

Follow the Money

Are Historic Infrastructure Investments Going to California Communities that Need Them Most?

HIGHLIGHTS

A Union of Concerned Scientists analysis, using environmental justice screening tools, suggests that federal infrastructure investments in California may fall short of Justice40 Initiative goals. Those goals seek to ensure that investments benefit communities that are historically underserved, underinvested in, and overburdened by pollution. The analysis is based on grant awards in California during the first two years of federal Bipartisan Infrastructure Law spending. With three years of this funding remaining, more federal investments must reach the communities that need them most. The United States needs a transparent, unified Justice40 tracking system that includes decisions about critical state-agency allocations to ensure equitable federal spending.

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Executive Summary

Historic levels of federal infrastructure investments are providing once-in-a-generation opportunities to eliminate persistent environmental injustices. In the past, such investments have left out or even harmed low-income communities and communities of color. Since 2021 and amid the climate crisis, the federal government’s Justice40 Initiative has sought to reverse this pattern. It has set a goal that 40 percent of key federal investments benefit communities that have been marginalized, underserved, and overburdened by pollution. However, few, if any, systematic assessments of place-based progress toward Justice40 equity goals have been conducted.

To better understand where federal infrastructure investments are actually flowing, the Union of Concerned Scientists (UCS) has analyzed the first two years of Bipartisan Infrastructure Law (BIL) awards to communities in California. As the state with the most federal funding to date from the BIL, California represents a critical case for assessing progress toward Justice40 goals. It combines this historic level of federal funding with the state’s record of leadership in developing and using environmental justice screening tools to guide investments.

According to the analysis, local, non-transportation BIL investments in California may not be meeting Justice40 goals. The UCS spatial analysis assessed a subset of local BIL grants (241 awards) from federal fiscal years 2022 and 2023 in relation to two different environmental justice screening tools. Depending on the screening tool used, only 9.4 percent or 18.2 percent of the \$779.29 million analyzed is flowing to communities designated and prioritized as “Disadvantaged.”

Improved BIL tracking and reporting may reveal that investments are closer than our analysis indicated to the Justice40 goal of 40 percent. Most BIL funding analyzed was allocated to state agencies without specific information about where projects would be performed; thus, data limitations prevented detailed analysis of this funding. Improved transparency and additional analysis of formula funding and statewide awards are needed to better know what funding is flowing to prioritized communities.

The UCS analysis highlighted the need for greater clarity regarding Justice40 implementation goals, as well as improved tracking to ensure that these historic infrastructure investments advance equity. Most important, we recommend the creation of a transparent, trackable definition of “benefits” under Justice40, accompanied by a clear process and timeline for the government to assess Justice40 progress. Among the opportunities to improve existing tools for tracking federal investments, we recommend improving the tracking of formula funding and non-formula statewide awards. With better tracking, individuals, community-based organizations, advocacy groups, and agencies could assess the final destination of these funds.

The US Bureau of the Fiscal Service, which manages the public clearinghouse on federal spending, can play a key role in this effort. We encourage it to improve the database on public government spending to facilitate future Justice40 analyses with better place-based information and enhanced compliance by federal agencies on submitting and reporting data. With improved transparency and additional analysis, BIL infrastructure investments can realize the transformative potential of Justice40.

A three-year window remains to get billions of dollars in infrastructure investments to communities where they are most needed. Understanding where investments have gone so far—as well as who is benefiting from this generational infrastructure investment—can help ensure federal dollars transform past patterns of inequity.

Funding Environmental Justice

Under the 2021 Bipartisan Infrastructure Law (BIL), once-in-a-generation funding is flowing from the federal government to states, territories, Native American Nations, and other institutions. The BIL is the largest federal commitment to invest in infrastructure since the 1956 creation of the Interstate Highway System, which devastated many communities of color, compounded 1930s-era housing market discrimination via redlining, and further cemented systemic racism into our infrastructure systems (Bullard, Johnson, and Torres 2004; Avila 2014; Rothstein 2017; Archer 2021).

Today, there is cautious optimism that the Bipartisan Infrastructure Law will do things differently. One reason is the Biden Administration’s Justice40 Initiative. This commitment to climate and environmental justice established the goal that at least 40 percent of the benefits from certain BIL investments flow to communities that have been historically underserved, underinvested in, and overburdened by pollution (Executive Order No. 14008).

After two years of BIL spending, the Union of Concerned Scientists (UCS) analyzed federal BIL grant awards in California to understand the extent to which those awards are flowing to historically disinvested and overburdened communities, as well as to flag where more effort is needed. California represents a critical case for assessing progress toward Justice40 goals. It combines historic inflows of federal funding with the state’s leadership in developing and using environmental justice screening tools to guide investments.

Between 2021 and 2026, the BIL will invest nearly a trillion dollars in infrastructure, including roughly \$550 billion in new federal spending (Infrastructure Investment and Jobs Act, Public Law No. 117-58. 2021). As of early 2024, more than \$39 billion of BIL funding had been announced for California (White House 2024a). Our study provides an initial look at progress toward equitable investment goals in the state’s underserved and overburdened communities.

UCS analyzed the first two years of BIL awards to begin understanding whether the investments are contributing to Justice40 goals. We also wanted to characterize the challenges and opportunities of spatial analyses using publicly available data for a place-based equity analysis. The analysis was designed to address a gap in the understanding of Justice40 and BIL implementation, asking whether and how federal datasets can be used to understand progress toward equitable funding goals.

With three years remaining to move billions of dollars in infrastructure investments to priority communities that need it most, it is troubling that federal datasets lack sufficient detail for a comprehensive analysis of whether the funds benefit underserved and underinvested in communities. At this BIL midpoint, identifying gaps in or progress toward Justice40 goals can inform decisions intended to ensure that federal dollars eliminate past patterns of inequity.

A History of Inequitable Infrastructure Investments Motivates Justice40 Goals

Infrastructure spending and construction decisions have long marginalized and overburdened communities (Aiken 1987; Anderson 2008). Nationwide, the chronic lack of investment has earned critical infrastructure a dismal “C-“ grade from the American Society of Civil Engineers, indicating “mediocre, requires attention”—and California is no exception (ASCE 2019; 2021). Moreover, what federal funding has existed has not always adequately reached historically underinvested and overburdened communities (Mueller and Gasteyer 2023; Rempel, Fencl, and Community Water Center 2023; Hansen and Hammer 2022; Hansen et al. 2021). For example, the federal government has chronically underinvested in Indigenous peoples after having dispossessed them of much of their wealth (Dunbar-Ortiz 2014; Farrell et al. 2021; US Commission on Civil Rights 2018). Thus, critical scholars caution against assuming that today’s infrastructure investments will inherently translate into environmental justice (Gansauer et al. 2023). Unless the approaches and strategies of federal programs change, BIL funding risks perpetuating a pattern of disinvestment in already overburdened communities (Martín, Perry, and Barr 2021).

