevate the needs of low-income communities of color, ensure that we achieve meaningful and direct benefits to these populations, and invest more significantly in community-led transformations. Moreover, equity strategies require that investments build assets and wealth that lead to greater economic security and mobility, proactively enhancing the capacity of impacted populations and communities to participate in the clean energy economy. Based on California's lessons learned, we outline the following recommendations and types of programs that would help us to achieve this vision on a national level.

- [Affordable Housing & Sustainable Communities](#)
 - This program funds affordable housing developments and sustainable transportation infrastructure (i.e. public transit, sidewalks, bike lanes, bus shelters, etc.) to ensure that residents have access to jobs, education, retail, and other critical services.
- [Transformative Climate Communities](#)
 - This program advances community-led decision-making to address the needs of residents and achieve local transformation in California's most disadvantaged communities. Multiple emission-reducing services delivered in a coordinated way — like

affordable solar-powered housing with access to public transit and active transportation — can transform long-neglected neighborhoods into models of economic and environmental sustainability. Funding should support development and implementation of robust climate adaptation and resilience plans and projects that are community-driven and respond to community-identified needs.

- [Low-Income Weatherization Program](#)
 - This program helps ensure our residents' homes are healthy, clean, and structurally resilient. The Low-Income Weatherization Program (LIWP) offers housing retrofits such as improved ventilation, energy efficiency, weatherization, and hardening to support affordable and high-quality public housing units. In the context of COVID-19, air ventilation and filtration system upgrades offer the potential to reduce susceptibility to germs and the spread of disease. Other strategies to promote home-based resilience include offering financial support for air conditioning access and use to combat the health impacts of extreme heat as well as innovative insurance policies to finance pre- and post-disaster home repairs.
- [Urban and Community Forestry](#)
 - The Urban and Community Forestry program works to ensure all communities have access to green space and trees to support strong mental and physical health, reduce exposure to extreme heat, sequester carbon, and help with stormwater management.
- [Regional Climate Collaboratives](#)
 - The Regional Climate Collaboratives program builds the capacity of local communities to make the investments necessary to transition all of California to a climate resilient future. The collaboratives will assist in building community-driven leadership, knowledge, skills, technical assistance and resources to identify and access public funding for climate mitigation and adaptation projects.
- Community Resilience Centers
 - Funding for neighborhood-based essential service providers offering crisis response is needed to support the uninterrupted delivery of essential social and health resources and outreach services in response to the current pandemic. We recommend development of a federal grant program that offers funding to critical community institutions that provide emergency response services including senior and youth centers, park and recreation sites, libraries, health clinics, schools, food banks, community centers, emergency shelters, healthcare centers, nonprofits and places of worship. In order to protect communities from the additive and immediate threats anticipated from crises like wildfires, power outages, smoke waves, extreme heat, and evacuations, the community facilities should also be offered funding to secure additional resources and staffing to provide integrate delivery of emergency response services including clean backup power, drinking water, air purifiers / filters for clean air respite, cooling, food storage, shelter, telecommunications and broadband services, economic / emergency assistance, and other health protection measures. Community-based organizations and

community residents should be involved in governance and decision-making processes for development of the community resilience centers.

- Distributed Clean Energy Systems
 - Distributed clean energy systems (e.g., rooftop solar, storage, demand response, microgrids) are a powerful tool for reducing harm from power outages while at the same time improving air quality and offering economic savings. In the face of growing climate disasters like wildfires that result in power outages, this infrastructure is drastically needed for medically dependent residents, working-class communities, and community facilities. We urge the federal government to further invest and expand inclusivity of programs that deliver clean, zero-emission, and community-led microgrids that integrate energy efficiency, renewable distributed generation, energy storage, and demand response technology in low-income housing and critical community institutions (as defined above) to protect communities from wildfires and associated power outages.
- Invest in resilient workforce development and training
 - Ensure targeted training and hiring
 - Prioritize training for projects that provide high road training and employment opportunities, as defined by the California Workforce Development Board, to residents of disadvantaged communities, economically distressed areas, and vulnerable communities and individuals with barriers to employment. If American Jobs Plan funds any career pathway/training opportunities, we recommend funding be targeted to organizations that have demonstrated a track record of success in recruiting, developing soft skills, providing wraparound support services, training, and placing individuals in jobs that will be created by the bond.
 - Support homecare workers
 - Homecare workers such as in-home healthcare workers and personal care aides are on the frontlines of resilience for many of our most vulnerable populations including the elderly, disabled, and immuno-compromised. Significant measures should be taken to protect both homecare workers and their clients. Recommended actions include: training homecare workers to respond to disaster and emergency scenarios; leveraging the homecare workforce to help coordinate, facilitate, and communicate with local government and other community organizations; providing free health and safety supplies; improving wages and benefits; and guaranteeing paid sick leave.
 - Expand the public sector workforce
 - A larger and well-trained public sector workforce dedicated to resilience would strengthen communities and increase their capacity for a coordinated and effective emergency response. Recommended actions include: increasing staffing for public health, social services, community wellness, and emergency services departments; investing in workplace safety protections (e.g., personal protective equipment); developing protocols to ensure communication and coordination

between relevant government departments and community advocates; increasing workforce for frontline public health workers including social workers, public health nurses, community health nurses, counselors, and educators; and training public sector workers to respond to a variety of emergency and disaster scenarios.

6. Research and Development

We applaud the emphasis that the American Jobs Plan has on investing in research and development as a key strategy for advancing future technologies and an economy. Yet while research is a powerful tool to advance racial equity, progress remains stubbornly slow due to a multitude of structural barriers that prevent research from truly benefiting marginalized communities, and in some cases harming these communities. Even well-intentioned research practices can be nonreciprocal, tokenizing, extractive and culturally insensitive.

Greenlining's [Making Racial Equity Real in Research](#) report offers five key steps to creating equitable, partnership-based research:

1. **Understand** the context of racism in research in the past and present
2. **Review** the challenges, best practices, and opportunities available for centering racial equity in research
3. **Conduct** an internal equity assessment of your research institution, department, or team
4. **Partner** with and pay a community partner
5. **Co-create** the research questions and scope of work with a community partners

This report offers recommendations for a wide audience, including research funders, academic and non-profit research institutions, individual researchers and community partners. We recommend that the American Jobs Plan build in these equity components into the research and development strategies, to ensure that future technologies are developed and deployed in an inclusive, equitable manner.

Conclusion

These recommendations and programs are based on California's experience with developing and implementing a wide array of equity policies, programs, and pilots across sectors. Greenlining hopes to be a resource to other states and the federal government to advise how to replicate and scale similar programs across the country in order to implement the American Jobs Plan.