Acknowledging this history, the Biden Administration announced the Justice40 initiative in January 2021 (Executive Order No. 14008). The initiative seeks to ensure that at least 40 percent of the overall benefits of Justice40-covered federal funding programs flow to communities historically marginalized by disinvestment and overburdened by pollution (Young, Mallory, and Zaidi 2023; White House 2024b). Benefits are understood to mean “direct and indirect investments (and program outcomes) that positively impact disadvantaged communities” (GAO 2024a). However, no federal guidance provides a common understanding of or approach to measuring “benefits,” so interpretation of and accountability toward Justice40 goals remain unclear and inconsistent across federal agencies (Schott and Whyte 2023; Hoague et al. 2023; Siddiqi et al. 2023; GAO 2024a).

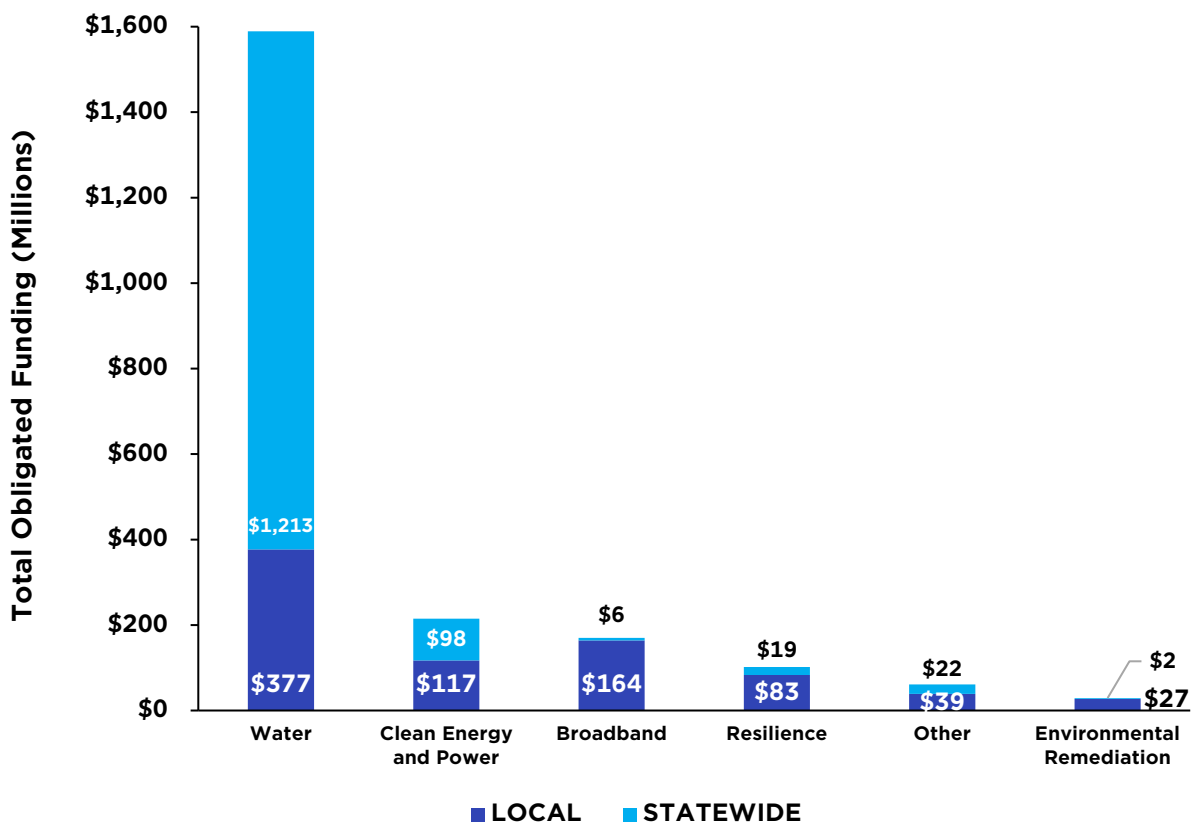
In the absence of common metrics for measuring Justice40 benefits, the first step in our study was to analyze the extent of obligated and promised BIL funding in communities prioritized for Justice40 goals. (We did not assess the extent to which award funds benefit the communities to which they appear to flow, an analysis that is not feasible at this time for many reasons, including lack of data, a definition of the benefits, and other factors.)

Enacted in November 2021, the BIL provides funding for many Justice40-covered investment areas and economic sectors, including clean energy, energy efficiency, critical water infrastructure, and remediating legacy pollution (White House 2023). A “covered” program under Justice40 means that the agency receiving funds intends for it to meet Justice40 goals. As of November 2023, the list of covered programs had grown to more than 500 (a list that could be an underestimate as agencies continue to add programs) (GAO 2024a). Moreover, given the all-of-government effort needed to address the climate crisis, our analysis reflects calls for a broader, more inclusive definition of Justice40-covered programs (Cohen et al. 2023). As such, we included both covered and uncovered Justice40 programs, recognizing the widespread extent of historic disinvestment across all critical infrastructure sectors, ranging from dams to internet access.

BIL Investments in California

UCS analyzed grant awards from federal fiscal year (FFY) 2022 and 2023 that designated a “place of performance” based in California.¹ The grant awards include awards in all sectors except transportation, which are tracked elsewhere (CSTA 2023). The 401 awards in our analysis total more than \$2.17 billion across six major sectors. They range from community-scale to statewide projects (Figure 1). Approximately \$805.75 million (37 percent) of the total funding analyzed has a local performance scope (253 awards); \$1.36 billion (63 percent) has a statewide scope (148 awards).

FIGURE 1. \$2.17 Billion in Analyzed BIL Awards, by Sector and Place of Performance



The 401 BIL awards to California in the UCS analysis, covering FFY 2022 and FFY 2023, are worth a total of \$2.17 billion; 148 awards are statewide in scope (\$1.36 billion) and 253 awards are local in scope (\$805.75 million).

SOURCE: BUREAU OF FISCAL SERVICE (2024A).

Of the 401 awards in this study, we were able to use spatial information associated with 241 local awards (\$779.29 million) to analyze investments in underserved and overburdened communities. Spatial analysis revealed which communities had received BIL funding and identified which had been designated as either historically disinvested in or overburdened by pollution per federal and state environmental justice (EJ) mapping and screening tools. To understand which communities received BIL funding, we linked the reported “primary place

of performance” for each local award (the county, city, zip code, or Tribal area) with the appropriate spatial information from the 2020 decennial census.

For more information on the analysis methodology, see the note at the end of this report and further details in the [Technical Appendix](#).

The White House Council on Environmental Quality built the Climate and Economic Justice Screening Tool 1.0 (CEJST), the first EJ screening tool used in our analysis, to support federal agencies in identifying Disadvantaged Communities as the agencies seek to meet Justice40 funding goals (CEQ 2022; Young, Mallory, and Zaidi 2023; White House 2022). The California Environmental Protection Agency (CalEPA) designed the second tool used in our analysis, to designate Disadvantaged Communities based on California Senate Bill 535 (de León), legislation that set a minimum investment goal for the state’s climate investments in Disadvantaged Communities (CalEPA 2023; 2022; de León 2012). The tools use different approaches to designating Disadvantaged Communities, but both integrate a range of social and environmental indicators to identify priority communities for investment.

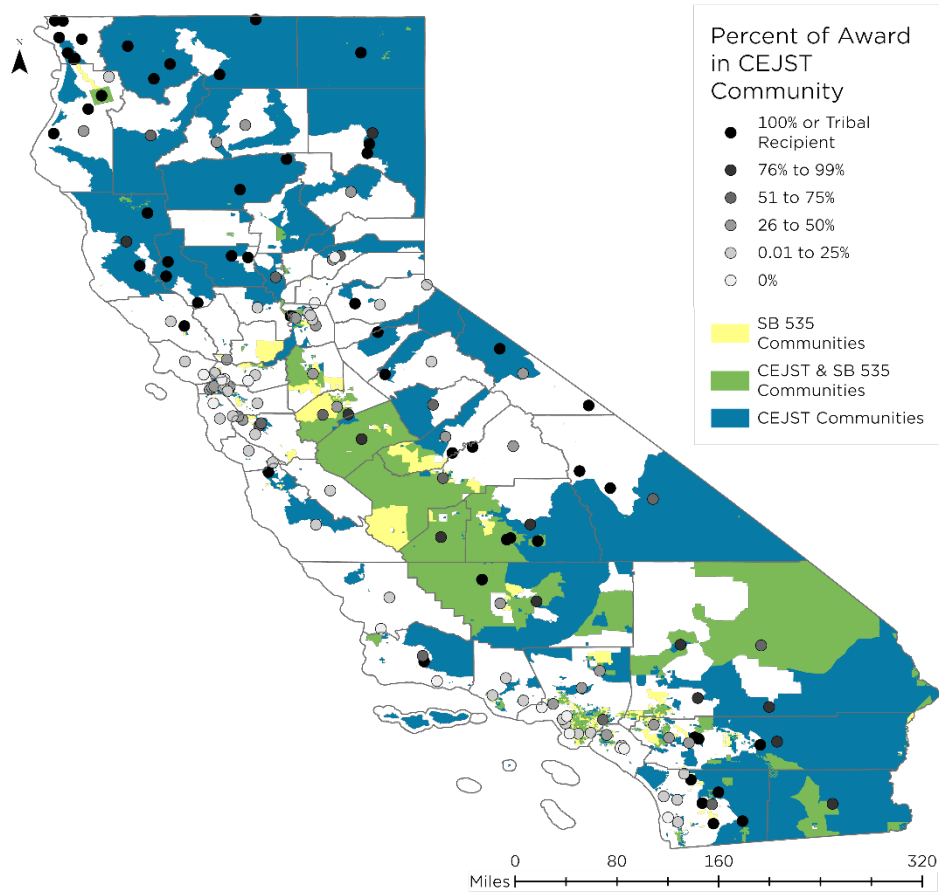
Both tools use the term Disadvantaged Communities to reflect the cumulative environmental, climate, and socioeconomic burdens associated with and experienced in those communities. That label emphasizes the burdens and harms experienced by the communities, perpetuating a framework centered on damage rather than reflecting either the systemic nature of injustice or communities’ strengths and assets (Tuck 2009; Horgan et al. 2024; Faiver-Serna 2021). Instead of Disadvantaged Communities, we primarily refer to these geographies as “CEJST Communities” and “SB 535 Communities.”

Infrastructure Investments in Underserved and Overburdened Communities

At the halfway point of BIL implementation, local BIL investments flowing into California may not be meeting Justice40 goals. Depending on which EJ screening tool we used, 9.4 percent (SB 535) or 18.2 percent (CEJST) of the \$779.29 million analyzed is flowing to priority communities designated as Disadvantaged. This finding is based on cases where the award’s geographic area overlaps 100 percent with census tracts designated as a Disadvantaged Community or where the award recipient includes a Tribal entity. While communities’ SB 535 designations are not associated with BIL Justice40 goals, our analysis suggests that the local awards analyzed may not be meeting Justice40 goals by either the federal or statewide measures (Figure 2).

Spatial analysis revealed where BIL funding is flowing but not who benefits; our analysis assumed that prioritized communities would be more likely to benefit where the percentage of overlap is greater. In some instances, an award’s benefits may flow away from its place of performance; alternatively, the benefits may accrue in only part of an award area. For this reason, we consider that awards with a spatial overlap of at least 75 percent with CEJST or SB 535 communities potentially contribute to equity goals. By this definition, 24.4 percent (per CEJST) or 20.9 percent (per SB 535) of the funding analyzed—a total of up to \$189.80 million—is flowing to an underinvested and overburdened community (Table 1).

FIGURE 2. Spatial Analysis of Local BIL Awards in CEJST Communities



The map shows the 241 local BIL awards analyzed with EJ screening tools. CEJST Communities (blue) cover larger areas and more population as Disadvantaged than do SB 535 Communities (yellow). The shading of the dot in this map is associated with each award and reflects the percent of its geographic area in a CEJST Community, from 0 percent overlap to 100 percent overlap or Tribal Recipient.

Note: BIL awards were assigned a category based on the spatial intersection with a CEJST Community, as well as recipient type. Award locations on the map are represented by a point at the center of the award's place of performance.

SOURCE: BUREAU OF FISCAL SERVICE (2024A); WHITE HOUSE (2022); CALEPA (2022).

Apparent differences in the total funding flowing toward underserved and overburdened communities arise because the tools use different criteria to identify communities (i.e., census tracts) as Disadvantaged:

- CEJST uses a threshold approach: Disadvantaged tracts score at or above a certain percentile in at least one of eight “burden” categories.² It creates burdens by combining socioeconomic indicators with indicators like proximity to a Superfund site (CEQ 2022). CEJST does not account for cumulative burdens, nor does it encourage users to consider a census tract that surpasses all eight burdens as more disadvantaged than a tract that only surpasses one or two.

- SB 535 relies heavily on CalEnviroScreen’s determinants of cumulative impacts, combining pollution burdens and population characteristics (CalEPA 2022). CalEnviroScreen assigns an overall score to each census tract to reflect cumulative impacts experienced; SB 535 uses this to designate a subset of tracts as Disadvantaged.³

TABLE 1. Spatial Analysis Results of Local BIL Awards in CEJST and SB 535 Communities

Percent of Award Area in a Prioritized Community	CEJST Communities		SB 535 Communities	
	Total Funding	Percent of Funding	Total Funding	Percent of Funding
100% or Tribal Recipient	\$141,897,316*	18.2%	\$73,049,565	9.4%
76% to 99%	\$47,902,514	6.2%	\$90,114,842	11.6%
Subtotal	\$189,799,830	24.4%	\$163,164,407	20.9%
51 to 75%	\$180,381,642	23.1%	\$39,140,762	5.0%
26 to 50%	\$149,875,543	19.2%	\$83,621,419	10.7%
0.01 to 25%	\$208,069,005	26.7%	\$376,596,339	48.3%
0%	\$51,159,406	6.6%	\$116,762,499	15.0%
Total	\$779,285,427	100%	\$779,285,427	100%

*The total funding amount includes awards to Tribal Recipients with less than 100% of the award’s area in a CEJST Community, such that \$43.41 million would not have contributed to funding goals if we solely relied on a spatial analysis.

SOURCES: BUREAU OF FISCAL SERVICE (2024A); WHITE HOUSE (2022); CALEPA (2022).

CEJST uses federal data and designates a larger portion of California as Disadvantaged (3,081 census tracts); it includes 14.9 million people or 38 percent of Californians. SB 535 relies on state-level criteria and ultimately designates fewer tracts for prioritized state funding (2,310 tracts): 11.3 million people or 29 percent of the population (White House 2022; CalEPA 2022). Both CEJST and SB 535 prioritize census tracts on land within the boundaries of federally recognized Tribes regardless of how the respective methodologies may rank that tract. Differences in inclusion criteria, as well as how those criteria affect the number of designated census tracts, explain Table 1’s wide range in values between the two tools. Subsequent results focus on CEJST analysis only, given the federal reliance of Justice40 on using CEJST.

The percentage of funding flowing to CEJST Communities varies across the type of grant recipient. Recipients include nonprofit organizations, for-profit companies, local and state agencies, and Tribal governments, among others. Of the \$207.14 million in local awards to state agencies, we did not find any funding flowing to CEJST Communities. Nonprofit organizations together had 26 percent of their overall funding in a CEJST Community compared with 16 percent for for-profit recipients and 13 percent for local governments. Awards to nonprofits support such activities as habitat conservation, cultural resource management, and natural resource stewardship. Most of the \$30.53 million in local government awards went to water agencies, irrigation districts, and a few cities through the federal Bureau of Reclamation’s WaterSmart (CFDA 15.507) and Emergency Drought Relief (CFDA 15.514) programs.⁴ Our analysis precluded detailed assessment of whether local government funding, such as awards to irrigation districts, is flowing toward agribusiness

interests served by the district or to low-income farmworker communities living in and around the districts (Dobbin 2020; Dobbin et al. 2022).

Federally recognized Tribes are underserved and underinvested in by the federal government, warranting prioritization for Justice40 implementation (GAO 2024b; US Commission on Civil Rights 2018). Awards to federally recognized Tribal recipients represented more than a third (37 percent) of all funding flowing to underserved, underinvested in, and overburdened communities in California. Forty federally recognized Tribal recipients received \$71.01 million in grants from 21 funding programs. The Tribal Broadband Connectivity Program at the Department of Commerce was the source of almost half this funding (\$30.88 million). The 40 awards to Tribal recipients (\$43.41 million) would not have contributed to Justice40 goals in this report had we relied solely on a spatial analysis; these awards contributed to Justice40 goals based only on the recipient type.

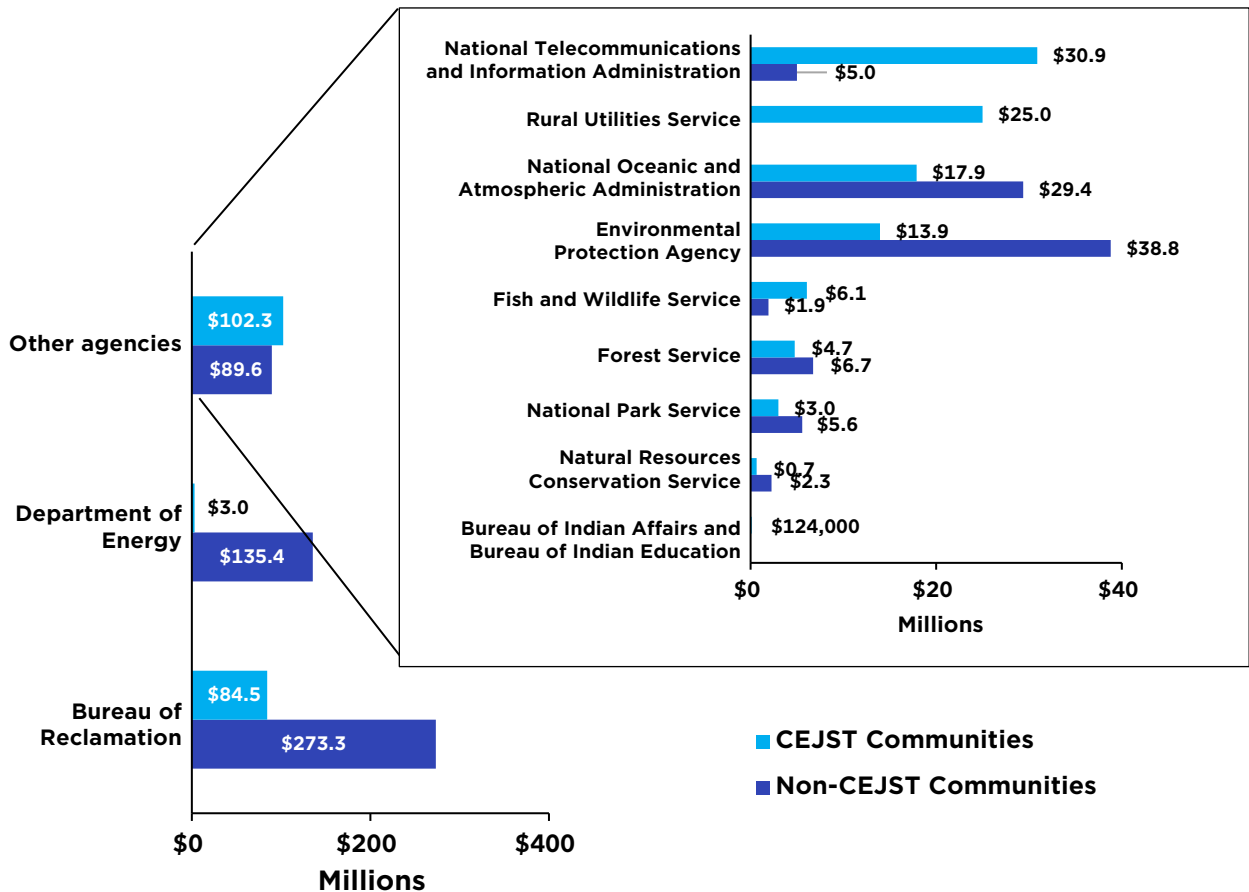
Federal programs that are specifically designed for, or with explicit set-asides for, Indigenous peoples are critical mechanisms for more equitable federal investing generally, and for more progress on Justice40 specifically. However, tools like CEJST have limitations, especially around lands with significance to Indigenous people (Mullen, Whyte, and Holified 2023). CEJST does not comprehensively include Native Americans' ancestral territories and excludes Indigenous communities without federal recognition status. Yet given the history of federal dispossession and underinvestment, Indigenous communities certainly warrant priority consideration for federal infrastructure funding (US Commission on Civil Rights 2018).

To understand whether and how federal grants reach CEJST Communities, we assessed funding differences across federal agencies. The Biden Administration reports on Justice40 progress through an Environmental Justice Scorecard that documents whether agencies have modified programs to improve funding access (OMB and CEQ 2024a; GAO 2024a), although the scorecard does not show whether funding programs are contributing to Justice40 goals. Our analysis found that five federal agencies accounted for most of the \$189.80 million in BIL funding flowing to California CEJST Communities (Figure 3):

- The **National Telecommunications and Information Administration** manages the Tribal Broadband Connectivity Program, a key source of funding for Native Americans.
- The **USDA's Rural Utilities Service** awarded nearly \$25 million to the Cal-Ore Telephone Company for broadband infrastructure in Siskiyou County, a rural and low-income county.
- Across three programs, the **National Oceanic and Atmospheric Administration** (NOAA) granted \$17.88 million that is flowing toward CEJST Communities, mostly for habitat conservation (CFDA 11.463). NOAA has competitive funding programs explicitly set aside for Native American Nations (OMB and CEQ 2024b).
- The **Environmental Protection Agency (EPA)** granted \$13.94 million to CEJST Communities, primarily because the EPA obligated \$9.15 million in water-sector grants and \$3.48 million in environmental remediation grants for Native American Nations.
- The **Bureau of Reclamation** awarded \$4.42 million in WaterSmart (CFDA 15.507) grants to recipients in CEJST Communities. The bureau recently modified its WaterSmart criteria so it now evaluates grants to “encourage projects that will directly

benefit disadvantaged communities and support climate change resiliency” (OMB and CEQ 2024b). Other bureau programs may be more successful in contributing to Justice40 goals. For example, 45 percent of Emergency Drought Relief Awards flow to CEJST Communities (CFDA 15.514).

FIGURE 3. Federal Agency Grants to CEJST Communities vs. Other Communities



The UCS analysis estimated that 11 federal agencies obligated \$189.80 million that flows to CEJST Communities (24.4 percent) compared with \$589.49 million going to other communities for FFY 2022 and FFY 2023. This figure includes awards identified as flowing to CEJST Communities (>75% spatial overlap with a CEJST Community or Tribal recipient). The Bureau of Land Management, Federal Emergency Management Agency, National Institute of Food and Agriculture, and National Institute of Standards and Technology are not displayed here. These agencies had none of the \$91.1 million analyzed going to CEJST Communities.

SOURCE: BUREAU OF FISCAL SERVICE (2024A).

Statewide Awards and the Role of State Agencies in Justice40 Implementation

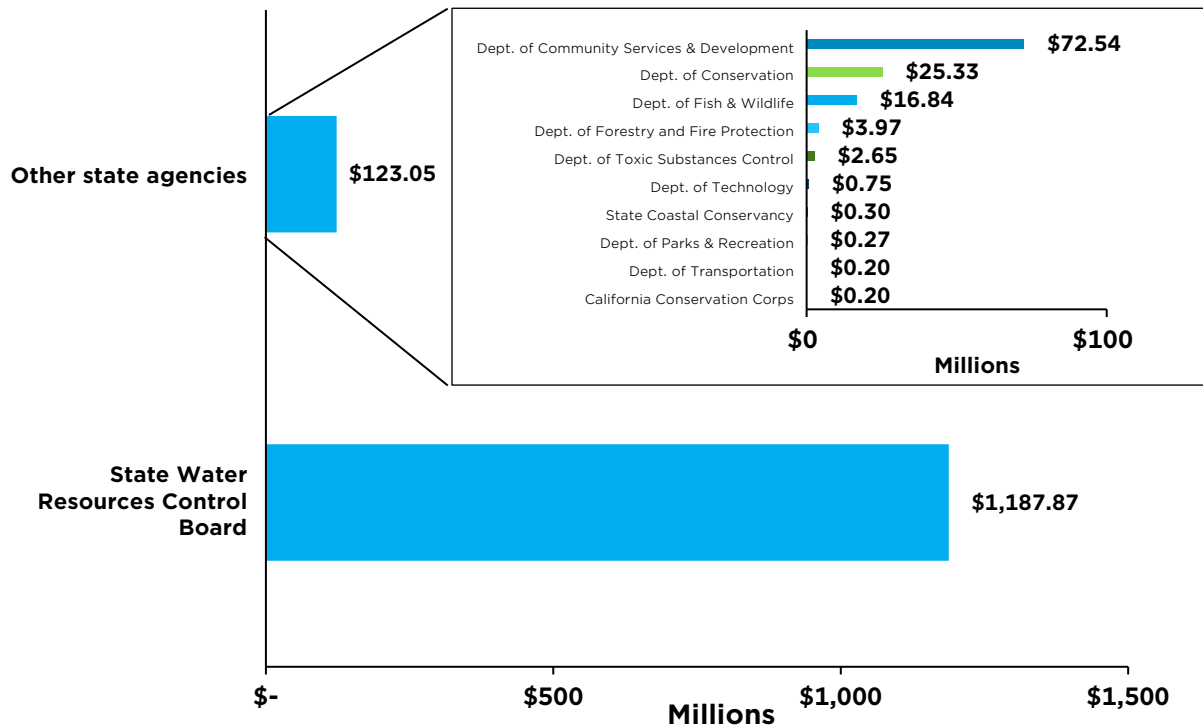
Awards with a statewide place of performance (148 awards) sum to more than \$1.36 billion in grants (63 percent of the total dollar amount analyzed). As noted, we excluded these awards

from the spatial analysis using EJ screening tools because there is insufficient information to understand where award activities occur and whether they occur in prioritized communities. California state agencies control more than 96 percent of this funding; thus, the state has significant control over whether funding flows to CEJST Communities.

The type of award structures whether state agencies allocate funding to localities or retain and administer it as statewide projects. “Formula” programs constitute most of BIL funding, meaning a federal agency uses a formula to allocate funds to Tribal Nations, states and local governments, with limited allocations set aside for direct spending by the agency. Many of the awards to California agencies with a statewide performance scope are either formula grants (\$1.25 billion) or block grants (\$9.89 million). Several state agencies have project grants (\$48.81 million) and cooperative agreements (\$1.70 million) that also report a statewide performance scope.⁵ Together, state agency spending and allocation decisions are critical to ensuring equitable BIL spending and should be tracked. However, publicly available federal data prevent systematic analyses of whether these types of awards flow to CEJST Communities.

For FFY 2022 and 2023, the California State Water Resources Control Board (State Water Board) received most of the statewide funding in our analysis—87 percent or \$1.19 billion—from the US EPA to fund two programs: the Clean Water State Revolving Fund (SRF) and the Drinking Water SRF (Figure 4). Ten agencies will implement the remaining \$123.05 million in statewide awards; most of this funding is in the Clean Energy and Power sector (\$97.87 million). Certain programs run by state agencies specifically name a beneficiary population that would qualify as Disadvantaged—for example, \$72.5 million in weatherization assistance (formula grant) and home-energy assistance (block grant) programs distributed by the California Department of Community Services and Development to low-income households. Such awards would likely meet Justice40 goals; state agencies with BIL grants specifically for CEJST Communities could be communicating progress made toward state and federal funding equity goals.

FIGURE 4. Grants to State Agencies with Statewide Places of Performance



In FFY 2022 and FFY 2023, California state agencies received \$1.31 billion in awards with a statewide place of performance. Ten state agencies are responsible for implementing \$123.05 million in BIL grants. The State Water Board is responsible for implementing 87 percent of federal BIL funding to California state agencies, which is why the UCS analysis includes additional analysis of the board’s programs.

SOURCE: BUREAU OF FISCAL SERVICE (2024A).

Understanding Statewide Formula Awards at the Local Level: State Revolving Funds

Given the preponderance of BIL money with the State Water Board, we examined the funding flowing to Clean Water and Drinking Water State Revolving Fund programs more deeply, in part using data we requested from the State Water Board.

The US EPA provides SRF formula grants to states, territories, and Tribal agencies to capitalize revolving loan funds, while the states administer the actual loans and grants through agencies like California’s State Water Board. States have a fair amount of discretion in how they spend the SRFs, and they place differing levels of priority on ensuring equitable investments (Hammer and Olsen 2024). Most of the SRF award is allocated by the SRF recipient for local infrastructure projects (Hansen et al. 2021), with a smaller portion of the award held as a “set-aside” by the recipient, usually for administering the SRF. The BIL provides supplemental funding to five SRF programs for water infrastructure projects (Fox 2022) (Box 1).

BOX 1. BIL Supplemental Funding to State Revolving Funds

Through the BIL, the EPA has \$50 billion to strengthen drinking-water and clean-water infrastructure nationally between 2021 and 2026. This is the single largest federal investment in this type of water infrastructure (EPA 2024). The SRF programs are part of the EPA’s progress toward Justice40 goals. Official guidance on BIL implementation explains that “a key priority of BIL is to ensure that Disadvantaged Communities benefit equitably from this historic investment in water infrastructure” (Fox 2022).

The BIL requires that at least 49 percent of certain BIL supplemental SRF funds be awarded as grants and forgivable loans (principal forgiveness) to Disadvantaged Communities (DACs), as indicated below, and it instructs states to define DACs in alignment with statute (EPA 2022; Husain and Scanlan 2022). The guidance also indicates an expectation that SRF recipients offer more than the subsidization BIL is funding; recommending additional benefits like lower interest rates, or extended loan terms while acknowledging variation in the amount of SRF assistance directed to DACs historically (Fox 2022).

Five SRF programs have BIL supplemental funding:

- Clean Water SRF General Supplemental Funding;*
- Clean Water SRF Emerging Contaminants Funding;**
- Drinking Water SRF General Supplemental Funding;***
- Drinking Water SRF Emerging Contaminants Funding;****
- Drinking Water SRF Lead Service Line Replacement Funding.***

* 49 percent of funds must be provided as grants or forgivable loans to certain recipients or project types.

** 100 percent of funds must be provided as grants or forgivable loans.

*** 49 percent of funds must be provided as grants or forgivable loans to DACs.

**** 100 percent of funds must be provided as grants or forgivable loans and at least 25 percent of funds must go to small DACs of fewer than 25,000 people.

SOURCES: FOX (2022); US EPA (2022B).

The California State Water Board’s Intended Use Plans document the investment plans for SRF programs. Both the Drinking Water and Clean Water SRF Intended Use Plans (IUPs) reflect an agency priority to fund Disadvantaged Communities, and particularly small DACs (CSWRCB 2023a; 2023b). This alignment between state and federal goals is indicative of the state’s commitment to meeting federal Justice40 goals with the BIL supplemental SRF awards. As a state, California legislatively recognized the human right to water in 2012, and the State Water Board adopted a resolution to make the human right to water a primary consideration in decision making in 2016. Ensuring safe and affordable drinking water for all Californians is a core value. The State Water Board annually assesses needs and progress toward the human right to water, identifying at risk and failing systems for priority intervention (CSWRCB 2023c).

The Intended Use Plans and BIL requirements suggest that the SRFs could very well be prioritizing awards to Disadvantaged Communities; thus, we requested data from the State Water Board to further investigate. The board provided information for \$1.01 billion of its FFY 2022 and FFY 2023 awards from the EPA; this reflects 86 percent of the \$1.19 billion of BIL

supplemental funding obligated to it. The remaining 14 percent, absent from the data, reflects \$169.11 million for Emergency Contaminants Funding focused on small DACs specifically and \$4.41 million for the State Water Board and the Regional Water Quality Control Boards to fund the agencies' programs to manage water quality. According to the State Water Board, the \$169.11 million has yet to be allocated, as it awaits authority from the California legislature to spend these funds.

Federal funding requirements influence how the State Water Board makes funding decisions among its assistance-portfolio options. For DAC-designated priority systems, California can draw from several funding sources, many of which are more flexible than SRF money. The Safe and Affordable Drinking Water Fund, which provides up to \$130 million per year for ten years, focuses on small DACs and low-income households. Additionally, the State Water Board received a large state General Fund allocation in 2022 and 2023, which it prioritized for DAC water system assistance (CSWRCB 2023d). In recent years, the State Water Board has prioritized using these state funds (e.g., general obligation bonds, general fund appropriation) for projects in DAC-designated communities, because SRF funds include federal requirements that are often costly and difficult for small DACs to implement. Moreover, while SRF programs may seek to prioritize projects for DACs, complete applications that can use the SRF award right away for “shovel-ready” projects get processed faster.

The combination of these factors means that non-disadvantaged communities may be receiving BIL awards sooner in the first few years of the BIL SRF funding. However, we were not able to assess project-level State Water Board SRF formula-award spending in a comparable way to the federal award data.

As non-SRF state grant funds become fully committed, the State Water Board will rely increasingly on BIL SRF principal-forgiveness funds to be the primary source of affordable financing for small DACs. Such funds, as outlined in Box 1, are the primary way in which the State Water Board will meet Justice40 goals for its BIL awards. As the State Water Board signs binding commitments with SRF recipients, each award liquidates over several years as the recipient incurs costs for its project activities. Projects may take several years to construct, with the State Water Board gradually reimbursing costs incurred throughout the process. Thus, we anticipate ongoing SRF progress toward Justice40 goals, although the lack of systematic and transparent tracking of local formula award beneficiaries impedes a comprehensive Justice40 assessment.

Recommendations

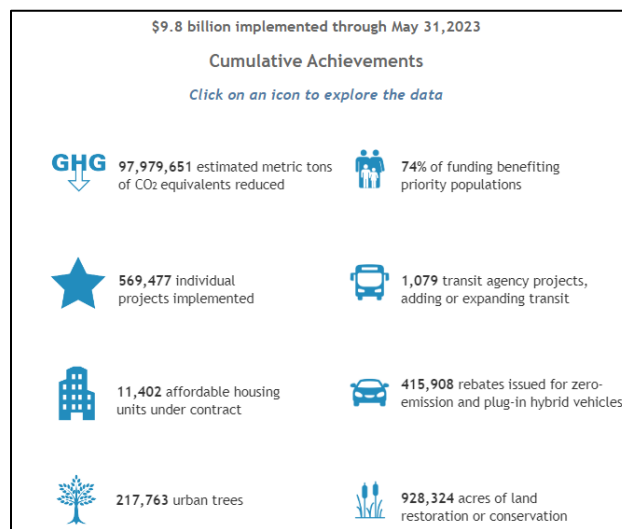
The UCS analysis reveals the need to improve the tracking and assessment of federal infrastructure investments to meet equitable investment goals:

- A transparent, trackable definition of award “benefits” would help ensure that the United States meets Justice40 goals. A clear definition would make it possible to track progress. Without a clear definition, analyses are limited, and we risk missing opportunities to redress past harms from historically uneven infrastructure investments.

- The United States needs better tools to track formula funding to state governments, as well as improvements to the publicly reported federal spending data provided by the Department of Treasury’s Bureau of the Fiscal Service via USASpending.gov.

Because most BIL funding flows to state governments via formula funding, federal agencies need to ensure that states prioritize projects and decisionmaking processes in ways that advance Justice40 goals (Martín, Perry, and Barr 2021). We recommend using proven, state-level tracking tools as a template for a transparent, unified system that helps community members, community-based organizations, and advocacy groups to ensure that Justice40 goals are met. An example is California’s Climate Investments (CCI) dashboard (Figure 5).

FIGURE 5. The California Climate Investments Dashboard



The California Climate Investments dashboard provides clear, easy-to-access information about expenditures from California’s Greenhouse Gas Reduction Fund, including the total funding, number of projects, and beneficiaries. This is a proven tool that could provide a template for a transparent, unified system for helping ensure that Justice40 goals are met.

SOURCE: [HTTPS://WWW.CACLIMATEINVESTMENTS.CA.GOV/CCI-DATA-DASHBOARD](https://www.caclimateinvestments.ca.gov/cci-data-dashboard).

This suggestion echoes recommendations of the White House Environmental Justice Advisory Council that point to California’s SB 535 and the CCI program as examples from which to learn (WHEJAC 2021; 2022). That said, the use of tools like SB 535 and CalEnviroScreen is not immune to critique (Huynh et al. 2024; Horgan et al. 2024); we offer them as examples of an approach to linking explicit benefit assessment to transparent, public communication about progress—information that is currently lacking for Justice40. Federal agencies should expand their dashboards for tracking BIL implementation to communicate progress toward Justice40 goals and account for state redistribution of funding (EPA OIG 2024a; GAO 2024a). Ultimately, answering questions about where funding flows and who benefits requires coordinated monitoring and reporting at multiple levels.

In addition, complete, accurate accounting is a prerequisite for ensuring that the public and policymakers have access to transparent data on federal spending. Transparent tracking is necessary to ensuring that priority communities benefit from public infrastructure investments. To support this, the US Bureau of the Fiscal Service should improve USASpending.gov:

- Expand and improve guidance for the “place of performance” field. The current four options (statewide, countywide, citywide, and single zip code) are not inclusive of Tribal areas. Reported places are not always consistent with other award variables like recipient name.
- Review non-formula awards that indicate a statewide place of performance to ensure benefits accrue statewide.
- Request a Disaster Emergency Fund (DEF) Code to track Inflation Reduction Act investments in USASpending.gov. The DEF codes for BIL awards made this UCS analysis possible, but such codes do not yet identify Inflation Reduction Act awards. Transparently tracking investments under each historic federal financial commitment to climate resilience and clean energy could demonstrate progress toward Justice40 goals.

Finally, the Bureau of the Fiscal Service should hold federal agencies accountable for both submitting data to USASpending.gov and meeting expectations for reporting and compliance. Many agencies currently fall short (GAO 2023). The EPA’s internal watchdog recommended improved oversight and reviews to help ensure that BIL investments are not wasted (Carey-DiGregorio et al. 2024), and it urged the agency to improve its process for submitting funding data to USASpending.gov (EPA OIG 2024b). The Executive Office of the President should work with the Office of Management and Budget and the Bureau of Fiscal Service to adopt necessary changes that would accommodate the tracking and submission of estimates of Justice40 benefits to CEJST Communities (GAO 2024a). This would enable Justice40 analyses to use USASpending.gov data more readily.

The Next Three Years

California stands to continue as the beneficiary of the largest amounts of BIL funding due to its size and eligibility for formula awards. It is incumbent on the state to lead by example and ensure that federal funding flows to historically underinvested and overburdened communities. However, at the halfway point of BIL implementation, our findings suggest that local BIL investments flowing into California may not be meeting Justice40 goals. Our spatial analysis suggests that just 24.4 percent (per CEJST) or 20.9 percent (per SB 535) of analyzed local award funding—far short of the 40 percent goal using either tool—is flowing to historically underinvested and overburdened communities.

History shows that government investments are at high risk of being maladaptive to climate change when they fail to center equity and justice. Thus, achieving Justice40 goals for BIL spending are critical to our collective ability to adapt to climate change. As climate change renders aging and failing infrastructure systems increasingly obsolete, the federal government must have guardrails, tools, requirements, and metrics in place. Only then can public infrastructure investments withstand the mounting pressures posed by climate change

(Rogers Gibson 2017). Justice40 goals for BIL spending are critical to the equitable allocation of public funds and climate justice.

Improved tracking and transparency for formula funding and statewide awards may reveal that the United States is closer to meeting Justice40 goals than our analysis indicates. While the CEJST Community analysis excluded awards with statewide performance scopes, those investments represent important opportunities for meeting equitable funding goals. As such, state agencies are essential partners in the equitable allocation of federal funds. Reporting and tracking tools for federal spending must be transparent, accessible, and publicly available to ensure that low-income and underserved communities are prioritized. State agency decisions will affect whether Justice40 goals are met and surpassed in California.

A three-year window remains to invest billions of infrastructure dollars where they are most needed. Understanding where investments have gone so far—as well as who is benefiting from this generational infrastructure investment—can help federal dollars transform past patterns of inequity.

A Note on Methodology

To identify whether BIL funding is reaching communities that state and federal governments have prioritized as historically overburdened and underserved, we used spatial-analysis techniques to examine a subset of BIL awards in California. We analyzed BIL prime-award grant listings from the US Department of the Treasury for FFY 2022 and FFY 2023 (Bureau of the Fiscal Service 2024b). Our analysis focused on awards with a place of performance in California, for which we assessed the total obligated amount.⁶

Over this period, California received \$18.25 billion in obligated funding from 2,324 prime awards designated as receiving BIL funding. While this funding mostly targets transportation, the state already tracks BIL investments in that sector (CSTA 2023). We focused instead on the \$2.17 billion of non-transportation BIL awards (n = 401); specifically, we focused on the \$779.29 million across 241 awards with a local place of performance that we could link to census-designated geometries (zip code, city, county, Tribal areas).⁷

To analyze where funding is flowing, we examined whether these 241 awards were being implemented in prioritized communities, as designated by two environmental justice screening tools: the federal White House Climate and Economic Justice Screening Tool version 1.0 (White House 2022) and the California-specific SB 535 Disadvantaged Communities list, which derives partially from CalEnviroScreen (CalEPA 2022). Each tool identifies a set of Disadvantaged Communities prioritized for investment; we refer to these as CEJST Communities and SB 535 Communities.

To assess which BIL awards are being implemented in CEJST or SB 535 Communities, we intersected the 241 award geometries with CEJST and SB 535 geometries (census tracts and Tribal areas), and then calculated the percentage of each award's area overlapping with CEJST Communities and SB 535 Communities. BIL awards were assigned to one of six categories based on the portion of intersection and the recipient type. The categories were 0 percent intersection, 0.01-25 percent, 26-50 percent, 51-75 percent, 76-99 percent, and 100 percent or Tribal Recipient. BIL awards to Tribal Recipients were designated as flowing to priority communities (the "100 percent or Tribal Recipient" category) to align with CEJST's

inclusion of federally recognized Tribal areas in its designations, independent of the results of any spatial analysis.

To assess progress toward equitable-funding goals, we adopted the California-based CCI program assumption that the “investment minimum” or goal applies to the whole investment portfolio (CalEPA 2023). Thus, for the Justice40 goal of 40 percent of federal investments benefiting CEJST Communities, we considered the entire analyzed investment portfolio of \$779.29 million.

We used R Statistical Software to analyze all data (R Core Team 2024).

See the *Technical Appendix* for additional details.

Limitations

Our approach and its reliance on publicly available data have several limitations:

- BIL funding data may be missing from USAspending.gov due to agency non-reporting and noncompliance with the 2014 Digital Accountability and Transparency Act.
- The place of performance field used to map awards may contain inaccuracies that could lead to over- or undercounting awards to prioritized communities.
- EJ screening tools represent but one way of prioritizing communities, with inherent limitations to both the approach and the analysis (Horgan et al. 2024; Schott and Whyte 2023).
- This analysis focuses on where BIL funding flows, and not the extent to which funds benefit those communities. Absent a federal definition of “benefits” for the Justice40 program, at minimum funding needs to be tracked to monitor progress toward 40 percent of the funding based on dollar amounts (WHEJAC 2022).

Addressing the dataset limitations would open possibilities for further Justice40 analysis.

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Endnotes

- ¹ This analysis uses data from USASpending.gov, the official open-data source of federal spending information, including information about federal awards (e.g., contracts, grants, loans). The federal fiscal year is October 1 to September 30. The California fiscal year is July to June. Place of performance refers to the “predominant” place of award activity. There are four options, each of which can mean “up to and including” each specific geography category: statewide, county, city, and single zip code (Bureau of the Fiscal Service 2024a).
- ² CEJST 1.0 also designates tracts as Disadvantaged if they are surrounded by Disadvantaged tracts and at or above the 50th percentile for low income, as well as any census tract that includes Tribal areas, defined as Federal Indian land area or lands of federally recognized Tribes.
- ³ SB 535 designates tracts as Disadvantaged based on a combination of results from CalEnviroScreen 3.0 and 4.0, as well as land under the control of federally recognized Tribes (CalEPA 2022). CalEnviroScreen has been used in California for more than decade—for example, to prioritize communities for investments from California Climate Investments, which invests the proceeds from cap-and-trade auctions.
- ⁴ The US government’s Catalog of Federal Domestic Assistance (CFDA) is a public listing describing federal funding programs. Because program names sometimes change, we reference a program’s five-digit numeric CFDA code (##.###) to indicate which funding program we are describing.
- ⁵ Cooperative agreements are a funding instrument used when the federal government is substantially involved in providing the award recipient with goods and services, which can include project implementation. With some exceptions, these are competitive awards, like project grants.
- ⁶ The total obligated dollar amount includes BIL funding as well as other funding sources associated with the prime award (USASpending.gov Service Desk, email message to the website, November 27, 2023). Obligated amounts represent the amount the agency has promised to the recipient through a grant award, signed contract, etc
- ⁷ To analyze which communities have obligated funding from BIL awards, we focused on the primary place of performance designated for each award (statewide, countywide, citywide, or single zip code), as well as the recipient type. We used 2020 decennial census data to assign each award the spatial geometry associated with the reported place of performance, excluding local awards that could not be mapped (12 awards) and non-transportation grants with a statewide place of performance (148 awards).